FINAL
FORMER PWT SITE REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

FORMER PACIFIC WOOD TREATING CO. SITE

Prepared for
PORT OF RIDGEFIELD
July 1, 2013
Project No. 9003.01.49

Prepared by
Maul Foster & Alongi, Inc.
400 E Mill Plain Blvd., Suite 400, Vancouver WA 98660

MAUL
FOSTER
ALONGI

FINAL FORMER PWT SITE REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

FORMER PACIFIC WOOD TREATING CO. SITE

The material and data in this report were prepared under the supervision and direction of the undersigned.

MAUL FOSTER & ALONGI, INC.

STEVEN P. TAYLOR
STATE OF WASHINGTON
34036
REGISTERED PROFESSIONAL ENGINEER
EXPIRES: 3/30/14

Steven P. Taylor, PE
Principal Engineer

Madi Novak

Madi Novak
Senior Environmental Scientist

State of Washington
2498
Exp 9/23/2013
Licensed Geologist
Alan R. Hughes

Alan R. Hughes

Alan R. Hughes, LG
Senior Geologist

\\mfaspdx-fs1\final_dir.net\9003.01 Port of Ridgefield\Report\49_2013.07.01 RIFS\Rf-PWT RI FS.docx

CONTENTS

CONTENTS (CONTINUED)

CONTENTS (CONTINUED)

TABLES AND ILLUSTRATIONS

FOLLOWING REPORT:

TABLES

TABLES AND ILLUSTRATIONS (CONTINUED)

FIGURES

TABLES AND ILLUSTRATIONS (CONTINUED)

TABLES AND ILLUSTRATIONS (CONTINUED)

DRAWING

ACRONYMS AND ABBREVIATIONS

3-D	three-dimensional
Anchor	Anchor QEA, LLC
ARAR	applicable or relevant and appropriate requirement
BEHP	bis(2-ethylhexyl) phthalate
bgs	below ground surface
bml	below mudline
BNSF	Burlington Northern-Santa Fe
CAMU	Corrective Action Management Unit
CCC	criterion continuous concentration
the City	City of Ridgefield
cm	centimeter(s)
COE	U.S. Army Corps of Engineers
cPAH	carcinogenic PAH
CRBG	Columbia River Basalt Group
CSM	conceptual site model
CUL	cleanup level
CY	cubic yard(s)
DCA	disproportionate cost analysis
DEQ	Oregon Department of Environmental Quality
dioxins	chlorinated dibenzo-p-dioxins and dibenzofurans
DNR	Washington State Department of Natural Resources
DRO	diesel-range organic
E&E	Ecology & Environment
Ecology	Washington State Department of Ecology
EIC	ecological indicator concentration
EMNR	enhanced monitored natural recovery
ENR	enhanced natural recovery
EVS	Environmental Visualization System™ software
FOC	fraction organic carbon
FRTR	Federal Remediation Technologies Roundtable screening matrix
FS	feasibility study
HH	human health (USEPA criteria)
IHS	indicator hazardous substance
K	hydraulic conductivity
LRIS	Lake River Industrial Site
LWBZ	lower water-bearing zone
MFA	Maul Foster & Alongi, Inc.
mg/kg	milligrams per kilogram
MNR	monitored natural recovery
MRL	method reporting limit
MTCA	Model Toxics Control Act

ACRONYMS AND ABBREVIATIONS (CONTINUED)

µg/kg	micrograms per kilogram
µg/L	micrograms per liter
NAPL	nonaqueous-phase liquid
ng/kg	nanograms per kilogram
NGVD	National Geodetic Vertical Datum of 1927/1947
NPDES	National Pollutant Discharge Elimination System
the Order	Agreed Order No. 01TCPSR-3119 between the Port and Ecology
PAH	polycyclic aromatic hydrocarbon
PCE	tetrachloroethene
PCP	pentachlorophenol
PEC	probable effect concentration
pg/L	picograms per liter
POC	point of compliance
the Port	Port of Ridgefield
PQL	practical quantitation limit
PWT	Pacific Wood Treating Co.
RA	risk assessment
RCRA	Resource Conservation and Recovery Act
REL	remediation level
RFI	RCRA facility investigation
RI	remedial investigation
RNWR	Ridgefield National Wildlife Refuge
RRO	residual-range organic
SEA	Sweet Edwards & Associates
SER	steam-enhanced remediation
Site	LRIS, upland off-property areas, and nearby surface water bodies Lake River and Carty Lake
SL_v	screening level(s) for vapor intrusion
SLV	screening level value
SMP	soil management plan
SMS	sediment management standards
SPY	south pole yard
SVOC	semivolatile organic compound
SWAC	surface weighted average concentration
TCDD	2,3,7,8-tetrachloro dibenzo-p-dioxin
TCE	trichloroethene
TEC	toxicity equivalent concentration
TEE	terrestrial ecological evaluation
TEF	toxic equivalency factor
TEQ	toxicity equivalent
TOC	total organic carbon
TPAH	total PAHs

ACRONYMS AND ABBREVIATIONS (CONTINUED)

TPH	total petroleum hydrocarbons
UPRR	Union Pacific Railroad
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UWBZ	upper water-bearing zone
VOC	volatile organic compound
WAC	Washington Administrative Code
WBZ	water-bearing zone
WDFW	Washington Department of Fish and Wildlife
WQC	water quality criterion/criteria
WWTP	wastewater treatment plant

SUMMARY

This summary is not intended as a stand-alone document and must be evaluated in context with the entire document.

On behalf of the Port of Ridgefield (the Port), Maul Foster & Alongi, Inc. prepared this remedial investigation (RI) and feasibility study (FS) report for the former Pacific Wood Treating Co. (PWT) site in Ridgefield, Washington (see Figure ES-1). PWT operated a wood-treating facility from 1963 to 1993 at the Port's Lake River Industrial Site (LRIS). This RI/FS report was prepared under the authority of Agreed Order No. 01TCPSR-3119 between the Port and the Washington State Department of Ecology (Ecology) to satisfy the requirements of the Model Toxics Control Act (MTCA) and sediment management standards (SMS) and addresses the substantive requirements of Washington Administrative Code (WAC) 173-340, -350, and -360 (MTCA) and WAC 173-204 (SMS). This final report addresses comments provided by Ecology on a draft version submitted on March 16, 2012, and includes additional investigation and reporting completed since the draft version was submitted.

The purpose of this report is to summarize RI activities on the LRIS and adjacent off-property areas, describe cleanup activities already implemented and under way on the LRIS, develop cleanup levels (CULs), evaluate the feasibility of remediation alternatives, and describe preferred remedies. The areas addressed by the RI/FS include the LRIS, adjacent upland off-property areas (i.e., upland areas not part of the LRIS), and nearby surface water bodies Lake River and Carty Lake (see Figure ES-2). For purposes of this RI/FS report, the "Site" is defined as these four areas.

Since 1985, multiple investigations have been conducted on and adjacent to the LRIS property to characterize the impacts associated with historical PWT operations; these investigations included collection of soil samples on the LRIS and upland off-property, groundwater samples on the LRIS and the nearby Ridgefield National Wildlife Refuge (RNWR), and sediment samples in Lake River and Carty Lake.

The Port has conducted interim actions on the LRIS since 1996, with Ecology oversight and approval. The interim actions have included initial source removal after PWT vacated the property, an emergency action that involved steam-enhanced remediation (SER) focused on removing mobile product in the subsurface, and more recent interim actions to address soil impacts. Former PWT operations impacted soil, groundwater, and sediment with wood-treating-related chemicals including metals, phenols (including pentachlorophenol [PCP]), polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, volatile organic compounds, and/or chlorinated dibenzo-p-dioxins and dibenzofurans (collectively referred to in the report as dioxins). Recently completed interim actions and those under way, with completion slated for 2013, have focused on removal of highly impacted soil and capping remaining above-CUL soil for protection of human health (i.e., workers and potential future recreationists) and the environment.

Interim actions also include source control actions. Historically, stormwater discharge has been a mechanism for transporting impacts in soil on the LRIS property to Lake River. The soil cap will eliminate the mobilization of impacts in soil via stormwater; further, the interim actions for 2012 included completing replacement of the LRIS stormwater system.

The SER system operated as an emergency/interim action near the former tank farm where a 4-acre plume of nonaqueous-phase liquid was present. The SER greatly decreased concentrations of wood-treating compounds in groundwater; the nature and extent of groundwater impacts have been defined, and concentration trends are stable or declining. Groundwater modeling has shown that chemicals are not discharging to surface water at concentrations that exceed levels protective of beneficial uses of surface water. Point of compliance sampling will be conducted after remedial actions have been completed in order to confirm concentration trends in groundwater.

Characterization has been conducted for the upland off-property, which includes properties owned by the Port (Port-owned properties) and other properties (non-Port-owned properties). Characterization for the Port-owned properties is complete, while further characterization activities may be conducted for the non-Port-owned properties; a brief summary is provided below. Lake River and Carty Lake characterization has been completed. A summary of the nature and extent of impacts, exposure scenarios, and the preferred remedial alternative for these areas is presented below.

UPLAND OFF-PROPERTY

The upland off-property area includes the Port-owned properties (the undeveloped Railroad Avenue properties, the Port-owned marina, and the Port-owned proposed overpass property) and the non-Port-owned properties (a residential area, RNWR soils just north of Cell 4, and a privately owned marina property) (see Figure ES-2).

Port-owned properties: Wood-treatment chemicals associated with historical PWT operations were largely undetected or occurred below levels expected to cause unacceptable human health or ecological risk. Dioxins were detected above levels protective of human health and ecological receptors. Incidental ingestion of dioxins in soil was identified as the most significant potential exposure pathway for humans. Exposure to ecological receptors is limited, given the small size and lack of quality habitat in this area; however, ecological receptor direct contact and secondary ingestion are considered complete pathways. To address potential human health and ecological risk associated with direct or indirect exposure to impacts in soil, the following primary actions are recommended:

- A 2-foot cap for the Port Railroad Avenue properties. The extent of the cap would include a portion of the Port-owned property and the City of Ridgefield right-of-way, approximately 0.55 acre. The cap would be monitored annually.
- Most of the Port marina property has been capped with asphalt. In addition, a narrow strip of soil between the asphalt on the Port marina property and Cell 3 was capped with polypropylene geotextile fabric and soil as part of LRIS interim actions. The cap would be monitored.

- The proposed overpass area will be covered with a cap consistent with LRIS capping options, limiting potential exposure. If soil is excavated in this area during construction, a soil management plan will be required.

Non-Port-owned properties: Surface soil near the LRIS is generally impacted uniformly with dioxins at concentrations that marginally exceed the MTCA Method B CUL, but concentrations are well below the MTCA Method C CUL. RNWR soils are well below MTCA Method B CULs. The proximate source(s) of dioxins are not well established. Residential or worker exposure to dioxins in surface soil may occur through direct contact with impacted surface soil. No wood-treating chemicals were detected above MTCA default CULs in non-Port-owned properties. A terrestrial ecological evaluation conducted for the upland off-property area indicates that adverse ecological impacts are not expected for non-Port-owned properties. Soils have been characterized in rights-of-way in the residential area, and other potential exposure points (e.g., yards) have not been characterized. Human health CULs and a feasibility analysis are therefore not being developed at this time.

LAKE RIVER

Lake River is adjacent to and west of the LRIS and is a relatively shallow, slow-velocity river that is frequented by recreationists and is habitat to aquatic animals, including special-status salmonids, waterbirds such as the great blue heron, and aquatic mammals such as the river otter. Sediment is impacted with phenols (including PCP), PAHs, and dioxins. Phenol and PAH impacts are limited and colocated with elevated dioxin concentrations; thus, dioxins are selected as indicator hazardous substances. The highest concentrations were adjacent to LRIS stormwater outfalls and were generally limited in vertical extent to the top foot or two of sediment. Human exposure to impacts in sediment may occur through direct contact or consumption of organisms (e.g., fish) that have accumulated chemicals in tissue. Ecological exposure is likely to result from uptake of chemicals in sediment or ingestion of chemicals in aquatic prey. To address potential human health and ecological risk associated with direct or indirect exposure to impacts in sediment, the following primary actions are recommended:

- Dredge removal of Lake River sediment with dioxin toxicity equivalent exceeding 30 nanograms per kilogram. Dredging would also remove other contaminants exceeding screening criteria.
- Employment of enhanced natural recovery in the remediation area.
- Long-term monitoring to assess natural recovery of sediment.
- Application of bank armor to stabilize the lower portions of the bank below the ordinary high-water mark (this is not within the scope of the upland interim remedial actions); this would also protect against direct contact with and erosion of bank soil.

Implementation of this remedy, along with natural attenuation, is expected to achieve site-specific CULs, and contaminated sediment would be permanently removed and would not be available for potential future exposure or transport.

CARTY LAKE

Carty Lake is a 52-acre, ponded wetland located in the RNWR. The lake provides habitat for plants, benthic invertebrates, fish, mammals, and raptors, and is not readily accessed by visitors. Sediment in Carty Lake is impacted with arsenic, chromium, PCP, and dioxins. Highly elevated chemical concentrations are limited to the southern portion of the lake. Direct human exposure to impacts in sediment likely is limited to potential future U.S. Fish and Wildlife Service restoration workers. Tribal members might wish to reinstitute harvest of the wapato plant at Carty Lake; however, a CUL has not yet been developed for this scenario. Although fishing takes place only rarely in the lake, human consumption of fish was evaluated. Ecological exposure scenarios include uptake of chemicals in sediment and ingestion of chemicals in aquatic prey. To address potential human health and ecological risk associated with direct or indirect exposure to impacts in sediment, the following primary actions are recommended:

- Dredging and disposal of approximately 5,650 cubic yards (CY) of lake sediment above ecological CULs in the southern portion of the lake
- Placement of approximately 2,700 CY of sand for a residuals cap in a 6- to 12-inch-thick layer over dredged areas
- Long-term monitoring to assess natural recovery of sediment
- Institutional controls, including advisories on fish consumption, to protect potential fishers

Implementation of this remedy would remove sediment with concentrations of chemicals above CULs protective of ecological receptors. The highest concentrations of chemicals in sediment would be permanently removed and would not be available for potential future exposure or transport. Human health would be protected through institutional controls limiting consumption of fish from Carty Lake.

SUMMARY FIGURES

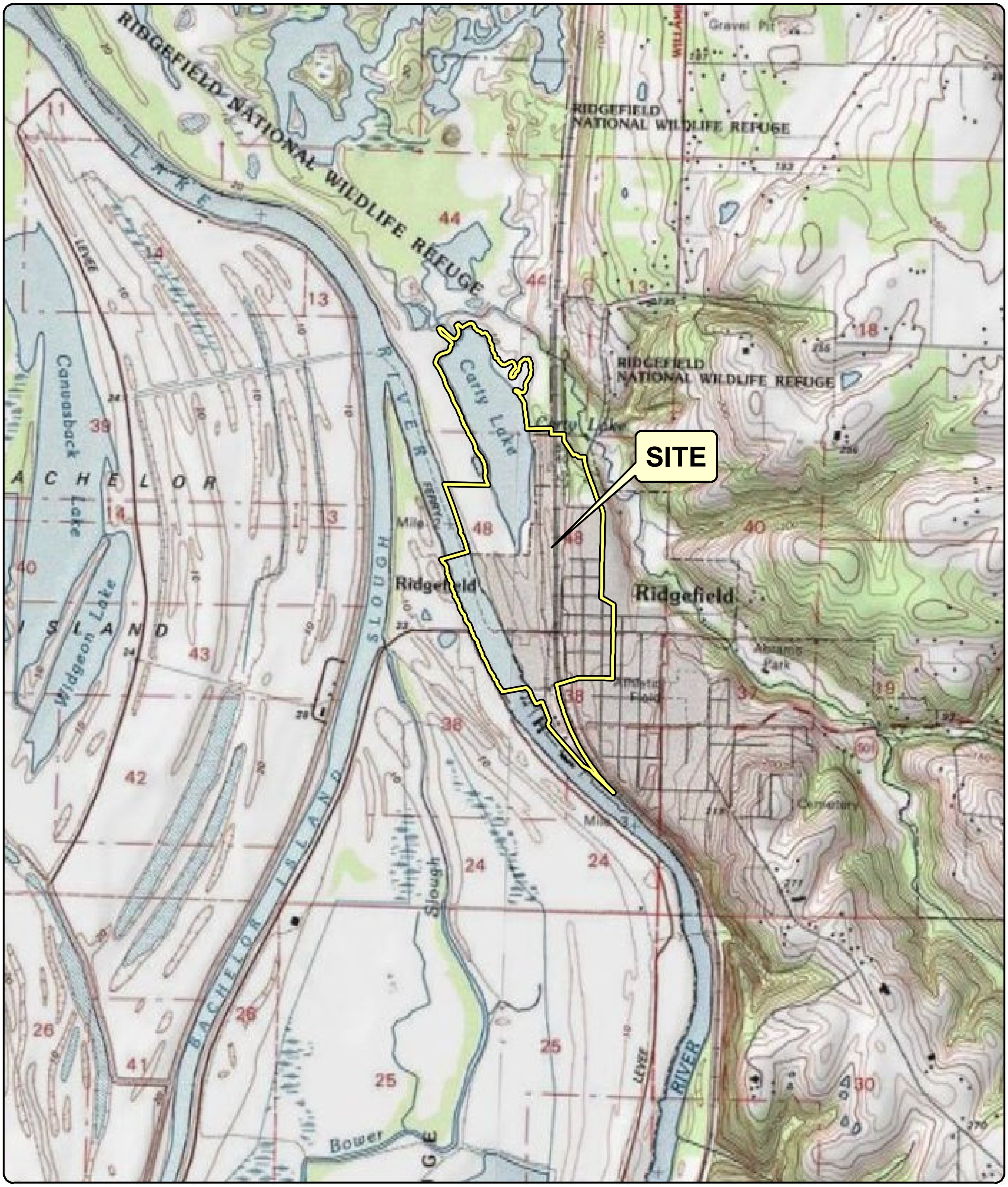
Project: 9003.01.20

Produced By: D. Coe/ W. Coffey

Approved By: J. King

Print Date: 6/4/2013

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\FigES-1_Site Location.mxd



Source: Topographic Quadrangle obtained from ArcGIS Online Services/NGS-USGS TOPO/US Geological Survey (1999)
7.5-minute topographic quadrangle: Ridgefield
Address: Lake River Industrial Site
111 W. Division Street, Ridgefield, WA 98642
Section: 24 Township: 4N Range: 1W Of Willamette Meridian

Legend

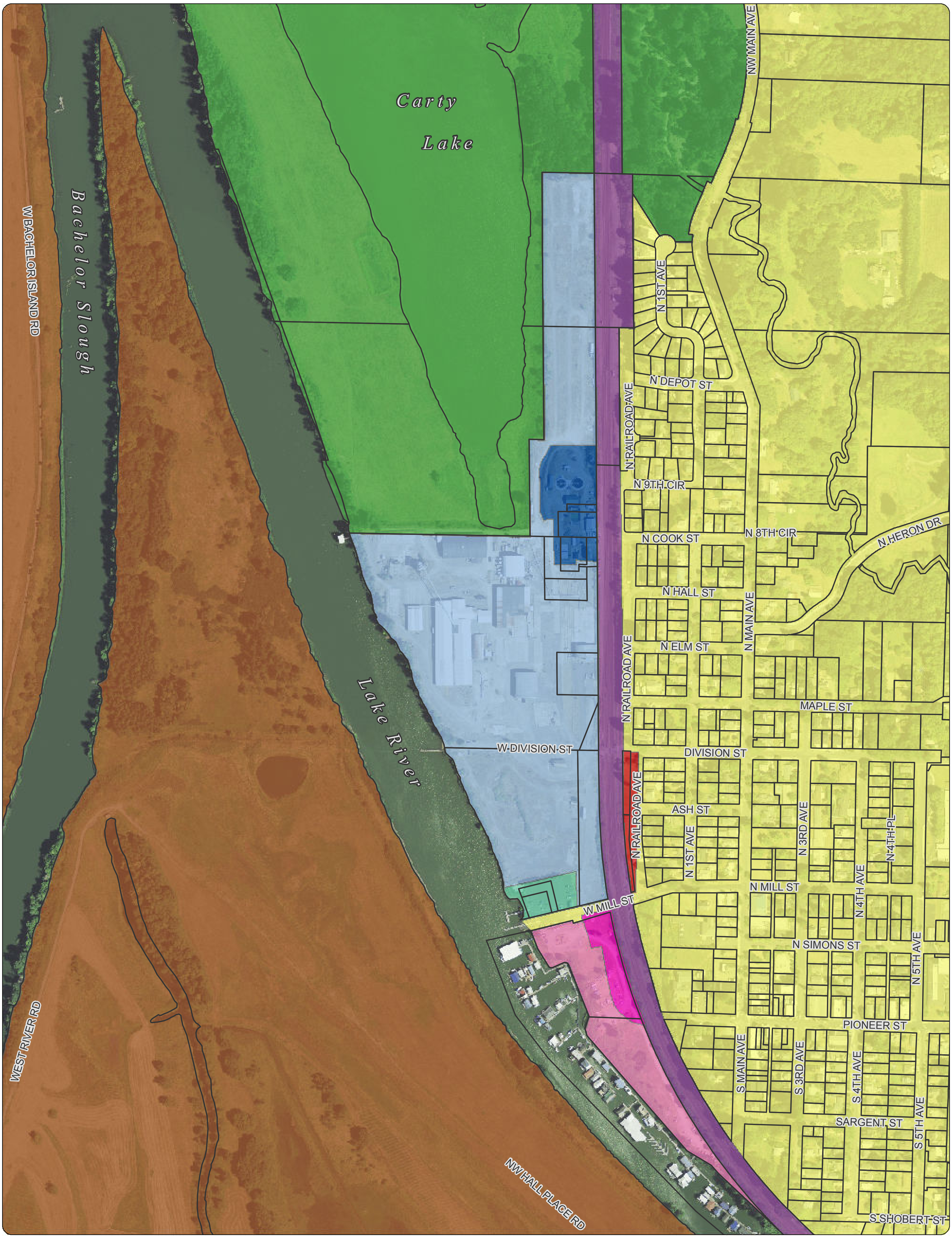
▭ Former Pacific Wood Treating Site

Figure ES-1
Site Location

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

0 1,000 2,000
Feet



Source: Aerial photograph obtained from Clark County (2007).

Notes:
1. LRIS = Lake River Industrial Site
2. RNWR = Ridgefield National Wildlife Refuge.
3. WWTP = Wastewater treatment plant
4. Port = Port of Ridgefield
5. BNSF = Burlington Northern Santa Fe

Legend

▨	LRIS; Port-Owned	▨	McCuddy's Marina Property
▨	Proposed Overpass Property	▨	Off-Property Uplands
▨	Port Railroad Avenue Property	▨	RNWR-Carty Unit
▨	Port Marina Property	▨	RNWR-River S Unit
▨	City of Ridgefield WWTP	▨	BNSF Railroad Property
		▭	Clark County Tax Lots (2010)

Figure ES-2
Site Vicinity

Former PWT Site RI/FS
Ridgefield, Washington

0 225 450
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\FigES-2_Site Vicinity.mxd
Print Date: 6/28/2013
Approved By: M. Novak
Produced By: J. Schane
Project: 9003.01.49

1 INTRODUCTION

On behalf of the Port of Ridgefield (the Port), Maul Foster & Alongi, Inc. (MFA) prepared this remedial investigation (RI) and feasibility study (FS) report for the former Pacific Wood Treating Co. (PWT) site in Ridgefield, Washington (see Figure 1-1). PWT operated a wood-treating facility from 1963 to 1993 at the Port's Lake River Industrial Site (LRIS). This RI/FS report was prepared under the authority of Agreed Order No. 01TCPSR-3119 (the Order) between the Port and the Washington State Department of Ecology (Ecology) to satisfy the requirements of the Model Toxics Control Act (MTCA) and sediment management standards (SMS) and addresses the substantive requirements of Washington Administrative Code (WAC) 173-340, -350, and -360 (MTCA) and WAC 173-204 (SMS).

The purpose of this report is to summarize RI activities on the LRIS and off-property areas, describe cleanup activities already implemented and under way on the LRIS, develop cleanup levels (CULs), evaluate the feasibility of remediation alternatives, and describe preferred remedies. This final report takes into account comments provided by Ecology on a draft version submitted on March 16, 2012. In addition, this report includes additional investigation and reporting completed since the draft version was submitted to Ecology.

1.1 Definition of Site

The areas addressed by this RI/FS include the LRIS, upland off-property areas, and nearby surface water bodies Lake River and Carty Lake (see Figure 1-2). The areas are described below:

- LRIS—this area consists of property formerly used by PWT, which operated a wood-treating facility, and includes four designated areas referred to in the Order as Cells 1, 2, 3, and 4. Soil and groundwater on the LRIS were impacted by PWT's historical operations.
- Upland off-property area—this consists of an upland area of investigation north, east, and south of the LRIS (i.e., upland areas not part of the LRIS). The area includes properties owned by the Port and other areas (residential area, Ridgefield National Wildlife Refuge [RNWR] soil, and a privately owned marina). The sources of chemicals in surface soil in the off-property are not well established.
- Lake River—a river on the western property boundary of the LRIS. Sediment offshore of the LRIS in Lake River has been impacted by wood-treating-related chemicals.
- Carty Lake—a lake in the RNWR north and west of the LRIS. Sediment in Carty Lake just north of the LRIS has been impacted by wood-treating-related chemicals.

For purposes of this RI/FS report, the "Site" is defined as the areas described above.

1.2 Regulatory Framework

This report completes the RI/FS for the Site, and incorporates the RI/FS work completed for the LRIS, surrounding upland off-property areas, Carty Lake, and Lake River. This RI/FS report was written to fulfill the requirements in Section IV, Item 8 of the Order. The report is designed to meet the requirements of MTCA (WAC 173-340, -350, and -360) and SMS (WAC 173-204) for conducting an RI/FS.

1.3 Report Organization

The report is organized as follows:

- Section 2 provides background information for the Site, including setting, geology, and hydrogeology. Previous investigations of each of the areas are summarized, and current and future land uses are identified.
- Section 3 summarizes the nature and extent of impacts and identifies indicator hazardous substances (IHSs).
- Section 4 summarizes interim remedial actions conducted, as well as approved actions that are under way on the LRIS.
- Section 5 presents a conceptual site model (CSM) identifying potentially complete exposure pathways by identifying sources, transport mechanisms, exposure media, and potential receptors on the Site.
- Section 6 summarizes CULs previously identified for the LRIS and describes development of CULs for the upland off-property areas (Port-owned properties and non-Port-owned properties) and Lake River and Carty Lake. Points of compliance (POCs) are identified for each area and matrix.
- Section 7 summarizes the feasibility analyses conducted and previously submitted to Ecology for remedy of soil and groundwater on the LRIS.
- Section 8 is the feasibility analysis for remedy of soil on the Port-owned properties.
- Section 9 is the feasibility analysis for remedy of Lake River sediments.
- Section 10 is the feasibility analysis for remedy of Carty Lake sediments.
- Section 11 identifies the selected remedial action alternatives for the LRIS approved by Ecology and describes the preferred remedial action alternatives for the Port-owned properties and for Lake River and Carty Lake.

2 BACKGROUND

This section presents a description of the LRIS operational history, the setting (see Figure 1-2), a summary of previous investigations and cleanup actions, environmental characteristics, and current and future land uses.

2.1 LRIS History

The approximately 40-acre LRIS is the former location of the PWT facility. PWT's operations involved pressure-treating wood products with oil-based treatment solutions containing creosote, pentachlorophenol (PCP), and water-based mixtures of copper, chromium, arsenic, and/or zinc.

The Port owns the LRIS (note: 2.57 acres in Cell 3 previously owned by Union Pacific Railroad [UPRR] was recently acquired by the Port), which PWT leased from approximately 1963 to 1993. PWT filed for bankruptcy in 1993 and abandoned the LRIS. The Port has established office spaces on the LRIS and manages the property. The LRIS is divided into four areas designated in the Order as cells (see Figure 2-1). The historical uses of each of the cells are described below.

Cells 1 and 2 were vacant or used for farmland before industrial use by PWT. Cell 1 contained the PWT tank farm, the retort area, and a boiler room (see Figure 2-1). PCP was normally stored in the tank farm in Cell 1 as a 40 percent concentrate in "P9 oil." The P9 oil consisted of diesel and about 10 percent long-chain alcohols and ketones. When used, the PCP concentrate was typically mixed with additional P9 oil, or occasionally with mineral spirits. PWT also used copper naphthenate as an alternative to PCP. Other wood-treating chemicals used by PWT include Woodgard™ and Fyrgard™. Woodgard consists of boric acid and paraffin wax in hexylene glycol. Fyrgard consists of ammonium phosphate, ammonium sulfate, boric acid, and borax in a water-based carrier.

Cell 2 was used by PWT for wood-manufacturing operations, and also contained other features such as PWT's wastewater treatment plant (WWTP) and the concrete pond stormwater feature. Before the 1980s, the concrete pond was used to trap and collect spills that had entered the stormwater system. In the 1980s, the WWTP was constructed and used to treat wastewater generated by PWT. The WWTP was operated until 1993, when PWT abandoned its operations. The WWTP was demolished by the Port, with Ecology's oversight.

Before PWT's operations, the area now designated as Cell 3 was used as part of general shingle and sawmill operations. PWT stored treated poles and dimensional lumber throughout Cell 3, which it also referred to as the south pole yard (SPY) (see Figure 2-1). Until 1988, PWT allowed preservative to drip directly onto the ground. In 1988, PWT installed a drip trough in Cell 3 as a step toward removing excess preservative from poles before their placement in Cell 3 (see Figure 2-1).

Before PWT's operations, the area now designated as Cell 4 was used for farming. PWT used Cell 4 to store untreated wood and operated a peeler, to debark poles, from approximately 1966 to 1993.

Transportation of poles for treatment between Cell 4 and the rest of the LRIS most likely caused incidental tracking of wood-treating chemicals into Cell 4.

2.2 Setting

2.2.1 LRIS

The physical address of the LRIS is 111 West Division Street, Ridgefield, Washington, which is within the Ridgefield city limits. It is located in section 24, township 4 north, range 1 west, Willamette Meridian (see Figure 1-1). The LRIS is bordered by the RNWR to the north, and by the Burlington Northern-Santa Fe (BNSF) railroad tracks and the City of Ridgefield's (City) WWTP to the east. The BNSF railroad tracks separate the LRIS from a residential area. Lake River and the RNWR border the LRIS to the west, with the Port's boat launch and associated parking and Mill Street to the south. South of Mill Street is McCuddy's Marina and the Port-owned proposed overpass property. Figure 1-2 shows the LRIS and vicinity.

The Port owns the LRIS property, with the exception of a portion of the City's WWTP that was historically part of the LRIS and that falls within the Cell 2 boundary (see Figure 1-2).

The LRIS is relatively flat. Stormwater either infiltrates the soil or discharges to Lake River through outfalls.

2.2.2 Upland Off-Property

The upland off-property area is adjacent to the LRIS (see Figure 1-2). The upland off-property area includes Port-owned properties and other properties not owned by the Port. The off-property investigation area comprises the following areas:

- Port Railroad Avenue properties (east of the LRIS): The Port owns two parcels oriented north-south and located along Railroad Avenue just east of Cell 3 of the LRIS. These properties are upgradient of the LRIS and are undeveloped at this time.
- Port marina property (south of the LRIS): The property immediately south of the LRIS includes the Port-owned boat launch and parking area.
- Port proposed overpass property (south of LRIS): The 1.4-acre overpass area was formerly part of McCuddy's Marina and includes the footprint of a proposed overpass development.
- McCuddy's Marina (south of the LRIS): The approximately 5.3-acre, privately owned McCuddy's Marina property is located at 5 West Mill Street. McCuddy's Ridgefield Marina, the current operator, also leases approximately 11.04 acres in Lake River from the Washington State Department of Natural Resources (DNR).
- RNWR property (north of the LRIS): Three soil samples were collected along an east-west transect just north of Cell 4 in the RNWR to better define contaminant extent (see Section 3.2.2.2). This area is zoned parks/open space.

- Residential areas (east of the LRIS): The remaining off-property area east of the LRIS is zoned low-density residential and is upgradient of the LRIS. For purposes of this RI/FS report, the residential off-property area is defined as the area in which samples were collected as required by Ecology and is bounded as follows: the west boundary extends along Railroad Avenue from the northern portion of Cell 4 to the southern portion of Cell 3 on Mill Street; the eastern boundary runs along Main Avenue.

The upland off-property setting is shown on Figure 2-2. As shown, except for the RNWR property, there is substantial development and minimal viable ecological habitat in the upland off-property area.

2.2.3 Lake River

The lower Columbia River extends 146 river miles from Bonneville Dam to the Pacific Ocean. Elongated islands frequently divide the Columbia River and form sloughs, side channels, and adjacent lakes. Lake River is a side channel of the Columbia River and lies within the lower Columbia River west of Ridgefield, Washington, near the confluence of the Columbia River and the Lewis River. The National Wetlands Inventory has classified Lake River as a riverine, tidal, unconsolidated bottom, permanent tidal habitat.

Lake River is a tidally influenced, 11-mile-long channel and is hydraulically connected at its mouth to the Columbia River, through Bachelor Island Slough approximately 1 mile upstream of the mouth, and through a tide gate/flushing structure along the western shoreline of Vancouver Lake. It originates at Vancouver Lake in Vancouver, WA, to the south, runs parallel to the Columbia River, and merges with the Columbia at the northern tip of Bachelor Island (see Figure 2-3).

Sections of the RNWR border the entire length of Lake River to the west. Lake River is slow moving. It varies in width from approximately 100 feet to over 300 feet, and averages 10 feet deep or less. Where it is adjacent to the LRIS, Lake River is approximately 300 feet wide. Generally, steep banks occur on both sides and there is currently no emergent vegetation. Armoring and mature vegetation dominate the shoreline along the western side of the LRIS. In-water and overwater structures, including the Port's pump house, several piles, and a public access float dock, are located along the shoreline of the LRIS (Anchor QEA, LLC [Anchor] and MFA, 2011).

Based on available information, maintenance dredging of Lake River by the U.S. Army Corps of Engineers (COE) was last conducted in 1970 (Anchor and MFA, 2011). See Figure 2-3 for the approximate COE 1970 project boundary; the COE is authorized to dredge a channel to a width of approximately 100 feet and a depth of 6 feet, and typically dredges 2 additional feet to account for refill. There are no plans for COE dredge activities in Lake River in the near future; however, future dredging, if proposed by the COE, would need to take into account any remedial action(s) completed in Lake River.

2.2.4 Carty Lake

Carty Lake is a 52-acre, ponded wetland located in the RNWR Carty Unit (see Figure 2-3). The Carty Unit "lowlands" are immediately north of LRIS Cell 2 and west of Cell 4. Carty Lake is bordered by Lake River to the west, Gee Creek to the north, and BNSF railroad tracks to the east. During the rainy season, Gee Creek and Carty Lake can be hydraulically connected at the lake's northern end. During most of the year, Carty Lake has no outlet. Water levels in Carty Lake vary seasonally, and generally are higher during winter and spring and lower during summer and fall. The National Wetlands Inventory has classified Carty Lake as palustrine, unconsolidated bottom, permanent nontidal wetland, and Carty Lake contains Washington State-designated priority palustrine habitat.

2.3 Previous Investigations

Since 1985, multiple investigations have been conducted on and off the LRIS property to characterize the impacts associated with historical PWT operations. Previous investigations conducted on the LRIS, on upland off-property, in Lake River, and in Carty Lake are described in the sections below. Drawing 1 displays sample and monitoring well locations.

2.3.1 LRIS

Historical investigations at the LRIS include several groundwater and hydrogeologic evaluations; a Resource Conservation and Recovery Act (RCRA) preliminary assessment that identified solid waste management units and areas of concern; sitewide evaluations of potential source areas at locations previously identified as areas of concern (including the tank farm area, the retort/drip pad area, the drip trough, and the concrete pond and piping system); and a focused investigation and risk assessment (RA) in the area of the City's WWTP expansion in Cell 2. A RCRA facility investigation (RFI) was initiated for Cell 3. Because PWT filed for bankruptcy, the RFI was not completed.

The historical investigations in Cells 1, 2, 3, and 4 have been conducted by multiple parties on behalf of PWT since the mid-1980s and are described in detail in the 2004 work plan (MFA, 2004, Vols. I, II, and III). The Port has also completed RI/FSs for each cell. The consultant reports are summarized below.

- In 1985 and 1987, Sweet Edwards & Associates (SEA), on behalf of PWT, conducted a groundwater evaluation on and near the LRIS (SEA, 1986, 1987).
- In 1990, Ecology & Environment (E&E), on behalf of the U.S. Environmental Protection Agency (USEPA), conducted a preliminary assessment on the PWT facility (E&E, 1991).
- In 1991, Hart Crowser conducted site characterization on behalf of the USEPA (Hart Crowser, 1991).
- In 1993, Kleinfelder, on behalf of PWT, conducted site characterization throughout the LRIS (Kleinfelder, 1993).
- In 1995, E&E conducted site characterization throughout the LRIS for the USEPA (E&E, 1996).

- From 1997 through 2002, on behalf of the Port, MFA (note that all work completed by MFA was on behalf of the Port) conducted site characterization; the data were included in the Ecology-approved 2004 work plan for Cells 1, 2, and 4 (MFA, 2004, Vol. I).
- In 2007, MFA conducted an RI/RA for Cell 3 (MFA, 2007). Ecology approved this document by e-mail (Ecology, 2008a).
- In 2010, MFA conducted an RI/FS for Cell 4 (MFA, 2010e). Ecology approved the document (Ecology, 2010b).
- In 2010, MFA finalized a terrestrial ecological evaluation (TEE) for the former PWT site and submitted it to Ecology (MFA, 2010a). Ecology approved the TEE for the LRIS (Ecology, 2010a).
- In 2011, MFA completed an FS for Cell 3 (MFA, 2011c), which incorporated Ecology comments on the previous draft version.
- In 2011, MFA prepared a draft RI/FS report for Cells 1 and 2 and submitted it to Ecology (MFA, 2011a). Partial comments were provided in a meeting with Ecology; however, the report is awaiting final comments from Ecology before completion. The previously provided comments have been incorporated into this final RI/FS report.
- In 2011, MFA submitted an evaluation of the steam-enhanced remediation (SER) system and recommended discontinuation of the system (MFA, 2011d). Ecology provided a letter approving discontinuation of the SER system (Ecology, 2011b).
- In 2012, the Port and Ecology prepared a final closure plan for the SER system (Port and Ecology, 2012). The certification of clean closure for the SER system is provided as Appendix A.
- In 2012, MFA submitted a final groundwater summary report, including a groundwater monitoring plan, based on data collected and analyzed through August 2011 (MFA, 2012c). Ecology approved the report (Ecology, 2012a).

All work performed by MFA for the Port has been conducted under Ecology's oversight and consistent with the Order. The data generated during the abovementioned investigations are evaluated in this RI/FS report. Over 2,000 soil samples were collected at over 700 locations on the LRIS. Eighty-five groundwater monitoring wells have been monitored and over 200 reconnaissance groundwater samples have been collected. Sampling methodologies and results, including review of data quality, were previously submitted to Ecology in the reports identified above. Soil and groundwater samples recently collected and analyzed (November 2011) after the SER system was shut down are presented in this report. The November 2011 sample methodologies, data quality, and results are presented in Sections 3 and 4.

2.3.2 Upland Off-Property

A total of 30 primary surface soil samples were collected in the upland off-property to characterize the off-property extent of polycyclic aromatic hydrocarbons (PAHs), PCP, arsenic, chromium, copper, zinc, and chlorinated dibenzo-p-dioxins and dibenzofurans (dioxins). One sample (SS-6) was collected in the off-property Port marina area in July 2008 as part of LRIS RI characterization. In February 2009, three surface soil samples were collected north of the LRIS Cell 4, on RNWR property. In June, August, and September 2010, off-property surface soil sampling in the Port Railroad Avenue and residential areas was conducted at the request of Ecology to evaluate any potential off-site impacts of PAHs, PCP, arsenic, chromium, copper, zinc, and dioxins; 12 samples with one duplicate were collected (MFA, 2010b,d). Ecology required additional off-property surface soil sampling for dioxins, and 14 additional samples were collected in May 2011 in residential areas, McCuddy's Marina, and the proposed overpass property (MFA, 2011e). Data were evaluated relative to potential risks to terrestrial ecological receptors, and in 2012 MFA submitted a final off-property TEE to Ecology (see Appendix B). Ecology approved the off-property TEE (Ecology, 2012b), and additional composite soil sampling was conducted at eight locations in September 2012 from residential areas, McCuddy's Marina, and the proposed overpass property to characterize potential for unacceptable risk to ecological receptors due to exposure to dioxins in soil (see Appendix B for the supplemental TEE).

2.3.3 Lake River

Historical investigations of Lake River include the following: In 1991, Foster, Drake, and Farlow (1999) sampled dioxins in carp, crayfish, and sediment collected at Lake River near the LRIS (also see Buck, 2004); an RFI conducted by Kleinfelder (1993) documented the relationship between on-property contaminants and sediment and water samples in and around surface water outfalls in Lake River; a study conducted for the USEPA in 1996 examined potential contaminant migration to Lake River (E&E, 1996); in 1999, the U.S. Fish and Wildlife Service (USFWS) collected sediment and fish tissue samples in Lake River (Buck, 2000); and in 2000, MFA collected sediment samples at three Lake River outfalls (MFA, 2002).

In April 2010, Anchor and MFA collected 30 surface sediment and 19 subsurface sediment samples from stations in Lake River in areas adjacent to Cell 2 and Cell 3 as part of the sediment RI. Sample locations were identified to confirm or update the understanding of sediment impacts, given historical sampling; define the vertical and lateral extent of sediment impacts; evaluate natural background conditions of dioxins in sediment; and characterize potential upstream contributions of impacts from a City stormwater outfall.

In the 2010 work, surface sediment samples were collected using manual and Van Veen methodologies; subsurface sediment sampling was performed using a vibratory core sampler (vibracore). Chemical testing included testing for conventionals, semivolatile organic compounds (SVOCs), and metals, as well as selective testing for polychlorinated biphenyls, diesel-range petroleum hydrocarbons, and dioxins. Grain size was also tested at each station. Results were reported in the sediment RI (Anchor and MFA, 2011), which was subsequently approved by Ecology (Ecology, 2011a).

2.3.4 Carty Lake

Historical investigations of Carty Lake include the following: an RFI conducted by Kleinfelder (1993) that documented the relationship between on-property contaminants and sediment and water samples in Carty Lake; a study conducted for the USEPA in 1996 that concluded that contaminants originating from the LRIS had migrated off site and into Carty Lake (E&E, 1996); and in 1999, collection by the USFWS of sediment and fish tissue samples from Carty Lake (Buck, 2000).

In April 2010, as part of the sediment RI, Anchor collected eight surface sediment and seven subsurface sediment samples from stations in Carty Lake in areas adjacent to Cell 2 and Cell 4 of the LRIS. Sediment samples were collected using manual (e.g., hand auger) methodologies. Chemical testing included testing for conventionals, SVOCs, metals, dioxins, and selected diesel-range petroleum hydrocarbons. Grain size was also tested in surface samples and selected subsurface samples. Results were reported in the sediment RI data memorandum (Anchor and MFA, 2011), which was subsequently approved by Ecology.

In September 2011, MFA conducted additional sampling in Carty Lake to further characterize dioxin impacts in sediment. Surface sediment samples were collected at eight locations in Carty Lake, and one subsurface (2 to 3 feet below mudline [bml]) sediment sample was collected at LRIS-CL-02 to define the vertical extent of dioxin impacts identified at this location in 2010. Chemical testing included testing for conventionals, dioxins, and grain size. Results were summarized and reported to Ecology (MFA, 2012a).

2.4 Geology

Four principal geologic units underlying the Site have been identified. These are fill, younger alluvium, older alluvium, and the Troutdale Formation. The terms "younger alluvium" and "older alluvium" are used to differentiate between unconsolidated geologic materials associated with two distinct depositional events. The designation of the Troutdale Formation is consistent with the nomenclature used by Mundorff (1960). A minor component of the LRIS consists of fill material. No significant lithologic change was observed from north to south across the LRIS. This approximately follows the strike of Lake River, which in turn approximates the strike along the Columbia River floodplain. Figure 2-4 shows the locations of geologic cross sections, and cross sections showing geologic interpretation of the LRIS are included as Figures 2-5 through 2-11. Figures 2-5 to 2-7 show lithologic change from north to south along the strike of Lake River. Figures 2-8 through 2-11 show lithologic change from east to west. The lithology is relatively consistent from north to south; however, from west to east the lithology varies from the uplands toward the Columbia River basin. The younger alluvium (clayey silts, sandy silts, and sands) thickens to the west toward Lake River and the Columbia River. The younger alluvium truncates the older alluvium and upper Troutdale Formation as it thickens east to west. Older alluvium (sandy gravel) is thicker to the east. The silty gravel is the aquitard and is believed to be the weathered surface of the Troutdale Formation. The upper Troutdale Formation gravels are truncated by the younger alluvium sand west of the LRIS. Therefore, the aquitard between the upper water-bearing zone (UWBZ) and the lower water-bearing zone (LWBZ) beneath Cell 1 and the eastern portion of Cell 2 is absent on the western portion of Cell 2.

A clay layer was identified below the sandy gravels of the upper Troutdale Formation in subsurface soils adjacent to the east and west sides of Lake River at the western portion of Cell 2 of the LRIS. The clay layer was very stiff, dry to damp, and is possibly part of the lower Troutdale Formation (Mundorff, 1960). Borings in other areas of the LRIS have not been advanced deeply enough to encounter the lower Troutdale Formation. The clay unit observed west of Lake River in the RNWR was 37 feet thick and was underlain by the Columbia River Basalt Group (CRBG). The clay unit likely prevents chemicals from migrating downward to the CRBG.

2.5 Hydrogeology

Detailed hydrogeologic descriptions are provided in the Cells 1 and 2 RI/FS and the Cell 3 RI/RA (MFA, 2007, 2011a). A recent letter reported on groundwater results through August 2011 (MFA, 2012c). Ecology's comments on the groundwater letter are incorporated in this document.

Figure 2-12 shows the monitoring wells that were present on the Site as of January 2012. Tables 2-1 through 2-6 present completion details for monitoring wells and for extraction and injection wells, summarize water levels, and show potential head differences between the water-bearing zones (WBZs) and between WBZs and surface water bodies.

Hydrogeologic data indicate that two WBZs occur beneath the Site. They have been termed upper and lower WBZs for purposes of discussion (UWBZ and LWBZ, respectively). The UWBZ occurs in the silts and sands of the younger alluvium and the sandy gravels of the older alluvium. The LWBZ occurs in the weakly cemented, sandy gravels of the Troutdale Formation. The UWBZ and LWBZ are separated by compact, iron-stained, silty sandy gravel that forms an aquitard over much of the eastern half of Cell 2 and all of Cells 1 and 3. This aquitard is not present in the western half of Cell 2.

The UWBZ is approximately 35 feet thick (approximately +5 to 15 feet National Geodetic Vertical Datum of 1927/1947 [NGVD] to -20 to -30 feet NGVD)[1] where the aquitard is present and is unconfined, with wells screened at differing depths in either the shallow or deep portion of the UWBZ in Cells 1, 2, and 3 and the RNWR. Shallow UWBZ wells are screened across the water table, and deep UWBZ wells are screened just above the aquitard or where the aquitard is not present at depths similar to those of the wells that are installed on top of the aquitard. Well construction details, including feet below ground surface (bgs), are included in Table 2-1. No monitoring wells were constructed in Cell 4 because reconnaissance groundwater sampling showed that contaminants were not present in Cell 4 above Method B groundwater CULs.

Potentiometric surfaces for the shallow and deep parts of the UWBZ have been evaluated separately because a significant vertical gradient was observed in wells screened in the different portions of the UWBZ, as described further below. Based on water levels in clustered well pairs that are screened in different parts of the UWBZ in Cells 1, 2, and 3 and the RNWR, the estimated groundwater flow direction in the shallow and deep portions of the UWBZ is generally toward Lake River and Carty Lake.

The LWBZ is approximately 50 to 60 feet thick and includes monitoring wells screened between -30 feet and -84 feet NGVD (see Table 2-1 for well construction details). The estimated groundwater flow direction in the LWBZ is toward Lake River.

---

[1] Relationship of NGVD and feet bgs is shown in Table 2-1.

While the elevation of the potentiometric surfaces in the shallow and deep UWBZ and the LWBZ varies throughout the seasons, the flow patterns throughout the Site are seasonally consistent (MFA, 2007, 2011a). Figures 2-13, 2-14, and 2-15 show the potentiometric surface for the shallow and deep UWBZ and the LWBZ, respectively, using August 2011 water levels. A comparison of the shallow UWBZ gradient and hydraulic head differences between Lake River and the shallow UWBZ indicates that the shallow portion of the UWBZ discharges to Lake River.

It is unlikely that groundwater from the deep UWBZ discharges to Lake River because (1) there is a downward vertical gradient from the shallow UWBZ to the deep UWBZ, and (2) there is fine-grained lithology between the base of Lake River (i.e., fine grained, low-permeability sediments) and the deeper portion of the UWBZ. The base of Lake River typically ranges from approximately -5 to -10 feet NGVD, while the deep UWBZ wells along the bank of Lake River range from approximately -20 to -50 feet NGVD. The hydraulic head difference between Lake River and the deeper UWBZ monitoring wells adjacent to Lake River shows an overall slight upward flow potential of groundwater (see Table 2-6); however, the lithology below Lake River is clayey silt to silty clay that is underlain by silty sand, sand, and sandy gravel, suggesting that the deep UWBZ does not discharge to Lake River. The difference in permeability between the clayey silt and the sand or sandy gravel underlying Lake River likely creates a boundary condition where groundwater will not discharge to Lake River. However, to be conservative, groundwater modeling evaluations assume that the deep UWBZ discharges to Lake River.

Groundwater from the LWBZ likely does not discharge to Lake River because (1) there is a generally downward vertical gradient from the deep UWBZ to the LWBZ (see Table 2-5), and (2) there is fine-grained lithology at the base of Lake River (i.e., fine-grained, low-permeability sediments). The average head difference between monitoring wells installed next to Lake River and in the deep UWBZ and LWBZ shows an overall potential downward gradient. The only nested wells that show slight upgradient potential (MW-55D and MW-58D) are next to Lake River, where there is no aquitard. Because of the vertical separation and tendency for a downward head potential, it is unlikely that the LWBZ discharges to Lake River.

The potentiometric surfaces for the shallow and deep UWBZ and the LWBZ show that groundwater flow is always toward Lake River or Carty Lake. Figures 2-13, 2-14, and 2-15 represent typical flow directions in these WBZs. Regular water level monitoring began in 2002, and since that time no flow reversals have been observed. Groundwater monitoring conducted in October 2004 to evaluate tidal effects on water levels indicates that water levels are only slightly influenced by tidal changes (approximately 0.05 foot [shallow UWBZ] and 0.3 foot [deep UWBZ]) in Lake River water levels (Table 2-6).

Twelve monitoring wells have been installed in and adjacent to the southern portion of Carty Lake in the UWBZ. This portion of the lake bottom is exposed when the lake level drops in the summer. During winter and spring months when the lake is recharged by rainfall and by Gee Creek at the north end of the lake, the southern area of the lake, where the monitoring well cluster pairs are located, is inundated. The water levels in the monitoring wells installed in the shallow and deep UWBZ are below the water level of Carty Lake, with an average head difference of 1.2 feet (see Table 2-6). The head difference indicates that the groundwater flow potential is downward. During installation of monitoring wells in and near Carty Lake, a potential confining layer composed of clay, which would restrict movement of water, was identified in the borings ranging from the lake bottom to 2.5 feet bgs. Based on lithology and head potential, the UWBZ will not discharge to Carty Lake (MFA, 2011a). However, to be conservative, groundwater modeling evaluations assume that the shallow and deep areas of the UWBZ discharge to Carty Lake.

As discussed in detail in the Cells 1 and 2 RI/FS (MFA, 2011a) and the Cell 3 RI/RA (MFA, 2007) conservative modeling evaluated compounds present in groundwater near the boundaries of Lake River and Carty Lake. The model assumed that groundwater in the entire UWBZ discharged to the surface water bodies. The modeling showed that concentrations in groundwater would not adversely impact surface waters. Specifically, modeling showed that compounds would naturally attenuate to concentrations below method reporting limits (MRLs) and/or to below ambient water quality levels or natural background concentrations before discharging to Lake River or Carty Lake. Additional information about the modeling, criteria, and results is provided in Section 5.2.3.

2.6 Stormwater System

The historical LRIS stormwater system and paved areas are shown in Figure 2-16, and the stormwater system is described below with respect to each cell. The interim actions on the LRIS have completely decommissioned the historical stormwater system, installed a clean cap, and installed a new stormwater system. Figure 2-17 shows the configuration of the new stormwater system.

2.6.1 Cells 1 and 2

Historically, Cells 1 and 2 drained to three outfalls: OF-2, OF-3, and OF-4. The drainage area of each outfall is described below.

OF-2 drained the west-central area of the LRIS and consisted of a series of trench drains, catch basins, and associated piping. Many of the top grates for the trench drains were constructed of wood planks or steel plates. Some of the trench drains were located inside buildings; however, they functioned as closed pipes, as the surface was solid.

OF-3 drained the north and central portions of the LRIS property and consisted of trench drains, catch basins, and piping. Industrial operations in the OF-3 drainage basin included the SER treatment system and wellfield. In addition to stormwater, OF-3 historically received boiler blowdown process water and treated groundwater from the SER system, permitted under WA0041025. The boiler blowdown entered the OF-3 collection system near CB-6, and the treated groundwater entered OF-3 near CB-11. Past improvements to the OF-3 basin in 1996 included replacement of the concrete pond with a catch basin and piping between the concrete pond area and CB-20. This improvement was removed in 2011 during the installation of the new stormwater system.

OF-4 drained the area north of the SPY and across from Division Street. The office building and Port employee parking were located in the OF-4 drainage basin. The stormwater system that drained to OF-4 consisted of trench drains, catch basins, and piping. Historically, this area was used for storage of treated dimensional wood. As an early interim action focused on addressing high zinc concentrations observed in OF-4 effluent, in June 2009 200 lineal feet of corrugated metal pipe between OF-4 and CB-33 was replaced with high-density polyethylene. The 2011 interim action in Cell 2 removed this improvement.

As part of the interim action completed in Cells 1 and 2 (see Section 4), the historical stormwater system and the changes made during early interim actions were removed and replaced with a new system, including three outfalls, OF-7, OF-8, and OF-9 (see Figure 2-17). The new system uses a series of catch basins to collect overland flow from the newly capped surface and discharges through the three new outfalls. Cell 4 stormwater is directed south to the new Cell 2 stormwater system and eventually discharges through OF-9.

2.6.2 Cell 3

Historically, Cell 3 had one outfall, known as OF-1. This outfall was used by PWT during their operations and discharged stormwater to Lake River from Cell 3.

OF-1 was decommissioned as part of the Cell 3 interim action during the summer of 2010 and was replaced with outfalls OF-5 and OF-6 (see Figure 2-17). Both outfalls receive drainage from Cell 3, which is composed of a vegetated, pervious surface that was capped as part of the interim action in Cell 3 (see Section 4).

2.6.3 Cell 4

Historically, stormwater on Cell 4 primarily infiltrated the surface. In 1996, the Port constructed a berm along the western edge of Cell 4 to direct noninfiltrating stormwater south to Cell 2 and eventually to the OF-3 basin.

During the Cell 4 interim action, two catch basins were installed, temporarily diverting stormwater to OF-3 (see Section 4). The 2012 Cells 1 and 2 interim action removed OF-3 and redirected Cell 4 stormwater to OF-9 in Cell 2 (see Section 4).

2.7 Aquatic Environment

The Lake River fluvial environment and Carty Lake aquatic environment are described in the following sections. Information is compiled from the sediment RI data memorandum (Anchor and MFA, 2011), Port investigations, and available regional information.

2.7.1 Lake River

2.7.1.1 Hydrodynamics

Lake River is hydraulically connected at its mouth to the Columbia River, through Bachelor Island Slough approximately 1 mile upstream of the mouth, and through a tide gate/flushing structure along the western shoreline of Vancouver Lake. The hydrodynamic regime in Lake River is dominated by influence from the Columbia River and, to a lesser degree, by upland drainage through several small creeks that flow into Lake River upstream of the LRIS.

Lake River receives upland drainage from a basin comprising approximately 150 square miles. The basin includes Vancouver Lake, Burnt Bridge Creek (which drains to Vancouver Lake), Salmon Creek, Whipple Creek, Flume Creek, and other, smaller, subbasins. Detailed hydrology for the Lake River system is not available; however, the estimated mean annual flow in Lake River is approximately 300 cubic feet per second (Bhagat and Orsborn, 1971). Water from the Columbia River historically has flowed or has been pumped into Vancouver Lake through a flushing channel during certain times of the year to facilitate flushing of the lake and Lake River. The flushing structure is composed of two 84-inch culverts with tide gate structures built under Lower River Road along the western shoreline of the lake (Gary Struthers Associates, Inc., 2005).

The flow direction in Lake River changes seasonally, depending on the flow (and water surface elevation) in the Columbia River and the flow into Lake River from upstream drainage (USEPA, 1979). For purposes of this discussion, "upstream" refers to the direction toward Vancouver Lake and "downstream" refers to the direction toward the Columbia River (i.e., Lake River mouth). Flow direction data have not been collected; however, the predominant flow direction is assumed to be toward the Columbia River. Observations indicate that surface water levels fluctuate during the summer and are connected with tidal influences. During the winter months, generally November through March, net flow is typically downstream toward the Columbia River because of the high volume of rain runoff from Salmon Creek and Burnt Bridge Creek. During the spring, generally April through June, snowmelt raises water levels in the Columbia River, and net flow in Lake River is toward Vancouver Lake. Flow velocity data are not available for Lake River; however, velocities are assumed to be low because of minimal upstream freshwater input (on average) and backwatering from the Columbia River during periods of high flow and/or high tide.

Data regarding tides on the Columbia River just upstream of the mouth of Lake River at St. Helens, Oregon, are available (NOAA Tide Station No. 9439201). The mean tidal excursion (difference between mean higher high water and mean lower low water, based on gauge data) at St. Helens is 3.3 feet. Water level data at St. Helens were compared to water levels taken during data collection in Lake River at the LRIS. The water levels in Lake River were, on average, 1 foot higher than at the St. Helens gauge during low tides, but were otherwise close in value to those measured at St. Helens. Water level data collected in Lake River during a water quality study of Vancouver Lake (Bhagat and Orsborn, 1971) showed similar trends.

2.7.1.2 Bathymetry

Lake River bathymetric surveys were conducted in 2004 and 2008 as part of the Port's planning activities. The bathymetric surveys included the entire length of Lake River adjacent to the upland portion of the LRIS. In addition, surface sediment elevations were obtained during the Lake River 2010 RI sediment sampling activities at specific locations and were consistent with elevations from the bathymetric surveys (Anchor and MFA, 2011). COE dredging records and existing bathymetry show relatively high deposition rates in Lake River in areas adjacent to the LRIS. Figure 2-18 shows the difference in Lake River mudline elevations from 1970 and the latest updated bathymetry surveys completed in 2010. Based on files provided by the COE, the greatest dredging depth in Lake River adjacent to the LRIS appears to be from 1970. The 1970 survey is a post-dredge survey, and no maintenance dredging has taken place since then, based on available information. The sediment thickness contours shown on Figure 2-18 are approximate because of survey measurement resolution in 1970 and the lateral extent of available data from the 1970 condition survey. Based on these evaluations, deposition rates in Lake River vary by location and can be up to 0.3 foot per year in the channel areas.

2.7.1.3 Sediment Characteristics

Grain size and total organic carbon (TOC) data were collected from 28 surface locations and nine subsurface locations during Lake River 2010 RI sediment sampling activities (Anchor and MFA, 2011). Tables 2-7 and 2-8 summarize surface and subsurface TOC and grain size data. In surface samples, TOC ranged from 0.34 to 3.2 percent. TOC concentrations in subsurface samples ranged from 0.13 to 3 percent.

Lake River surface sediment is characterized as a fine sand and silt, the relative quantities of which vary in different areas of Lake River. Subsurface sediment in Lake River varies, based on the sampling location. Generally, on the nearshore slope areas, the sediment is characterized as a fine, sandy silt to a depth of approximately 5 feet bml that then transitions to a fine to medium sand. Subsurface sediment in the channel areas of Lake River is generally a very fine, sandy silt from the length of the core up to 11 feet bml. Fine to medium sand was encountered in two cores (LRIS-LR-02 and LRIS-LR-13) in the Lake River channel area at approximately 6 to 7 feet bml. Surface grain size results are summarized in Table 2-7 and are shown on Figure 2-19. Boring logs are available in the sediment RI/FS (Anchor and MFA, 2011).

2.7.1.4 Fluvial Dynamics Summary

Low-flow velocity, bathymetric and historical analysis (see above), and grain size distribution all indicate that Lake River features a predominantly depositional fluvial environment. Typically, fine-grained sediments (silts, clays) dominate in relatively low-energy environments where current velocities are low enough to allow fine particles to settle out of the water column and remain deposited, whereas coarse sediments (sands, gravels) are indicative of higher-energy environments where fines are kept in suspension in the water column and/or winnowed out of previously deposited material and transported away during high-energy events (e.g., floods or anthropogenic disturbances, such as propeller wash and dredging). Figure 2-19 shows that percent fines in most Lake River areas are generally high (> 40 percent) and can exceed 70 percent, indicating areas of deposition. Percent fines are relatively low (< 20 percent) in several areas directly adjacent to outfalls that discharge near the water/sediment interface, likely causing some erosion. For comparison, fines in the mid-channel Willamette River in the Portland Harbor Superfund Site are generally less than 20 percent, excluding areas known to be highly depositional (Integral et al., 2009). While local scouring may occur during large flood events, outfall discharge, and because of propeller wash, the fluvial characteristics suggest that deposition occurs over most of Lake River's length. This is further supported by the complete filling of the historical turning basin that had been dredged for barges offshore of Cell 3 (see Figure 2-1).

2.7.2 Carty Lake

2.7.2.1 Hydrodynamics

Carty Lake is a 52-acre, ponded wetland located in the RNWR Carty Unit. During the rainy season, Gee Creek and Carty Lake can be hydraulically connected at the lake's northern end. During most of the year, Carty Lake has no outlet. Water levels range from 3 to 10 feet, varying seasonally, and are generally higher during winter and spring and lower during summer and fall. Water fluctuations are generally muted relative to Lake River, with increases and decreases occurring more gradually because there is no direct connection with the Columbia River.

During installation of monitoring wells in and near Carty Lake, a potential confining layer composed of clay, which would restrict movement of water, was identified in the borings. Clay was present upland near Carty Lake between approximately 5.6 and 9.0 feet bgs, and was most prominent in Carty Lake sediments from the surface to approximately 2.5 feet bgs. Based on lithology and head potential, the UWBZ does not discharge to Carty Lake, and it is unlikely that Carty Lake significantly discharges to the UWBZ in the lake's southern portion (MFA, 2011a).

2.7.2.2 Sediment Characteristics

Grain size and TOC data were collected from all surface and some subsurface sediment samples during 2010 (Anchor and MFA, 2011) and 2011 sediment sampling activities (MFA, 2012a). Carty Lake sediment characteristics are summarized in Table 2-9. In surface samples, TOC ranged from 1.3 to 5.4 percent. TOC generally decreased with depth (e.g., LRIS-CL-02 at 2.8 percent [1 to 2 feet bml] and 0.84 percent [2 to 3 feet bml]).

Percent total fines (silt and clay) generally dominated the particle size distribution, ranging from 56 to 93 percent in surface samples, with an average and median of 75.9 percent and 75.9 percent, respectively (see Figure 2-20).

2.7.2.3 Fluvial Dynamics Summary

Carty Lake is a low-dynamic environment. Hydrodynamics and grain size distribution indicate that Carty Lake features a low-energy, depositional environment. As indicated above, percent fines in Carty Lake are high, generally over 75 percent fines. Carty Lake's hydraulic exchange with other surface water bodies is limited to unusually high water events. Further, given that human access to Carty Lake is limited and boat access is restricted, anthropogenic high-velocity events are not expected.

2.8 Current and Future Land Use

Figure 2-21 depicts current zoning designations for the Site. Current and future land uses are summarized in this section.

2.8.1 Lake River Industrial Site

The LRIS is currently zoned for waterfront mixed use. Small portions of the LRIS were used for industrial purposes while the Port conducted RIs and interim actions. The LRIS is currently vacant and the Port is planning to redevelop it. Future land use may include a combination of commercial, light industrial, and retail developments. Ground floor residential and heavy industrial uses are not part of future land use plans and are prohibited by the zoning code. The Port plans to retain ownership of the LRIS. To support these types of land use, portions of the LRIS require placement of up to 5 feet of fill before development to bring their elevation above the 100-year floodplain.

2.8.2 Upland Off-Property

The upland off-property area is located north, east, and south of the LRIS (see Figure 2-2). The upland off-property area includes Port-owned properties and non-Port-owned properties. Current and future land uses for the following areas include:

- Port Railroad Avenue properties (east of LRIS): The Port owns two parcels along Railroad Avenue just east of the LRIS. These properties are undeveloped at this time and are zoned waterfront mixed use. The Port anticipates developing commercial parking lots on these parcels in the future; the area would require fill and commercial-grade asphalt layering for a single-level, at-grade parking lot.
- Port marina property (south of LRIS): The property immediately south of the LRIS includes the parking and landscaped areas for the Port-owned boat launch. This area is currently zoned waterfront mixed use. The Port plans to retain ownership and continue to use the area as parking for the foreseeable future.
- Port proposed overpass property (south of LRIS): The overpass area was formerly part of McCuddy's Marina and includes the footprint of a proposed overpass development. This area will be covered with a cap consistent with LRIS capping options.
- McCuddy's Marina (south of LRIS): The privately owned marina contains parking and open space for residential boathouses. This area is currently zoned waterfront mixed use. It is likely that the marina site use will remain unchanged for the foreseeable future.
- RNWR property (north of LRIS): This area is currently and likely will remain zoned parks/open space.
- Other off-property areas (east of LRIS): The remaining off-property area east of the LRIS is currently zoned low-density residential (the area is zoned primarily for 5,000-square-foot or larger lots, but an area zoned for 7,500-square-foot or larger lots is designated in the northern reach); a small area in the northwest is zoned urban public. Primary land use is expected to remain residential.

Except for the RNWR property, there is substantial development in the upland off-property area and there is minimal viable ecological habitat.

2.8.3 Lake River

Lake River is an area of high human traffic and boat use; a boathouse community, in-water and overwater structures (including the Port's pump house), and a public access float dock are all located along Lake River's eastern shoreline. The location and status of Lake River channel maintenance are described in Section 2.2.3. Future land use at the adjacent LRIS Cells 1, 2, and 3 may include a combination of commercial, light industrial, and retail developments.

Fishing activity in Lake River likely is low, as fishing is generally more popular in the cooler waters of the Columbia River. Under the RNWR 2010 Comprehensive Conservation Plan, the RNWR will evaluate fishing access enhancement opportunities in the River "S" Unit. This may result in an increase of fishing visits at Lake River, although currently only approximately 260 lake and bank fishing visits (the RNWR has no developed facilities specifically for fishing) take place annually throughout the entirety of the RNWR that is open to the public (i.e., the Carty Unit) (USFWS, 2010).

2.8.3.1 Natural Resources

Because of its proximity to the Columbia River, Lake River can be used by anadromous fish, and nearby areas may provide habitat for a diversity of species, including fish, plants, birds, and mammals. A Lake River habitat evaluation and special-status species information are provided in Appendix C. Lake River ecology is summarized below:

- Special-status fish species potentially present in Lake River include: steelhead (rainbow trout), Chinook salmon, coho salmon, chum salmon, sockeye salmon, coastal cutthroat trout, and Pacific smelt (Eulachon). Federally designated Pacific salmon and Eulachon critical habitat is identified for Lake River.
- Washington State priority-designated palustrine aquatic habitats are present along stretches of Lake River. In addition, three special-status plant species have been identified as historically or potentially present in the Carty Unit along which Lake River runs: water howellia, Bradshaw's desert parsley, and Nelson's checker-mallow. Where Lake River passes high-human-impact areas, vegetation such as reed canary grass, yellow marshcress, California false indigo, Himalaya blackberry, Pacific willow, Douglas fir, black cottonwood, and nonnative invasive shrub species is common.
- Common waterbird species that use wetlands along Lake River include coot, pied-billed grebe, double-crested cormorant, great blue heron, and the great egret. The riparian and floodplain forests adjacent to Lake River host breeding terrestrial species, including commonly seen resident and migrant species such as downy woodpecker, northern flicker, and western wood-pewee. Washington Department of Fish and Wildlife (WDFW) priority-designated purple martin foraging areas occur near Lake River. At least six pairs of bald eagles are known to nest and breed within approximately 1 mile of Lake River.
- American beaver, mink, muskrat, river otter, common opossum, and nutria inhabit wetlands along Lake River. Other mammals, including mule deer, coyote, raccoon, and

striped skunk, occur along the Lake River shoreline. Special status-listed Columbian white-tailed deer have recently been translocated to the RNWR and may occur near Lake River.

2.8.4 Carty Lake

Carty Lake has limited recreational uses (USFWS, 2010), but can include wildlife photography, wildlife observation, environmental education, and fishing. Boating is not allowed. Trails lead to the Gee Creek portion of the Carty Unit for fishing. Carty Lake itself is not currently readily accessible to visitors; the RNWR maintains a mowed seasonal footpath along the north end of the lake, but this path is flooded during high-water periods and is not heavily used. However, the potential exists for the RNWR to work with the Port to develop a loop trail adjacent to Carty Lake for the public to access from the Port property. At the RNWR, fishing is allowed in areas open to the public on the Carty Unit; the Carty Unit receives approximately 260 fishing visits per year, with use distributed among Gee Creek, Duck Lake, Middle Lake, and Carty Lake (USFWS, 2010), suggesting that public-use activities near or in Carty Lake are currently uncommon.

In the future, USFWS may consider the feasibility of reconnecting Carty Lake either to the Columbia River via Gee Creek or to Lake River through a constructed channel. Of the two options, the Gee Creek connection likely would be most feasible in terms of construction and access for salmonids such as cutthroat trout and coho salmon. The resulting hydrology of the lake could vary considerably, depending on the option selected; however, some changes to the fish, wildlife, and vegetation communities would be expected (USFWS, 2010), and implementation would need to consider the potential for contaminant impacts to fish and the potential for contaminant migration.

Potential Carty Lake restoration efforts could promote more robust emergents such as tule, wapato, and cattail, and submergents such as Eurasian milfoil and reed canary grass would probably still be prevalent in the seasonally flooded portions of the wetlands; however, mechanical treatments such as disking and mowing would allow the RNWR to improve the coverage of native vegetation. Additional efforts to establish riparian forest and shrub vegetation along Gee Creek and the east side of Carty Lake may be considered. Carty Lake historically contained a large native wapato bed, which is currently confined to small areas of Carty Lake. The Cowlitz Tribe historically incorporated wapato into their diets (USFWS, 2010), and may desire to use Carty Lake for wapato harvest again in the future (Mercuri, 2012).

2.8.4.1 Natural Resources

Diking and filling, in conjunction with agricultural development, have been a primary cause of decreases in tidal wetland area in the Columbia River estuary. These actions have eliminated most of the natural tidal exchange of water, materials, and organisms between the Columbia River and the adjacent floodplain forests and overflow lakes. Because Carty Lake lacks a consistent connection with the Columbia River system, the lake's functionality has been reduced, particularly with respect to anadromous fish rearing habitat and native mussel beds.

Carty Lake and its adjacent areas may provide habitat for a diversity of species, including fish, plants, birds, and mammals. A Carty Lake habitat evaluation and special status species information are provided in Appendix C. Carty Lake ecology is summarized below:

- As with other permanent nontidal wetlands on the RNWR, water quality and aquatic plants have been negatively impacted by introduced carp. Fish found in the RNWR where Carty Lake lies include primarily warm water fish, e.g., introduced carp and largescale sucker. Because Carty Lake does not maintain connectivity with the Columbia River, state and federally listed anadromous species such as Chinook and coho salmon are currently unlikely to utilize Carty Lake for spawning or rearing habitat. Federally designated Pacific salmon critical habitat is identified for Gee Creek to the northeast of Carty Lake.
- The lake contains WDFW priority-designated palustrine habitat, and Oregon white oak woodland priority habitat occurs directly adjacent to the east and north of Carty Lake. Three special-status plant species have been identified as historically or potentially present in the Carty Unit: water howellia, Bradshaw's desert parsley, and Nelson's checker-mallow. In addition, Oregon white oak woodlands are a WDFW priority-designated habitat. Oregon white oak woodlands occur adjacent to the east and north of Carty Lake. Wapato beds, confined to small areas of Carty Lake, are composed of emergent aquatic plants (tubers) in the family *Alismataceae* and are good indicators of suitable red-legged frog breeding habitat (USFWS, 2010).
- Common piscivorous species that use RNWR wetlands such as Carty Lake include double-crested cormorant, great blue heron, and great egret. Tundra and trumpeter swans are common in the winter, as are dabbling ducks such as American widgeon, northern pintail, and mallard. Other waterbirds such as coot and pied-billed grebe are also abundant. Special-status sandhill crane may aggregate at Carty Lake. The riparian and floodplain forests adjacent to Carty Lake host breeding terrestrial species, including commonly seen resident and migrant species such as downy woodpecker, northern flicker, and western wood-pewee. Bald eagles have been sighted using riparian trees on or near the RNWR for roosts from December through March, and three pairs are known to nest and breed approximately 1 mile northeast of Carty Lake.
- American beaver, mink, muskrat, river otter, common opossum, and nutria inhabit wetlands in the RNWR such as Carty Lake. Other mammals, including mule deer, coyote, raccoon, and striped skunk, may occur along the Carty Lake shoreline. Special status-listed white-tailed deer may occur on or near Carty Lake.

3 NATURE AND EXTENT

This section delineates areas of contamination based on available information from previous and current investigations. Chemicals detected in one or more samples are screened against relevant criteria to determine IHSs. IHSs are those compounds that are included for further consideration during the development of the cleanup approach because of their frequency, mobility, persistence in the environment, or toxicity. Compounds can be eliminated from further consideration on a site-specific basis, using the following evaluation factors outlined in WAC 173-340-703:

- The toxicological characteristics of the hazardous substance relative to the concentration of the hazardous substance at the Site
- The chemical and physical characteristics of the hazardous substance that govern its tendency to persist in the environment
- The chemical and physical characteristics of the hazardous substance that govern its tendency to move into and through environmental media
- The natural background concentrations of the hazardous substance
- The thoroughness of testing for the hazardous substance at the Site
- The frequency at which the hazardous substance has been detected at the Site
- Degradation by-products of the hazardous substance

The nature and extent of chemicals detected in soil (on the LRIS and off-property), in groundwater, and in sediment (in Carty Lake and in Lake River) are described below.

3.1 Data Usability

Analytical results collected during Port RI activities are reviewed for usability and are qualified consistent with USEPA procedures and appropriate laboratory and method-specific guidelines. Data quality review memoranda for historical data that have been previously submitted to Ecology are available in the reports referenced in Section 2. Laboratory analytical reports and data review memoranda for data not previously submitted to Ecology (i.e., SER soil and groundwater results discussed in Section 4) are provided in Appendix D. Historically collected soil data are presented in Appendix E. All validated analytical data have been uploaded to Ecology's Environmental Information System database.

Consistent with WAC 173-340-708(8), mixtures of dioxins and carcinogenic PAHs (cPAHs) are considered as single hazardous substances when evaluating compliance with CULs and remediation levels (RELs) such that the toxicity of a particular congener is expressed relative to the most toxic dioxin congener (i.e., 2,3,7,8-tetrachloro dibenzo-p-dioxin [TCDD] and benzo(a)pyrene, respectively). The toxicity of dioxins and cPAHs as groups was assessed using a toxic equivalency approach. Each congener in the group is assigned a toxic equivalency factor (TEF) describing the toxicity of that congener relative to the toxicity of the reference compound, TCDD or benzo(a)pyrene. For example, a congener that is equal in toxicity to TCDD would have a TEF of 1.0. Similarly, a congener that is half as toxic as TCDD would have a TEF of 0.5, and so on. Multiplying the concentration of a congener by its TEF produces the concentration of TCDD or cPAH that is equivalent in toxicity to the congener concentration of concern, known as the toxicity equivalent concentration (TEC). Computing the TEC for each congener (Ci in the equation below) in a sample, followed by summing all TEC values, permits expression of all congener concentrations in terms of a total TCDD or cPAH toxicity equivalent (TEQ) (i.e., dioxin TEQ and cPAH TEQ, respectively):

$$\text{Dioxin TEQ} = \sum_{i=1}^{k} \text{Ci x TEFi}$$

$$\text{cPAH TEQ} = \sum_{i=1}^{k} \text{Ci x TEFi}$$

Dioxin and cPAH TEQs were qualified and calculated as follows:

- Congeners qualified as non-detect and flagged with a "U" are used in the TEQ calculation at one-half the associated value.
- Congeners qualified as estimated and flagged with a "J" are used without modification in the TEQ calculation.
- Congeners qualified as non-detect with an estimated limit (i.e., flagged with a "UJ") are used in the TEQ calculation at one-half the associated value.
- If all congeners in a chemical group are undetected, the group sum is reported as undetected.

For further details on data validation and the TEQ calculation methodology used for dioxin screening, see Appendix F. The most recent effort to develop TCDD TEFs for dioxins was made at an expert meeting organized by the World Health Organization in 2005 (Van den Berg et al., 2006) and used multiple lines of evidence to develop a consensus-based list of TEFs for mammal, bird, and fish receptors. TEFs for cPAHs were used consistent with WAC 173-340-708(8).

3.2 Soil

Drawing 1 shows all soil sample locations for the Site, including reconnaissance borings, surface soil samples, test pits, monitoring wells, and confirmation samples from excavations. Tables showing the data from soil collected on the LRIS are included in the Cell 3 RI/RA (MFA, 2007), Cell 4 RI/FS (MFA, 2010e), and Cells 1 and 2 RI/FS (MFA, 2011a) and are included in this report as Appendix E. Detailed results for specific areas of the Site are discussed below. Interim actions have been conducted or are currently under way to address the impacts described below. Section 4 describes the interim actions.

3.2.1 LRIS

Previous LRIS investigations have provided data regarding surface and subsurface on-site soil from 1993 to the present. Results were previously reported to Ecology (see Section 2.3). To evaluate the nature, extent, and potential risks associated with exposure to soil, chemical contamination was compared to MTCA Method B CULs for unrestricted land use. Because MTCA Method B CULs do not take into account naturally occurring background levels of metals or regional ambient levels of organic chemicals, some MTCA Method B CULs are above natural or anthropogenic background levels. Therefore, chemical concentrations in soil were also compared with background levels. No value for MTCA Method B CULs is provided for petroleum hydrocarbons. Petroleum hydrocarbon values are compared to MTCA Method A CULs. Chemical concentrations in soil were also screened against the wildlife ecological indicator concentrations (EICs) provided in MTCA Table 749-3 as part of the LRIS TEE (MFA, 2010a).

Although applicable only to industrial sites, MTCA Method C CULs for industrial use were compared to soil concentrations on the LRIS. This comparison was conducted to determine areas where wood-treating chemicals were present at significant concentrations. "Hot spots" were identified by comparing soil concentrations to MTCA Method C CULs and generally were excavated later, during interim actions (see Section 4).

An on-property TEE (MFA, 2010a) was conducted for the entire LRIS to gather sufficient information to evaluate the ecological protectiveness of remedial alternatives. The TEE included problem formulation and an ecological screening evaluation, as well as an evaluation of the nature and extent of IHSs on the LRIS, as summarized below. The on-property TEE is provided in Appendix B.

Data used to evaluate the nature, extent, and potential risk associated with chemical concentrations in soil were previously submitted to Ecology and are summarized in tables provided in Appendix E. Figures depicting the nature and extent of impacts were evaluated by creating either distribution profiles per depth or three-dimensional (3-D) renderings, using Environmental Visualization System™ software (EVS), which uses kriging (i.e., a geostatistical method of estimating concentrations based on spatially limited data) to estimate concentrations beyond the locations at which the samples were collected. The soil figures used to graphically depict soil impacts throughout the LRIS are included as Appendix G. All soil data were used to create the figures in Appendix G. The figures show MTCA Method B CUL exceedances, except for the arsenic in the Cell 3 figures, which historically has been compared to MTCA Method A soil CULs based on direct contact and adjusted for natural background concentrations for Washington State. Appendix G has three sections:

- G-1 includes Figures 6-1 through 6-9 from the Cells 1 and 2 RI/FS (MFA, 2011a). Figure 6-1 depicts soil investigation locations and samples by depth used to prepare the 3-D models; this figure includes all soil data. Figures 6-2 through 6-9 in Appendix G-1 show the most widespread and/or toxic of the IHSs in Cells 1 and 2 (i.e., arsenic, cPAH TEQ, PCP, and dioxin TEQ). Two figures were produced for each of the IHSs, one showing impacts within the top 6 feet of soil and the second depicting impacts from 6 feet to 15.0 feet bgs. Figures 6-8 and 6-9 in Appendix G-1 show distribution of dioxin TEQs, but were not modeled because the number of samples and the data density were too low to create an output with requisite certainty.
- G-2 includes Figures 4-1 through 4-12 from the Cell 3 RI/RA (MFA, 2007) and Figure 1 from a letter evaluating dioxin concentrations (MFA, 2010b). Figures 4-1 through 4-9 in Appendix G-2 show the limit of the most widespread and/or toxic of the IHSs in Cell 3 tested for as of 2007 (i.e., arsenic, chrysene, and PCP) for three different soil depths (i.e., 0 to 3.0 feet, 4.0 to 9.0 feet, and 10.0 to 15.0 feet bgs). When the Cell 3 RI was completed, the rules regarding the mixtures of cPAHs (WAC 173-340-708(8)(e)) had not been published. Therefore, cPAHs were evaluated as individual substances, not as a

single hazardous substance. Chrysene was used because it was the most prevalent of the cPAHs. As part of the Cell 3 FS (MFA, 2011c), MFA used the TEFs to evaluate cPAH TEQs and found that the cPAH TEQ distribution is fairly similar to the distribution of cPAHs expressed with chrysene (i.e., it is only slightly reduced).

Dioxins were evaluated after the Cell 3 RI/RA was completed and approved by Ecology. Dioxins were evaluated as part of the Cell 3 FS. Figure 1 in Appendix G-2 shows the dioxin TEQ concentrations throughout the LRIS.

- G-3 includes Figures 5-1 through 5-5 from the Cell 4 RI/FS (MFA, 2010e). Figures 5-1 through 5-4 in Appendix G-3 show the distribution of the most widespread and/or toxic of the IHSs in Cell 4 (i.e., arsenic, cPAH TEQ, PCP, and dioxin TEQ). Figure 5-5 in Appendix G-3 shows the distribution of IHS exceedances throughout Cell 4.

3.2.1.1 IHSs

The following chemicals exceeded the MTCA Method B CULs for soil, based on dermal contact and ingestion, or other applicable CULs such as MTCA Method A CULs for arsenic and petroleum hydrocarbons, and are considered IHSs. The screenings conducted to select IHSs are detailed in the RI/RA or RI/FS reports for each Cell (MFA, 2007, 2010e, 2011a).

- **Metals:** arsenic and total chromium
- **PAHs:** 2-methylnaphthalene, acenaphthene, fluoranthene, fluorene, naphthalene, pyrene, cPAHs, benzo(a)pyrene
- **SVOCs:** dibenzofuran
- **Volatile organic compounds (VOCs):** 1,1,2,2-tetrachloroethane, 1,2,4-trimethylbenzene, styrene
- **Chlorinated phenolics:** PCP
- **Petroleum hydrocarbons:** diesel-range organics (DROs) (diesel), residual-range organics (RROs) (lube oil), gasoline-range organics (gasoline)
- **Dioxins**

Based on the leaching to groundwater pathway, IHSs were not selected in Cells 3 and 4, but were selected for Cells 1 and 2. An evaluation presented in the Cell 3 RI/RA (MFA, 2007) indicated that Ecology's three-phase partitioning model-derived soil CULs generated using the online "Cleanup Levels and Risk Calculation" worksheet did not accurately predict leaching to groundwater in Cell 3. The model predicted significantly higher groundwater concentrations than those actually measured in groundwater. Therefore, empirical groundwater data are used to evaluate compliance with groundwater CULs protective of drinking water in Cell 3. There were no groundwater exceedances in Cell 4; therefore, the leaching to groundwater pathway was not evaluated. However, because empirical data in Cells 1 and 2 showed that leaching to groundwater was occurring, the leaching to groundwater pathway was further evaluated for these cells. The following chemicals exceeded the calculated MTCA Method B CULs for soil in Cells 1 and 2, based on the leaching to groundwater pathway (MFA, 2011a):

- **Metals:** arsenic, cadmium, total chromium, and copper
- **PAHs:** acenaphthene, anthracene, fluoranthene, fluorene, naphthalene, pyrene, cPAHs
- **SVOCs:** carbazole
- **Chlorinated phenolics:** PCP
- **VOCs:** 1,1,2,2-tetrachloroethane, benzene, toluene, ethylbenzene, m,p-xylenes, isopropylbenzene, methylene chloride, styrene, tetrachloroethene (PCE)
- **Dioxins**

However, only a subset of these chemicals was actually detected above Method B CULs in groundwater in Cells 1 and 2. The historical operations that impacted soil ceased years ago, nonaqueous-phase liquid (NAPL) has been removed from the Site through the SER system and concrete pond removal, and there are no current operations generating contaminants. Therefore, it is likely that leaching of chemicals from soil to groundwater has already occurred. The lack of detections in groundwater for some of the chemicals listed above indicates that these chemicals are unlikely to cause unacceptable risk via the leaching to groundwater pathway. Therefore, the IHSs for the leaching to groundwater pathway are limited to those chemicals detected in groundwater and are summarized as follows:

- **PAHs:** acenaphthene, fluoranthene, fluorene, naphthalene, pyrene, cPAHs
- **SVOCs:** carbazole
- **Chlorinated phenolics:** PCP
- **VOCs:** 1,1,2,2-tetrachloroethane; 1,2,4-trimethylbenzene; benzene, styrene

Locations where IHSs were detected in soil above Method B CULs (or Method A CULs for petroleum hydrocarbons), background levels, and/or ecological screening levels are present throughout the LRIS. The details of the exceedances throughout the LRIS are summarized in the RI/RA or RI/FS reports for the different cells (MFA, 2007, 2010e, 2011a). A general description of the nature and extent of impacts on the LRIS is provided below. Figures in Appendix G show the spatial distribution of the most widespread and/or toxic chemicals in surface and subsurface soil, including, but not limited to, arsenic, PCP, cPAHs, and dioxins.

The distribution of IHSs in soil above CULs indicates that the greatest impacts (with the possible exception of dioxins) were in the general vicinity of the SER area (i.e., Cell 1 and portions of Cell 2) and the area around the former concrete pond (see Figures 6-2 through 6-9, Appendix G-1). The focus in the SER area of the treatment system was to remove mobile contaminants and NAPL. NAPL was released at the surface through spills that migrated through the vadose zone to the water table. The soil in the SER area from the surface to the WBZ, being mostly sandy gravel, did not restrict the migration of NAPL. The operation and performance of the SER system and the extent of NAPL pre- and post-SER operation are summarized in Section 4.2. However, considering that most of the data were collected over a decade ago and in view of the recent history of active treatment, some of the chemicals (especially the more mobile compounds) identified as soil IHSs are below their respective MTCA Method C soil CULs. Less mobile IHSs such as arsenic and dioxins were still present in soil above MTCA Method C CULs after SER treatment (see Section 3.2.1.2).

NAPL has also been observed in the former concrete pond area. The soils near the former concrete pond are clays and silts, which limit the migration of NAPL. The fine-grained soil prevented the SER system from operating effectively in this area, and SER has therefore not been applied. There were many NAPL-containing soil samples in this area that were not submitted for analysis because it was assumed that they exceeded CULs. The extent of the NAPL in the concrete pond area is shown on Figure 3-1. As part of the Cells 1 and 2 interim actions in 2011, soil containing NAPL from the concrete pond area was removed to a depth of 15 feet bgs (see Section 4.4.2.1).

In Cell 2 outside the former concrete pond area, impacts above Method B soil CULs were highest in soil near the surface; however, soil below 6.0 feet also showed impacts directly downgradient of Cell 1 and was included in the SER treatment.

IHSs in the remaining areas of the LRIS generally appear to be limited to shallow soils (within the top 6 feet bgs). IHS impacts in Cell 4 generally were limited to the top 2.5 feet of soil and likely were the result of vehicles tracking chemicals from other parts of the LRIS. Impacts above Method B CULs extended below 2.5 feet bgs only in three locations and did not extend below 10.0 feet bgs in Cell 4.

The spatial distribution of Cell 3 impacts indicates that the source likely was related mainly to treated-wood storage and drippage throughout the area. Impacts were greatest at the surface and generally decreased with depth (see Figures 4-10 through 4-12, Appendix G-2). Impacts in Cell 3 tended to extend deeper than Cell 4, with much of the soil down to 6.0 feet bgs exceeding one or more IHSs.

As indicated above, a TEE of the LRIS was performed (see Appendix B). The chemicals that exceeded wildlife ecological screening levels were the same chemicals selected as IHSs, with the exception of barium and zinc. However, in general, the IHSs that exceeded wildlife ecological screening levels were colocated with other IHS CUL exceedances.

3.2.1.2 SER Soil Evaluation

The SER was an emergency interim action designed to remove mobile contaminants (e.g., VOCs and some SVOCs). The SER system was not anticipated to be effective in removing less mobile compounds, such as metals and dioxins. The SER emergency action is further described in Section 4.

In November 2011, MFA conducted a soil investigation to evaluate areas in the SER area where chemical concentrations had exceeded Method C CULs. The purpose of the soil and groundwater sampling in the SER area was to evaluate subsurface conditions after operation of the SER system (see Figure 3-2).

The sampling was conducted consistent with the Ecology-approved sampling work plan (MFA, 2011f), with a few exceptions described below.

Five borings (B-316 through B-320) were completed to assess the soil that had been placed in Cell 1 during previous interim actions and drilling activities. Composite samples were collected from soils placed in Cell 1 and analyzed for PCP, cPAHs, arsenic, DROs, and RROs. Soil that was placed in Cell 1 was generally beneath approximately 0.5 to 1.0 foot of gravel, and the contact with the original tank farm surface was easily defined by a geofabric that had been placed prior to filling. The thickness of soil placed in Cell 1 in the five borings was found to average about 3 to 4 feet. The boring logs are included as Appendix H. The work plan provided for collecting two composite samples per borehole; however, during the fieldwork the thickness of the imported soil was less than anticipated. After consultation with Ecology, it was agreed that a single composite sample would be appropriate if the identified soil sampling interval was less than 4 feet.

Six borings (B-321 through B-326) were advanced to assess past discrete soil locations exceeding MTCA Method C CULs (see Figure 3-2). Figure 3-2 also shows the historical sample locations. Samples were collected for arsenic, PCP, SVOCs, total petroleum hydrocarbons (TPH), and/or dioxins. Discrete soil samples were collected from elevations consistent with past detections. One of the historical locations was beneath some of the SER equipment, and a boring could not advance at this location. Therefore, after consultation with Ecology, one boring (B-325) was installed to assess conditions at both TP-10 and B-85.

Under standard chain-of-custody procedures, soil samples were submitted to Pace Analytical Services of Minneapolis, Minnesota, for analysis of dioxins, and to Specialty Analytical of Clackamas, Oregon, for remaining analyses. Tables 3-1 through 3-4 summarize the soil analytical results from the November 2011 investigation and the historical sample results for the discrete sample locations.

The data were compared to the MTCA Method B and C CULs, except for arsenic and petroleum hydrocarbons, which were compared to natural background concentrations and Method A CULs, respectively.

3.2.1.3 Discrete Soil Analytical Results

The 2011 arsenic concentrations ranged from 4.02 to 241 milligrams per kilogram (mg/kg), and all but one sample from B-321 were higher than the natural background concentration of 5.81 mg/kg (see Table 3-1). The PAH and PCP concentrations were all below MTCA Method B CULs for sample locations, except for B-323 (PCP at 8,380 micrograms per kilogram [μg/kg]) and B-321 and B-322 (cPAH TEQ at 225 μg/kg and 15,626 μg/kg, respectively) (see Table 3-3).

Concentrations of IHSs in soil decreased between historical sample collection (between 1991 and 2009) and the 2011 sampling event, except for the sample collected from B-322, which was evaluated relative to historical sample B-306, collected in 2009.

The arsenic and dioxin TEQ concentrations (241 mg/kg and 8,100 nanograms per kilogram [ng/kg], respectively) exceeded the MTCA Method C CULs of 88 mg/kg for arsenic and 1,500 ng/kg for dioxin TEQ in sample B-322 at 2.5 feet bgs.

3.2.1.4 Composite Soil Analytical Results

Tables 3-1 through 3-4 show the composite analytical results. Arsenic concentrations were above natural background concentrations, but only the sample from B-317 at 1.25 feet bgs exceeded the Method C CUL, with a concentration of 140 mg/kg. cPAH TEQs in B-317 (874.9 μg/kg) and B-318 (270.74 μg/kg) exceeded Method B CULs of 140 μg/kg. PCP concentrations in B-318 (13,700 μg/kg) and B-320 (52,300 μg/kg) also exceeded Method B CULs. Other IHSs analyzed were below their respective MTCA Method B CULs or Method A for TPH.

The arsenic concentration in sample B-317 at 140 mg/kg was the only IHS to exceed the MTCA Method C CULs.

3.2.2 Off-Property

Several off-property investigations have been conducted to characterize surface soil in the following areas: Port-owned properties and public rights-of-way in the neighborhood to the east of the LRIS, Port-owned properties and McCuddy's Marina to the south of the LRIS, and RNWR property north of the LRIS Cell 4 (see Figure 3-3). Off-property sampling was conducted in July 2008; in February 2009; in June, August, and September 2010; and in May 2011 at the request of Ecology (MFA, 2010b,d; 2011e). Additional composite soil (0 to 6 feet bgs) sampling for dioxins was conducted at eight historical surface soil locations in September 2012 (see Appendix B). Off-property sampling efforts focused on the contaminants known to have impacted LRIS soils (i.e., PCP and associated chlorinated phenolics, PAHs, metals [arsenic, chromium, copper, and zinc], and dioxins).

3.2.2.1 IHSs

Contaminants at the off-property area are identified as soil IHSs, based on comparison to MTCA Method B soil CULs protective of human health and environment for residential properties (WAC 173-340-705). Examination of CULs protective of ecological receptors, in a TEE using risk-based criteria, is summarized briefly below and presented in detail in Appendix B. In the off-property areas, no PCP or associated chlorinated phenolics have been detected above Method B CULs. Similarly, PAHs were rarely detected and no exceedances of Method B CULs occurred. Thus PCP and PAHs are not selected as IHSs for off-property soil. See Table 3-5 for a summary of screening results.

Chromium, copper, and zinc were all below Method B CULs in off-property soils and are therefore not considered IHSs. Arsenic concentrations exceeded the Method B CUL of 0.67 mg/kg; however, arsenic is commonly found at levels that exceed risk-based CULs as a result of natural background conditions. Arsenic ranged from 2.78 mg/kg to 9.81 mg/kg on off-property soils and was below the MTCA Method A level adjusted for natural background of 20 mg/kg. Arsenic is not selected as an IHS, given that there are no exceedances of the background-adjusted MTCA Method A level. For a summary of metals results, see Table 3-5.

Dioxins were detected above Method B CULs in portions of off-property areas. Under MTCA, the default soil CUL based on direct contact is 11 ng/kg (Method B soil CUL) for residential properties.

Dioxin concentrations ranged from 0.49 ng/kg to 110 ng/kg in off-property areas and are therefore selected as IHSs. Dioxin TEQ concentrations in all off-property areas are summarized in Table 3-5.

The final off-property TEE showed that surface soil dioxins in portions of off-property areas exceeded site-specific EICs protective of ecological receptors (see Appendix B). Supplemental soil sampling showed that dioxins in the Port Railroad Avenue properties may result in unacceptable ecological risk; however, the remaining off-property areas are not expected to pose an unacceptable risk (see Appendix B).

In summary, off-property IHSs are limited to dioxins.

3.2.2.2 Sampling Results

Fourteen of the off-property soil samples (including one duplicate sample) exceeded the dioxin TEQ Method B CUL of 11 ng/kg: at SS-6, SS-37, SS-38, SS-41 (and duplicate sample) through SS-44, SS-47 through SS-51, and SS-57. Samples SS-46, SS-52 through SS-56, SS-58, and SS-59 did not exceed the Method B CUL; they define the extent of dioxin impacts to the east. The samples collected east and north of Cell 4 were below the Method B CUL. Therefore, the extent of dioxin impacts has been delineated. The results for off-property sample locations (see Figure 3-3) are further summarized below for Port-owned properties and non-Port-owned properties:

- Port Railroad Avenue properties (east of LRIS): The Port owns two parcels located along Railroad Avenue just east of the LRIS. These properties are vacant at this time and are zoned mixed-waterfront use. A potential future use of this area is parking lots (involving commercial grade filling and asphalt capping; see Section 2.8.2). Five soil samples were collected on these parcels. Four of five samples (SS-37, SS-38, SS-41, and SS-42) were above the MTCA B CUL of 11 ng/kg. One sample (SS-42, dioxin TEQ 110 ng/kg) appears to be an outlier and may not be representative, as it was more than twice the concentration measured in an adjacent soil sample (41 ng/kg for SS-37) and any of the other samples tested from these properties or the adjacent right-of-way. The fifth soil sample (SS-39 at 5.3 ng/kg) is below the MTCA B CUL. The median dioxin TEQ in these parcels, excluding the outlier sample, is 21 ng/kg.
- Port marina property (south of LRIS): The soil sample (SS-6; 37 ng/kg dioxin TEQ) collected on this property exceeded the MTCA B CUL.
- Port proposed overpass property (south of the LRIS): The soil sample (SS-50; 34 ng/kg dioxin TEQ) collected on this property exceeded the MTCA B CUL.
- McCuddy's Marina (south of LRIS): Three soil samples were collected on the marina property. Dioxin TEQs in surface soils ranged from 2.3 ng/kg to 13 ng/kg. The median dioxin TEQ in these areas is 3.2 ng/kg.
- RNWR property (north of LRIS): Three soil samples were collected north of Cell 4; dioxin TEQs for these samples ranged from 6.5 ng/kg to 9.5 ng/kg. These concentrations are below the Method B CUL of 11 ng/kg and indicate limited, if any, impacts north of the LRIS property.

- Residential areas (east of LRIS): Sixteen samples were collected in the remaining off-property areas in the rights-of-way east of the LRIS. The measured dioxin TEQ in these samples ranged from 0.49 ng/kg to 57 ng/kg. The median dioxin TEQ in these areas is 5.2 ng/kg. Soils more representative of potential human health exposure points in this area (e.g., soil concentrations in yards) have not been characterized.

In summary, wood-treatment chemicals associated with historical Port operations are largely undetected or occur at levels below IHS criteria in upland off-property areas. Dioxins are identified as off-property IHSs, but the most elevated concentrations are largely limited to the Port Railroad Avenue properties. Additional soil characterization in areas representing probable human health exposure points may be conducted for non-Port-owned properties (e.g., yards in residential areas). To further characterize ecological risk, dioxin concentrations in soil were characterized by collecting and analyzing composite samples in September 2012. Dioxin concentrations in off-property areas, excluding the Port Railroad Avenue properties, are not expected to pose unacceptable risk to ecological receptors (see Appendix B).

3.3 Groundwater

The nature and extent of groundwater impacts in the Site were evaluated using data collected from groundwater monitoring wells, SER extraction wells, and reconnaissance groundwater samples. Figure 2-12 shows the location of active monitoring wells as of January 2012, Table 2-1 summarizes the monitoring well completion details for active and decommissioned monitoring wells and piezometers that have been used to evaluate groundwater conditions, and Table 2-2 summarizes well completion details for extraction and injection wells. Reconnaissance groundwater samples used to evaluate the extent of groundwater impacts include those from locations throughout the LRIS, the southern part of the RNWR Carty Unit, and east of the LRIS and Lake River in the RNWR River "S" Unit.

Groundwater investigations conducted in Cell 4 and in the RNWR "S" Unit (across Lake River from the LRIS) confirm that these areas are not impacted (MFA, 2007, 2010e, 2011a). Therefore, groundwater in Cell 4 and in the RNWR "S" Unit is not discussed further in the nature and extent section or in the CSM.

IHSs were detected in groundwater in the UWBZ in Cells 1, 2, and 3. The LWBZ was not investigated in Cell 3 because of the presence of the aquitard that limits downward migration of contamination. Further, IHS concentrations were low in Cell 3 relative to groundwater collected in Cells 1 and 2. The LWBZ was investigated in Cells 1 and 2 because in Cell 2 an area exists where an aquitard is not present and downward migration has the potential to occur. In Cell 1 an aquitard is present but was compromised by wells that were installed by PWT and screened through the aquitard connecting the UWBZ and LWBZ.

Groundwater sampling has also shown that there are two distinct plumes on the LRIS, as shown in Figures 3-4 through 3-13 (note that the locations of the extraction wells are discussed in Section 4.2 and the locations of the remaining wells are shown in Drawing 1). One plume is beneath Cell 3 and is limited to the UWBZ, and the other is beneath Cells 1 and 2 in the UWBZ and LWBZ and extends into the southern portion of the RNWR Carty Unit. The plumes are separated laterally, as shown in Figures 3-4 through 3-14. Further, the plumes are separated vertically, as the impacts in Cell 3 are limited to the UWBZ and the closest impacts in Cell 2 occur in the LWBZ (at MW-62). Therefore, the description below of the nature and extent of groundwater impacts is presented separately for each plume (i.e., "Cells 1 and 2" plume and "Cell 3" plume).

Regularly scheduled groundwater monitoring has been conducted on the LRIS since 2002, typically during the high- and low-water events in January and August, respectively. Historically, monitoring was conducted semiannually for most wells, with a few wells sampled approximately every 18 months (in either January or August). Table 3-6 shows the sampling schedule through August 2012. Groundwater sampling was conducted in a manner consistent with the Ecology-approved field sampling plan (MFA, 2004, Vol. III). Groundwater samples from the Site were analyzed for SVOCs, including PAHs and chlorinated phenolics, using USEPA Method 8270D; for VOCs, using USEPA Method 8260B; for dissolved metals (arsenic, chromium, copper, and zinc), using USEPA Methods 6010/6020; and/or for petroleum hydrocarbons, using NWTPH-Dx.

Since August 2012, groundwater sampling has been conducted at the POC monitoring wells shown on Figure 2-12, and the samples analyzed for the IHSs shown in Table 3-7. The POC monitoring wells are sampled semiannually, in January and August. Note that during interim action construction activities, well MW-59 was damaged and had to be decommissioned. MW-59 was planned as a POC (MFA, 2012c); however, Ecology agreed that the remaining wells would be sufficient to monitor groundwater conditions, and a replacement for MW-59 was not required (Ecology, 2012c). Monitoring results through August 2011 generally show that IHSs are stable or declining throughout the LRIS (MFA, 2012c). The greatest change has occurred in wells located in or around the SER treatment area.

3.3.1 Evaluation of Extent

The nature and extent of groundwater impacts, as shown on Figures 3-4 through 3-13, were evaluated using the data described above by creating 3-D renderings using trendplots (see Appendix I) and EVS, which uses kriging (i.e., a geostatistical method of estimating concentrations, based on spatially limited data) to estimate concentrations beyond the sampling locations. For each node, the kriging parameters were a reach of 4,467 feet and were calculated using the closest 20 sample points. The adaptive gridding concept honors all measured data directly. The confidence bound tolerance is set to 10, which produces results within one order of magnitude of the "true value" (for reference, a confidence bound tolerance set at 1 would produce absolutely certain results and a confidence bound tolerance set at 100 would result in confidence within two orders of magnitude). All groundwater monitoring wells, extraction wells, and reconnaissance groundwater sample points used to create the renderings are shown on Figure 3-14. The monitoring point locations are also shown on Drawing 1.

The modeling uses data points throughout the UWBZ and LWBZ. The model interprets concentrations through the aquitard between the UWBZ and LWBZ beneath Cell 1 and the eastern portion of Cell 2. Monitoring wells are not installed in the aquitard because it does not produce sufficient water for sampling. While the aquitard limits downward migration, it is composed of silt, sand, and gravel and does allow some groundwater to slowly migrate downward from the UWBZ to the LWBZ. On the western portion of Cell 2, the aquitard is absent and the UWBZ and LWBZ are in communication. Because of the presence of the aquitard beneath Cell 3 and the relatively low levels of contamination, modeling was limited to the UWBZ (see Section 3.3.4 for further details).

The 3-D model does not extend into the clay of the lower Troutdale Formation. The clay is competent, very stiff, and dry. The lower Troutdale Formation clay was found to be approximately 40 feet thick, which greatly limits the potential for groundwater migration. A groundwater sample collected beneath the clay, in GP-14 on the RNWR, was non-detect for IHSs.

The results used to complete the modeling include the SER groundwater monitoring results from November 2011 (see Appendix J-1); monitoring well data collected in August 2011 (see Tables 3-8 through 3-16); and reconnaissance groundwater results collected on the LRIS during May and June 2009 and from the RNWR in September 2006 (see Appendices J-2 and J-3, respectively). Note that the reconnaissance sample from GP-14 at 180 feet bgs is included in the tables in Appendix J, but that value is not used in the EVS modeling. The 180-foot-bgs sample from GP-14 shows that the CRBG was not impacted. The arsenic distribution shown (see Figures 3-9 and 3-10) is for the dissolved fraction from monitoring well data only and does not include reconnaissance well groundwater samples. Reconnaissance sample results were excluded because the samples were analyzed for total metals and had relatively high turbidity. The most widespread and/or toxic of the IHSs in groundwater were modeled: benzene, PCE, naphthalene, arsenic, and PCP. The extent of the other IHSs falls within the extent of these five IHSs. The images on Figures 3-4 through 3-13 show different concentration gradients relative to the extent of the Method B groundwater CULs, the Method A groundwater CULs (i.e., for arsenic), and the draft Method B groundwater screening levels for vapor intrusion (SL_v) for VOCs (i.e., benzene, naphthalene, and PCE) exceedances. Figure 3-14 shows the groundwater data points used to create the groundwater images.

Analytical results were compared with MTCA Method B groundwater CULs. However, Method B CULs are not available for petroleum hydrocarbons; therefore, MTCA Method A groundwater CULs were compared to petroleum-hydrocarbon concentrations. Arsenic occurs naturally at concentrations above MTCA Method B CULs in groundwater in Washington State. Taking into account naturally occurring arsenic in groundwater, Ecology calculated the MTCA Method A groundwater CUL and Washington State maximum contaminant level of 5 micrograms per liter (μg/L) for arsenic, based on background concentrations. Therefore, arsenic concentrations are also compared with the Method A CUL, which accounts for concentrations of arsenic expected in groundwater under natural conditions.

As shown through conservative fate and transport modeling (see Section 5.2.3), groundwater impacts are not expected to negatively affect Lake River or Carty Lake; therefore, data are not compared with surface water criteria in this section.

3.3.2 IHSs

The following analytes have exceeded their respective CULs in samples collected from monitoring wells and extraction wells and are generally considered IHSs (MFA, 2007, 2011a):

- **Chlorinated phenolics:** 2,3,4,6-tetrachlorophenol, 2,4,5-trichlorophenol, 2,4,6-trichlorophenol, and PCP
- **cPAHs:** cPAH TEQ
- **Noncarcinogenic PAHs:** acenaphthene, anthracene, fluoranthene, fluorene, 2-methylnaphthalene, naphthalene, and pyrene
- **SVOCs:** bis(2-ethylhexyl) phthalate (BEHP), carbazole, and dibenzofuran
- **VOCs:** acetone, benzene, chloromethane, dichlorodifluoromethane, cis-1,2-dichloroethene, ethylbenzene, hexachlorobutadiene, naphthalene, styrene, 1,1,2,2-tetrachloroethane, PCE, 1,1,2-trichloroethane, trichloroethene (TCE), 1,2,3-trichloropropane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, vinyl chloride, m,p-xylene, toluene, and o-xylene
- **Dissolved metals:** arsenic and chromium
- **Petroleum hydrocarbons:** DROs and RROs

3.3.3 Cells 1 and 2 Plume

The concentrations of IHSs are generally consistent over time, except for those wells in or near the SER that show large reductions. Some of the groundwater IHSs were detected only in the SER area where NAPL was present, and have not been observed in areas outside the treatment area. The most widespread and/or toxic of the IHSs in groundwater in the Cells 1 and 2 plume are benzene, PCE, naphthalene, arsenic, and PCP. Appendix I-1 shows trend plots for the Cells 1 and 2 plume monitoring wells. Where concentrations significantly exceeded CULs (e.g., ten times the Method B groundwater CUL), the concentration gradients are displayed on the images.

A detailed description of the nature and extent of the Cells 1 and 2 plume is presented in the Cells 1 and 2 RI/FS (MFA, 2011a); a brief description is provided below.

3.3.3.1 VOCs

VOCs historically have been detected at higher frequencies in the SER area, but the SER system has removed many of the VOC IHSs to below Method B CULs. The highest remaining concentrations of VOCs in the Cell 2 area generally are found in the former concrete pond area. The chemicals in the Cells 1 and 2 plume area that most frequently exceeded the Method B groundwater CUL were benzene, naphthalene, PCE, TCE, and vinyl chloride. The remaining VOC IHSs generally exceeded Method B groundwater CULs in 10 percent or less of the samples (MFA, 2011a).

3.3.3.2 PAHs

PAHs were detected at much higher frequencies and concentrations in the SER area than VOCs (MFA, 2011a). The higher concentrations of PAHs in the SER area likely are related to the presence of NAPL and the heat generated by the SER system. cPAHs are seldom detected in groundwater samples outside the SER area. Naphthalene is the most widespread of the PAH IHSs; therefore, the nature and extent of naphthalene were modeled.

Figures 3-7 and 3-8 show the extent of the naphthalene plumes on the LRIS and a cross section from east to west.[2] Note that naphthalene does not exceed CULs in Cell 3.

3.3.3.3 Dissolved Metals

Copper and zinc either are not detected or are detected below CULs in groundwater samples (MFA, 2011a). Arsenic is often detected in groundwater samples from monitoring wells, especially in the shallow UWBZ. Figures 3-9 and 3-10 show the extent of the dissolved arsenic plume on the LRIS and a cross section from east to west. Note that arsenic exceeds CULs beneath Cell 3 but is not connected with the impacts on Cells 1 and 2. Arsenic impacts in Cell 3 are discussed below in Section 3.3.4.

3.3.3.4 Chlorinated Phenolics

Chlorinated phenolics were detected historically at much higher frequencies and concentrations in the SER area than elsewhere (MFA, 2011a). The higher concentrations of phenolics in the SER area likely were related to the presence of NAPL and the mobilization of chemicals resulting from the heat generated by the SER system. Only two chlorinated phenolics have been detected outside the SER area above Method B groundwater CULs: 2,4,6-trichlorophenol and PCP, of which PCP is the more widespread. Figures 3-11 through 3-13 show the extent of the dissolved PCP plume and present three cross sections. Note that PCP exceeds CULs beneath Cell 3, but the impacts are not connected with the impacts in Cells 1 and 2. PCP impacts in Cell 3 are discussed below in Section 3.3.4.

The highest concentrations of PCP are observed in and just downgradient of the known source, the former tank farm area. Higher concentrations historically occurred in the tank farm area, but the SER system has reduced contaminant levels. PCP is detected almost exclusively in the shallow UWBZ in the former tank farm area. Shallow UWBZ groundwater samples collected near the former concrete pond showed minimal PCP impacts (e.g., PCP was detected in well MW-26 six out of 18 times since January 2004, averaging 8.25 μg/L in those six samples). Therefore, it appears that the former concrete pond is not a significant source of PCP. The PCP detected in the deep UWBZ (e.g., MW-52D at an average concentration of 311 μg/L) and the LWBZ (e.g., MW-35 at an average concentration of 2,321 μg/L) in the area of the former concrete pond likely is the result of migration from the former tank farm and retort area. The PCP plume extends just beyond the western and northern property boundaries under Lake River and Carty Lake, but as shown in the cross sections, the plume does not intersect the water bodies. Rather, it flows beneath them and attenuates before reaching the eastern bank of Lake River. In addition, groundwater modeling indicates that if the

---

[2] Naphthalene is a PAH, but, because it is volatile, is also analyzed as a VOC. Results from the VOC analyses are generally slightly higher than results from PAH analyses for naphthalene. The VOC analytical results for naphthalene were used in the modeling.

deep UWBZ discharged to Lake River or Carty Lake, PCP would not adversely impact groundwater (see Section 5.2.3).

3.3.3.5 SVOCs

Three SVOCs other than PAHs and chlorinated phenolics exceed CULs: BEHP, carbazole, and dibenzofuran. BEHP is not detected frequently, but it is most frequently detected in three monitoring wells in the RNWR, USDFW-1 through USDFW-3 (see Table 3-9). BEHP is not generally detected in monitoring wells in Cells 1 and 2 and is not believed to be related to LRIS sources. Monitoring wells USDFW-1 through USDFW-3 have dedicated pumps with dedicated plastic tubing. BEHP is a component of plastic; therefore, the BEHP detections could be the result of the dedicated plastic tubing. The fate and transport of BEHP were evaluated because of its presence above surface water criteria (see Section 5.2.3). The results of the modeling indicate that BEHP will not adversely affect surface water bodies.

Carbazole and dibenzofuran are detected throughout the LRIS, but are not as widespread as other IHSs, such as PCP or naphthalene. Fate and transport modeling of dibenzofuran were completed because it exceeded surface water criteria adjacent to Lake River and Carty Lake. The modeling indicated that dibenzofuran will not negatively impact the surface water bodies (see Section 5.2.3).

3.3.3.6 Petroleum Hydrocarbons

Petroleum hydrocarbons such as DROs and RROs are detected frequently at the LRIS and often exceed the Method A groundwater CULs. DROs are detected more frequently than RROs. The DRO extent is similar to those of PCP and naphthalene.

3.3.3.7 Dioxins

Dioxins have a high affinity to adsorb to soil particles and are relatively insoluble. However, because NAPL was in contact with groundwater, dioxins may have impacted groundwater. Therefore, on August 21, 2008, during a semiannual sampling event, samples from monitoring wells MW-38, MW-39, MW-56, and USDFW-1 were analyzed for dioxins, as requested by Ecology (Ecology, 2008b). The results of the monitoring were provided to Ecology (MFA, 2009).

The groundwater dioxin TEQs ranged from 13 picograms per liter (pg/L) (MW-56) to 29 pg/L (MW-39) (see Table 3-12). TCDD was not detected and the reporting limits were below the maximum contaminant level of 30 pg/L for TCDD. MTCA does not have a CUL for dioxins or TCDD in groundwater.

While dioxins are present in groundwater, the concentrations near the property boundaries do not exceed the maximum contaminant level. Further, the dioxin congeners that are detected (i.e., 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin and 1,2,3,4,6,7,8,9-octachlorodibenzofuran) are typically the least toxic congeners.

3.3.4 Cell 3 Plume

Conditional POC sampling in Cell 3 is currently conducted as described in the groundwater results letter (MFA, 2012c). POC monitoring wells (i.e., MW-29D, MW-45D, MW-46S, MW-46D, and MW-47D) are sampled and analyzed for specific IHSs historically identified in groundwater samples at the riverbank: PCP, arsenic, and/or PCE (see Table 3-7). Tables 3-13 through 3-16 summarize groundwater analytical results for monitoring wells in Cell 3 since 2004. Appendix I-2 includes trend plots for PCP (MW-45D), PCE (MW-45D, MW-46D, and MW-47D), and dissolved arsenic (MW-46S). Figures 3-5 and 3-6 (PCE), 3-9 and 3-10 (arsenic), and 3-11 through 3-13 (PCP) show the nature and extent of and cross section from east to west. Note that as discussed above, the Cell 3 UWBZ plume is separated from the Cell 2 plume vertically and laterally. The LWBZ in Cell 3 was not investigated because of the relatively low concentration of IHSs in the UWBZ and because the aquitard is continuous and significant downward migration is not expected.

PCP in Cell 3 is in the deep UWBZ downgradient of the former drip trough and extends just beyond the property boundary under Lake River, but as shown in the cross section, the plume does not intersect the water body (see Figures 3-11 through 3-13). Rather, the plume flows beneath it and attenuates before reaching the eastern bank of Lake River. In addition, groundwater modeling indicates that if the deep UWBZ discharged to Lake River, PCP would not be present (see Section 5.2.3).

PCE typically is detected in the deep UWBZ monitoring wells, except for MW-20D. Concentrations vary but show an overall stable or slightly declining trend; however, there was a slight increase in concentration from January 2010 to August 2011 (see Table 3-15). Concentrations of PCE in the deep portion of the UWBZ generally decrease to the west and north across Cell 3 (see Figures 3-5 and 3-6). The plume extends just beyond the western property boundary under Lake River, but as shown in the cross section and through groundwater transport modeling (Section 5.2.3), the plume does not intersect Lake River. Rather, it flows beneath Lake River and attenuates before reaching the eastern bank of the lake.

PCE concentrations exceed the groundwater SL_v of 1 μg/L on portions of the LRIS. However, the impacts are deep and do not extend to the shallow UWBZ. For PCE to impact soil vapor concentrations, the impacts would have to migrate to the surface of the water table.

It appears that the source of the PCE in Cell 3 is a former dry cleaner located in downtown Ridgefield. This presumed source area is approximately 690 feet east (upgradient) of Cell 3. A dry cleaner (Park Laundry) reportedly operated at 122 North Main Avenue from 1964 to 1980. An ongoing investigation being conducted by MFA (MFA, 2012b) shows groundwater impacts extending in the UWBZ from the source to Cell 3. Figures 3-5 and 3-6 do not show the plume extending southeast, toward Park Laundry, because off-site Park Laundry data were not used in the model.

The highest concentrations of arsenic are observed just downgradient of known sources (i.e., the former drip trough) in the shallow UWBZ. Arsenic in some areas may be the result of site impacts, while in other areas it may be the result of natural geologic conditions. The arsenic plume appears to intersect Lake River; however, the conservative fate and transport modeling presented in Section 5.2.3 indicates that arsenic above the Method A groundwater CUL will not reach Lake River.

3.3.5 IHS Trends

3.3.5.1 Cells 1 and 2

Concentrations of IHSs in most wells in Cell 1, Cell 2, and the RNWR (i.e., the southern portion of Carty Lake) show stable or declining trends. The monitoring wells expressing significant fluctuations of IHS concentrations are in or near the SER system in the UWBZ and LWBZ. Appendix I-1 contains trend plots for the Cells 1 and 2 plume monitoring wells.

Groundwater monitoring data indicate that source control and reduction efforts in the SER area are effective and that concentrations of IHSs in groundwater are generally stable or decreasing. Concentrations of chemicals in groundwater in and near the SER area have greatly decreased because of the operation of the SER system (see Section 4). Concentrations of IHSs outside the active SER area are also generally stable or declining.

3.3.5.2 Cell 3

Concentrations of IHSs in groundwater in Cell 3 show overall stable trends. Attachment E contains IHS trend plots in POC wells for PCP (MW-45D), PCE (MW-45D, MW-46D, and MW-47D), and dissolved arsenic (MW-46S). The IHS trend plots and trends in non-POC wells are discussed below:

PCP concentrations in MW-45D have varied from 120 µg/L (July and October 2004) to 24.2 µg/L (January 2005). PCP concentrations in groundwater from MW-45D show an overall decreasing trend. PCP was also detected in other wells infrequently (i.e., MW-9S and MW-29D) or during a single event (i.e., MW-20S, MW-28S, MW-20D, and MW-46D). The only other SVOCs detected above CULs were cPAHs, 1-methylnaphthalene, and carbazole. Those SVOCs were infrequently detected and typically were found in MW-9S, in the interior of Cell 3.

PCE typically is detected in the deep UWBZ monitoring wells. Concentrations vary but show an overall stable or slightly declining trend; however, there was a slight increase in concentration from January 2010 to August 2011. Concentrations of PCE in the deep portion of the UWBZ generally decrease to the west and north across Cell 3. As described above, it appears that PCE is migrating onto Cell 3 from an upgradient source. No other VOCs were detected above CULs, except for benzene only, in MW-9S during one event.

Concentrations of dissolved arsenic in groundwater from MW-46S vary and show no overall trend. Concentrations have varied from 56 µg/L (January 2007) to 11.0 µg/L (October 2005). Arsenic was also typically detected above Method A CULs in MW-9S and MW-45S. Concentrations in MW-45S showed an overall decreasing trend, and only one of the last six sampling events detected arsenic over the Method A CUL. Arsenic in MW-9S samples showed an overall stable trend, with concentrations generally around 50 to 60 µg/L.

The trends described above show that concentrations of IHSs are generally stable or declining.

3.4 Stormwater Monitoring

In 2002, Ecology issued an industrial stormwater general permit for the LRIS (National Pollutant Discharge Elimination System [NPDES] permit number SO3-00-1835). This permit required the Port to monitor each of the four stormwater outfalls (OF-1, OF-2, OF-3, and OF-4) quarterly for turbidity, pH, zinc, oil and grease, copper, lead, hardness, and biological oxygen demand. Note that other parameters not included in the NPDES permit (e.g., PCP, benzo(a)pyrene) were analyzed in stormwater, based on Ecology's verbal request. Ecology reissued the industrial stormwater general permit on October 21, 2009, effective January 1, 2010 (NPDES Permit No. WAR001835E), eliminating oil and grease, hardness, and biological oxygen demand as required parameters.

Stormwater monitoring was incorporated into the site-specific NPDES permit WA 0041025, issued August 1, 2010, which also permitted the discharge from the SER system. The permit required monthly monitoring at OF-1 through OF-4 for PCP, benzo(a)pyrene, total zinc, total suspended solids, and pH.

Outfalls OF-5 and OF-6 were constructed in 2010 as part of the Cells 3 and 4 interim action. OF-1 through OF-4 were decommissioned (see Section 4.4) and OF-7, OF-8, and OF-9 were installed during 2012 as part of the Cells 1 and 2 interim action. Outfalls OF-7, OF-8, and OF-9 have not yet been sampled, as the drainage area is still under construction.

Stormwater data collected through January 2012 from outfalls OF-1, OF-2, OF-3, OF-4, OF-5, and OF-6 are included in Table 3-17. Figure 2-16 shows the historical stormwater configuration, and Figure 2-17 shows the current stormwater configuration as of January 2012.

Parameters include IHSs (e.g., arsenic, PCP, benzo(a)pyrene) and additional parameters that were required under NPDES permit monitoring (e.g., pH, total suspended solids, hardness). Data were screened against four criteria: USEPA water quality criteria (WQC) freshwater criterion continuous concentration (CCC), MTCA Method B surface water CULs, USEPA WQC human health (HH) consumption of organisms and water, and USEPA WQC HH consumption of organisms only.

The relevant IHS stormwater monitoring (i.e., metals, benzo(a)pyrene, PCP) are discussed below.

3.4.1 Metals

Dissolved zinc typically exceeded the WQC freshwater CCC at OF-4. Historically, OF-2 regularly exceeded the zinc screening criteria; however, since 2009 concentrations have generally been below the screening criteria. OF-3 samples periodically exceeded the dissolved zinc WQC freshwater CCC. Zinc concentrations at OF-2 and OF-4 exceeded surface water criteria as recently as 2010. OF-5 and OF-6 have not detected zinc above screening criteria.

Dissolved arsenic at OF-2 typically was not detected above MRLs. Detections typically exceeded WQC HH consumption of organisms and water and WQC HH consumption of organisms only. Dissolved arsenic at OF-3 and OF-4 typically was detected above WQC HH consumption of organisms and water and WQC HH consumption of organisms only. However, most of the recent dissolved arsenic concentrations in stormwater (i.e., collected from 2007 through 2010) were below concentrations generally associated with background levels in groundwater in Washington State.

Dissolved chromium exceeded the hexavalent chromium WQC freshwater CCC once: in OF-2 in 1997. Several exceedances of this criterion were observed in samples collected at OF-3 in 1998, 2003, and 2004. This criterion is a conservative comparison, as the data are based on nonspeciated chromium analysis, not hexavalent chromium analysis. Stormwater samples collected since 2004 have not exceeded this conservative criterion.

Exceedances of the dissolved copper WQC freshwater CCC were observed at OF-2 from 1997 to 2000 and once in 2008. No exceedances of the WQC freshwater CCC have been observed at OF-3 since 2006. Dissolved copper typically exceeded the WQC freshwater CCC in OF-4 from 1997 to 2000. Four exceedances were observed at OF-4 between 2003 and 2008. Stormwater samples collected since 2008 have not exceeded copper surface water criteria.

Dissolved lead exceeded the WQC freshwater CCC in 1997 (once at OF-2 and twice at OF-3) and in 2003 (twice at OF-3). No exceedances were observed at OF-4. Dissolved lead concentrations have not exceeded surface water criteria since 2003.

3.4.2 Benzo(a)pyrene

Benzo(a)pyrene typically is not detected above MRLs; however, the MRLs are higher than several screening criteria. When benzo(a)pyrene was detected at OF-2, OF-3, and OF-4, the concentrations exceeded the following criteria: WQC HH consumption of organisms and water, WQC HH consumption of organisms only, and the MTCA Method B surface water CUL.

3.4.3 Pentachlorophenol

PCP has exceeded one or more screening criteria in samples from OF-1, OF-2, OF-3, and OF-6. While concentrations have steadily decreased over time, recently collected samples (i.e., 2011 and 2012) continue to exceed the lowest of the surface water criteria for PCP and the USEPA WQC HH consumption of organisms and water of 0.3 μg/L.

One sample from OF-6 in December 2010 detected PCP. PCP has not been detected in stormwater samples since then.

3.5 Sediment

This section summarizes the results of sediment chemical and physical testing performed at Lake River and Carty Lake. Data were collected during the RI in April 2010, and results were reported in the sediment memorandum (Anchor and MFA, 2011). Sediment samples collected in 2010 were submitted for analysis of LRIS IHSs (PCP and associated chlorinated phenolics, PAHs, metals [arsenic, chromium, copper, and zinc], and dioxins). In addition, at the request of Ecology, selected sediment samples were submitted for parameters, including polychlorinated biphenyls, TPH, ammonia, grain size, and TOC. Additional Carty Lake sampling was performed in September 2011 and reported in the Supplemental Carty Lake Sediment Sampling Results report (MFA, 2012a);

samples were analyzed for dioxins, grain size, and TOC at the direction of Ecology. Sediment preliminary screening criteria are identified below and are compared with sediment concentrations in Lake River and Carty Lake to identify hazardous substances in sediment.

3.5.1 Sediment Screening Criteria

The goal of SMS (WAC 173-204) is to reduce and ultimately eliminate adverse effects on biological resources and threats to human health from surface sediment contamination. Ecology does not currently have freshwater sediment screening criteria, and freshwater sediment standards are currently set on a case-by-case basis. Because the SMS rule regulates sediments based on benthic toxicity, recently developed freshwater sediment quality values based on benthic toxicity described by Avocet Consulting (2011) are used to screen sediments. These values were developed for Washington, Oregon, and Idaho, and represent the current state of the science for sediment values that are representative of possible toxicity, with the use of the floating percentile method to provide a reasonable/conservative evaluation of chemical concentrations that could predict toxicity. Two levels of benthic criteria were developed, corresponding to the SMS narrative sediment quality standard and the cleanup screening level/minimum CUL. The more protective benthic criteria, when available, were compared with sediment concentrations to identify hazardous substances. In addition, data were screened against consensus-based probable effect concentrations (PECs) developed to predict sediment toxicity (MacDonald, Ingersoll, and Berger, 2000). Tables 3-18 and 3-19 show the Lake River screening results and Table 3-20 shows the Carty Lake screening results (see Figures 3-15 and 3-16 for screening criteria exceedances in Lake River and Carty Lake, respectively).

To assess potential adverse effects on aquatic receptors and on the wildlife that consume them, the Oregon Department of Environmental Quality (DEQ) developed screening level values (SLVs) protective of ecological receptors exposed to bioaccumulative chemicals (DEQ, 2007). Constituents for which default SLVs are available (i.e., PCP and dioxins) were compared with sediment concentrations. Tables 3-18 and 3-19 (Lake River) and Table 3-20 (Carty Lake) show the results of the bioaccumulative screening for ecological receptors.

In addition to protecting benthic and ecological receptors, MTCA/SMS regulations require protection of human health. Impacts to human health may result from exposure to bioaccumulative chemicals; these compounds have the potential for trophic transfer to higher-level organisms that humans may consume. Specific approaches for human health are not currently available, as the rule is being revised but is not yet promulgated. The approach provided in the DEQ bioaccumulative guidance (DEQ, 2007) is used to evaluate bioaccumulative chemicals (PCP and dioxins) in sediment with respect to human health risk.

For PCP, the default DEQ bioaccumulation SLV of 250 μg/kg protective of human consumption of fish was used to screen sediment concentrations (DEQ, 2007). For dioxins, levels in sediments considered protective of human health are typically very low because of both bioaccumulative potential and low effects levels. Modeling sediment concentrations of a group of chemicals (e.g., multiple dioxin congeners) that is protective of higher trophic levels is complex because each congener varies in its bioaccumulative potential. As a result of the low toxicity values and complexities associated with bioaccumulation modeling for groups of chemicals, CULs are frequently based on background conditions.

Ecology is currently developing methods for defining natural background and regional background concentrations for sediments, and its strategy for management of low-level bioaccumulatives is expected to be implemented over the coming decades. Currently, CULs typically defer to background concentrations. Therefore, the Lower Columbia River dioxin TEQ natural background concentration (2 ng/kg; see Appendix K for derivation) was used to screen dioxins in sediment. Dioxins (measured as TEQs) were compared to the Columbia River background concentration, as shown in Tables 3-18 and 3-19 for Lake River and in Table 3-20 for Carty Lake (see Figures 3-15 and 3-16 for screening criteria exceedances in Lake River and Carty Lake, respectively).

In screening evaluations, half of the estimated detection limit was compared to screening criteria when data were qualified as U or UJ. For further details on data validation and the TEQ calculation methodology used for dioxin screening, see Appendix F.

The screening criteria approach described above supports initial identification of hazardous substances in sediment. WAC 173-340-703 states that when cleanup requirements are being defined for a site that is contaminated with a large number of hazardous substances, those hazardous substances that contribute a small percentage of the overall threat to human health and the environment may be eliminated from consideration, and the remaining hazardous substances shall serve as IHSs for purposes of defining site cleanup requirements. Other risk-based criteria and CULs relevant to Lake River and Carty Lake are developed in Section 6 of this RI/FS report.

3.5.2 Lake River

Surface sediment was collected from the presumed biologically active zone of 0 to 10 centimeters (cm) bml at 28 Lake River locations. Thirty surface samples (including two duplicate samples) were tested to delineate the lateral extent of sediment impacts. One surface sample was collected offshore of the City stormwater outfall approximately 900 feet upstream (south) of the LRIS to characterize potential nearby sources of chemicals. Subsurface sediment was collected in nine locations at depths of 1 to 2, 3 to 4, 4 to 5, 5 to 6, or 9 to 10 feet bgs to delineate the vertical extent of sediment impacts. Surface and subsurface sample locations were selected to characterize areas suspected to be highly impacted (e.g., just offshore of former outfalls) and to delineate the boundaries of sediment impacts relative to preliminary sediment screening criteria (see Figure 3-15). In addition, three samples were collected (two in Lake River and one in Bachelor Slough) to characterize local background conditions in surface sediment (Anchor and MFA, 2011; note that Appendix K presents the findings of an evaluation of natural background conditions in regard to dioxins in sediment in the Lower Columbia River).

3.5.2.1 IHSs

The results of sediment testing and screening are summarized in Tables 3-18 and 3-19. Figure 3-15 shows screening criteria exceedances in Lake River.

Sediment results and identification of IHSs in Lake River are described below:

- There were no exceedances of Avocet benthic screening criteria and PECs for chemicals detected in surface sediment samples.

- Dioxins: concentrations of dioxins in surface samples, reported as dioxin TEQs, ranged from 0.51 to 580 ng/kg, with exceedances of background (2 ng/kg) occurring primarily in LRIS offshore areas. Dioxins are identified as an IHS.

  The lateral extent of dioxin impacts is well-defined. Dioxin TEQs were highest along the LRIS nearshore areas and significantly decreased farther from shore. Concentrations also decreased to the north, approaching the LRIS northern property boundary. Surface sediment concentrations to the south of the LRIS (i.e., south of LRIS-LR-19) decreased significantly at LRIS-LR-18 (1.7 ng/kg) and LRIS-LR-17 (4.3 ng/kg), but then increased at LRIS-LR-16 (14 ng/kg), which is just offshore of the City stormwater outfall (see Figure 3-15).

  The highest surface sediment dioxin TEQ (580 ng/kg) was detected in LRIS-LR-09, just offshore the LRIS and OF-4 and near LRIS-LR-08, where concentrations of dioxins were also high. Other chemicals were also above screening levels in these two samples. Concentrations at LRIS-LR-09 are bounded vertically (<5 ng/kg at 1 to 2 and 4 to 5 feet bml) and laterally to the west at LRIS-LR-23 and to the southwest at LRIS-LR-07.

  Subsurface sediment dioxin TEQ concentrations were highest at LRIS-LR-08, which is offshore of OF-4, and at LRIS-LR-10, which is offshore of OF-2. LRIS-LR-08 (1 to 2 feet bml) had a dioxin TEQ of 910 ng/kg; the concentration decreased substantially to 6.9 ng/kg in the deeper 3- to 4-foot-bml interval. To the north of LRIS-LR-08, LRIS-LR-10 had a dioxin TEQ of 79 ng/kg in the 1- to 2-foot-bml interval. The other nearshore subsurface sediment dioxin TEQ results were much lower and ranged from 6.4 ng/kg (LRIS-LR-01, adjacent to OF-1) to 17 ng/kg (LRIS-LR-05, adjacent to the former barge-loading area).

  Exceedances of dioxin congener SLVs protective of ecological receptors were generally colocated with elevated dioxin TEQs (see Tables 3-18 and 3-19). LRIS-LR-08 and LRIS-LR-09 had the most dioxin congener ecological SLV exceedances (12 and seven exceedances, respectively) and also had the highest dioxin TEQs.

- PCP: PCP exceeded Avocet benthic criteria at one subsurface location (LRIS-LR-08). No PEC is available for PCP. The 3,100-μg/kg PCP exceedance of the Avocet benthic criteria was limited to the shallow subsurface (1 to 2 feet bml) and is vertically bound at 3 to 4 feet bml (22 μg/kg). Elevated subsurface PCP at LRIS-LR-08 is consistent with historical stormwater discharge of wood-treating chemicals from OF-4.

  Slightly elevated PCP surface concentrations above the ecological bioaccumulation SLV criterion of 310 μg/kg and the human consumption bioaccumulation SLV of 250 μg/kg (but below benthic criteria) are found at LRIS-LR-24 (510 μg/kg), adjacent to LRIS-LR-08; at LRIS-LR-25 (740 μg/kg) near OF-3; and at LRIS-LR-19 (380 μg/kg) and LRIS-LR-20 (490 μg/kg) near OF-5 and OF-6, again suggesting stormwater inputs as a primary PCP transport pathway to Lake River.

  Where elevated PCP occurs, it is colocated with elevated dioxins (see Figure 3-15), and any remedial action developed for dioxins is therefore expected to address elevated PCP.

For example, the maximum PCP detection occurs in the subsurface at LRIS-LR-08, where the dioxin TEQ is also most elevated. PCP exceedances in other samples were marginally above screening criteria, were below screening criteria, or were non-detect. PCP therefore was not selected as an IHS.

- M&p-cresol: m&p-cresol (3- and 4-methylphenol) exceeded the Avocet benthic criterion for 4-methylphenol (260 μg/kg) at one subsurface location (LRIS-LR-09) in two sample intervals: 1 to 2 feet bml (360 μg/kg) and 4 to 5 feet bml (280 μg/kg). Elevated m&p-cresol at LRIS-LR-09 is colocated with elevated dioxins (see Figure 3-15) and is consistent with historical stormwater discharge of wood-treating chemicals from OF-4; any remedial action developed for dioxins is therefore expected to address elevated m&p-cresol. M&p-cresol infrequently and marginally exceeded screening criteria and is colocated with elevated dioxins; therefore, m&p-cresol was not selected as an IHS.
- PAHs: total PAHs (TPAH) exceeded Avocet benthic criteria at one subsurface location: LRIS-LR-08 (1 to 2 feet bml); fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene, and benzo(a)anthracene also exceeded PECs at this location. As with PCP, no exceedances occurred in the surface layer or the deeper subsurface (3 to 4 feet bml) at LRIS-LR-08, indicating that the vertical extent of these chemicals is bounded. Other slightly elevated levels (but below screening criteria) are observed at LRIS-LR-25 (TPAH at 4,160 μg/kg) between OF-2 and OF-3. In addition, elevated values at LRIS-LR-19 (TPAH at 2,863 μg/kg) and LRIS-LR-20 (TPAH at 2,237 μg/kg) are adjacent to OF-1; similarly elevated concentrations (but below screening criteria) occur at LRIS-LR-05 and -06. Thus, subsurface PAH exceedances at LRIS-LR-08 and other elevated PAH levels are generally consistent with historical stormwater discharge from the LRIS outfalls.

  Where elevated PAHs occur, they are colocated with elevated dioxins (see Figure 3-15), and thus any remedial action developed for dioxins is expected to address PAHs. For example, the most elevated TPAH and PAH congener detections occur in the subsurface at LRIS-LR-08, where the dioxin TEQ is also most elevated. PAH concentrations in other samples were below screening criteria or were non-detect. PAHs were therefore not selected as an IHS.
- Di-n-octyl phthalate was not detected in any surface or subsurface samples, but a reported non-detect of 110 μg/kg exceeded the Avocet benthic criteria in the surface at LRIS-LR-05; based on no reported detections, di-n-octyl phthalate was not selected as an IHS.

In summary, dioxins were identified as IHSs. Other contaminants exceeding Avocet benthic criteria or PECs were identified only in the subsurface layers at LRIS-LR-08 and LRIS-LR-09, adjacent to OF-4, where the most elevated dioxin concentrations also occur. Slightly elevated concentrations of site-related chemicals in other locations also occurred adjacent to LRIS outfalls, suggesting historical stormwater as the most significant transport pathway for site-related contaminants. Elevated surface dioxin TEQs also occurred primarily near outfalls and tended to decrease with depth.

Ecological SLVs were exceeded in surface and subsurface, but exceedances were limited to the same areas where contaminants exceeded benthic screening criteria or PECs and where there were elevated dioxin TEQs.

Site-related impacts are bounded to the north at LRIS-LR-28 (dioxin TEQ at 0.84 ng/kg) and to the south at LRIS-LR-18, where the dioxin TEQ was 1.7 ng/kg. A slightly elevated dioxin TEQ occurs farther south at LRIS-LR-16 (14 ng/kg), but contamination observed here was discontinuous from the areas of elevated dioxins in sediments adjacent to the LRIS property and likely is related to City stormwater outfall inputs and/or in-water and overwater structures near the sample location (see Section 5.2 and Appendix L for a discussion of potential sources to the City stormwater outfall).

3.5.3 Carty Lake

Eight surface and seven subsurface sediment samples were collected in Carty Lake as part of the RI sampling; results were reported in the sediment memorandum (Anchor and MFA, 2011). In 2011, supplemental sampling was conducted at Ecology's request to more fully delineate the lateral and vertical extent of dioxins in Carty Lake (MFA, 2012a); surface sediment samples were collected at eight locations in Carty Lake. In addition, a subsurface (2 to 3 feet bml) sediment sample was collected at LRIS-CL-02 to define the vertical extent of impacts identified at this location in 2010. Figure 3-16 shows all Carty Lake sediment sampling locations.

3.5.3.1 IHSs

The results of Carty Lake sediment testing and screening are presented in Table 3-20 and Figure 3-16. Results for Carty Lake are summarized below:

- Dioxins are identified as an IHS, based on exceedances of background (2 ng/kg dioxin TEQ). Dioxin TEQs are most elevated in surface sediment in the southern portion of the lake (LRIS-CL-01, -02, and -04 at concentrations of 140 ng/kg, 1,400 ng/kg, and 300 ng/kg, respectively) and decrease substantially within approximately 100 feet (LRIS-CL-03 at 24 ng/kg) and 300 feet (LRIS-CL-05 at 1.8 ng/kg). TEQs in the surface sediment in the rest of the lake are generally consistent and range between 15 ng/kg and 32 ng/kg, with the following two exceptions: one low-level concentration of 1.8 ng/kg (LRIS-CL-13) and one somewhat higher concentration of 54 ng/kg (LRIS-CL-09). The average and median surface sediment dioxin TEQs were 20 ng/kg and 22 ng/kg, respectively, excluding the highly elevated LRIS-CL-01, -02, and -04 samples in the southern portion of Carty Lake. The vertical extent of dioxin impacts is limited; dioxin TEQs in samples collected at 1 to 2 feet bml are generally between 1 and 5 ng/kg, except at the most highly impacted location, LRIS-CL-02, where the 1- to 2-foot-bml sample was 130 ng/kg and the extent is defined at 2 to 3 feet bml at 2.5 ng/kg.

  Multiple dioxin congeners exceeded ecological bioaccumulation SLVs (see Table 3-20); impacts were concentrated in the surface in samples collected at the southern end of the lake at LRIS-CL-01 (three of 17 congeners exceeded), LRIS-CL-02 (ten of 17 congeners exceeded), and LRIS-CL-04 (six of 17 congeners exceeded). Fifteen of 17 dioxin congeners did not exceed ecological SLVs in any other areas of the lake (see Table 3-20). Exceedances in areas north of the impacted southern portion were limited to detected concentrations of 2,3,4,7,8-pentachlorodibenzofuran at LRIS-CL-06 and-07 (in other cases this congener was not detected, but the detection limit exceeded the SLV) and two

TCDD concentrations with minimal exceedances (i.e., 0.1 ng/kg above the SLV) at LRIS-CL-09 and LRIS-CL-15.

- Metals (arsenic and chromium): Arsenic concentrations at LRIS-CL-02 were 48 mg/kg and 15 mg/kg in surface sediment (0 to 10 cm bml) and the subsurface (1 to 2 feet bml), respectively. Arsenic exceeded the PEC (33 mg/kg) in the surface, and exceeded the Avocet benthic criteria of 14 mg/kg in surface and subsurface. The arsenic concentration decreased with depth, suggesting that contamination is vertically bounded. Chromium (86 mg/kg) marginally exceeded the benthic criterion (72 mg/kg) at LRIS-CL-02 surface and also decreased with depth (34 mg/kg at 1 to 2 feet bml) and is vertically bounded.

  Elevated metals are colocated with elevated dioxins (see Figure 3-16), and any remedial action developed for dioxins is expected to address metals. Metal exceedances occur only at LRIS-CL-02, where dioxins are also most elevated. Metals in other samples were below screening criteria and are generally consistent with natural soil background concentrations for arsenic (5.81 mg/kg) and chromium (26.57 mg/kg) for Clark County (Ecology, 1994). Since the limited number of metals exceedances were colocated with dioxins, they were not selected as an IHS.

- Di-n-octyl phthalate was not detected, but an elevated reporting limit of 87 μg/kg exceeded Avocet benthic criteria in the subsurface at LRIS-CL-02; di-n-octyl phthalate was not carried forward as an IHS, as detected concentrations did not exceed benthic criteria.

- PAHs did not exceed screening criteria at any location and were therefore not selected as an IHS.

- PCP exceeded bioaccumulation SLVs protective of ecological receptors and human fish consumption in surface sediment at LRIS-CL-02 but was well below both Avocet benthic and bioaccumulation SLVs at nearby sample locations, bounding the lateral extent of impacts. PCP decreased substantially with depth at LRIS-CL-02, suggesting that vertical extent is bounded; however, the human fish consumption SLV of 250 μg/kg was marginally exceeded in the 1- to 2-foot-bml sample (270 μg/kg). PCP concentrations did not exceed Avocet benthic criteria; a PEC is not available for PCP.

  PCP bioaccumulation SLV and benthic criteria exceedances are limited to one location and are colocated with the highest dioxin concentrations (see Figure 3-16). Remedial actions developed for dioxins are expected to address any potential unacceptable risk resulting from exposure to PCP; therefore, PCP was not selected as an IHS.

In summary, dioxins were identified as IHSs for Carty Lake sediment. Significantly elevated dioxin TEQs are largely limited to the southern portion of the lake and consist of samples LRIS-CL-01, -02, and -04, although elevated (i.e., higher than background of 2 ng/kg) dioxin TEQ concentrations occur at multiple locations; dioxin congener exceedances of ecological bioaccumulation SLVs, where they occur, are colocated with dioxin TEQ exceedances. The spatial distribution of impacts is consistent with the CSM that shows that the source of impacts is historical discharge and/or surface soil erosion from the upland LRIS.

4 INTERIM ACTIONS

The Port has conducted interim actions on the LRIS since 1996, with Ecology oversight and approval. The interim actions include the following:

- Initial source removal: included the initial actions to clean up the LRIS after PWT vacated the property.
- Emergency action: includes the SER system, which focused on removing mobile product related to the former tank farm and retort area.
- Current interim actions: include actions completed in Cells 1, 2, 3, and 4, based on Ecology-approved LRIS FSs and work plans.

Figure 4-1 shows interim actions completed on the LRIS, and Figure 4-2 shows the preferred alternatives for Cells 1 and 2 identified in the draft Cells 1 and 2 RI/FS (MFA, 2011a), which were implemented as an interim action in the spring, summer, and fall of 2012 and which will be finalized during the summer of 2013.

4.1 Initial Source Removal

Remedial actions were conducted from 1996 until 2002 as emergency and interim actions to meet requirements of the Order. The actions were focused on removing PWT equipment, tanks, and product; general site maintenance; and hot spot removal. The interim actions are detailed in the 2004 RI work plans (MFA, 2004, Vols. I, II, and III) and are summarized below for Cells 1, 2, 3, and 4.

4.1.1 Cells 1 and 2

- Replacement of the stormwater line and removal of drain tile and impacted soil west of the concrete pond to OF-3.
- Cleanout of the remaining stormwater system and installation and maintenance of catch basin and trench drain filters. The first cleanout was conducted in phases, starting in 1995 and ending in 1998. A second stormwater cleanout was conducted in 1999.
- Removal of the tank farm, retorts, PWT's WWTP, treated lumber, ancillary equipment, treating buildings, hazardous chemicals and sludge, the concrete pond, and the historical French drain system.
- Excavation of contaminated soil at the dry PCP spill area; soil where the City expanded its WWTP around sample locations T-4 and T-5; and soil near Building 6, around sample locations B-228, DS-N, and DS-S.

4.1.2 Cell 3

- Removal of treated wood left by PWT.
- Removal of an oil/water separator that historically discharged to OF-1.
- Removal of the drip trough and treatment of 300 cubic yards (CY) of impacted soils with peroxide. The soil was placed back in the excavation after treatment.
- Soil exceeding Method C CULs, centered on B-208 and B-220 in the western portion of Cell 3, was removed and placed in Cell 1.

4.1.3 Cell 4

A soil berm was constructed to direct surface water flow to Cell 2 and OF-3.

4.2 Emergency SER System

The SER system was constructed as an interim/emergency action to remove NAPL from the subsurface and prevent a free-phase product plume from migrating onto the RNWR from a portion of the LRIS (i.e., the SER area). The SER area and wellfield are shown on Figure 4-3 (note that the locations of the extraction wells [with an E- prefix] are also shown in Figure 4-3). The details of the SER system operation are provided in the draft Cells 1 and 2 RI/FS (MFA, 2011a) and the memorandum regarding discontinuation of steam injection (MFA, 2011d). The operations and performance of the SER system are briefly summarized below.

The SER system was constructed as an interim/emergency action, starting in 2002. The SER project was conducted in two phases, with a final polish stage.

Section 4 of the draft Cells 1 and 2 RI/FS (MFA, 2011a) discusses the 2004 to 2005 Phase 1 operations and the 2006 through 2010 Phase 2 operations in detail. A polish phase was conducted in 2011, and the SER system was shut down on June 30, 2011 (MFA, 2011d).

Phase 1 was a pilot study conducted through the center of the NAPL plume to evaluate the effectiveness of the system and obtain information to design the full-scale operation. Phase 2, the full-scale operation, was designed to thoroughly remediate the entire SER area. The polish stage treated the entire SER area at once from outside in and confirmed diminishing returns.

The SER process is based on steam flooding processes that have been used successfully in oil fields around the world. Steam is injected into the subsurface through a series of injection wells. As the heat is injected, semivolatile contaminants become volatile and are captured by vapor extraction wells; simultaneously, the viscosity of NAPL is lowered to allow recovery through groundwater extraction wells. Under an NPDES permit, treated water was discharged to Lake River through OF-3.

The SER system removed approximately 24,800 gallons of NAPL, disposed of over 500 tons of contaminated sludge, and treated over one million gallons of groundwater.

Based on performance of the system in Phases 1 and 2 and the lack of NAPL removal in the polishing phase, it was determined that the SER system had reached a point of diminishing returns. By the time the steam injection was discontinued on June 30, 2011, the approximately 4-acre NAPL footprint had decreased by 92 percent (MFA, 2011d).

Figure 4-4 shows the reduction of extent of NAPL through Phase 2. Note that before SER operation, NAPL thickness was up to approximately 3 feet; however, measurements at the end of Phase 2 found NAPL thickness approximately 0.1 foot or less.

After June 30, 2011, when steam injection was stopped, groundwater and vapor extraction continued during a cooldown period instituted to allow subsurface heat to decrease. Shutdown of vapor and groundwater extraction during the cooldown period was completed with Ecology approval on October 24, 2011 (Ecology, 2011d), followed by soil and groundwater sampling (see Sections 3.2.1.2 and 4.2.1). Decommissioning of the SER system, consistent with the closure plan (Port and Ecology, 2012), began during the summer of 2011.

4.2.1 SER Groundwater Evaluation

The SER was an emergency interim action designed to remove mobile contaminants (e.g., VOCs and some SVOCs). To evaluate performance, groundwater was regularly sampled from a number of the extraction wells during the operation of the SER system. In November 2011, MFA conducted the last of the groundwater sampling events to evaluate the SER area after SER treatment was complete. The sampling was conducted consistent with the Ecology-approved sampling work plan (MFA, 2011f). The analytical results for all of the SER groundwater monitoring events are summarized in Tables J-1-1 through J-1-4 in Appendix J.

The SER groundwater influent was also sampled regularly at a sample port identified as L0. Data from L0 represent an average concentration of chemicals as they are extracted from the subsurface. Figures 4-5 through 4-8 show the trend of analytical results from sampling port L0. The most prevalent and toxic wood-treating chemicals (i.e., PCP, naphthalene, benzene, and PCE) are shown on the figures. Note that during the startup of the SER system, concentrations of most chemicals were relatively high and some of the VOC analytes (e.g., benzene and PCE) had elevated MRLs because of interference by those analytes that were present at relatively high concentrations (e.g., naphthalene). Figures 4-5 through 4-8 show relatively high initial concentrations that decreased as SER operations continued. Spikes in concentrations typically occurred when operations began in a new treatment area.

Figures 4-9 through 4-18 compare the nature and extent of wood-treating chemicals in 2002, before the SER was initiated, with the nature and extent in November 2011. The November 2011 SER groundwater results show that concentrations of IHSs in groundwater are generally consistent with or lower than in previous sampling events. The most prevalent and toxic wood-treating chemicals (i.e., arsenic, benzene, naphthalene, PCE, and PCP) were modeled using EVS as described in Section 3.

Figures 4-9 and 4-10 show the extent of benzene in groundwater. In 2002, benzene was present throughout the SER area and extended beneath the RNWR in the UWBZ and LWBZ. Benzene historically was detected at up to 59 μg/L, but since August 2010, benzene generally has not been detected above the MTCA Method B CUL of 0.8 μg/L in the UWBZ or LWBZ in the SER area (see Table J-1-1 in Appendix J). Concentrations downgradient of the SER area have also been reduced, for example in the concrete pond area in the deep UWBZ and LWBZ (see Table 3-8). Also, benzene is no longer detected in monitoring wells in the RNWR north of Cell 2.

Figures 4-11 and 4-12 show the extent of PCE in groundwater. The concentration of PCE has been reduced, especially in the SER area. PCE historically was detected at up to approximately 58 μg/L; however, concentrations are still present above the Method B CUL of 0.081 μg/L[3] in some areas of the SER (see Table J-1-1 in Appendix J). Outside the SER area, PCE generally is detected only in LWBZ wells. PCE concentrations in the LWBZ beneath the SER area have decreased, while concentrations downgradient of the SER have been more stable (see Table 3-8). The source of the PCE in the former tank farm area appears to have been largely removed and concentrations are typically lower than those downgradient.

Figures 4-13 and 4-14 show the extent of naphthalene in groundwater. In 2002, naphthalene extended into the RNWR; the highest concentrations were in the former tank farm area and the former concrete pond area. Historically, naphthalene has been detected at up to 26,000 μg/L, but currently most of the naphthalene in the SER area is below the Method B CUL of 160 μg/L in the SER area (see Table J-1-1 in Appendix J). Also in 2002, naphthalene was present throughout the UWBZ, but is currently limited generally to the shallow UWBZ near other potential sources (i.e., the former concrete pond and the OF-2 stormwater catchment).

Figures 4-15 and 4-16 show the extent of PCP in groundwater. The concentration of PCP has been reduced, especially in the SER area. In past sampling events, PCP has been detected at up to 32,200 μg/L (see Table J-1-3 in Appendix J). Concentrations of PCP have been greatly reduced but PCP is still present above the Method B CUL of 0.73 μg/L in the SER area. Outside the SER area and the former concrete pond area, PCP generally is detected only in deep UWBZ and LWBZ wells (see Table 3-9). The source of the PCP in the former tank farm area appears to have been largely removed.

Figures 4-17 and 4-18 show the extent of arsenic in groundwater. Arsenic concentrations did not change much during the operation of the SER system, as shown by the figures. Concentrations decreased slightly in the western portion of the SER, while concentrations increased slightly in the eastern portion (although current concentrations are lower than detections from past sampling events in which arsenic was detected at concentrations as high as 530 μg/L) (see Table J-1-2 in Appendix J).

Figures 4-4 through 4-18 show that the SER has reduced concentrations of IHSs in groundwater and reduced the risk to downgradient receptors. The reduction in concentrations in the SER area has also created reduction of IHSs outside the SER area—most notably, concentrations in wells completed adjacent to or beneath the southern portion of Carty Lake in the RNWR. For example, USDFW-1, completed approximately 50 feet north of Cell 2 in the RNWR, historically detected

---

[3] Note that the Method B CUL for PCE was updated in 2012 to 5 μg /L.

benzene, carbazole, DROs, naphthalene, PCE, PCP, RROs, TCE, and vinyl chloride above MTCA CULs; however, in recent sampling events these compounds were not detected above CULs.

The November 2011 analytical results show that overall concentrations of IHSs have declined or remained stable since the last sampling event in December 2010. The overall results are similar to those reported in the SER discontinuation letter (MFA, 2011d) and shown in Figures 4-9 through 4-18. Some locations did have slight increases of a few compounds, with the most increases occurring at extraction well DEW-4, where six compounds have increased in concentration since December 2010.

4.3 Cells 3 and 4 Interim Action

Interim actions for Cells 3 and 4 were conducted during 2010 and 2011 and followed the May 27, 2010, Ecology-approved interim action work plan (MFA, 2010c). The work was conducted consistent with the requirements of the Order and the interim action requirements provided in WAC 1733-340-430. After the interim actions have been concluded, the details of the work will be provided to Ecology in a forthcoming interim action completion report. The actions conducted for each cell are described below.

4.3.1 Cell 3

Soil characterization samples collected throughout Cell 3 generally contained IHS results exceeding MTCA Method B soil CULs and/or ecological screening criteria.

In order to address the risk posed by exposure to the soil, capping and the excavation of hot spot soils (i.e., soils with concentrations above Method C soil CULs) was determined to be the preferred remedial alternative.

In Cell 3, the following locations had confirmed detections of IHSs that exceeded Method C CULs and required excavation (see Figure 4-1):

- MW-9S: arsenic and cPAH TEQ at 0.5 foot bgs
- SPY-01A: cPAH TEQ at 1 foot bgs
- SPY-01B: arsenic at 5 feet bgs
- SS-7: arsenic and dioxin TEQ at 0.3 foot bgs

Table 4-1 shows the approximate volumes of soil removed from the hot spot locations. Soil was disposed of at the Clean Harbors Aragonite Incineration Facility in Utah as hazardous waste.

After completion of hot spot excavation, Cell 3 was graded in preparation for the clean soil cap. This included regrading the Lake River bank and removing a bulkhead and barge-loading ramp.

Soil for the soil cap was from the Interstate 5 interchange construction project. Before placement on site, the soil was analyzed consistent with the Ecology-approved soil acceptance plan (MFA, 2007), and the results were presented to Ecology in a letter report (MFA, 2007). The soil did not contain site IHSs above Method B CULs or natural background concentrations.

Obstructions on Cell 3 (e.g., building, loading ramps, and pilings) were removed before installation of the soil cap. Activities included the removal of the UPRR spur railroad line and a groundwater monitoring well (i.e., MW-28S). Concrete was crushed and surface applied before cap placement. In addition, stormwater improvements on Cell 3 included decommissioning of stormwater outfall OF-1 and replacement with two new outfalls, OF-5 and OF-6. Stormwater improvements were implemented before cap installation.

A geotextile (SKAPS GT-160 Nonwoven Geotextile™ or equivalent) was placed on a smooth, prepared surface, free of puncture obstructions, between the contaminated surface and the clean fill. The geotextile was used as a demarcation layer between the impacted site soils and the soil cap.

A minimum of 2 feet of soil was placed over the geotextile and compacted. The cap was deeper in certain areas to allow for additional, stabilizing vegetation (e.g., the bank along Lake River in Cell 3) and to contour the cap to control stormwater. In addition, capping was elevated in the upland area in order to protect the cap from potential flooding (as the cap is partially located within the 100-year floodplain) and in preparation for development. The capping will be inspected and maintained consistent with a soil management plan (SMP) and a cap maintenance plan.

4.3.2 Cell 4

Soil characterization samples collected throughout Cell 4 contained IHS results exceeding MTCA Method B soil CULs and/or ecological screening criteria. As the risk posed by exposure to the soil is best addressed by capping and excavation of soils exceeding Method C soil CULs, these were determined to be the preferred remedial alternative action.

In Cell 4, the following locations had confirmed detections of IHSs that exceeded Method C CULs, and therefore the soil was removed as part of the interim action (see Figure 4-1):

- SS-4B detected dioxin TEQ at 0.3 foot bgs.
- SS-30 detected dioxin TEQ at 0.5 foot bgs.

Table 4-1 shows the approximate volumes of soil removed from the hot spot locations. Soil was disposed of at the Clean Harbors Aragonite Incineration Facility in Utah as hazardous waste.

Stormwater improvements were implemented before cap installation. A pipe and catch basins were installed to direct stormwater to Cell 2 and eventually to outfall OF-3. A geotextile (SKAPS GT-160 Nonwoven Geotextile™ or equivalent) was placed on a smooth, prepared surface, free of puncture obstructions, between the contaminated surface and the clean fill. The geotextile was used as a demarcation layer between the impacted site soils and the soil cap.

A minimum of 2 feet of soil was placed over the geotextile and compacted. The cap was deeper in certain areas in order to contour the cap to control stormwater. The capping will be inspected and maintained consistent with an SMP and a cap maintenance plan.

4.4 Cells 1 and 2 Interim Action

The Cells 1 and 2 interim action is currently under way and is to be completed by summer 2013. The interim action includes removal of historical PWT structures and impacted soils, grading and capping, institutional controls, and completion of the SER, including the polishing phase. The work is being completed consistent with the April 13, 2011, Ecology-approved interim action work plan (MFA, 2011b). The work will be conducted consistent with the requirements of the Order and the interim action requirements provided in MTCA WAC 173-340-430. The interim action is based on the preferred alternative in the draft Cells 1 and 2 RI/FS (MFA, 2011a). Figure 4-2 shows the interim action locations for Cells 1 and 2. After the interim actions have been concluded, the details of the work will be provided to Ecology in a forthcoming interim action completion report. The Cells 1 and 2 interim action began during the summer of 2012 and will be completed by summer 2013. Below is a summary of actions associated with the Cells 1 and 2 interim action.

4.4.1 Historical Feature Removal, Grading, and Capping

As described in Section 3, IHSs generally extended over the entire LRIS. As the risk posed by exposure to the soil is best addressed by capping, this was determined to be the primary preferred alternative action (MFA, 2011a). Soil capping is also protective of potential ecological receptors.

Obstructions (e.g., buildings, surface completions, pilings) were removed before grading and placement of the soil cap. Grading will include regrading the Lake River bank along Cell 2. Actions required to address existing site features included the following:

- Demolition of site buildings
- Crushing of concrete pads, rubble, and foundation, and removing or grading them into the LRIS
- Removal of site rail lines and existing stormwater piping and trenching
- Installing a new stormwater system

4.4.2 Soil Removal

4.4.2.1 Concrete Pond

As stated in Section 3.2.1.1, Cell 2 contained an area of NAPL around the former location of the concrete pond that had been removed as part of the interim action, also identified as the "concrete pond excavation." Until the early 1970s, the concrete pond was used to treat wastewater generated by site operations. NAPL identified around the former location of the concrete pond originated from this feature. The observed NAPL and associated soils were removed during the 2012 interim action work.

The concrete pond excavation began in mid-June and continued through mid-July 2012. Impacted soil excavated from the concrete pond contained listed hazardous waste at levels above Method C CULs and was considered and handled as a listed hazardous waste being transported directly to

Waste Management's Subtitle C Hazardous Waste Landfill in Arlington, Oregon. The final extent of the concrete pond excavation was determined by visual inspection for the presence of NAPL. Soil was excavated using conventional excavation equipment (e.g., backhoe). Approximately 5,700 CY of impacted soil was removed from the concrete pond excavation and disposed of at the Arlington Landfill.

The depth of the excavation associated with the concrete pond averaged 15 feet bgs. Because the concrete pond releases occurred below the ground surface, approximately 4,700 CY of clean overburden that did not have NAPL impacts was removed and stockpiled for use as backfill after completion of the excavation.

Groundwater was encountered in the concrete pond excavation between 6 and 13 feet bgs. The excavation was dewatered and the liquid collected into baker tanks and treated before disposal.

Details of the concrete pond excavation will be provided to Ecology in a forthcoming interim action completion report.

4.4.2.2 Hot Spot Soil

The preferred alternative for Cells 1 and 2 includes removal of soil above MTCA Method C CULs in areas outside the SER treatment area (MFA, 2011a). The following locations (hot spot areas) are located outside the SER treatment area and have confirmed detections of IHSs in soil that exceed Method C CULs; these were excavated and removed from the Site in 2012:

- B-308: dioxin TEQ at 15 feet bgs (included in former concrete pond excavation, discussed above)
- MFP-01: PCP at 3.0 feet bgs (included in former concrete pond excavation, discussed above)
- SS-14: dioxin TEQ at 0.5 foot bgs
- TP-03: PCP at 0.3 foot bgs
- TP-13: arsenic at 0.2 foot bgs (included in former concrete pond excavation, discussed above)

Locations SS-14 and TP-03 were separate excavations, unrelated to the concrete pond. These were excavated to approximately 1 foot bgs, with a combined volume of approximately 19 CY.

In addition, 25 CY of soil was removed near the stormwater catchment to address what may have been the source of elevated groundwater concentrations in the area (MW-57S). Final excavation extents were determined through confirmation sampling of the sidewalls and bottoms of the excavations. Excavated soil from the hot spot areas was direct-loaded for disposal at the Arlington Subtitle C landfill. Details of the hot spot excavations will be provided to Ecology in a forthcoming interim action completion report.

4.4.3 Institutional controls

Institutional controls for Cells 1 and 2 include restrictions for soil and groundwater and construction requirements related to the cap. The institutional controls will be detailed in a forthcoming cleanup action plan.

As described in Section 4.2, the more mobile contaminants have been reduced in the SER soils; however, limited impacts of less mobile compounds such as metals and dioxins remain at elevated concentrations. Since the more mobile contaminants were removed, capping and institutional controls in Cell 1 have been determined to be effective in protecting human health and the environment. The following locations in Cell 1, in the SER area, have confirmed detections in soil of IHSs that exceed Method C CULs:

- B-317 for arsenic (140 mg/kg) at 1.25 feet bgs
- B-322 for arsenic (241 mg/kg) and dioxin TEQ (8,100 ng/kg) at 2.5 feet bgs

4.4.4 SER System

Actions associated with the SER system, including the polish phase, are summarized in Section 4.2.

Polishing was completed on June 30, 2011.

5 CONCEPTUAL SITE MODEL

The CSM describes the physical and chemical conditions on the LRIS, the upland off-property (Port-owned properties and non-Port-owned properties), Lake River offshore of the LRIS, and Carty Lake. The CSM identifies potential chemical sources, release mechanisms, environmental transport processes, and potential exposure pathways and receptors (WAC 173-34-200). The primary purpose of the CSM is to identify contaminant sources and migration, to describe pathways by which human and ecological receptors may be exposed to site-related chemicals in the environment, and for planning effective cleanup and eliminating sources of potential recontamination. According to the USEPA (1989), a complete exposure pathway consists of four necessary elements: (1) a source and mechanism of chemical release to the environment; (2) an environmental transport medium for a released chemical; (3) a point of potential contact with the impacted medium (referred to as the exposure point); and (4) an exposure route (e.g., incidental sediment ingestion) at the exposure point.

Potential source areas and chemical release and transport mechanisms that can allow chemicals to migrate to potential receptors are summarized for the Site. In addition, a discussion of significant exposure points, pathways, and potential receptors for each area (i.e., LRIS, upland off-property, Lake River, and Carty Lake) is presented separately in individual sections. The human health and ecological CSM depicting exposure pathways and potential receptors is shown in Figure 5-1.

5.1 Sources

Suspected historical sources of soil, groundwater, and/or sediment impacts at the LRIS include wood-treating chemicals and other substances that were used as part of wood-treating operations. Historical LRIS features are shown on Figure 2-1; potential historical sources include:

- Spills in the process areas in Cells 1 and 2 (i.e., tank farm, retorts, drip pad) that impacted LRIS surface and subsurface soil and groundwater.
- Releases to surface soil in Cells 1, 2, and 3 such as incidental drips of chemicals from treated wood.
- Releases to surface and subsurface soil during operation of the former drip trough in Cell 3. These releases also appear to have impacted groundwater.
- Releases in Cell 3 (where treated wood was stored) from drippage and "washing" by precipitation-impacted surface soil.
- Washing of treated wood via precipitation and subsequent soil impacts or stormwater discharge to Lake River and/or Carty Lake.
- Discharge of the concrete pond contents to stormwater outfall OF-3 on Lake River. The concrete pond was used until the early 1970s to treat wastewater generated by site operations. NAPL and other soil and groundwater impacts identified around the former concrete pond originated from this feature.
- Stormwater catchment (similar to the concrete pond) near the western edge of former Building No. 8 and MW-57S discharged stormwater to OF-2. Soil and groundwater impacts were identified around this feature.
- Historical LRIS activities leading to dioxin formation; proximate source(s) are not well established.
- Overwater activities, such as barge loading adjacent to Cell 3.

In addition to former PWT-related sources, background sources of chemicals represent a ubiquitous input to the Site. WWTPs are a common source of low-level chemical impacts. The City's WWTP is located north of Cell 1 (see Figure 4-1). The effluent from the WWTP is piped underground along the northern portion of Cell 2 and discharges into Lake River at the northern boundary of Cell 2. Historically, the line discharged from a pipe located at the bank. During the summer of 2006, the City upgraded its outfall and added a diffuser in Lake River. The WWTP outfall upgrade was performed under the direction of Ecology and includes ongoing discharge monitoring as outlined in the associated NPDES permit.

Dioxins are widespread in the environment and can result from both natural and anthropogenic sources (USEPA, 2006). The area around the LRIS is an urban environment where industrial activity has been conducted and a city has been established for over 100 years. In urban areas, dioxins can result from vehicle emissions, back-yard trash burning, structure fires, stormwater runoff, and other common events and activities. Therefore, low levels of dioxins are present in soil or sediment because of natural and/or non-point anthropogenic activities.

It is likely that low levels of dioxins resulting from background sources are also present in Lower Columbia River sediment (see Appendix K) and that they similarly impact Lake River and Carty Lake sediment, since atmospheric deposition is a primary dioxin transport mechanism.

5.2 Transport

Potential contaminant transport mechanisms operating at the Site include direct discharge to soils, tracking of soil impacts by vehicles, leaching of chemicals in soil to groundwater, groundwater flow to surface water, outfall discharge to sediments, stormwater runoff to soils and/or sediments, soil erosion, atmospheric deposition to soils and/or sediments, chemicals in soil/groundwater volatilizing to air, sediment erosion caused by waves, erosion of soils and/or sediment caused by propeller wash, water current sediment erosion, groundwater infiltration, and food chain transfer originating from impacted media.

In sediments, physical transport of contaminants can be upward (advection/diffusion, ebullition), downward (advection/diffusion, burial), or lateral (resuspension/deposition); bioturbation caused by benthic organisms can further displace or mix contaminants. In water, contaminants can move by the same advective and diffusive forces operating in the sediment, by sorption to/from sediments resuspended by currents or scour events, or via bioturbation (e.g., releases from sediment to the water column).

The relative importance of the above processes will vary, depending on the chemical and physical properties of a released contaminant. The properties of soil and the dynamics of groundwater flow also shape contaminant fate and transport. The most significant site-specific transport mechanisms are discussed further below.

5.2.1 Stormwater Transport

As discussed in Section 3.5.2.1, magnitude and extent of dioxins in Lake River are consistent with localized historical stormwater impacts to sediment adjacent to outfalls and along the nearshore areas of Lake River. These results support a conceptual model for historical stormwater impacts, with the Lake River area farther offshore of stormwater outfalls showing low-level dioxin concentrations. Thus historical stormwater inputs from LRIS outfalls and/or surface soil erosion from upland areas likely are contributing sources of contamination observed in nearshore Lake River sediment adjacent to the LRIS.

As part of LRIS interim actions, the stormwater system was removed and a new system was installed (see Section 4). The new system was intentionally routed around areas of previously known contamination (such as the concrete pond), and no visible impacts were observed in the pipe trenches during excavation. Further, because the new stormwater system was installed above the groundwater level, the system is not going to act as a preferential pathway for contaminated groundwater.

Slightly elevated contamination found at LRIS-LR-16, south of the LRIS, likely is related to the City stormwater outfall located approximately 900 feet south of the LRIS (see Figure 3-15). The drainage basin for this outfall had not been determined by the City, but MFA was able to model it using City stormwater maps and direct observation (see Appendix L). Catchment areas in the City-determined stormwater outfall drainage area were calculated by using a combination of Civil3D and ArcGIS Spatial Analysis tools, as well as surface topography. These computer-generated catchment areas were based on the information available and on a site visit, and are further described in Appendix L. MFA concluded that the contamination at LRIS-LR-16 is unrelated to the Site. This conclusion and the supporting information were presented to Ecology on February 10, 2012, and are included as Appendix L. The Port received an e-mail on February 24, 2012, in which Ecology concurred with this conclusion.

5.2.2 Sediment and Shoreline Processes

A number of processes, including water flow, wave erosion, and propeller wash, have the potential to impact sediment transport in Lake River and/or Carty Lake.

High-percent fines coupled with low water velocities (see Section 2.7.1) indicate that Lake River is a low-energy depositional environment. Therefore, contaminant resuspension and redistribution due to bed-shear caused by river currents is not expected to be a significant mechanism for transport, as evidenced by significantly reduced or non-detect chemical concentrations both upstream and downstream of the Site. Evidence for significant sediment accumulation in Lake River near the Site (see Section 2.7.1) also indicates potential for long-term improvement of chemical concentrations in surface sediment via natural recovery (i.e., deposition) processes.

Wind waves are not anticipated to be a mechanism for erosion in Lake River. The limited straight line fetch distance (an area in which waves are generated by wind) in Lake River, combined with the shallow depths of the river (approximately 7 to 8 feet), limits wind wave production in Lake River. Wakes from passing vessels will be much larger and are a potential factor for sediment movement. Wakes likely range from 1 foot (for a 25-foot recreational vessel traveling at 8 miles per hour) to 2.5 feet (for a 35-foot sport yacht). Erosion potential along the shoreline due to wakes is expected from approximately 4 feet below low water in Lake River (1.5 times the wave height) up to mean higher high water (Anchor and MFA, 2011).

Portions of Lake River are potentially vulnerable to erosion from propeller wash. Wakes from passing recreational vessels have the potential to resuspend fine materials in water depths of less than 8 feet; except for the centerline of the navigation channel, Lake River is generally less than 8 feet deep. The center of the channel may also be within 8 feet of water depth during low-flow periods in the Columbia River. Areas near the public boat launch just upstream of the LRIS will be exposed to higher-velocity propeller wash because of launching and berthing activities in that area. Areas (regardless of depth) in the vicinity of the boat launch and attached dock likely will be subject to bed erosion (Anchor and MFA, 2011).

Sediment resuspension and transport potential is low in Carty Lake. High-percent fines and organic carbon, absence of a water inlet/outlet except during flood events, and lack of propeller wash (boats are not allowed on Carty Lake) all evidence Carty Lake as a low-energy depositional environment (see Section 2.7.2). Its small size, shallow depths (approximately 3 to 10 feet), and lack of boat use also likely limit wave production. The absence of steep side slopes minimizes potential for shoreline erosion.

The following summarizes the general sediment transport potential:

- Lake River currents are not anticipated to resuspend materials from the river bottom.
- Wind waves are not anticipated to resuspend materials from the river bottom or erode side slopes in Lake River.
- Propeller wash from passing vessels has the potential to resuspend material from portions of the bed in Lake River (areas with less than 8 feet of water depth).
- If material is resuspended from the bed of Lake River, fine sediments with low fall velocity (silts and clays) could be transported.
- Wakes will range from about 1 foot to 2.5 feet in Lake River. These waves can induce erosion of side slopes on either side of Lake River for most of its navigable length down to approximately 4 feet below low water.
- Sediment transport potential is low in Carty Lake.

5.2.3 Groundwater Fate and Transport Modeling

The potential for groundwater to discharge to Lake River or Carty Lake and adversely impact surface water is evaluated. Groundwater in the shallow portion of the UWBZ likely discharges to Lake River; however, the deep UWBZ and the LWBZ do not discharge to Lake River (see Section 2.5). Further, based on lithology, hydrogeology, and head potential, it is also unlikely that the UWBZ or LWBZ discharges to Carty Lake (see Section 2.5). The head difference between Carty Lake and the UWBZ indicates that the groundwater flow potential is downward, although a confining layer between them likely restricts water movement. However, as a conservative measure, IHSs in groundwater near the water bodies in the shallow and deep UWBZ were modeled to evaluate the potential for adverse impacts to occur if groundwater were to discharge to surface water. The most downgradient wells with the highest concentrations of IHSs for each of the two plumes were modeled (i.e., MW-4, MW-10, MW-55S, MW-55D, MW-58D, RMW-2S, RMW-2D, USDFW-1, USDFW-2, and USDFW-3 [Cells 1 and 2 plume], and MW-45D, MW-46S, and MW-47D [Cell 3 plume]).

In order to determine the appropriate IHSs to model, groundwater results from monitoring wells installed nearest the water bodies were compared to MTCA Method B surface water CULs (Ecology, 2011e) and the USEPA national recommended WQC for freshwater CCC for aquatic organisms, for HH consumption of organisms only, and for HH consumption of organisms and water (MFA, 2007, 2011; USEPA, 2009). The chemicals that exceed the surface water criteria in one or more samples were modeled. These included:

- Lake River—Cells 1 and 2 Plume
  - Metals: arsenic and chromium
  - SVOCs: BEHP, dibenzofuran, PCP
  - VOCs: benzene and PCE
- Lake River—Cell 3 Plume
  - Metal: arsenic
  - SVOCs: PCP
  - VOC: PCE
- Carty Lake—Cells 1 and 2 Plume
  - Metals: arsenic and chromium
  - SVOCs: BEHP and PCP

The modeling was performed using the USEPA's BIOCHLOR model. Detailed descriptions of the model, the model inputs, and assumptions are included in the RIs (MFA, 2007, 2011a). General assumptions are outlined below:

- Site-specific hydraulic conductivities (Ks) were calculated using slug test results from Cells 2 and 3, and organic carbon data were collected from the sediment investigations in Lake River and Carty Lake. The default conservative fraction organic carbon (FOC) of 0.0018 was used for soil in the aquifer.
- To account for differences in FOC and Ks between the WBZs, groundwater modeling was conducted in two phases for contaminants present in the deep UWBZ. First, groundwater was modeled from the monitoring well to the riverbank, using the default FOC and the deep UWBZ Ks, and the modeled concentrations at the riverbank were then input into the second model as starting concentrations. The second model used the site-specific FOCs and the shallow UWBZ Ks to model groundwater to the assumed discharge point.
- It was assumed that the shallow and deep areas of the UWBZ discharge by the river's midpoint and that hydrologic conditions in Cells 2 and 3 are mirrored on the RNWR River "S" unit side of Lake River. Discharge concentrations were, therefore, estimated at the midpoint between the riverbank and the middle of Lake River.
- For purposes of modeling groundwater, it was assumed that the entire portion of the UWBZ discharges to Carty Lake by 50 feet from the typical dry season lake boundary (see Figure 2-1).
- An average concentration of chemicals, except for chromium, from the well with the highest detections was used in the modeling. The maximum chromium detections were

used in the modeling because only a few detections have exceeded the hexavalent chromium screening values.[4]

- A constant, nondegrading source was assumed.
- The models assumed a 30-year time frame. Given that the primary source of the contamination (i.e., the SER area) is no longer present, it is unlikely that impacts will continue for this length of time.

The model predicts for each plume that BEHP, benzene, dibenzofuran, PCP, and/or PCE are naturally attenuated to concentrations below analytical MRLs; that chromium is reduced below regulatory screening levels for hexavalent chromium in groundwater and surface water; and that arsenic is reduced to concentrations below the natural background concentration for Washington State (0.005 milligram per liter) before reaching Lake River or Carty Lake. Modeling results and parameters are included in Table 5-1.

Groundwater sampling and analysis conducted across Lake River from the LRIS in the RNWR indicate that IHSs found in Cells 1, 2, and 3 are not present in the RNWR at detectable concentrations (MFA, 2007). Based on the modeling results and the groundwater sampling data from west of Lake River, IHSs in groundwater at the estimated groundwater-discharge boundary with Lake River and Carty Lake are below MRLs and/or reduce to below regulatory surface water screening levels or natural background concentrations. Therefore, groundwater discharge to surface water is not considered a complete transport pathway.

Note that naphthalene was not modeled because, when modeling was completed, naphthalene was not present in reconnaissance groundwater samples that had been collected directly downgradient of MW-57S. After modeling was completed, naphthalene was detected at concentrations above the Method B CUL in newly installed monitoring well MW-55S, located approximately 180 feet downgradient of MW-57S. MW-55S is approximately 70 feet from the bank of Lake River. Naphthalene concentrations decrease from MW-57S to MW-55S by approximately 90 percent. For example, the naphthalene concentrations from August 2011 were 18,700 μg/L (MW-57S) and 938 μg/L (MW-55S). The decrease in concentrations indicates that naphthalene decreases significantly (e.g., up to approximately 100 μg/L per foot) near the riverbank and will not reach Lake River at detectable concentrations.

5.3 LRIS Exposure Scenarios

Potentially complete exposure pathways for LRIS soil, groundwater, and surface water adjacent to the LRIS are described below.

---

[4] Non-speciated chromium screening levels are not available.

5.3.1 Potentially Complete Soil Exposure Pathways

The LRIS was formerly an industrial site that was first used for industrial purposes in the early 1900s. Public use and access to the Cells are restricted until the interim actions are completed. The Port staff occupy the one building that remains on site.

The LRIS is zoned by the City for waterfront mixed use. Under this classification, allowed uses include ground floor commercial with upper story living units; retail, restaurants and lodging; and service industries, among other types of commercial use. Therefore, it is possible that commercial workers will occupy the LRIS at some time in the foreseeable future.

Scenarios by which human receptors may contact wood-treating chemicals in soil include the following:

On-site commercial workers—Commercial workers currently occupy the LRIS and are likely to do so in the future. It is assumed that future workers could contact chemicals in the top 15 feet of the current ground surface.

The pathways by which future workers could potentially be exposed to wood-treating chemicals in soil include direct skin contact with soil, incidental ingestion of soil, and inhalation of soil particulates. There is potential for inhalation of volatile compounds in soil that have migrated to indoor air in Cells 1 and 2; however, in Cells 3 and 4, VOCs generally were not detected in soil samples, and therefore exposure to VOCs from soil is not considered a significant exposure pathway.

On-site construction workers—There are currently no construction workers (e.g., excavation workers, trench workers) working on the LRIS. However, construction activities likely will be performed as part of site redevelopment and remediation. Construction workers could contact IHSs in soil at 0 to 15 feet bgs through incidental ingestion, dermal contact, and inhalation of impacted soil particulates.

The 100-year floodplain elevation is approximately 26.5 feet NGVD and groundwater is typically below 11 feet bgs. Therefore, once the fill has been placed on site to bring the ground surface above the 100-year floodplain elevation for development purposes, groundwater will typically be below 15 feet bgs, which is the maximum excavation depth of most excavating equipment without engineering controls. In addition, utilities are typically installed above the water table. It is unlikely that trench workers will come into contact with contaminated groundwater because excavations are unlikely to extend to the water table.

On-site recreational users—There are currently no recreational users in the LRIS. However, future development may include recreational uses. The pathways by which a future recreational user could potentially be exposed to IHSs in soil include incidental ingestion, dermal contact, and inhalation of soil particulates.

Terrestrial ecological receptors—As a result of past operations, the LRIS is disturbed and does not support natural habitats important for native plants and wildlife. Based on current land use plans, it is unlikely that the LRIS will be redeveloped as a natural area. Therefore, terrestrial ecological receptors are unlikely to have significant exposure to IHSs in soil.

However, the LRIS is adjacent to the RNWR, which is an important regional resource for a variety of wildlife. Because of the close proximity of the RNWR, a TEE has been conducted for the LRIS (MFA, 2010a). This TEE describes interim remedial actions, protective of potential future ecological receptors, that will be implemented on the LRIS (see Appendix B).

5.3.2 Potentially Complete Groundwater Exposure Pathways

As discussed in Section 3.3, groundwater in Cell 4 has not been impacted by contaminants. In addition, it is unlikely that contaminants will migrate to groundwater in the future (see the Cell 4 RI/FS [MFA, 2010e]). Human or ecological receptors that may contact either groundwater or surface water that has received groundwater discharge will not be exposed to contamination in Cell 4.

Groundwater impacts have been identified in Cells 1, 2, and 3. Potentially complete groundwater exposure pathways are discussed below for these Cells.

Drinking Water Pathway

Groundwater in the vicinity of the LRIS is not used for drinking. Drinking water is provided by the City (i.e., municipal water supply). There are no drinking-water wells at the LRIS or immediately downgradient of the LRIS.

The city draws drinking water from wells located approximately 3,000 feet (0.6 mile) upgradient of the LRIS, in Abrams Park. The City is currently conducting a hydraulic study to investigate expanding the current waterworks system (Wall, 2006). It appears that the City can construct one additional well at Abrams Park. The City plans to develop drinking water supplies near the I-5 junction once the Abrams Park well installation is complete. A test well has already been completed near the junction. If additional water needs arise, beyond the additional wells planned at Abrams Park and the I-5 junction, the City will install wells east of I-5. Mr. Steven Wall, PE, the City's public works director, stated that water wells will not be installed west of Abrams Park, in the direction of the LRIS.

Human receptors are unlikely to have direct exposure to IHSs in groundwater at the LRIS. Groundwater is not used for drinking, and it is unlikely that IHSs in groundwater will be transported to an aquifer that could be used for drinking. Given the availability, reliability, and relatively low cost of municipal water, it is unlikely that water-supply wells will be developed at or near the LRIS in the foreseeable future. The Port will ensure that groundwater will not be used in the future by placing a restrictive covenant on groundwater use for the entire LRIS.

Vapor Intrusion

In Cells 1 and 2, it is possible for human receptors to have indirect exposure to groundwater IHSs in excavation trenches or outdoor air. VOCs in groundwater may volatilize and migrate in soil gas into existing or future buildings.

Based on the available information, VOCs historically were not used in the Cell 3 area, although it appears that an off-site source has contaminated groundwater beneath Cell 3 with PCE. However, migration of PCE vapors from groundwater to either indoor or outdoor air is not considered to be a complete exposure pathway in Cell 3. PCE is detected almost exclusively in monitoring wells completed in the deep portion of the UWBZ. In order for PCE to enter the vapor phase and migrate to indoor or outdoor air, it would first have to migrate to the top of the water table through diffusion or advection (where it would be detected in groundwater samples). In samples collected from monitoring wells completed in the shallow portion of the UWBZ, PCE was detected in only one sample (from MW-45S). The detection occurred in the first sampling event conducted in the newly constructed monitoring well, and PCE was not detected at this location in subsequent groundwater-sampling events. It therefore appears that attenuation processes prevent PCE from migrating to the interface between groundwater and vadose-zone soils at detectable concentrations.

5.3.3 Potentially Complete Surface Water Exposure Pathways

Two surface water bodies are adjacent to the LRIS: Lake River and Carty Lake. Lake River and Carty Lake exposure scenarios are discussed in greater detail in Sections 5.5 and 5.6. As discussed above, there are no current complete pathways, via groundwater or stormwater overland flow, to the southern portion of Carty Lake. It is assumed that shallow groundwater discharges to Lake River. However, as discussed in the groundwater modeling in Section 5.2.3, concentrations of IHSs in surface water and sediment pore water near the groundwater-discharge boundary are estimated to be below MTCA B CULs, surface water criteria, and/or background concentrations (for modeling details see the Cells 1 and 2 RI/FS, Appendix H; and Section 5.1.3 in the Cell 3 RI [MFA, 2007, 2011a]).

Site stormwater currently drains to catch basins by overland flow and discharges directly into Lake River. The Port samples stormwater on a routine basis in a manner consistent with its NPDES permit. It is assumed that aquatic biota in both surface water and sediment could contact waterborne IHSs if impacted stormwater discharges to Lake River, and that recreational users of Lake River could contact IHSs in surface water. Potential exposure routes include incidental ingestion of surface water, dermal contact with surface water, and ingestion of fish that bioaccumulate IHSs from surface water or sediment. However, upland remedial actions (i.e., soil capping and stormwater conveyance system replacement) are completed or are under way to eliminate the potential transport of impacted stormwater to Lake River (see Sections 4 and 5.2).

5.4 Upland Off-Property Exposure Scenarios

The upland off-property area includes Port-owned properties and non-Port-owned properties. Currently, the Port-owned Railroad Avenue properties to the east of the LRIS consist of undeveloped land zoned waterfront mixed-use. The Port-owned parking and landscaped areas and the Port-owned proposed overpass property to the south of the LRIS are zoned waterfront mixed-use. The off-property area east of the LRIS is predominantly residential, while McCuddy's Marina is privately owned. The property north of the LRIS is RNWR-owned land. Figure 2-21 displays the zoning designations for all areas.

Wood-treatment chemicals associated with historical Port operations are not detected above CULs or levels consistent with background in upland off-property areas. Dioxins are identified as an IHS for the off-property areas (see Section 3.2.2.1).

The most elevated dioxin concentrations occur on the Port-owned properties (i.e., Railroad Avenue properties) zoned waterfront mixed-use (see Section 3.2.2.2). Dioxin characterization in non-Port-owned properties, including the residential area, has been conducted primarily in rights-of-way; other exposure points (e.g., yards) have not been characterized. Exposure scenarios are developed separately for Port-owned properties and non-Port-owned properties.

5.4.1 Port-owned Properties

The primary exposure pathways are identified for surface soils east and south of the LRIS. Potential exposure pathways and receptors include:

- Human direct contact, including incidental soil ingestion, dermal contact, or inhalation
- Human secondary ingestion (consumption of chemicals in produce)
- Ecological receptor direct contact, including soil ingestion/uptake, dermal contact, and inhalation
- Ecological receptor secondary ingestion (consumption of chemicals in plant material and/or prey by upper trophic level receptors)

Human Health CSM

Exposure scenarios are shown in Figure 5-1. Potential human receptors include workers (e.g., construction) and residents (adults and children). Note that exposures to residents on Port-owned properties may be significantly less than in residential areas because of less frequent use; however, this pathway is retained. Human incidental soil ingestion may occur. Paustenbach et al. (2006) found dermal contact with dioxins and the inhalation pathway for dioxins to be relatively insignificant exposure pathways relative to incidental soil ingestion. Based on these findings, human incidental ingestion of soil is the most significant potential exposure pathway.

Ecological Receptor CSM

Exposure scenarios are shown in Figure 5-1. Potential ecological receptors include wildlife (e.g., mammals and birds) and plants. However, the Port-owned properties provide minimal important ecological habitat because of substantial human disturbance and the lack of important resources for wildlife (see Figure 2-2). Wildlife may visit the area, but potential exposures of wildlife receptors to impacted soil are expected to be minimal, as their foraging range is unlikely to be restricted to these areas. Based on the upland off-property TEE, impacts in Port-owned area soils are not expected to result in unacceptable risk to ecological receptors, with the exception of dioxins in the Port Railroad Avenue properties (see Appendix B).

Summary

Human incidental ingestion of soil is identified as a potential exposure pathway, while unacceptable risk to ecological receptors is limited to exposure to the Port Avenue Railroad properties.

5.4.2 Non-Port-owned Properties

The primary exposure pathways are identified for surface soils east and south of the LRIS. Potential exposure pathways and receptors include:

- Human direct contact, including incidental soil ingestion, dermal contact, or inhalation
- Human secondary ingestion (consumption of chemicals in produce)
- Ecological receptor direct contact, including soil ingestion/uptake, dermal contact, or inhalation
- Ecological receptor secondary ingestion (consumption of chemicals in plant material and/or prey by upper trophic level receptors)

Human Health CSM

Exposure scenarios are shown in Figure 5-1. Potential human receptors include residents (adults and children) and workers (e.g., construction). Recent findings support limited potential exposure from dermal contact, inhalation, and produce-consumption pathways. Paustenbach et al. (2006) conducted a probabilistic risk analysis of cancer risks and noncancer hazards for exposures to adults and children (up to 6 years old) from dioxins in urban residential soils. The probabilistic risk analysis determined that the most sensitive determinants of dose and risk are childhood soil ingestion, exposure duration, and the selected TCDD cancer potency factor. Paustenbach et al. (2006) found dermal contact with dioxins in soil to be a relatively insignificant exposure pathway relative to incidental soil ingestion and stated that the inhalation pathway for dioxins in soil is insignificant relative to the direct-contact pathways. Paustenbach et al. (2006) also provided a discussion of the transfer of dioxins in soil to home-grown vegetables/plants and concluded that this exposure pathway was insignificant, given that:

- The extremely low vapor pressure of dioxins prevents any substantial vapor flux from contaminated (and often long-weathered) soils.
- The suspension of local soils with subsequent deposition on plants is expected to be nominal for dioxins because of normal washing, processing, and/or cooking of vegetables.

Based on these findings, human incidental ingestion of soil is the most significant potential exposure pathway.

Ecological Receptor CSM

Exposure scenarios are shown in Figure 5-1. Potential ecological receptors include wildlife (e.g., mammals and birds) and plants. However, the non-Port-owned properties do not provide important ecological habitat (except for the RNWR property) because of residential development, i.e., there is substantial human disturbance and there are no important resources for wildlife (see Figure 2-2). Wildlife may visit the area, but potential exposures of wildlife receptors to impacted soil are expected to be minimal, as their foraging range is unlikely to be restricted to this urban area. Based on the upland off-property TEE, impacts to soil are not expected to result in unacceptable risk to ecological receptors (see Appendix B).

Summary

Human incidental ingestion of soil is identified as a potential exposure pathway, although potential exposure points in residential areas (i.e., yards) have not been characterized. Unacceptable risk to ecological receptors is not expected.

5.5 Lake River Exposure Scenarios

Lake River offshore of the LRIS is a relatively shallow, slow-velocity river that is frequented by recreationists and is habitat to aquatic animals, including special-status salmonids, waterbirds such as the great blue heron, and aquatic mammals such as the river otter. Lake River's setting, fluvial dynamics, and uses are further described in Section 2.

Dioxins are identified as IHSs for Lake River sediment. See Section 3.5.2.1 for a discussion of IHS screening. Other contaminants at elevated concentrations are colocated with elevated dioxin concentrations, and any cleanup action directed at dioxins is expected to remedy those contaminants.

Potentially complete exposure pathways for human health and ecological receptors are described below and are presented in Figure 5-1.

Human Health CSM

The principal human receptors that have the potential to contact sediment offshore of the LRIS in Lake River are described below.

- **Recreationists.** The water recreation scenario includes personal watercraft, water skiing, kayaking, swimming, and other beach activities. The primary exposure medium for these activities is water, but individuals may also come into contact with sediment while entering or exiting the water. Adults and children may be recreationists.

  Recreationist exposure to dioxins in sediment likely is limited, as use of nearshore LRIS areas and/or sustained contact with sediment near the LRIS is unlikely. Although the recreationist pathway is not likely to be significant, CULs protective against direct contact with dioxins in sediment are developed as a precaution (see the discussion of CUL development in Section 6).

- **Fishers.** Fishers generally angle near the LRIS by boat or from nearby piers, using hook and line. Fish may be caught for personal consumption. Because of the strongly hydrophobic nature of dioxins, exposure to fishers via surface water is not expected to be a significant pathway. The primary exposure media for potential fishers are aquatic biota; direct contact with surface water and sediment is considered an insignificant pathway. Fishers may include adults and children.

  Fishing is allowed in RNWR areas open to the public (on the Carty Unit), including sections of Lake River. Under the RNWR 2010 Comprehensive Conservation Plan, the RNWR will evaluate fishing access enhancement opportunities in the River "S" Unit located west and southwest of the Site. This may result in an increase in fishing visits at Lake River, although presently there are only approximately 260 fishing visits annually throughout the entire area of the RNWR that is open to the public (i.e., the Carty Unit) (USFWS, 2010).

  The frequency of fishing activity in Lake River sections outside the RNWR is not known; however, fishing in the region is more popular in the cold waters of the Columbia River. Harvestable resident fish and shellfish species known to exist in Lake River include common carp, channel catfish, largescale sucker, and crayfish (USFWS, 2010). Of these, the largescale sucker and the crayfish have relatively small home ranges and would be most relevant to evaluation of site-related seafood health risks. The channel catfish and the common carp, by contrast, tend to have large home ranges that would limit the influence of the LRIS site sediments on tissue quality or human health exposures.

  With the potential exception of crayfish, shellfish are not expected to be relevant to human health exposures. The USFWS (Buck, 2000) attempted to sample Asian clams (*Corbicula fluminea*) in Lake River adjacent to the PWT site, but none were found at any of the sampling locations. The WDFW (as cited in Ecology, 2011c) reports no recreational take of shellfish from the Columbia River in 2006. While freshwater mussels were an important dietary component of Columbia River and Snake River tribes, neither mussels nor the invasive Asian clam have been noted in Lake River. Therefore it is unlikely that these species will contribute to potential human health risks.

  Lake River is not a documented usual and accustomed fishing ground for tribes. However, tribes may have an interest in the area and will be included in the cleanup decision-making process. Anadromous and freshwater finfish constitute most of the fish consumed by Columbia River region tribal members (Ecology, 2011c). Columbia River tribal consumption surveys did not report the consumption of shellfish (i.e., crayfish). Salmon was reported to be consumed by the largest number of tribal adult respondents (92 percent), followed by trout (70 percent), lamprey (54 percent), and smelt (52 percent). Because the potential return for fishing in Lake River is low, it is most likely that recreational and subsistence fishers will maximize their limited resources (i.e., time and fuel) by fishing in the substantially more productive Columbia River. In addition, while species such as crayfish and largescale sucker are present in Lake River, it is important to consider that relatively low species production rates and the long lifespan of these species will tend to limit potential fishing success (and resulting diet fraction) of fishers who elect for whatever reason to target their fishing activity near the LRIS.

Development of CULs protective of recreational fisher consumption of fish that have accumulated dioxins in tissue are discussed in Section 6.

Ecological Receptor CSM

Water-dependent ecological receptors, including plants, benthic invertebrates, fish (piscivorous, omnivorous, and benthivorous), piscivorous mammals, and piscivorous raptors are ecological receptors most likely to become exposed to dioxin-impacted sediment offshore of the LRIS.

Relevant exposure media for ecological receptors include sediment and also fish tissue for receptors at higher trophic levels. As indicated above, plants, benthic invertebrates, fish, birds, and mammals may all be exposed to dioxins present in sediment. Specifically, plants and benthic invertebrates may be exposed to dioxins through direct contact with and uptake from sediment; fish may be exposed to dioxins through direct contact with sediment and ingestion of food that has accumulated contaminants. Birds and mammals may be exposed to dioxins through incidental ingestion of sediment and consumption of food that has accumulated the contaminant. Although birds and mammals may have some dermal exposure to dioxins in sediment, this exposure route is considered insignificant because of external protection such as fur and feathers.

Considerable toxic effect has been demonstrated for fish, birds, and mammals exposed to dioxins (USEPA, 2008). However, plants and benthic invertebrates are relatively insensitive to dioxin-induced toxicity (USEPA, 2008), and no relationship to benthic toxicity has been established (Avocet, 2011). CULs developed (see Section 6) for protection of the more susceptible ecological receptors (i.e., fish, birds, and mammals) are also expected to be protective of the less susceptible plants and benthic invertebrates.

As discussed above, the largescale sucker and crayfish have relatively small home ranges and would be most relevant to evaluation of site-related impacts to aquatic biota. Common waterbird species and raptors that use wetlands along Lake River and that likely would be fish/shellfish consumers include coot, pied-billed grebe, double-crested cormorant, great blue heron, great egret, bald eagle, osprey, and northern harrier. Mammals that inhabit wetlands along Lake River and that have the potential to ingest fish/shellfish include mink, muskrat, river otter, common opossum, raccoon, and striped skunk (see Appendix C).

Lake River Summary

The following exposure pathways and receptors are selected for further evaluation and CUL development:

- Human direct contact with sediment and incidental sediment ingestion
- Human secondary ingestion (consumption of chemicals in tissue of aquatic biota)

- Fish uptake of chemicals in sediment
- Bird or mammal secondary ingestion (consumption of chemicals in aquatic prey)

5.6 Carty Lake Exposure Scenarios

Carty Lake is located on the RNWR north of Cell 2 and west of Cell 4 (see Figure 2-3). Carty Lake is a 52-acre, ponded wetland. During most of the year Carty Lake has no outlet, but during the rainy season it can be hydraulically connected to Gee Creek at the lake's northern end. Carty Lake has limited recreational uses (USFWS, 2010) (i.e., it is accessible by trails and fishing is allowed, but boating is not allowed). Carty Lake's setting, fluvial dynamics, and uses are further described in Section 2.

Dioxins are identified as IHSs for Carty Lake sediment (see Section 3.5.3.1). Dioxins were detected in all samples and were significantly elevated in the southern portion of the lake, but decreased substantially in concentration farther north. Other contaminants at elevated concentrations are colocated with the highest dioxin concentration (1,400 ng/kg dioxin TEQ at LRIS-CL-02), and any cleanup action directed at dioxins is expected to remedy these contaminants.

The relevant exposure point for Carty Lake is surface sediment with elevated concentrations of dioxins and other chemicals. Potential exposure pathways for human health and ecological receptors are described below. Exposure scenarios are shown in Figure 5-1.

Human Health CSM

The principal potential receptors at Carty Lake are discussed below.

- **Fishers.** While there is potential for fishers (recreational) to angle in Carty Lake, fishing for consumption is likely to be very limited. Uses in the Carty Unit of the RNWR include hiking and fishing; however, there are only about 260 fishing visits annually throughout the entire RNWR, with use distributed between Gee Creek, Duck Lake, Middle Lake, and Carty Lake (USFWS, 2010), suggesting that public use activities near or in Carty Lake are currently uncommon. Trails lead to the Gee Creek portion of the Carty Unit for fishing, but Carty Lake itself is not currently readily accessible to visitors. The RNWR maintains a mowed seasonal footpath along the north end of the lake, but this path is flooded during high-water periods and is not heavily used; however, the RNWR could work with the Port to develop a loop trail adjacent to Carty Lake for public access from the Port property. A few individuals have been observed fishing on an irregular and seasonal basis (Chmielewski, 2011), and possible catch includes common carp, largescale sucker, and crayfish. However, it is not known if fish are caught for consumption (USFWS, 2010).

  In the future, the USFWS may consider the feasibility of reconnecting Carty Lake either to the Columbia River via Gee Creek or to Lake River through a constructed channel (see Section 2.8.4). A Gee Creek connection likely would restore access for salmonids such as cutthroat trout and coho salmon, in which case future potential fish catch and consumption of these desirable species would require examination, although limited access and preference for Columbia River fishing (see Section 5.5 above) may continue to limit fishing activity.

Because of the strongly hydrophobic nature of dioxins, exposure to fishers via surface water is not expected to be a significant pathway. The primary exposure media for potential fishers are aquatic biota; direct contact with surface water and sediment is considered an insignificant pathway. Fishers may include adults and children.

- **Restoration workers.** Recreationist activity at Carty Lake likely is extremely limited and exposure to dioxins in sediment likely is not significant. However, the USFWS may attempt to remove nonnative vegetation (i.e., tilling reed canary grass) and restore native wapato in the future, potentially resulting in direct contact with and incidental ingestion of sediment. Restoration efforts likely would involve tilling vegetation for a 40-hour work week about once every three years (USFWS, 2012).
- **Tribal use.** The Cowlitz Tribe historically used Carty Lake for wapato harvest and may want to use the area for this purpose in the future (Mercuri, 2012). In the event that Tribal members choose to harvest and consume wapato, they may be exposed to impacted sediment via direct contact and incidental ingestion of sediment during harvest activities. However, ingestion of wapato grown in impacted sediment is not expected to be a significant exposure pathway because studies have shown that dioxins are not incorporated into any substantial fraction of the edible plant material (Paustenbach et al., 2006). The frequency and duration of potential future harvesting activities are not known.

Ecological Receptor CSM

Carty Lake ecological functionality has been reduced because of diking and filling, and water quality and aquatic plants have been negatively impacted by introduced carp (USFWS, 2010). However, Carty Lake provides habitat for plants, benthic invertebrates, fish (piscivorous, omnivorous, and benthivorous), piscivorous mammals, and piscivorous raptors.

Relevant exposure media for receptors include sediment and also fish tissue, in the case of receptors at higher trophic levels. Plants, benthic invertebrates, fish, birds, and mammals may all be exposed to dioxins in sediment. Specifically, plants and benthic invertebrates may be exposed to dioxins through direct contact with and uptake from sediment; fish may be exposed to dioxins through direct contact with sediment and ingestion of food that has accumulated contaminants; and birds and mammals may be exposed to dioxins through incidental ingestion of sediment and consumption of food that has accumulated dioxins. Although birds and mammals may have some dermal exposure to dioxins in sediment, this exposure route is considered insignificant because of external protection such as fur and feathers.

Considerable toxic effect from dioxins has been demonstrated for fish, birds, and mammals (USEPA, 2008). However, plants and benthic invertebrates are relatively insensitive to dioxin-induced toxicity (USEPA, 2008), and no relationship to benthic toxicity has been established (Avocet, 2011). Actions to remedy contamination, developed for the more susceptible ecological receptors (i.e., fish, birds, and mammals), will account for protection of the less susceptible plants and benthic invertebrates.

As discussed above, the largescale sucker, common carp, and crayfish in Carty Lake likely have relatively small home ranges and would be most relevant to evaluation of site-related impacts to aquatic biota. In the event that a connection between Carty Lake and the Columbia River is restored (see Section 2.8.4), access for salmonids such as cutthroat trout and coho salmon could be achieved. Common waterbird species and raptors that utilize habitat along Carty Lake and that may ingest fish/shellfish include coot, pied-billed grebe, double-crested cormorant, great blue heron, great egret, bald eagle, osprey, and northern harrier. Mammals that inhabit wetlands along Carty Lake and that have the potential to consume fish/shellfish include mink, muskrat, river otter, common opossum, raccoon, and striped skunk (see Appendix C).

Carty Lake Summary

The following exposure pathways and receptors are selected for further evaluation and CUL development:

- Human secondary ingestion (consumption of chemicals in tissue of aquatic biota)
- Restoration worker direct contact with sediment and incidental ingestion of sediment
- Fish uptake of chemicals in sediment
- Bird or mammal secondary ingestion (consumption of chemicals in aquatic prey)

6 PRELIMINARY CLEANUP LEVELS AND POINTS OF COMPLIANCE

A CUL is the concentration of a hazardous substance in soil, water, air, or sediment that is determined to be protective of human health and the environment under specified exposure conditions. CULs, in combination with POCs, typically define the area or volume of soil, water, air, or sediment at a site that must be addressed by the cleanup action (WAC 173-340-700 through 173-340-760). Cleanup standards must also incorporate other state and federal regulatory requirements applicable to the cleanup action and/or its location. POCs are identified in accordance with standard MTCA protocols for soil and groundwater, and consistent with the SMS for affected sediments.

This section first describes preliminary soil and groundwater CULs protective of potential receptors in upland portions of the Site. MTCA includes procedures for developing standard and modified Method B and Method C risk-based CULs for media, including residential soils, industrial soils, and groundwater (Chapter 173-340-700 WAC).

Preliminary CULs are also developed for sediments in Lake River and Carty Lake. MTCA addresses sediment CULs by reference to the SMS (Chapter 173-204 WAC). While SMS CULs have been developed for marine sediments, freshwater sediment quality criteria are currently determined on a case-by-case basis (Chapter 173-204-340 WAC). Cleanup standards consider protection of human health and ecological receptors.

6.1 Soil

Under the standard MTCA Method B, generic default assumptions are used to calculate risk-based CULs protective of human health. Modified Method B provides for the use of chemical-specific or site-specific information to change selected default assumptions, within the limitations allowed in WAC 173-340-708. Modified Method B may be used to establish CULs. Method C industrial soil CULs may also be established at industrial properties that meet the criteria in WAC 173-340-745.

6.1.1 LRIS

As reported in previously submitted LRIS RI/FS reports (MFA 2007, 2010e, 2011a), on-site preliminary CULs for soil were selected based on the applicable endpoints of direct contact via ingestion or dermal contact by humans (Ecology, 2011e). Soil CULs are presented in Table 6-1. Future development likely will not be industrial. Therefore, Method C CULs are not applicable. Similarly, Method A CULs are not considered applicable for most chemicals because of site complexity (e.g., relatively large size and multiple hazardous substances). With a few exceptions, standard Method B direct-contact CULs are applied to soil on the LRIS.

MTCA Method B CULs are not available for petroleum mixtures. The only standard CULs for petroleum mixtures are MTCA Method A Unrestricted Use values. Therefore, Method A soil CULs are used for petroleum hydrocarbon mixtures (2,000 mg/kg for RROs and DROs). The MTCA Method B direct-contact CUL (0.67 mg/kg) for arsenic is below natural background concentrations in soil. Therefore, the natural background concentration of arsenic in Clark County of 5.81 mg/kg (Ecology, 1994) is used as the CUL. Based on the MTCA Method B carcinogen standard formula value for direct contact (ingestion only), unrestricted land use value, the soil CUL for cPAHs (i.e., benzo(a)pyrene and cPAH TEQ) is 0.14 mg/kg; for PCP, 8.3 mg/kg; and for dioxins (i.e., dioxin TEQ), 11 ng/kg.

Leaching from soil to groundwater is a potentially complete endpoint for IHSs in soil. However, it should be noted that the CULs for soil leaching to groundwater are developed using simple models that often overpredict soil concentrations as reasonably likely to cause unacceptable groundwater impacts. Direct measurements of groundwater quality at the LRIS have been made consistently since 2004, and available evidence indicates that the chemicals in groundwater likely are stable or declining over time. Further, because the contaminants were released to soil in 1998 or earlier and have been exposed to precipitation since then, it is likely that the concentrations of IHSs in soil are stable and that any leaching of IHSs from the soil has already reached a state of equilibrium. For these reasons, while the endpoint is potentially complete, the soil leaching to groundwater CULs are not necessary to protect groundwater at the LRIS. However, at Ecology's request, the CULs are presented for completeness.

It was assumed that a hypothetical terrestrial ecological receptor could contact soil at the LRIS at some point in the future. Therefore, a TEE was completed for the LRIS to evaluate options that would be protective of ecological receptors (see Appendix B). MTCA EICs protective of wildlife were selected as CULs if more protective than MTCA Method B CULs.

Point of Compliance. The soil POC is the depth bgs at which soil CULs will be attained. The standard POC for Method B is soil within 15 feet of the ground surface throughout the entire Site.

6.1.2 Off-Property

Dioxins were identified as an IHS for the upland off-property (see Section 3.2.2.1). The upland off-property area includes Port-owned properties and non-Port-owned properties. The Port-owned properties have a mixed waterfront use designation, while the non-Port-owned properties are primarily residential.

6.1.2.1 Port-owned Properties

The preliminary soil CULs are presented in Table 6-2, and Figure 6-1 shows exceedances of human health CULs. CULs for soil were selected based on the applicable endpoints of direct contact via ingestion or dermal contact by humans. Method A CULs are not applicable for dioxins, and Method C CULs are not applicable because future development likely will not be industrial. Therefore, the dioxin TEQ of 11 ng/kg is selected as the preliminary Port-owned properties human health CUL, based on the MTCA Method B level. Note that human health CULs are based on standard default calculations applicable to all sites, yet exposures to residents on Port-owned properties may be significantly less than in residential areas because of less frequent use (see Section 5.4.1).

CULs protective of ecological receptors are presented as a dioxin TEQ (herein referred to as EIC dioxin TEQ) and a furan TEQ (EIC furan TEQ). A TEE determined site-specific criteria of 9.8 ng/kg EIC dioxin TEQ and 11.4 ng/kg EIC furan TEQ, respectively (see Appendix B). These concentrations were selected as preliminary ecological CULs. As indicated in the TEE provided in Appendix B, there may be unacceptable risk if ecological receptors are exposed to soil on the Railroad Avenue property.

Points of Compliance. The POC for human exposure via direct contact is 0 to 15 feet bgs for soil throughout the off-property (WAC 173-340-740 (6)(d)). The POC for ecological exposure is the biologically active zone of 0 to 6 feet bgs for soil (WAC 173-340-7490).

6.1.2.2 Non-Port-owned Properties

Previous soil characterization activities in non-Port-owned properties have focused primarily on rights-of-way in the residential area (see Section 3.2.2.2).[5] Additional characterization is being contemplated in yards of residential areas. Because characterization is not complete, CULs for non-Port-owned properties are not being developed at this time.

---

[5] Several samples were also collected in McCuddy's Marina and on RNWR property. McCuddy's Marina soil is marginally above the MTCA Method B CUL and RNWR soil concentrations are well below MTCA Method B (see Section 3.2.2.2). Further characterization activities developed for residential areas will consider additional sampling on the McCuddy's Marina property.

6.2 Groundwater

As described above, MTCA provides three different options for establishing CULs for human health: Method A, Method B, and Method C. Future development on the LRIS may not be of an industrial nature. Therefore, Method C CULs are not considered to be applicable. Similarly, Method A CULs are not considered applicable for most chemicals because of site complexity (e.g., relatively large size and multiple hazardous substances). With a few exceptions, Method B CULs are applied to groundwater (see Table 6-1). In addition, Method B groundwater guidance screening levels protective of indoor air (Ecology, 2009) are compared with concentrations of VOCs in groundwater. Vapor intrusion screening levels are also expected to be protective of human health for those who may be exposed to vapors migrating to outdoor air, given the significant mixing with ambient air that is expected to occur in the outdoor environment. These CULs are calculated using reasonable maximum human health exposure assumptions with target risk levels set at the MTCA acceptable risk level.

As discussed in Section 5.2.3, the only surface water body that receives groundwater recharge is Lake River. The shallow portion of the UWBZ discharges to Lake River. The deeper UWBZ and the LWBZ flow beneath Lake River. Groundwater from the UWBZ and LWBZ flows beneath the southern portion of Carty Lake. Therefore, groundwater results from wells near Lake River and Carty Lake are compared to the following surface water screening levels:

- MTCA Method B groundwater and surface-water CULs (Ecology, 2011e)
- USEPA national recommended WQC for freshwater CCC for aquatic organisms, for HH consumption of organisms only, and for HH consumption of organisms and water (USEPA, 2009)

As discussed in Section 3, MFA modeled groundwater transport of arsenic, BEHP, benzene, chromium, dibenzofuran, PCP, and PCE, the most widespread of the site-related chemicals, to evaluate the potential for these chemicals to impact surface water of Lake River. Using conservative modeling assumptions outlined in the Cells 1 and 2 RI/FS (MFA, 2011a) and the Cell 3 RI (MFA, 2007), these chemicals are not expected to discharge at concentrations that would adversely impact human health or the environment (see Section 5.2.3).

Petroleum hydrocarbons are not included in the above-mentioned screening levels or CULs; therefore, MTCA Method A groundwater CULs were compared to petroleum hydrocarbon concentrations.

The MTCA Method B groundwater CUL for arsenic is below natural background concentrations in groundwater. The MTCA Method A groundwater CUL is based on naturally occurring arsenic throughout Washington; therefore, the Method A CUL of 5 μg/L is used as the CUL.

Point of Compliance. The POC for groundwater is the entire UWBZ and LWBZ at the Site (WAC 173-340-720(8)(b)). A conditional POC may be established if it is not practicable to meet the CUL throughout the Site within a reasonable restoration time frame (WAC 173-340-720(8)(c)). The proposed conditional POC for groundwater is located in the UWBZ and the LWBZ at the top of the bank along the western boundaries of Cell 2 and Cell 3. In addition, five monitoring wells will be monitored north of Cell 2 in the RNWR and one well on the southern boundary of Cell 3. POC monitoring wells include the following:

- **Cell 2:** MW-55, MW-55S, MW-55D, MW-56, MW-57S, MW-57D, MW-58D, and MW-62
- **Cell 3:** MW-29D, MW-45D, MW-46S, MW-46D, and MW-47D
- **RNWR:** RMW-2S, RMW-2D, MW-61, MW-63, and USDFW-1

6.3 Sediment

Dioxins were identified as an IHS in Lake River and Carty Lake sediments. Dioxins are known carcinogens that bioaccumulate in food chains, and they are colocated with elevated concentrations of other contaminants (see Sections 3.5.2 and 3.5.3). Therefore, any remedy directed at dioxins is expected to remedy other contaminants that exceed screening levels. CUL development for dioxins is described below.

The criteria, methods, and procedures necessary for the development of freshwater benthic sediment CULs are currently determined on a case-by-case basis under SMS (WAC 173-204-520 (1)(d)). This topic is subject to ongoing regulatory development by Ecology in an effort to harmonize MTCA and SMS procedures. A benthic sediment CUL was not established for dioxins (identified as an IHS for Lake River and Carty Lake), as appropriate benthic toxicity criteria are currently unavailable.

MTCA defines specific procedures for the development of risk-based CULs for media such as soils and groundwater. However, procedures for developing human health or ecological risk-based CULs for sediments are not currently defined. As rule-making is still under development, CULs are currently set on a case-by-case basis. Here an effort was made to follow the overall MTCA approach for risk-based CUL development while integrating recent science for freshwater sediment. This direction is consistent with the potential new rule language.

Under MTCA, risk-based Method B CULs are established using a 1×10^{-6} excess cancer risk; human health risk-based CULs for dioxins in sediment (measured as dioxin TEQ) were therefore established using a 1×10^{-6} cancer risk. Ecological risk-based CULs were developed for dioxin congeners, using standard USEPA models and MTCA defaults, when available. See Appendix M-1 for further details on human and ecological risk-based models.

MTCA regulations specify that where risk-based CULs are less than natural background levels, or where they are less than the achievable practical quantitation limit (PQL), the CULs shall be established at concentrations equal to the natural background concentration or the PQL, whichever is higher (WAC 173-340-700, 706, 707). Natural background and the PQL for dioxins were determined following MTCA procedures as described in Appendix K and Appendix M-2, respectively. Ecology conducted additional evaluation and analysis of PQLs for dioxins beyond the evaluation presented in Appendix M-2 and agrees that the value as determined (5 ng/kg dioxin TEQ) is a reasonably achievable PQL to be used as a quantifiable CUL.

6.3.1 Lake River

Because elevated dioxin concentrations are colocated with elevated concentrations of other contaminants (see Section 3.5.2), CULs and associated actions set for dioxins are expected to address all areas impacted by other contaminants.

The risk-based CUL development focuses on exposure of human and ecological receptors to dioxins in sediment and tissue, while exposure to dioxins in surface water is considered negligible (see Section 5.5). Specifically, CULs were developed for the receptors, identified in the CSM, with significant exposure pathways and/or sensitivity to dioxins (i.e., recreationists, fishers, fish, piscivorous birds, and piscivorous mammals). The CUL must be at least as stringent as established state or federal standards or other laws. Some applicable or relevant and appropriate requirements (ARARs) contain numerical values or methods for developing such values; however, there are no ARARs for sediment.

Risk-based preliminary CULs were developed for:

- Human direct contact with sediment and incidental sediment ingestion
- Human secondary ingestion (consumption of chemicals in tissue of aquatic biota)
- Fish uptake of chemicals in sediment
- Bird or mammal secondary ingestion (consumption of chemicals in aquatic prey)

Risk-based preliminary CUL development methods and assumptions are described in Appendix M-1. Preliminary CULs are summarized in Table 6-3. The preliminary risk-based CULs protective of human consumption of fish are based on standard, default assumptions commonly used and in MTCA rules. Limited site-specific assumptions, where applicable, are integrated into CUL models, although models do not represent refined site-specific risk analysis. As detailed in Appendix M-1, development of risk-based, site-specific sediment CULs would require substantial work and would include development of a risk-receptor relationship quantifying the potential links between sediment quality and fish tissue quality, and between fish tissue quality and potential human exposures. Some elements of this relationship have already been developed as part of the Lake River 2010 RI CSM (Anchor and MFA, 2011). However, additional information would be needed to appropriately develop a more exact, site-specific, risk-based CUL for sediments that is based on human fish consumption. Additional details are provided in Appendix M-1.

To evaluate potential adverse ecological effects at higher trophic levels (e.g., piscivorous birds and mammals) resulting from dioxins in sediment, expected concentrations in tissue were modeled, applying default or site-specific assumptions. Ecological CULs based on default assumptions or site-derived data were developed using standard USEPA models on a congener-specific basis (DEQ, 2007; USEPA, 1989; WAC 173-340-740). Models and assumptions used to generate ecological CULs are further described in Appendix M-1.

As described in Section 6.3, considerations of natural background inputs and analytical constraints affect CUL selection for dioxins. Evaluations of background levels and dioxin PQLs are presented in Appendix K and Appendix M-2, respectively. Appendix K shows that natural background is

2 ng/kg dioxin TEQ. The PQL (developed in consultation with Ecology), the concentration at which dioxin TEQs can be measured reliably, is 5 ng/kg. Both background (2 ng/kg) and PQL (5 ng/kg) levels exceed the preliminary risk-based CUL for fish ingestion and are below the preliminary CUL protective against human direct contact with and incidental ingestion of sediment (Table 6-3). WAC 173-340-700(6d) states that when risk-based CULs are less than natural background levels or levels that can be reliably measured, then the CUL shall be established at a concentration equal to the PQL or natural background concentration, whichever is higher. Therefore, the preliminary human health dioxin CUL is 5 ng/kg dioxin TEQ. Lake River sample locations and CUL exceedances are shown in Figure 6-2.

Ecological congener-specific CULs are presented in Table 6-3; the value protective of fish, bird, and mammal populations was selected as the CUL for each congener. Human health and ecological CUL exceedances are shown in Table 6-4. Table 6-4 and Figure 6-2 show that ecological CUL exceedances are less frequent than human health CUL exceedances and occur only in areas where dioxin TEQs are elevated. Therefore, any remedy directed at addressing sediment exceeding the human health CUL is expected to mitigate unacceptable risk to ecological receptors as well.

Point of Compliance. According to SMS requirements, the POC is represented by the biologically active sediment zone within the uppermost 10 cm bml. This includes protection from potential exposure to deeper contaminants and to contaminant migration.

6.3.2 Carty Lake

Because elevated dioxin concentrations are colocated with elevated concentrations of other contaminants (see Section 3.5.3.1), CULs set for dioxins, and associated actions, are expected to address other contaminants above screening levels.

The risk-based CUL development focuses on exposure of receptors to dioxins in sediment and tissue, while exposure to dioxins in surface water is considered negligible. Specifically, preliminary risk-based CULs were developed for the receptors, identified in the CSM, with potentially significant exposure pathways and/or sensitivity to dioxins (i.e., human direct contact, fish, piscivorous birds, and piscivorous mammals). A risk-based human fish consumption CUL was not developed, as human consumption rates for Carty Lake are unavailable. To account for potential risk resulting from human consumption of fish, hypothetical scenarios based on models developed for Lake River (see Section 6.3.1) were evaluated, including the amount of fish that could be consumed at current Carty Lake dioxin levels to meet acceptable risk levels (see Appendix M-1 for details). A CUL must be at least as stringent as established state or federal standards or other laws. Some ARARs contain numerical values or methods for developing such values; however, there are no numerical ARARs for dioxins in sediment.

Preliminary risk-based CULs were developed for:

- Human direct contact with sediment and incidental ingestion of sediment. This pathway is based on a restoration worker scenario; see Section 2.8.4 for a description of restoration activities that may be conducted at Carty Lake.
- Fish uptake of chemicals in sediment.
- Bird or mammal secondary ingestion (consumption of chemicals in aquatic prey).

Preliminary risk-based CUL development methods and assumptions are described in Appendix M-1. Preliminary CULs are summarized in Table 6-5.

To evaluate potential adverse ecological effects at higher trophic levels (e.g., piscivorous birds and mammals), expected dioxin concentrations in tissue were modeled, applying default or site-specific assumptions. Ecological CULs based on default assumptions or site-derived data were developed using standard USEPA models on a congener-specific basis (DEQ, 2007; USEPA, 1989; WAC 173-340-740). Models and assumptions used to generate CULs are further described in Appendix M-1. As detailed in Section 6.3, considerations of natural background inputs and analytical constraints may also impact CULs. Evaluations of background levels for Lake River and dioxin PQLs are presented in Appendix K and Appendix M-2, respectively. A natural background evaluation for Carty Lake has not been conducted and is not anticipated, given the lack of available dioxin sediment data in regional lakes. However, the background level in the Lower Columbia River has been established at 2 ng/kg dioxin TEQ. The PQL (the concentration at which dioxin TEQs can be measured reliably) is 5 ng/kg dioxin TEQ.

Evaluations of human fish consumption scenarios at Carty Lake (see Appendix M-1) indicate that a human health risk-based CUL may be below natural background or the PQL, while the preliminary risk-based CUL protective of human direct contact is higher than natural background or the PQL (see Table 6-5). WAC 173-340-700(6d) states that when risk-based CULs are less than natural background levels or levels that can be reliably measured, then the CUL shall be established at a concentration equal to the PQL or natural background concentration, whichever is higher. Therefore, the human health dioxin CUL is based on the PQL of 5 ng/kg dioxin TEQ. Carty Lake sample locations and CUL exceedances are shown in Figure 6-3.

Ecological congener-specific CULs are presented in Table 6-5; the value protective of fish, bird, and mammal populations was selected as the CUL for each congener. Human health and ecological CUL exceedances are shown in Table 6-6. Dioxin congeners are found at levels below risk-based CULs at all locations except the area comprising LRIS-CL-01, -02, and -04, where highly elevated dioxin TEQs occur (see Section 3.5.3.1). Thus actions directed at remedying elevated dioxin TEQs are expected to account for potential risk both to human health and to ecological receptors.

Point of Compliance. According to SMS requirements, the POC is represented by the biologically active sediment zone within the uppermost 10 cm bml. This includes protection from potential exposure to deeper contaminants and to contaminant migration.

7 SUMMARY OF LRIS FEASIBILITY STUDIES

This section presents the results of the feasibility analyses conducted for soil and groundwater for the LRIS property. FSs have been conducted and reports submitted to Ecology for Cells 1 and 2, and separately for Cell 3 and Cell 4. Detailed descriptions of the development of the studies, including cost estimates, are provided in these three FS reports. Most of the interim actions for Cells 1, 2, 3, and 4 have been completed, as discussed in Section 4. The remedial alternatives are presented below as they were in their respective FS reports, except where noted. Preferred alternatives may have been altered slightly, based on site conditions or as discussed with Ecology during implementation.

The draft FS for Cells 1 and 2 was submitted on January 19, 2011 (MFA, 2011a). Ecology provided verbal comments on March 3, 2011, and indicated that additional comments were forthcoming. The discussion of Cells 1 and 2 presented below is a summary of the draft FS with the alternatives slightly revised to address comments received from Ecology. An interim action work plan was prepared for Cells 1 and 2 (MFA, 2011b) and approved by Ecology in June 2011, based on the preliminarily preferred alternative from the draft Cells 1 and 2 FS. Interim actions described in Section 4.4 are near completion.

The final FS for Cell 3 was submitted to Ecology on June 3, 2011 (MFA, 2011c). The final FS for Cell 4 was submitted to Ecology on November 29, 2010 (MFA, 2010e), and approved by Ecology on December 17, 2010 (Ecology, 2010b). Interim actions consistent with the remedial alternatives recommended in the Cell 3 FS and the Cell 4 FS were developed into an Ecology-approved (in June 2011) interim action work plan (MFA, 2010c) and were completed in 2010 and 2011 (see Section 4.3). Although final FSs for Cells 3 and 4 have been completed, the feasibility analysis is summarized below for completeness. See Section 4.3 for a description of interim actions completed in Cells 3 and 4.

CULs for Cells 1, 2, 3, and 4 are developed and presented in Section 6. Potential RELs were identified for Cells 3 and 4. RELs may be developed as part of the cleanup action alternatives to be considered during the FS. An REL, according to WAC 173-340-200, is a concentration (or other method of identification) of a hazardous substance in soil, water, air, or sediment above which a particular component will be required as part of a cleanup action at a site. In accordance with WAC 173-340-355, the remedial action that includes RELs must still comply with cleanup standards, including the requirement that CULs be met at the applicable POCs.

According to WAC 173-340-355(4), these potential RELs may be defined as a concentration or another method of identification of a hazardous substance. Quantitative or qualitative methods may be used to develop these potential RELs. These methods may be simple or complex, as appropriate to the LRIS.

Based on the MTCA Method C Carcinogen Industrial Land Use Table Value (direct contact), the soil REL for arsenic is 88 mg/kg; for cPAHs (i.e., benzo(a)pyrene and cPAH TEQ), 18 mg/kg; for

PCP, 1,100 mg/kg; and for dioxins (i.e., dioxin TEQ), 1,500 ng/kg. In addition, the presence of NAPL is set as an REL.

7.1 Remedial Alternatives

7.1.1 Cells 1 and 2

Five remedial alternatives were developed that meet cleanup standards for Cells 1 and 2. As discussed in Section 4.4, an interim action work plan (based on Alternative 2B, [MFA, 2011b]) was developed for Cells 1 and 2. The remedial alternatives are described below:

Alternative 1: Capping, Groundwater Monitoring, and Institutional Controls

- Cells 1 and 2 would be capped with a minimum of 2 feet of soil and a geotextile (i.e., a permeable cap) or an equivalent exposure barrier (e.g., liner, asphalt, concrete, building).
- Equivalent exposure barriers for potential types of use are provided in Table 7-1 (note: the capping sections described were consistent in the FS documents for Cells 1, 2, 3, and 4. When capping is discussed in this document, it is synonymous with the sections described in Table 7-1, but for brevity these sections are not repeated in each capping discussion.)
- The existing stormwater system would be removed to address IHS exceedances; this would include removal of a stormwater catchment. A new stormwater system incorporating engineering controls would be installed.
- Steam would be injected in the entire SER area to polish areas previously treated and to ensure capture of residual mobile NAPL. Once diminishing returns are observed, demobilization of the SER system would be phased to coordinate with site capping activities. Post-demobilization sampling would be conducted to better define conditions for the SMP and institutional controls. The SER system would be dismantled and decommissioned.[6]
- Groundwater monitoring would be completed at the proposed POC monitoring wells to assess whether contaminants are stable and reducing. Monitoring wells other than the proposed POC would be decommissioned as part of remedial activities. Table 3-7 shows the proposed POC monitoring wells and the analytes that would be sampled from each. Note that this POC table was modified based on discussions with Ecology after the interim action was completed. Figure 2-12 highlights the POC monitoring wells. The wells would be sampled semiannually for two years and then approximately every 18 months to evaluate seasonal variation. Sampling would be conducted during the observed high- and low-water events on the LRIS (i.e., January and August, respectively).

---

[6] As approved by Ecology (Ecology, 2011b), steam injection has ceased (see Section 4.2), dismantling and decommissioning have begun, and post-demobilization sampling has been completed (see Section 4.4).

- Institutional controls would be implemented as part of the remedial action. These would be in the form of restrictive covenants to provide options for vapor mitigation for future construction, which would require adherence to an SMP for protection and maintenance of surface capping and management of residual contaminated soils during redevelopment or subsurface work. Institutional controls would also prohibit groundwater use. Upon approval from the City, historical city drinking wells east of the LRIS would be abandoned.[7] Via institutional controls, ingestion of drinking water would become an incomplete pathway.

Alternative 2A: Targeted Removal, Capping, Groundwater Monitoring, and Institutional Controls

- Soil in the concrete pond area with historically observed NAPL would be excavated, transported, and disposed of at a licensed facility. The excavation would extend to 15 feet bgs, which is 3 feet below the typical water table depth in the area, and would remain open to allow removal of floating product. For the purposes of the cost estimate, soil from the concrete pond excavation is presumed to require treatment before landfilling at a Subtitle C disposal facility. This waste may be considered a Corrective Action Management Unit (CAMU)-eligible waste, which could alter the disposal requirements.[8] Excavations would be backfilled using clean backfill and unimpacted overburden.
- Cells 1 and 2 would be capped as discussed in Alternative 1.
- The existing stormwater system would be removed as described in Alternative 1.
- The SER system would operate and be decommissioned as described in Alternative 1.
- Groundwater monitoring would be completed as described in Alternative 1.
- Institutional controls would be implemented as part of the remedial action. These would be in the form of a restrictive environmental covenant to provide options for vapor mitigation for future construction, and would require adherence to cap maintenance and an SMP for protection and maintenance of surface capping and management of residual contaminated soils during redevelopment or subsurface work. Institutional controls would also prohibit groundwater use. The institutional controls may vary by cell, based on the sampling results, to ensure that the implemented remedy is protective of human health and the environment.

---

[7] The City abandoned these drinking wells in 2011.

[8] During remedial design, the Port worked with Ecology to establish CAMU eligibility (see Appendix N for CAMU eligibility documentation); however, cost estimates did not assume that CAMU eligibility would be established.

Alternative 2B: Targeted Removal, Capping, Groundwater Monitoring, and Institutional Controls

- Soil in the concrete pond area would be excavated, transported, and disposed of as described in Alternative 2A.
- Shallow soil near sample locations SS-14 and TP-03 contained dioxins and PCP, respectively, that exceeded Method C soil CULs. This soil would be excavated, transported, and disposed of at a licensed facility. The SS-14 excavation would extend to 1 foot bgs and would be approximately 20 feet by 20 feet. The TP-03 excavation would extend to 1 foot bgs and would be 10 feet by 10 feet. The soil from these areas is associated with the former PWT wood-treatment operations, and is considered to be an F032-, F034-, and F035-listed waste. For the purposes of the cost estimate, the soil is assumed to require off-site treatment (organic vapor recovery) before disposal at a Subtitle C facility. This waste may be considered a CAMU-eligible waste.[9]
- Cells 1 and 2 would be capped as discussed in Alternative 1.
- The existing stormwater system would be removed as described in Alternative 1.
- The SER system would operate and be decommissioned as described in Alternative 1.
- Groundwater monitoring would be completed as described in Alternative 1.
- Institutional controls would be implemented as described for Alternative 2A.

Alternative 3: Removal of Soil Exceeding MTCA C CULs, Capping, Groundwater Monitoring, and Institutional Controls

- Soil exceeding the MTCA C CULs and soil in the concrete pond area exhibiting characteristics of NAPL would be excavated, transported, and disposed of at a licensed facility. The maximum depth of excavation is 15 feet bgs. For the purposes of the cost estimate, soil from the concrete pond excavation is assumed to require treatment before landfilling at a Subtitle C disposal facility, and soil from the MTCA C CUL excavation would be disposed of at the Aragonite incineration facility. Profile analysis would determine the final disposal location. Excavations would be backfilled with clean backfill from an off-site source.
- Cells 1 and 2 would be capped as discussed in Alternative 1.
- The existing stormwater system would be removed as described in Alternative 1.
- The SER system would operate and be decommissioned as described in Alternative 1.
- Groundwater monitoring would be completed as discussed in Alternative 1.
- Institutional controls would be implemented as described for Alternative 2A.

---

[9] During remedial design, the Port worked with Ecology to establish CAMU eligibility (see Appendix N for CAMU eligibility documentation); however, cost estimates did not assume that CAMU eligibility would be established.

Alternative 4: Excavation of SER System and Soil Exceeding CULs; Groundwater Monitoring

- Soil from 0 to 15 feet bgs that contains concentrations above Method B CULs would be removed for off-site disposal. For the purposes of the FS, one-third of the soil is assumed to be disposed of in each of the three methods: direct landfilling at a Subtitle C disposal facility, organic vapor recovery treatment and landfilling at a Subtitle C disposal facility, and disposal at an incineration facility. Excavations would be backfilled using clean backfill from an off-site source.
- Operation of the SER system would continue until Method B groundwater CULs are reached. For the purposes of the FS, a minimum of 20 years of operation is assumed to achieve CULs, based on an analysis of current system efficiencies. Additional extraction wells would be installed to reach contaminated areas not addressed by the current wellfield. Once CULs are achieved, the SER system will be demobilized.
- The existing stormwater system would be removed as described in Alternative 1.
- Groundwater monitoring would be completed at existing monitoring wells to assess effectiveness of the SER system.

7.1.2 Cell 3

Three remedial alternatives were developed for Cell 3 to meet cleanup standards. As discussed in Section 4.3.1, interim actions (based on Alternative 2 [MFA, 2010c]) were completed in Cell 3 in 2010 and 2011. The FS alternatives are summarized below for completeness.

Alternative 1: Capping, Institutional Controls, and Groundwater Monitoring

- Cell 3 would be capped with a minimum of 2 feet of soil and a geotextile (i.e., a permeable cap) or an equivalent exposure barrier (e.g., liner, asphalt, concrete, building).
- Institutional controls will be implemented as part of the remedial action. These will be in the form of a restrictive environmental covenant to prohibit groundwater use and will require adherence to an SMP for protection and maintenance of surface capping and management of residual contaminated soils during redevelopment or subsurface work. Via institutional controls, ingestion of drinking water will become an incomplete pathway.
- Groundwater monitoring will be conducted at the conditional POC to demonstrate that concentrations are not increasing in groundwater. The groundwater monitoring locations and analytes are assumed to be MW-46S for arsenic; MW-45D for PCP; and MW-29D, MW-45D, MW-46D, and MW-47D for PCE.

Alternative 2: Soil Removal to RELs, Capping, Institutional Controls, and Groundwater Monitoring

- Soil exceeding the RELs would be excavated and disposed of off site. Application of the RELs, based on MTCA C CULs for industrial land use, does not indicate that potential receptors are solely industrial users. RELs are applied in Alternative 2 to identify areas for removal that exceed less conservative criteria based on an industrial worker receptor. The alternative still meets the cleanup standards for unrestricted land use through capping and institutional controls.
- Cell 3 would be capped as discussed in Alternative 1.
- Institutional controls would be implemented as part of the remedial action, as with Alternative 1.
- Groundwater monitoring would be implemented as discussed in Alternative 1.

Alternative 3: Soil Remediation to CULs and Groundwater Recovery/Treatment

- Soil with concentrations above the Method B direct-contact CULs would be excavated, transported, and disposed of off site at a licensed facility. Excavated soil with IHS concentrations below CULs (i.e., clean overburden soil) and oversized inert material would be temporarily stockpiled on site and used as excavation backfill. Clean, imported fill would be used to backfill excavations.
- Groundwater containing concentrations above Method B groundwater CULs would be extracted, treated, and discharged at an existing stormwater outfall. Groundwater monitoring would also be completed to assess the groundwater extraction system performance.
- No institutional controls would be required following operation of the treatment system and soil removal. Existing controls would be continued during remediation (e.g., restricting access to the LRIS and restricting the use of groundwater).

7.1.3 Cell 4

Three remedial alternatives were developed for Cell 4 to meet cleanup standards. As discussed in Section 4.3.2, interim actions based on Alternative 2 were completed in Cell 4 in 2010 and 2011. The alternatives for Cell 4 include only actions for soil because IHSs were not detected in groundwater above the CULs. The FS alternatives are summarized below for completeness.

Alternative 1: Engineered Cap and Institutional Controls

Alternative 1 blocks exposure pathways via capping and institutional controls:

- Cell 4 would be capped with an exposure barrier (e.g., soil, liner, asphalt, concrete, a building), concurrent with the cap profiles outlined in the TEE (MFA, 2010c). The estimated cap surface area is 7.5 acres.
- Institutional controls would be implemented as part of the remedial action. These would be in the form of a restrictive environmental covenant to require cap maintenance and adherence to an SMP for protection and maintenance of surface capping and management of residual contaminated soils. The restrictive covenant would also prohibit use of groundwater on Cell 4, preventing installation of any water well that may influence groundwater flow and pull contamination from Cell 2 toward Cell 4.

Alternative 2: Engineered Cap, Removal of Soil above RELs, and Institutional Controls

Alternative 2 blocks exposure pathways via capping, excavation of areas exceeding preliminary RELs, and institutional controls:

- An engineered cap, identical to the cap described in Alternative 1, would be placed on Cell 4.
- Soil exceeding the preliminary RELs would be excavated and managed according to an SMP. For the purposes of the cost estimate, soil is assumed to be removed for off-site disposal at a Subtitle C facility. Application of the preliminary RELs, based on MTCA C CULs for industrial land use, does not indicate that potential receptors are solely industrial users. Preliminary RELs are applied in Alternative 2 to identify areas for removal that exceed less conservative criteria based on an industrial worker receptor. The alternative still meets the cleanup standards for unrestricted land use through capping and institutional controls.
- Institutional controls would be implemented as described for Alternative 1.

Alternative 3: Soil Removal to CULs

Alternative 3 eliminates exposure pathways in Cell 4 via excavation of soil exceeding CULs:

- Soil exceeding the Method B soil CULs would be excavated for off-site disposal at a licensed facility. For the purposes of the cost estimate, a total of 29,100 CY would be removed from Cell 4.
- Institutional controls would be implemented as part of the remedial action to limit the use of groundwater. Because no residual contaminated soil is expected in Cell 4 following excavation, there is no requirement for a restrictive environmental covenant regarding the soils.

7.2 Alternative Analysis

This section evaluates the proposed cleanup action alternatives in the context of MTCA requirements.

7.2.1 Threshold Requirements

The cleanup action must meet the threshold requirements, which include the following:

- Protection of human health and the environment
- Compliance with cleanup standards
- Compliance with applicable state and federal laws
- Providing for compliance monitoring

All alternatives in Section 7.1 meet the threshold requirements.

The alternatives are next evaluated against public concerns and permanent solutions through the disproportionate cost analysis (DCA) and the time frame for restoration.

7.2.2 Disproportionate Cost Analysis

The cleanup action alternative chosen would be conducted under MTCA (WAC 173-340) and would be consistent with all applicable state and federal laws. The Cells 1 and 2 RI/FS (MFA, 2011a), Cell 3 FS (MFA, 2011c), and Cell 4 RI/FS (MFA, 2010e) discuss compliance with ARARs.

Compliance monitoring for all alternatives in Section 7.1 would include construction performance criteria, a cap maintenance program, and confirmation sampling during excavation, if warranted.

Costs are determined to be disproportionate to benefits if the incremental cost of a more expensive alternative over that of a lower-cost alternative exceeds the incremental degree of benefits achieved by the more expensive alternative. As outlined in WAC 173-340-360(3)(e) and (f), DCA includes evaluation criteria that are a mix of qualitative and quantitative factors, including:

- Protectiveness
- Permanence
- Long-term effectiveness
- Management of short-term risks
- Technical and administrative implementability
- Consideration of public concerns
- Cost

Primary assumptions, unit costs, and number of units for all significant project elements are included in the FSs for Cells 1 and 2, Cell 3, and Cell 4. Net present value calculations are also included for operation, maintenance, and monitoring costs, if applicable. Summaries of the analyses are provided in the three RI/FSs.

7.2.2.1 Cells 1 and 2

Alternatives 1, 2, 3, and 4 meet the threshold criteria and were included in the DCA. The estimated net present value costs for implementation, operation and maintenance, and monitoring are as follows:

Alternative 1:	$7,030,000
Alternative 2A:	$10,301,000
Alternative 2B:	$10,320,000
Alternative 3:	$32,883,000
Alternative 4:	$367,531,000

Alternative 1 costs less than Alternatives 2A and 2B. Alternatives 2A and 2B are estimated to be one-third the cost of Alternative 3. Given the large cost discrepancy and the limited incremental benefit over the other alternatives, the baseline option, Alternative 4, is disproportionately costly and is rejected as an alternative. Based on this assessment, Alternatives 1, 2A, and 2B remain viable options in terms of cost effectiveness. Alternative 2B, for an incremental cost of approximately $3.3 million over Alternative 1, provides a greater degree of protectiveness and long-term effectiveness. In addition, if material removed is CAMU-eligible, it is estimated that Alternatives 2A and 2B will cost approximately $1.7 million less.

7.2.2.2 Cell 3

Excluding the cost criterion, the relative ratings reflected in Table 6-1 of the Cell 3 FS show that Alternative 3 is rated the worst; Alternative 1 is rated next, followed by Alternative 2. Alternatives 1 through 3 meet the threshold criteria and were included in the DCA. The estimated net present value costs for implementation, operation and maintenance, and monitoring from the Cell 3 FS (MFA, 2011c) are as follows:

Alternative 1:	$1,263,000
Alternative 2:	$1,524,000
Alternative 3:	$22,880,000

The estimated cost for Alternative 3 is $21,356,000 greater than Alternative 2. Given the large cost discrepancy and the limited incremental benefit over Alternative 2, Alternative 3 is disproportionately costly and is rejected as an alternative. Based on this assessment, Alternative 2 remains a viable option. The estimated cost for Alternative 2 is $261,000 greater than Alternative 1, but for the incremental cost difference, Alternative 2 was determined to provide a greater degree of protectiveness and long-term effectiveness.

7.2.2.3 Cell 4

Alternatives 1 through 3 meet the threshold criteria and were included in the DCA. The estimated net present value costs for implementation, operation and maintenance, and monitoring from the Cell 4 FS (MFA, 2010e) are as follows:

- Alternative 1: $707,000
- Alternative 2: $720,000
- Alternative 3: $12,692,000

Given the large cost discrepancy and the limited incremental benefit over the other alternatives, the baseline option, Alternative 3, is disproportionately costly and is rejected as an alternative. Alternative 1 costs slightly less than Alternative 2. Based on this assessment, Alternatives 1 and 2 remain viable options in terms of cost effectiveness. Alternative 2, for an incremental cost of $13,000 over Alternative 1, provides a greater degree of protectiveness and long-term effectiveness.

7.2.3 Provide for Reasonable Restoration Time Frame

WAC 173-340-360(4) contains guidance for determining reasonable restoration time frames. A preference is given for alternatives that can be implemented in less time if other factors such as permanence and costs are equal.

7.2.3.1 Cells 1 and 2

Alternatives 1, 2, and 3 likely would have a longer restoration time frame than Alternative 4 because not all soil exceeding CULs would be removed. The practicability of achieving a shorter restoration time frame is limited; Alternative 4 requires the removal of more than 500,000 tons of soil, decreasing the practicability of such an option.

To achieve site restoration in the soil POC (within 15 feet of the ground surface), Alternatives 1, 2, and 3 include natural attenuation of IHSs. Alternatives 1, 2, and 3 do not rely on natural attenuation to protect receptors, but instead use engineering and institutional controls to address risks to human health and the environment and to restore the LRIS to potential future uses. The effectiveness and reliability of institutional controls at the LRIS are high because of the Port's continued ownership and management of the LRIS. Long-term cap monitoring and maintenance are included as part of Alternatives 1, 2, and 3 to control and monitor hazardous substances at the LRIS.

7.2.3.2 Cell 3

Alternative 2 has a slightly greater degree of permanence than Alternative 1; however, Alternative 1 costs less than Alternative 2. Alternative 1 can be implemented within a shorter time frame than Alternative 2.

As discussed in the RI report, chemicals in groundwater likely are stable or declining over time; therefore, soil with IHS concentrations above CULs that would remain in Alternatives 1 and 2 is not likely to leach into groundwater. For Alternatives 1 and 2, protection of human health and the environment against risks associated with soil contaminants remaining after excavation would be achieved through institutional controls rather than through meeting cleanup standards. These protections can be established within a reasonably short time frame.

7.2.3.3 Cell 4

Alternatives 1 and 2 likely would have a longer restoration time frame than Alternative 3 because soil exceeding CULs would not be removed. The practicability of achieving a shorter restoration time frame is limited; Alternative 3 requires the removal of more than 42,000 tons of soil, decreasing the practicability of such an option.

To achieve site restoration in the soil POC (within 15 feet of the ground surface), Alternatives 1 and 2 include natural attenuation of IHSs. Alternatives 1 and 2 do not rely on natural attenuation, but instead use engineering and institutional controls to address risks to human health and the environment and to restore the LRIS to potential future uses. The effectiveness and reliability of institutional controls at the LRIS are high because of the Port's continued ownership and management of the LRIS. Long-term cap monitoring and maintenance are included as part of both Alternatives 1 and 2 to control and monitor hazardous substances at the LRIS.

7.2.4 Expectations for Alternatives

WAC 173-340-370 outlines Ecology's expectations for the development of alternatives and the selection of cleanup actions. There is some flexibility in the expectations, but generally Ecology expects the treatment of the following: liquid wastes, high concentrations of hazardous substances, highly mobile hazardous materials, and discrete areas of hazardous materials that lend themselves to treatment.

Ecology also favors the minimization of long-term management for small sites through the use of destruction, detoxification, and/or removal to bring concentrations on site to below CULs. It recognizes the need to use engineering controls, such as containment, for sites where there are large volumes of low-level contamination and where treatment is impractical. Ecology also expects that measures will be taken to avoid stormwater contamination and potential migration off site. There is a preference for consolidation of hazardous substances left on site in order to minimize potential for direct contact and migration.

Contamination of surface water near the LRIS should also be avoided through the control of runoff and groundwater discharge or migration. Ecology acknowledges that natural attenuation may be appropriate where criteria are met. It also expects that any cleanup actions chosen with consideration given to WAC 173-340-370 will not result in a significantly greater overall threat to human health and the environment than other alternatives.

The provided cleanup action alternatives were designed to meet Ecology's expectations.

8 FEASIBILITY ANALYSIS: PORT-OWNED PROPERTIES

The Port-owned properties are part of the upland off-property adjacent to the LRIS at 111 West Division Street in Ridgefield, Washington (see Figure 1-2).[10] The Port-owned properties comprise the Port Railroad Avenue properties (east of the LRIS), the Port marina property (south of the LRIS), and the Port proposed overpass property (south of the LRIS). The feasibility analysis conducted is consistent with the analysis conducted for the LRIS (see Section 7). See Section 2.2.2 of this report for further background information on this area.

8.1 Technology Screen

Consistent with WAC 173-340-350(8)(b)—Screening of Alternatives, individual cleanup action components (technologies) were reviewed and screened to identify applicable methods for remediating the soil on the Port-owned properties. A preliminary screening of applicable technologies was completed, based on technologies discussed in the Federal Remediation Technologies Roundtable screening matrix (FRTR, 2008), as well as on other commonly used remediation methods. Effectiveness and implementability of the technologies were assessed for the specific contaminants in the soil, resulting in a list of technologies that were retained for further consideration (see Appendix O, Table O-1).

8.2 Alternatives

Remedial alternatives for the Port-owned properties are developed using the individual cleanup technologies retained from the technology screening process discussed in Table O-1, Appendix O, with consideration of the CULs presented in Section 6. The development of remedial alternatives involves combining various remedial technologies into a comprehensive approach that accomplishes the remedial action goals.

Exposed soil on the Port marina property (located between the LRIS property boundary and the paved area of the marina property) was capped with approximately 1 foot of clean soil during interim LRIS actions (see Section 4.3), and a polypropylene geotextile fabric was placed above the native, impacted soil and below the clean layer. These actions and the presence of an asphalt cap on the rest of the Port marina property eliminate exposure to underlying soil, and therefore cleanup actions for this area were not further considered.

In the proposed Port overpass property (located south of the LRIS Cell 3 and east of McCuddy's Marina), construction of an overpass will reduce potential for exposure to soil. Construction will include covering the overpass footprint with a cap consistent with LRIS capping options. This

---

[10] Note that the FS does not consider non-Port-owned properties that are part of the upland off-property. As described in Section 6.1.2.2, further characterization and risk characterization will be conducted.

construction will eliminate exposure to underlying soil, and therefore cleanup actions for this area were not further considered.

For the Railroad Avenue properties, three remedial alternatives were developed that potentially meet cleanup standards. Alternatives were evaluated relative to ecological CULs; note that soil exceedances of ecological CULs and the preliminary human health CULs are colocated, and therefore any remedy developed for protection of ecological receptors is also expected to mitigate unacceptable risk to human health (see Section 6.1.2.1). A no-action alternative was considered and dismissed as an option because of ecological exposure concerns. The remedial alternatives are described below and are evaluated in detail in Section 8.3.

8.2.1 Alternative 1: Institutional Controls

Under Alternative 1, institutional controls would be implemented at the Railroad Avenue properties. These controls could include deed restrictions, access restrictions such as installing a fence, and signage.

8.2.2 Alternative 2: Engineered Cap

The primary components of Alternative 2 are:

- Placement of a cap at the Port Railroad Avenue properties to mitigate ecological exposure to dioxins
- Annual cap monitoring and development of an SMP and a cap maintenance plan.

Alternative 2 relies on the installation of an engineered cap over the existing grade at the Railroad Avenue properties to protect ecological receptors from exposure. For the purposes of the cost estimate, the cap consists of 2 feet minimum of gravel over a geotextile separation layer to demarcate the underlying soil. The actual cap configuration will be based on Ecology-approved cap profiles. Considering the existing topography, subgrade preparation, regrading, and construction of a retaining wall may be required to protect cap integrity. Right-of-way considerations involving the City and the Port and stormwater management requirements by the City would be incorporated into the design of Alternative 2 as well. The SMP and the cap maintenance plan would identify procedures in the event of future development or of any condition in which the protective cap is breached. Public concerns and comments would be considered by Ecology as part of the cleanup action selection process, consistent with WAC 173-340-600.

8.2.3 Alternative 3: Sampling and Soil Removal

Primary components of Alternative 3 are:

- Prefinal design sampling
- Removal of soil to CULs
- Placement of crushed rock for operational surface

A work plan would be prepared defining sampling locations and methods to supplement existing sampling data from the Railroad Avenue properties. A report documenting sampling results would be prepared for Ecology.

Based on existing sampling data and knowledge of how dioxins behave in the environment, the CSM assumes that only surface soil is impacted with dioxins above the CULs and that, for the purposes of the cost estimate, 1 foot of soil would be removed from the Port Railroad Avenue properties. Additional sampling would determine which areas of the property require soil removal and to verify the 1-foot depth assumption. For the purposes of the FS, the excavation boundary for the Railroad Avenue properties requiring soil removal is shown in Figure 8-1. Removed soil would be replaced with clean soil and/or gravel for an operational surface and to protect against erosional forces. Based on research conducted to date, the cost estimate assumes that the excavated soil would be transported by truck and disposed of as nonhazardous material at a Subtitle D landfill facility permitted to accept Railroad Avenue site soils with detected concentrations.[11]

8.3 Detailed Alternative Analysis

This section describes the process by which the preferred cleanup action alternative for the Railroad Avenue site will be selected. The MTCA requirements are used as the criteria for evaluating cleanup action alternatives. The selected cleanup action must meet the minimum threshold requirements, pursuant to WAC 173-340-360 and described below.

8.3.1 Threshold Requirements

The cleanup action must meet the MTCA threshold requirements (WAC 173-340-360(2)(a)), which include the following:

- Protection of human health and the environment
- Compliance with cleanup standards and applicable state and federal laws
- Provisions for compliance monitoring

8.3.1.1 Protection of Human Health and the Environment

Alternative 1 (Institutional Controls) is protective of both human health and the environment, as institutional controls would minimize exposure through access restrictions.

Alternative 2 (Engineered Cap) is protective of human health and the environment. Under this alternative, a cap would be placed on the Railroad Avenue properties to protect ecological receptors. The cap would effectively eliminate any human health exposure as well.

Alternative 3 (Sampling and Removal) is protective of human health and the environment. This alternative involves removal of impacted soil in areas with dioxin concentrations above the CUL and

---

[11] The source of the dioxins in off-property soil is not well established. See Appendix P for waste designation information.

replacing it with clean soil. Through excavation, direct or indirect contact and exposure would be prevented for the long term.

8.3.1.2 Compliance with Cleanup Standards

This cleanup action is being conducted under MTCA (WAC 173-340). All cleanup alternatives will be conducted consistent with applicable state and federal laws, as discussed in Appendix Q.

8.3.1.3 Provision for Compliance Monitoring

Compliance monitoring, as required by WAC 173-340-410 and 173-340-720 through 173-340-760, consists of protection monitoring, performance monitoring, and confirmation monitoring to determine short- and long-term safety and effectiveness of the implemented alternative.

Protection monitoring is used to confirm that human health and the environment are adequately protected during construction, operation, and maintenance periods. Performance monitoring confirms that the cleanup action has attained cleanup standards or other performance standards, including those outlined in any permits. Confirmation monitoring may be included to verify the long-term effectiveness of the remedial action.

Alternative 1 (Institutional Controls) relies on existing data to address compliance monitoring requirements.

Alternative 2 (Engineered Cap) makes use of existing data to document soil quality. Confirmation, performance, and protection monitoring would all take place as part of construction oversight during the implementation of the Railroad Avenue properties cap as well as the post-implementation cap monitoring program.

Alternative 3 (Sampling and Removal) includes additional sampling activities, including protection, performance, and confirmation monitoring. Protection monitoring would consist of engineering oversight to verify safe material handling procedures, effective health and safety measures, and dust monitoring. Engineering controls would be applied as necessary to protect nearby residences from exposure and unsafe conditions. Performance monitoring in the form of confirmation sampling would be conducted at the Site by obtaining composite samples before replacing soil.

8.3.2 Disproportionate Cost Analysis

Costs are determined to be disproportionate to benefits if the incremental cost of a more expensive alternative over that of a lower-cost alternative exceeds the incremental degree of benefits achieved by the more expensive alternative. As outlined in WAC 173-340-360(3)(e) and (f), DCA includes evaluation criteria that are a mix of qualitative and quantitative factors, including protectiveness, permanence, long-term effectiveness, management of short-term risks, technical and administrative implementability, consideration of public concerns, and cost. A summary of the analysis is provided in Table 8-1.

Alternatives 1, 2, and 3 were included in the DCA.

Protectiveness

Overall protectiveness of human health and the environment includes the degree to which existing risks are reduced, time required to reduce risk at the facility and attain cleanup standards, on-site and off-site risks resulting from implementing the cleanup action alternative, and improvement of the overall environmental quality. All three alternatives are protective at the $1\text{x}10^{-5}$ cumulative risk level applied to the LRIS and are protective of ecological receptors. Alternatives 2 (Engineered Cap) and 3 (Sampling and Removal) provide additional measures in comparison to Alternative 1 (Institutional Controls) to enhance protectiveness for all areas exceeding the CUL. Alternative 1 would be selected only if the current contaminant concentrations were found to be consistent with developing Ecology regulatory updates on risk management of dioxins in urban soils. Alternative 2 is more protective, as the placement of a soil cap would provide effective measures to eliminate soil exposures. Alternative 3 is the most protective of the three remedies, as areas of soil exceeding the CUL are removed from the Railroad Avenue properties for off-site disposal. Alternative 3 receives a slightly higher scoring than Alternative 2 to reflect the reduction in area and volume of soils exceeding the CUL.

Permanence

Permanence is a factor by which the cleanup action alternative permanently reduces the toxicity, mobility, or volume of hazardous substances. The adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and sources of releases, the degree of irreversibility of the waste-treatment process, and the characteristics and quantity of treatment residuals generated are all considered under this criterion.

MTCA states that when selecting an alternative, preference shall be given to “permanent solutions to the maximum extent practicable.” A “permanent solution” is defined in WAC 173-340-200 as a cleanup action in which the cleanup standards of WAC 173-340-700 through 760 are met without further action being required at the site being cleaned up or at any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances.

Alternative 1 (Institutional Controls) has the lowest level of permanence. Institutional controls would not serve to destroy the substances; however, if effectively implemented, they could reduce the human or ecological exposure. No additional actions, including treatment, would be conducted on the Site.

Alternative 2 (Engineered Cap) has a higher level of permanence, given that a cap will contain the dioxins. The cap does not destroy the substances, but does effectively reduce the mobility and eliminate exposure. Breaching the cap would require a significant effort or natural event.

Alternative 3 (Sampling and Removal) has the highest level of permanence. Soil exceeding the CULs is removed.

Effectiveness over the Long Term

Long-term effectiveness includes the degree of certainty that the alternative will be successful; the reliability of the alternative for the period of time during which hazardous substances are expected to remain on site at concentrations that exceed CULs; the magnitude of residual risk with the alternative in place; and the effectiveness of controls required to manage treatment residues or remaining wastes.

Alternative 1 (Institutional Controls) is less effective. Properly implemented, institutional controls have been found to be effective in protecting receptors. To achieve long-term effectiveness, the institutional controls placed must be maintained periodically and renewed or reevaluated. No further action would be conducted to address soils exceeding the CUL in the Railroad Avenue properties.

Alternative 2 (Engineered Cap) provides for long-term effectiveness through the use of capping in the Railroad Avenue properties. The cap provides effective long-term protection for ecological receptors and eliminates exposure to nearby residents.

Alternative 3 (Sampling and Removal) provides improved long-term effectiveness because soil will be permanently removed, resulting in a marked reduction in the area and volume of soils exceeding the CUL.

Management of Short-Term Risks

Management of short-term risks addresses the risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that will be taken to manage such risks. Short-term risks to remediation workers, the general public, and the environment are assessed under this criterion. Generally, short-term risks are expected to be linearly related to the amount of material handled, treated, and/or transported/disposed of (e.g., worker injury/CY excavated [equipment failure], public exposure/CY per mile transported [highway accident], release to environment/gallons treated [treatment system upset]).

Alternatives 1 (Institutional Controls) and 2 (Engineered Cap) rate high for management of short-term risks. These alternatives do not involve significant handling or management of impacted soil and, because of the low probability of disturbing soil associated with cap placement, will not result in excess dust or high risk for exposure during construction.

Alternative 3 (Sampling and Removal) rates lower for short-term risk. This alternative involves construction to remove impacted soil. This construction will disturb soil, increasing the potential for improper handling during the removal process, and may result in the generation of dust that could transport the contaminant and become an inhalation exposure. Most of the construction associated with Alternative 3 would take place in a location adjacent to private residences. Construction equipment can be dangerous if operated improperly or if the public enters work areas. Alternative 3 increases the likelihood of conflicts between the general public and construction activities.

Technical and Administrative Implementability

Technical and administrative implementability addresses the ability to implement the alternative and includes consideration of whether the alternative is technically possible; the availability of necessary off-site facilities, services, and materials; administrative and regulatory requirements; scheduling; size; complexity; monitoring requirements; access for construction operations and monitoring; and integration with existing facility (or locally applicable) operations and other current or potential remedial actions.

All three alternatives are implementable from a technical and administrative standpoint. Alternative 1 (Institutional Controls) will require significant administrative effort to ensure that institutional controls are implemented correctly and remain effective. Alternative 3 (Sampling and Removal) will require increased coordination with area property owners to accomplish the remediation work.

Consideration of Public Concerns

Consideration of public concerns addresses concerns from individuals, community groups, local governments, tribes, federal and state agencies, and any other organization that may have an interest in or knowledge of the Site and that may have a preferred alternative.

Ecology and the Port have addressed community concerns throughout the history of this project. Additional issues or concerns will be considered by Ecology as part of the cleanup action selection process, consistent with WAC 173-340-600. Public comments on the project and this document will be solicited from the community during the formal comment period, following Ecology input. Common community concerns include noise and traffic, short- and long-term risks, and the time frame of any proposed cleanup actions. Community concerns will also be factored into local permit processes, including responding to any City permitting concerns.

All of the alternatives would benefit from previous outreach actions (distribution of fact sheets to public and a community meeting on February 12, 2012) for addressing potential community concerns that could arise because of the presence of dioxins above the CUL in off-property areas. In addition, Ecology will ensure that any cleanup action selected accounts for further community input (i.e., public comment), consistent with WAC 173-340-600.

Alternatives 2 (Engineered Cap) and 3 (Sampling and Removal) likely would include concerns relating to required construction activities, noise, property owner disturbance, and related actions, with Alternative 3 having the greatest impact to the surrounding community because of the disturbance of contaminated soil. These types of concerns were raised during previous site construction activities. The performance of construction work near private properties likely would result in a significant degree of concern from affected property owners. Such concerns would be managed throughout the project as part of a preconstruction community outreach effort.

Cost

The detailed cost estimates for Alternatives 1 through 3 are provided in Appendix R, Tables R-2, R-3, and R-4, respectively. Primary assumptions, unit costs, and number of units for all significant project elements are included. The estimated costs (2013 cost basis) for implementation, operation and maintenance, and monitoring are as follows:

Alternative 1:	$53,000
Alternative 2:	$184,000
Alternative 3:	$297,000

Alternative 3 is the most expensive of the alternatives. The alternative is incrementally more expensive than Alternative 2, while providing only modest improvements in protectiveness and permanence. Alternative 1 has the lowest cost, but the alternative does not provide the same degree of risk management and places constraints on a property adjacent to residential properties that could otherwise be a useful asset to the community.

8.3.3 Provide for Reasonable Restoration Time Frame

WAC 173-340-360(4) contains guidance for determining reasonable restoration time frames. Consideration is required for potential risks posed by the Site to human health and the environment; the practicability of achieving a shorter restoration time frame; current use of the Site, surrounding areas, and associated resources that are, or that may be, affected by releases from the Site; availability of alternative water supplies; likely effectiveness and reliability of institutional controls; ability to control and monitor migration of hazardous substances from the Site; toxicity of the hazardous substances at the Site; and the natural processes that reduce concentrations of hazardous substances and that have been documented to occur at the Site or under similar conditions.

All of the alternatives possess reasonable restoration time frames. Alternative 3 involves more extensive construction activities and will require the most time to complete. The engineered cap (associated with Alternative 2) and implementation of institutional controls (associated with Alternative 1) can be implemented readily. Institutional controls can be effective and reliable if implemented correctly and maintained.

8.3.4 Expectations for Alternatives

WAC 173-340-370 outlines Ecology's expectations for the development of alternatives and the selection of cleanup actions. Based on the above DCA, Alternative 2 is emphasized as the most likely to ensure compliance with the expectations. Each of the expectation criteria is summarized below:

Treatment of Waste and Hazardous Substances

Ecology generally expects the treatment of liquid wastes, high concentrations of hazardous substances, highly mobile hazardous materials, and discrete areas of hazardous materials that lend themselves to treatment. There are no liquid wastes on the Railroad Avenue properties. The concentrations are not especially high and, in fact, correspond at most to a 1 in 100,000 excess cancer risk level and are less than an order of magnitude above CULs. Further, the contaminants on the Railroad Avenue properties are not highly mobile.

All alternatives comply with Ecology's expectation.

Minimization of Long-Term Management at Small Sites

Ecology also favors the minimization of long-term management for small sites through the use of destruction, detoxification, and/or removal to bring concentrations on site to below CULs.

Alternative 3 involves removal; however, destruction and detoxification of dioxins are not feasible. Alternative 1 would require active long-term management of the Site to ensure that institutional controls remain effective. Alternative 2 requires long-term management of the cap.

Use of Engineering Controls at Large Sites

Ecology recognizes the need to use engineering controls, such as containment, for sites where there are large volumes of low-level contamination and where treatment is impractical.

The Railroad Avenue properties do not include a large volume of soil; however, the soil that is in place on the property would be categorized as low-level contamination. The use of capping and on-site management under Alternative 2 is consistent with Ecology expectations.

Minimize Stormwater Contamination and Off-Site Migration; Control Runoff to Avoid Surface Water Contamination

Ecology also expects that measures will be taken to avoid stormwater contamination and subsequent migration off site. In addition, contamination of surface water near the off-property should be avoided through the control of runoff and groundwater discharge or migration.

Because the contaminants have limited mobility, stormwater contamination will be minimized. In addition, the design may minimize run-on from the street to minimize the amount of stormwater that enters the area.

Minimize Direct Contact and Migration by Consolidating Hazardous Substances

Ecology expects that when hazardous substances remain on site at concentrations that exceed CULs, those hazardous substances will be consolidated to the maximum extent practicable where needed to minimize the potential for direct contact and migration of hazardous substances.

No consolidation is considered appropriate or practicable under Alternative 2, as the area to be addressed is relatively compact.

Control Groundwater Discharge or Migration to Avoid Surface Water Contamination

Groundwater is not a consideration on the off-property, as the contamination is surficial and the water table is greatly removed from the contaminated layer.

This criterion is not applicable to the Railroad Avenue property.

Use of Natural Attenuation

Ecology acknowledges that natural attenuation may be appropriate where criteria are met.

Although Alternatives 1 and 2 do not rely on natural attenuation, or degradation of dioxins, some reduction in concentrations may occur over the long term because of natural processes.

Significantly Greater Overall Threat to Human Health and the Environment as Compared to Other Alternatives

Ecology expects that any cleanup actions chosen with consideration of WAC 173-340-370 will not result in a significantly greater overall threat to human health and the environment than with other alternatives. All alternatives will minimize threats to human health and the environment during the remedial actions, as long as they are successfully implemented.

9 FEASIBILITY ANALYSIS: LAKE RIVER

Lake River is a side channel of the Columbia River and lies within the lower Columbia River west of Ridgefield, Washington, near the confluence of the Columbia and Willamette rivers. The Lake River remediation area described in this FS report consists of the shoreline adjacent to the LRIS, approximately 2 miles upstream from where Lake River meets the Columbia River. See Section 2.2.3 of this report for further background information on this area.

9.1 Technology Screen

Consistent with the SMS requirements in WAC 173-204-560(4)(f)(iii) and using MTCA procedures as a guideline (WAC 173-340-350(8)(b)—Screening of Alternatives), individual cleanup action components (technologies) were reviewed and screened to identify applicable methods for remediating the impacted sediment in Lake River. The preliminary screening of applicable technologies was completed based on technologies identified in the FRTR (2008), as well as other commonly used remediation methods. Effectiveness and implementability of each technology were assessed for the specific contaminants in the sediment, resulting in a list of technologies that were retained for further consideration (see Table O-2, Appendix O).

9.2 Alternatives

Remedial alternatives for Lake River were developed by using the individual cleanup technologies retained from the technology screening process discussed in Table O-2, Appendix O, and by considering the preliminary CULs presented in Section 6. The selected CUL is 5 ng/kg dioxin TEQ. The number and magnitude of dioxin CUL exceedances far exceed those of other chemicals that exceeded screening criteria, as described in Section 3. Therefore, only dioxins were selected as IHSs, and any of the remedial options presented here and designed to meet the selected CUL are expected to remedy other contaminants as well. Individual remedial technologies have been assembled into a comprehensive approach that will achieve the remedial action goals for impacted sediment.

Four remedial alternatives have been developed for Lake River that potentially meet cleanup standards. A no-action alternative was considered but was dismissed from further evaluation, as it does not meet cleanup standards.

Interim actions for upland soil that is supported by the riverbank have been completed (Cell 3) or will be completed in 2013 (Cell 2) (see Section 4). For all of the alternatives in this analysis, the area between the upland cap and the chosen in-water remedy (approximately elevation +11 [Columbia River Datum] down to the slope break to the beach) will be covered with a geotextile filter fabric and stabilized with rock armor. Armoring of the bank will reinforce the existing slopes and act as a physical barrier to the movement of underlying soil and sediment. No other remedial alternatives for the riverbank were retained from the technology screen because of the discovery of cultural artifacts in the bank and the requirement to preserve the artifacts in place (see Appendix O).

The remedial alternatives are described below and are evaluated in detail in Section 9.3.

9.2.1 Alternative 1: Monitored Natural Recovery

The primary components of Alternative 1 are:

- Bank stabilization
- Natural attenuation
- Long-term monitoring program
- Institutional controls

Alternative 1 relies on stabilization of the riverbank, combined with the natural deposition of clean sediment over impacted sediment in Lake River, to engender natural attenuation in the form of dilution of contaminant concentration through mixing and/or a physical barrier (if no mixing occurs) that acts to reduce the mobility, volume, and concentration of contaminants in sediment. This process occurs under favorable conditions over an indeterminate period of time and acts without human intervention.

A comprehensive work plan would be prepared outlining monitoring techniques; methods for further characterization of the Lake River fluvial conditions; and sampling events to better understand the deposition rates of fluvial process that would affect natural attenuation. The plan would define sampling locations and methods to supplement existing sampling data from within the study area perimeter.

Following the in-depth characterization of the fluvial environment, institutional controls (e.g., no-anchor zones) and/or a monitoring program would be developed that would be capable of verifying the ongoing effectiveness of recovery by natural processes. The monitoring program would quantify the extent of risk reduction achieved.

9.2.2 Alternative 2: Enhanced Monitored Natural Recovery

Primary components of Alternative 2 are:

- Bank stabilization
- Placement of a sand layer to enhance natural attenuation

- Long-term monitoring plan
- Institutional controls

Alternative 2 relies on a combination of bank stabilization, enhanced natural recovery (ENR), and a long-term monitoring program to protect receptors and verify recovery, resulting in enhanced monitored natural recovery (EMNR) of Lake River. EMNR is accomplished by placing a layer (approximately 6 to 12 inches) of clean sand over the impacted sediment and then monitoring the additional natural recovery that occurs. The ENR layer would not be intended to completely isolate the impacted sediment as in a conventional sediment capping alternative but instead would jump-start the natural deposition of clean sediment over impacted sediment. This layer would provide a surface stratum of cleaner sediment, resulting in an immediate reduction in surface contaminant concentrations. Biological and wave-induced mixing would further enhance dilution of contaminant concentrations in existing sediment. Should no further mixing occur, the ENR layer would act to accelerate the process of physical isolation that would continue over time through natural sediment deposition. These processes reduce the mobility, volume, and concentration of contaminants in surface sediment.

A thin layer of sand for ENR may be placed by clamshell spreading or other contractor-proposed means. Sand for ENR would be placed over all areas with preremediation dioxin concentrations in surface sediment greater than the CUL of 5 ng/kg dioxin TEQ (see Figure 6-2 for sample locations exceeding the CUL).

As in Alternative 1, a comprehensive work plan would be prepared, outlining characterization of the fluvial conditions at Lake River; monitoring techniques; and sampling events. In addition, institutional controls (e.g., no-anchor zones) and/or a long-term monitoring program would be developed that would be capable of verifying the ongoing effectiveness of recovery by natural processes.

9.2.3 Alternative 3: Engineered Cap

Primary components of Alternative 3 are:

- Bank stabilization
- Placement of an engineered sand cap
- Placement of a protective armor layer
- Long-term monitoring and maintenance
- Institutional controls

Alternative 3 implements engineering and institutional controls to prevent the migration of and exposure to sediment containing contaminants at concentrations exceeding the site-specific CUL at Lake River. Under Alternative 3, bank stabilization would be performed and an engineered 2-foot sediment cap would be placed by mechanical means over the designated remediation area (i.e., areas exceeding the dioxin CUL). Appropriate options for the capping material would be developed in detail during the remedial design.

Impacts to active federal navigation channels designated by the COE are subject to review by the COE and the U.S. Coast Guard. Typically, where capping is performed within the limits of an active federal navigation channel, the cap's top elevation is maintained below the project depth, with sufficient clearance to provide for channel maintenance dredging. Pending further review of channel dimensions and navigation requirements, the cost for removal of sediment from within the navigation channel project boundary has not been included in Alternative 3.

The cap material would be placed in a manner that minimizes mixing of impacted sediment and cap material, allows for proper settlement during and after construction, and minimizes the amount of turbidity generated in the water column. Following the placement of the engineered cap, a protective layer of rock armor would be placed to protect against erosion of the underlying sediment cap.

Cap integrity would be managed on an ongoing basis through implementation of a monitoring and maintenance program, which would include a plan outlining the requirements for routine cap performance monitoring, schedule, emergency response, and reporting. It would also include steps to be taken if the cap fails to meet the performance criteria.

Restrictions on future maintenance dredging would be required as an institutional control in order to prevent breaching of the engineered sediment cap without appropriate remedial measures. Additional restrictions on navigation, access to shore, and short-term future land use (e.g., in-water construction) would all be included as institutional controls.

9.2.4 Alternative 4: Dredging and ENR

Primary components of Alternative 4 are:

- Removal of impacted sediment through mechanical dredging
- Existing in-water structure removal
- Bank stabilization
- Placement of an ENR layer
- Monitoring natural recovery

Alternative 4 consists of removing impacted sediment in Lake River through the process of mechanical dredging. An evaluation of potential dredge scenarios (based on various potential RELs) is provided as Appendix S. The most permanent scenarios of removing all sediment with dioxin impacts above the CUL or above two times the CUL were considered (see Appendix S) but were eliminated from further analysis because of the significant remedy cost increase when compared to the limited areawide reduction in dioxin concentrations. Further, as explained in Appendix S, it is significantly less feasible to remove dioxins at such low levels because of the generation of residuals.

The scenario selected for Alternative 4 is Scenario C (removal of sediment with dioxin TEQs above 30 ng/kg). The dredge volume associated with removing sediment above an REL of 30 ng/kg dioxin TEQ is selected for purposes of the FS, and sampling conducted in the design phase will be used to further refine the dredge prism. The recommended dredge scenario involves removal of sediment with concentrations above the REL and placement of a 1-foot-thick sand layer over areas with sediment concentrations between the CUL of 5 and 30 ng/kg dioxin TEQ. This scenario results in several positive outcomes, including: (1) the maximum technically feasible reduction in dioxin concentrations is achieved, (2) all significantly impacted sediment along the LRIS shoreline is removed, and (3) other contaminants above screening levels (see Section 3) are removed. Figure 9-1 shows the estimated lateral and vertical extent of dredging and the resulting estimated surface post-dredge dioxin TEQ surrounding each sample location (the areal extent of the dredge area is estimated in this FS using Thiessen polygons, but it would be refined during design). For a discussion of the dredge scenarios that were evaluated, varying dredge volumes, and estimated postremedial concentrations, see Appendix S.

Sediment containing dioxins above the REL would be removed from the river bottom and transferred, by material barge, to an upland offloading area in the LRIS adjacent to the in-water work. Initial dewatering would take place on the material barge through filtered scuppers. Further dewatering and solidification of the dredged material in the upland area would take place before landfilling.

Dredged material would be disposed of as nonhazardous material waste at a Subtitle D landfill facility. The sediment data results have been reviewed and screened for waste designation purposes; the dredged material would not be designated as either a RCRA-listed hazardous waste or a RCRA characteristic waste.

Before dredge operations, existing in-water structures would be demolished. There are few infrastructure remnants of historical LRIS river operations; however, some dolphins, pilings, a possible submerged bulkhead, and a dock (currently in operation) are located in the sediment remediation area.

Armor would be applied to the lower portions of the bank, below where the upland interim action soil cap and bank layback daylight at elevation +11 feet Columbia River Datum. The armor would be tied in to the bank layback and extend down to overlap the dredged areas and the ENR layer. The armor would also function as a cap in the transition area, protecting against exposure and erosion.

Access improvements would be necessary to accomplish the sediment remediation. These improvements include clearing and grubbing of the site vegetation to create a staging area for sediment handling. Division Street, which runs through the LRIS between Cells 2 and 3 and which is currently used as shoreline access and a boat launch, would be used to access the sediment staging area where possible cement amending and load out of dredged sediment would be conducted.

The Lake River sediment remediation area may have various site constraints during construction, as water levels throughout Lake River are very shallow, particularly at the mouth, where Lake River empties into the Columbia River. These shallow conditions may result in the need for additional dredging in the navigational channel for purposes of access. The existing data, consisting of a 2010 sounding, indicate that water levels at the start of the work window likely would allow for the mobilization of unloaded material barges and derricks through the confluence with the Columbia River and up Lake River to the LRIS. However, access at the time of construction may change because of possible ongoing deposition. Before cleanup begins, a bathymetric survey of the river confluence area will be conducted.

Best management practices for water quality would be implemented, including silt curtains for containment; dredge method; and turbidity monitoring before, during, and after construction.

A 1-foot-thick layer of clean sediment would be placed over the remediation area to enhance the natural recovery of sediment after construction. Sand for ENR would be placed over dredged areas and resulting (presumed) generated residuals, as well as over areas not dredged and with preremediation dioxin concentrations of greater than the CUL (5 ng/kg dioxin TEQ). Monitoring of the ENR layer would ensure achievement of the CUL and continued effectiveness.

Although this alternative likely would not prevent any future dredging activities for channel maintenance and other construction activities, evaluation of sediment conditions would be required before activities involving significant sediment disturbance are initiated.

9.3 Detailed Alternative Analysis

The cleanup action alternatives related to Lake River sediments were evaluated using the SMS guidelines listed in WAC 173-204-560(4)(f)(iii) A through D and described below. The SMS requires that each cleanup study plan include an evaluation of alternative cleanup actions that protect human health and the environment by eliminating, reducing, or otherwise controlling risks posed through each exposure pathway and migration route.

9.3.1 SMS Evaluation Requirements

The proposed cleanup action alternatives must be evaluated consistent with the requirements of the SMS. The SMS requirements in WAC 173-204-560(4) are worded similar to MTCA evaluation requirements, although they are structured slightly differently. The SMS lists the following evaluation criteria to assess the cleanup action alternatives that pass the initial screening (technology screen):

- Overall protection of human health and the environment
- Attainment of the cleanup standard(s) and compliance with applicable federal, state, and local laws
- Short-term effectiveness
- Long-term effectiveness

9.3.1.1 Protection of Human Health and the Environment

According to the SMS, considerations for the protection of human health and the environment include overall protectiveness of the alternative, time required to attain the cleanup standard(s), and on-site and off-site environmental impacts and risks to human health resulting from implementing the cleanup alternatives.

All four alternatives protect human health and the environment through compliance with cleanup standards, removal and capping of impacted sediment, and/or institutional controls to manage the potential for exposure to impacted sediment.

Alternative 1 (monitored natural recovery [MNR]) is somewhat protective of human health and the environment. This alternative consists of bank stabilization and subsequent monitoring of the natural recovery of sediment within the cleanup boundary, and implementation of institutional controls, including restriction on future uses, navigation, and dredging. Natural recovery in Lake River would involve the slow deposition of clean sediment on top of existing impacted sediment and the mixing of impacted sediment and clean deposition through biological activity and wave action. Implementing the components associated with Alternative 1 would eventually prevent unacceptable exposure to the impacted sediment, relying in the short term on institutional controls. Alternative 1 has few to no on-site or off-site impacts resulting from implementation, as material is not handled and exposure during implementation is limited to sampling events. Alternative 1 relies on natural processes to attenuate impacts in the sediment, resulting in an extended time frame. Therefore, there is still potential for exposure to contaminants, as well as for institutional controls to go unheeded.

Alternative 2 (EMNR) is protective, as it includes the above restrictions plus the placement of a sand layer that would result in the immediate reduction in surface contaminant concentrations. Alternative 2 has few to no on-site or off-site impacts resulting from implementation, as handling of the sediment is limited; however, this alternative has a slightly increased potential for local exposure increases over Alternative 1 during implementation. There is a slight risk for resuspension during operations; however, proper controls during placement of the ENR layer would remove this exposure potential. Implementation of Alternative 2 would prevent exposure to the sediment over the short term as well as the long term, as the process of physical isolation and concentration reduction through mixing would continue over time with natural sediment deposition. The contamination would initially be covered by clean sand but, over the long term, it is likely to mix as a result of site use or wave action, thereby exposing receptors to dioxins in the surface sediment. In addition, achievement of the CUL would demand an extended time frame relative to Alternatives 3 and 4. State and federal permitting of future projects would require the evaluation of the impacts of maintenance dredging activities, potentially requiring ENR layer placement as part of those activities to maintain protectiveness of the remedy.

Alternative 3 (Engineered Cap) is protective because it fully isolates contaminants in the sediment from the environment immediately after construction. Alternative 3 has few to no on-site or off-site impacts resulting from implementation, as handling of the sediment is limited. This alternative has a marginally increased potential for local exposure during implementation through resuspension that may occur during sand cap placement; however, proper controls during placement of the sediment cap would eliminate this potential for resuspension. The Alternative 3 sediment cap would be designed to remain in place as a physical barrier and prevent exposure to the impacted sediment over the long term because of the engineered thickness requirements of the isolation and armor layers. Controls to prevent or repair damage to the sediment cap would be required in order to increase the likelihood that the remedy will remain protective in the long term. However, loss of the sediment cap could result in re-exposure of the environment to contaminants.

Alternative 4 (Dredge and ENR) is protective, as it uses dredging and ENR to comply with the CUL. The selected dredging scenario (see Section 9.2.4 and Appendix S) is estimated to result in a surface weighted average concentration (SWAC) of 7 ng/kg dioxin TEQ following remedy implementation (see Appendix S). The estimated SWAC is marginally above the CUL of 5 ng/kg dioxin TEQ, and significantly less time would be required to achieve the CUL than for Alternatives 1 and 2. Only Lake River areas currently exceeding the CUL were included in the SWAC calculation; when results of all Lake River sampling conducted offshore of the LRIS are included, the estimated SWAC is 4 ng/kg dioxin TEQ. Therefore, aquatic receptors (including potential catch for human consumption) that use the Lake River area offshore of the LRIS are estimated to be exposed to dioxin concentrations below the CUL. As described in Appendix S, Alternative 4 is also immediately protective of ecological receptors. Alternative 4 has a higher potential for on- and off-site impacts due to handling, transport, and disposal of impacted sediments. Alternative 4 has an increased potential for local aquatic exposure during implementation through resuspension that may occur during dredging. Proper controls during dredging would limit this exposure potential.

9.3.1.2 Compliance with Cleanup Standards and Applicable Federal, State, and Local Laws

This cleanup action evaluation is being conducted under the SMS (WAC 173-204). The selected cleanup action would be conducted consistent with all applicable state and federal laws and applicable cleanup standards, as discussed in Appendix Q.

All alternatives are anticipated to meet the CUL; however, the time required to attain the CUL differs by alternative. Alternative 1 (MNR) is likely to require the most extended time frame to attain the CUL because it relies entirely on natural processes. Alternative 2 (EMNR) also relies considerably on natural processes; however, the initial placement of a clean layer of sand is expected to decrease the time frame relative to Alternative 1. Both of these alternatives would also require some time to achieve the REL. Alternative 3 (Engineered Cap) is expected to attain the CUL immediately upon completion of the remedial action. Alternative 4 (Dredge and ENR) is expected to attain the REL immediately upon completion of the remedial action and to result in sediment conditions approaching the CUL, thus requiring less time than Alternatives 1 and 2 to ultimately achieve the CUL. Further, because a significant mass of the dioxins will be permanently removed under Alternative 4, once the CUL is achieved it is less likely that concentrations will increase above the CUL as a result of transport from the impacted subsurface.

9.3.1.3 Short-Term Effectiveness

According to the SMS, analysis of the short-term effectiveness includes consideration of the protection of human health and the environment during construction and implementation of the alternative.

Alternative 1 (MNR) provides little effective protection in the short term; however, exposure potentials are also lowest, as limited bank stabilization construction activities would be conducted. Alternative 1 would take the longest to achieve overall protectiveness, as it relies on natural processes.

Alternative 2 (EMNR) has much greater short-term effectiveness than Alternative 1 because of Alternative 2's concentration reduction in the surface contaminants due to the placement of the clean sand layer. However, Alternative 2 would leave in place elevated concentrations of impacted sediments, which are expected to become mixed into the ENR layer in the future, becoming accessible to the environment. Additional construction-related exposure would be insignificant because the sand layer can be spread slowly to minimize the disturbance of the existing sediment surface.

Alternative 3 (Engineered Cap) has the greatest short-term protectiveness because a cap, engineered for longevity, would be placed and act as a physical barrier between the environment and the impacted sediment. The sediment cap would be effective immediately after its construction and would be expected to remain effective for the long term. Construction-related exposure would be minimal because the sand layer can be spread slowly to minimize the disturbance of the existing sediment surface. Dredging in the navigation channel to accommodate the sediment cap would have some short-term construction risks.

Alternative 4 (Dredge and ENR) produces the most short-term exposure because of dredging of the sediments and the subsequent handling of the dredged material, and therefore provides the least amount of short-term effectiveness. Construction methods would be actively managed to limit the spread of disturbed, impacted sediment beyond the dredge footprint.

9.3.1.4 Long-Term Effectiveness

Pursuant to the SMS, the following were considered in analyzing the alternatives for the evaluation requirements pertaining to long-term effectiveness: degree of certainty that the alternative will be successful; long-term reliability; magnitude of residual, biological, and human health risk; and effectiveness of controls for ongoing discharges and/or controls required to manage treatment residues, remaining wastes cleanup, and/or disposal site risks.

Alternative 1 (MNR) can be effective in the long term, and additional information would be collected during the preparation of the monitoring program to confirm long-term effectiveness. The attenuation would be closely monitored to confirm that recovery is occurring and that residual, human health, and ecological risk is being mitigated. No disposal site risks are associated with this alternative. Restrictions would be placed on future uses in order to protect human receptors (increasing the long-term effectiveness if the restrictions are followed), and long-term monitoring would be implemented to confirm remedy effectiveness.

Alternative 2 (EMNR) would provide long-term effectiveness in much the same way as Alternative 1. While the placement of the ENR layer increases the short-term effectiveness, it has a reduced benefit over the long term because of mixing of the ENR layer with higher concentrations below.

Alternative 3 (Engineered Cap) provides a high level of long-term effectiveness. The design of the chemical isolation layer and the armoring layer of the sediment cap would provide a high degree of certainty in this remedy's effectiveness, assuming that the cap is maintained and repaired as necessary. Sediment caps are commonly used and easily implementable, with many examples illustrating the long-term reliability and mitigation of residuals and risks to receptors. However, implementing a sediment cap places the most restrictions on future uses. Adding material to the bottom of the river would require future navigation and shore access restrictions, as well as restrictions on dredging for the purposes of navigation. Damage as a result of marine traffic contacting shallow river substrate, propeller wash, flood events, or natural processes could jeopardize long-term effectiveness of the remedy because sediment impacts would remain in place. Appropriate design would limit these disturbances to the underlying sediment. Institutional controls would communicate the limits of the armored cap boundary as well as requirements for future development in capped areas. Long-term cap monitoring would confirm remedy effectiveness. This alternative would require that future work in these areas be performed in a manner that will not conflict with the completed cap remedy.

Alternative 4 (Dredge and ENR) has the greatest long-term effectiveness. The remedy consists of removal of sediments with the highest concentrations and placement of an ENR layer to mitigate the exposure to residuals (see Appendix S). Additional reductions in contaminant concentrations likely would occur through natural processes following remedy implementation for compliance with the CUL. The alternative does not require long-term institutional controls. Dredging is common and has a relatively high degree of certainty for success, and the long-term reliability is high. Monitoring would be conducted to ensure effectiveness and evaluate the natural recovery processes. Further, the disposal site would be an operating landfill with established long-term controls in place.

9.3.2 Cleanup Time Frame

WAC 173-204-580(3) contains guidance for determining reasonable time frames for completing the cleanup actions. The cleanup action selected shall provide for a reasonable time frame for completion, based on the consideration of many of the factors addressed throughout this report as well as the following: practicability of achieving the site cleanup standards in less than ten years; current use of the Site and surrounding areas; and potential future use of the Site and surrounding areas.

Lake River poses potential risks to human health and the environment, requiring the shortest cleanup time frame practicable. Alternatives 3 and 4 provide a relatively quick cleanup time frame, followed by Alternative 2, and ultimately achieve site cleanup standards within the ten-year time frame required by the SMS WQC 173-204-580(3)(a)(ii).

Alternative 1 (MNR) relies on natural deposition and mixing to achieve site cleanup standards and likely would have a long cleanup time. Natural attenuation through sedimentation may occur within the ten-year time frame in some areas of Lake River, and a detailed fluvial evaluation would be required to provide the level of certainty required for this analysis. Institutional controls would be required under this alternative.

Alternative 2 (EMNR) uses the placement of a clean sand layer to jump-start the natural deposition and mixing described for Alternative 1. Alternative 2 may initially achieve the CUL immediately following construction, but as mixing occurs, the concentrations in surface sediment may increase and require additional time before cleanup standards are ultimately achieved through natural recovery processes. This alternative may complete cleanup within the requisite ten-year period. Institutional controls would be required under this alternative.

Alternative 3 (Engineered Cap) leaves impacted sediment in place and places a physical barrier to prevent exposure. Alternative 3 would achieve the CUL immediately after construction. Institutional controls would be required under this alternative.

Alternative 4 (Dredge and ENR) achieves the REL through dredging and ENR. Alternative 4 would achieve the CUL after some natural recovery of sediments. Although this alternative likely would not prevent any future dredging activities, evaluation of sediment conditions would be required before activities involving significant sediment disturbance are initiated.

The current use of Lake River and surrounding areas allows for implementation of all of the action alternatives. Institutional controls would be required under Alternatives 1, 2, and 3. These would not be required under Alternative 4 because the scenario does not require that sediments remain undisturbed. Potential future uses, including shoreline improvements and access, navigability and future dredging of the navigation channel, and possible marina construction, were all considered in the development of the alternatives.

9.3.3 Evaluation of Alternatives

In WAC 173-204-580(4), the SMS specifies that, in evaluating the alternatives, the net environmental effects, relative cost effectiveness, and relative technical effectiveness should be considered for the cleanup action alternatives. For the purposes of performing a comprehensive assessment, cost and technical effectiveness were evaluated together, using the MTCA DCA framework because it addresses the above SMS requirements as well as additional requirements found in WAC 173-204-560(4)(g-k).

9.3.3.1 Net Environmental Effects

This requirement includes consideration of the net environmental effects of the alternatives, including residual effects, recovery rates, and any adverse effects of cleanup construction or disposal activities.

Under Alternative 1, leaving contamination exposed over time to gradually recover naturally may result in a net environmental effect. Some construction impacts would be associated with Alternatives 2, 3, and 4, but these impacts can be minimized through appropriate project design and construction practices.

9.3.3.2 Relative Cost and Technical Effectiveness

The MTCA DCA framework was implemented to evaluate the relative costs and technical effectiveness of the sediment remediation alternatives required by the SMS. The criteria for performing the DCA can be found below. Alternatives 1, 2, 3, and 4 comply with MTCA threshold criteria and were included in the DCA.

Costs are determined to be disproportionate to benefits if the incremental cost of a more expensive alternative over that of a lower-cost alternative exceeds the incremental degree of benefits achieved by the more expensive alternative. The DCA includes evaluation criteria that are a mix of qualitative and quantitative factors, including protectiveness, permanence, long-term effectiveness, management of short-term risks, technical and administrative implementability, consideration of public concerns, and cost. A summary of the analysis is provided in Table 9-1. Detailed cost estimates are provided in Appendix R.

Protectiveness

Protectiveness of human health and the environment includes the degree to which existing risks are reduced; time required to reduce risk at the facility and attain cleanup standards; on-site and off-site risks resulting from implementing the cleanup action alternative; and improvement of the overall environmental quality.

As discussed in the evaluation requirements (see Section 9.3.1.1), Alternatives 1 through 4 are, in varying degrees, protective of human health and the environment. The alternatives were scored as described below and summarized in Table 9-1:

- Alternative 1 (MNR) scores lowest for protectiveness, as the alternative relies on long-term natural processes to develop a physical barrier and reduce contaminant concentrations, as well as on less reliable institutional controls to protect receptors in the short term.
- Alternative 2 (EMNR) scores in the middle for protectiveness because of the placement of the ENR layer, resulting in an immediate reduction of surface concentrations of contaminants; however, contaminants remain in the subsurface and may be re-exposed.
- Alternative 3 (Engineered Cap) is scored high for protectiveness. Contaminants are physically isolated from the environment, underneath a sediment cap that is armored to contain all of the material in place over the long term. There is still potential for contaminant release in the future if significant damage to the cap occurs, but the likelihood of this is small.
- Alternative 4 (Dredge and ENR) scores high for protectiveness because the remedy consists of contaminant removal, enhances natural recovery, immediately achieves the REL, and provides for monitoring to ensure compliance with the CUL following natural recovery. No institutional controls are required (see Section 9.3.2).

Permanence

Permanence is a factor by which the cleanup action alternative permanently reduces the toxicity, mobility, or volume of hazardous substances. The adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and sources of releases, the degree of irreversibility of the waste-treatment process, and the characteristics and quantity of treatment residuals generated are all considered under this criterion.

Under the MTCA DCA process, preference is given to permanent solutions to the maximum extent practicable. A "permanent solution" is defined as a cleanup action in which the cleanup standards are met without further action being required at the site being cleaned up or at any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances.

Alternative 1 (MNR) has the lowest level of permanence because of the uncertainty in achieving the desired result. Sediment exceeding CULs would remain in place and would be accessible to biological and human receptors in the short term. The alternative also must include continued monitoring of the deposited sediment to verify effectiveness, and must also rely on institutional controls to protect the sedimented layer from damage (i.e., scour).

Alternative 2 (EMNR) has a slightly higher level of permanence than Alternative 1, but is still at some risk from scour of the ENR layer.

Alternative 3 (Engineered Cap) scores higher under this criterion; sediment exceeding CULs would remain in place but would be capped by an isolation layer and protective armor providing a higher degree of permanence. This alternative, as with Alternatives 1 and 2, must include continued maintenance and monitoring of the cap and would rely on institutional controls to protect the cap section from damage.

Removal of sediment in Alternative 4 (Dredge and ENR) makes this alternative the most permanent. The remedy provides compliance with the REL through dredging and ENR; monitoring will ensure compliance with the CUL following natural recovery. Risks associated with scour are significantly reduced because of removal of the most impacted sediment. No institutional controls are required.

Effectiveness over the Long Term

In addition to the evaluation requirements discussed in Section 9.3.1.4, long-term effectiveness in the DCA includes the degree of certainty that the alternative will be successful; the reliability of the alternative for the period of time during which hazardous substances are expected to remain on site at concentrations that exceed CULs; the magnitude of residual risk with the alternative in place; and the effectiveness of controls required to manage treatment residues or remaining wastes.

With proper implementation, all four alternatives can be effective over the long term under this criterion; therefore, they were rated based on the degree of certainty of effectiveness.

Alternative 1 (MNR) can be effective in the long term, provided that the natural processes occur and that the institutional controls are effective. Because of the uncertainty associated with these requirements, this alternative is scored low.

Alternative 2 (EMNR) is scored in the middle, as the remedy still relies on natural processes to achieve the ultimate cleanup goal but is enhanced by the addition of a foot of clean material, effectively bolstering the success of the sedimentation process.

Alternative 3 (Engineered Cap) is scored high because a properly constructed engineered cap has a high degree of permanence. The degree of certainty of long-term effectiveness is lower than for Alternative 4 because of the potential that future damage to the cap could result in releases of contaminated sediment.

Alternative 4 (Dredge and ENR) is most effective over the long term. The remedy provides compliance with the REL through contaminant removal and ENR; monitoring will ensure compliance with the CUL following natural recovery. No institutional controls are required. This alternative is therefore rated the highest.

Management of the Short-Term Risks

As discussed in the evaluation requirements (see Section 9.3.1.3), this factor addresses the risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that would be taken to manage such risks. Short-term risks to remediation workers, the general public, and the environment are assessed under this criterion. Generally, short-term risks are expected to be linearly related to the amount of material handled, treated, and/or transported/disposed of (e.g., worker injury/CY dredged [equipment failure], public exposure/CY per mile transported [highway accident], release to environment/gallons treated [treatment system upset]).

There are limited short-term risks associated with Alternative 1 (MNR). Limited construction for bank stabilization, along with monitoring, would be conducted under this alternative. Alternative 1 scores the highest under this criterion.

Alternative 2 (EMNR) has slightly greater short-term risk as a result of the additional construction required to place sand for ENR; however, the complexity and magnitude of construction to implement the remedy are low compared to other alternatives, resulting in a high rating for the management of short-term risks.

Alternative 3 (Engineered Cap) requires removal of sediment to maintain the navigation depth, in addition to placing significantly more material than in Alternative 2. This alternative has a higher potential than Alternatives 1 and 2 for resuspending contamination and stimulating transport of contaminated sediments off site during dredging; however, proper controls during construction can greatly reduce that potential. Further, constructing the cap is more complex than the ENR placement applied in Alternative 2 because an additional armored layer is required. Alternative 3 scored in the middle with these considerations.

Alternative 4 (Dredge and ENR) scores in the middle for short-term risk, as the amount of sediment to be transported off site for disposal is significant and has the potential to detrimentally affect human health or the environment if handled improperly. Alternative 4 also has the highest potential for resuspension and off-site transport of contaminated sediments; however, construction controls known to be effective in managing this risk would be employed, mitigating the overall risk.

Technical and Administrative Implementability

This factor addresses whether the alternative can be implemented and is technically possible. The availability of necessary materials; regulatory requirements; scheduling; access for construction operations and monitoring; and integration with existing facility operations must be considered.

All the alternatives use proven sediment-remediation technologies that have been employed at many sites. All four are implementable from a technical and administrative perspective.

Alternative 1 (MNR) entails significant administrative requirements, such as placing and maintaining institutional controls at Lake River, that restrict current uses, shore access, and navigation, among others. Additionally, the ongoing monitoring plan and sampling events would add to the administrative components. Restrictions on future use would also be required and would rely on the long-term effectiveness of communication of the hazards associated with the river sediments. A lower score is the result.

Alternative 2 (EMNR) has the same administrative requirements as Alternative 1, with the addition of the permitting and approvals required for project construction. The ENR layer does not impose any technical difficulties, nor does it increase the administrative requirements; it is therefore scored the same as Alternative 1.

Alternative 3 (Engineered Cap) is more easily implemented, as engineered sediment caps have been successfully constructed in many locations around the country. The alternative requires the mobilization of marine equipment past the confluence of Lake River and the Columbia River, introducing some technical logistics issues. Added complexity would also be manifested in the permitting process. Alternative 3 requires institutional controls and ongoing monitoring and maintenance of the cap. Alternative 3 is ranked in the middle for this criterion.

Alternative 4 (Dredge and ENR) is implementable, although the project will require multiple permits and approvals to complete. Because Alternative 4 does not require institutional controls, it is ranked higher under this criterion.

Consideration of Public Concerns

This factor includes considering concerns from individuals, community groups, local governments, tribes, federal and state agencies, including DNR (i.e., the landowner, and therefore the owner, of the sediments), and any other organization that may have an interest in or knowledge of Lake River and that may have a preferred alternative. Specifically, the following agencies will have input in the process through permitting:

- The COE will review the design of the selected alternative and permit the project upon input from natural resource trustees and tribes.
- DNR will have input in the remedy selection process through permitting of the preferred alternative and/or implementation of institutional controls.

Ecology has addressed community concerns throughout the history of the associated project sites. Additional issues or concerns of DNR, other agencies, and the public will be considered by Ecology as part of the cleanup action selection process. Public comments on the project and this document will be solicited from the community during the formal comment period, following Ecology input. Common community concerns include noise and traffic, short- and long-term risks, and the time frame for any proposed cleanup actions. Community concerns will also be factored into local permit processes, including responding to the City's shoreline ordinance and development permitting. All alternatives are scored high for this criterion because they have the same permitting and public comment processes.

Cost

The detailed cost estimates for Alternatives 1, 2, 3, and 4 are provided in Tables R-3, R-4, R-5, and R-6, respectively, and can be found in Appendix R. Primary assumptions, unit costs, and number of units for all significant project elements are included. Net present value calculations are also included for operation, maintenance, and monitoring costs, if applicable. The estimated net present value costs for implementation, operation and maintenance, and monitoring are as follows:

• Alternative 1 (MNR):	$679,000
• Alternative 2 (EMNR):	$2.8 million
• Alternative 3 (Engineered Cap):	$7.7 million
• Alternative 4 (Dredge and ENR):	$9.5 million

As shown in Table 9-1, Alternative 4 is the most permanent of the alternatives. The associated costs are considered proportionate to the level of risk reduction achieved in comparison to other, lower-cost, alternatives. Alternative 1 has the lowest cumulative score and has a significant amount of uncertainty in achieving protectiveness within a reasonable restoration time frame. Alternative 3 scores lower than Alternative 4 and retains a similar remedy cost (depending on the amount of dredging that is incorporated into the alternative to accommodate navigation considerations). Alternative 2 has a relatively low cost compared to Alternative 4; however, Alternative 4 achieves a significant increase in protectiveness as well as a higher cumulative score compared to Alternative 2. Based on the DCA findings, Alternative 4 is considered permanent to the maximum extent practicable.

10 FEASIBILITY ANALYSIS: CARTY LAKE

Carty Lake is a 52-acre ponded wetland located in the RNWR Carty Unit immediately north of Cell 2 and west of LRIS Cell 4, formerly used by PWT for untreated wood storage. See Section 2.2.4 of this report for further background information on this area.

10.1 Technology Screen

Consistent with the SMS requirements found in WAC 173-204-560(4)(f)(iii) and using MTCA procedures as a guideline (WAC 173-340-350(8)(b)—Screening of Alternatives), individual cleanup action components (technologies) were reviewed and screened to identify applicable methods for remediating the sediment in Carty Lake. The preliminary screening of applicable technologies reviewed technologies that are identified in the FRTR (2008), as well as other commonly used remediation methods. Effectiveness and implementability of the technologies were assessed for the contaminants in the sediment, resulting in a list of technologies that were retained for further consideration (see Table O-2, Appendix O).

10.2 Development of Remediation Levels

Human health and ecological CULs were developed for dioxins in Section 6 and are presented in Table 6-5. Elevated dioxins (i.e., above CULs) are colocated with contaminants that exceed screening criteria identified in Section 3. Therefore, any remedy directed at dioxins is expected to remedy other contaminants. Because Carty Lake is part of the RNWR, it is an important resource for ecological receptors. The REL is set at a level protective of ecological receptors, i.e., at the ecological CULs for dioxin congeners described in Section 6.

10.3 Alternatives

Remedial alternatives for Carty Lake were developed based on the cleanup technologies identified in the technology screening (Table O-2, Appendix O) and the CULs presented in Section 6. Individual remedial technologies have been assembled into comprehensive alternatives that accomplish the remedial action goals for impacted sediment. Three remedial alternatives were developed for Carty Lake that meet ecological CULs with institutional controls that protect human health. RELs for the Carty Lake alternatives have been set equivalent to ecological CULs. Because Carty Lake is part of the RNWR, it will be necessary to coordinate alternatives with USFWS and ensure that they are consistent with USFWS plans for Carty Lake. It is understood that at this time USFWS is considering reconnecting Carty Lake with the Columbia River. A no action alternative was considered, but it was dismissed from further evaluation, as it does not address cleanup standards. The remedial alternatives are described below (see Appendix T for detailed analysis) and are evaluated in Section 10.4.

10.3.1 Alternative 1: Monitored Natural Recovery

Primary components of Alternative 1 are:

- Natural attenuation
- Long-term monitoring program
- Institutional controls to protect human health

Alternative 1 relies on MNR and institutional controls to achieve cleanup standards. Natural recovery occurs under favorable conditions over an indeterminate period of time and acts without human intervention. The deposition rate for sediment in Carty Lake depends on many variables, including lake morphology, water circulation, climate conditions, and catchment area. At Carty Lake, many of these conditions are known; however, further analysis of the hydrodynamic processes occurring in Carty Lake would be required to quantify the expected time frame for sufficient sedimentation to occur.

A comprehensive work plan would be prepared outlining methods for monitoring techniques and sampling events. The plan would define sampling locations and methods within the study area perimeter. The monitoring program would be developed with the objective of verifying the ongoing effectiveness of recovery of contaminated sediment by natural processes. The monitoring would quantify the reduction in concentrations relative to RELs.

Restrictions on access and future land use (short-term) and advisories on fish consumption would all be included as institutional controls. Additional evaluations may be necessary before Carty Lake is reconnected with the Columbia River.

10.3.2 Alternative 2: Focused Dredge and Limited Residuals Cap

Primary components of Alternative 2 are:

- Dredging sediment above RELs
- Placement of a residuals cap layer over the dredged area
- Natural attenuation
- Long-term monitoring
- Institutional controls to protect human receptors

Alternative 2 consists of removing approximately 5,650 CY of sediment above RELs in the southeast corner of Carty Lake by means of dredging and disposal. The areal extent of the dredge area is estimated in this FS using Thiessen polygons but would be refined during design. Figure 10-1 shows the estimated lateral and vertical extent of the dredge prism and the anticipated resulting postremedial conditions. The USFWS will be consulted regarding the development of the specific design for the dredge area.

The location of the impacted sediments would allow dredging from an upland position, with tracked equipment. Dewatering and solidification of the dredged material in the upland area would be required before landfilling.

Dredged material would be disposed of as nonhazardous material at a local Subtitle D landfill. Data results have been reviewed for waste designation purposes, and the dredged material would not be designated as either a RCRA-listed hazardous waste or a RCRA characteristic waste.

A silt curtain would provide adequate containment of sediment entrained during dredging, and water quality would be monitored outside the dredge area before, during, and after construction.

Approximately 2,700 CY of sand would be placed in a 6- to 12-inch-thick layer over dredged areas and the resulting residuals that are assumed to be contained within the dredge footprint (see Appendix T). The thin layer sand cap is comparable to the ENR layer considered in Alternatives 2 and 4 for Lake River (see Section 9), but is less likely to be disturbed because Carty Lake is a quiescent environment. In addition, motorboats are not allowed on the lake, so propeller-induced mixing of the sand cap layer will not occur. Sand placement for the residuals cap would be conducted from shore, using tracked equipment. Access improvements may be required and likely would include clearing and grubbing and construction of a staging area.

The monitoring program would be developed with the objective of verifying the ongoing effectiveness of recovery of contaminated sediment by natural attenuation. The monitoring would quantify the reduction in concentrations relative to the CUL (5 ng/kg dioxin TEQ) and would evaluate whether institutional controls associated with fish consumption would be appropriate.

Advisories on fish consumption would be included as institutional controls, and additional evaluations may be necessary before Carty Lake is reconnected with the Columbia River.

10.3.3 Alternative 3: Focused Dredge and Expanded Residuals Cap

Alternative 3 consists of the same elements found in Alternative 2, but with additional ENR placement in areas of somewhat elevated dioxin concentrations (i.e., sample locations LRIS-CL-07 and LRIS-CL-09). See Figure 10-1 for the estimated lateral and vertical extent of dredging and the areal extent of residuals cap placement. Note that extents are estimated using Thiessen polygons. Actual extents will be refined during design, in consultation with the USFWS. For purposes of this FS, the polygons surrounding sediment samples LRIS-CL-07 and LRIS-CL-09 are used to estimate the area of ENR placement beyond the dredged area.

Following the removal of 5,650 CY of contaminated sediment in the southeast corner of the lake (using the same RELs as for Alternative 2), approximately 12,800 CY of sand for a residual cap layer would be placed in a 6- to 12-inch-thick layer over a selected portion of Carty Lake. Because the lake is a quiescent environment, the residuals layer would also act to provide an isolation layer over impacted bottom sediments. Carty Lake is a low-energy, low-traffic (e.g., no boats allowed), quiescent environment, and consequently the likelihood that the residuals cap would be disturbed is low. Should Gee Creek be hydraulically connected to Carty Lake in the future, the design of the connection should take into account the possibility that any high-velocity connection will result in changed fluvial conditions that could encourage sediment transport.

Sand placement for the residuals cap likely would be conducted using a combination of shore-based equipment and floating equipment. The material would be placed either from shore, using a conveyed aggregate system or similar, or from segmented floating barges.

10.3.4 Alternative 4: Focused Dredge and Full Residuals Cap

Alternative 4 consists of the same elements found in Alternatives 2 and 3, with the addition of residuals cap placement over all areas of the Carty Lake bottom sediments that have concentrations above the CUL of 5 ng/kg dioxin TEQ. See Figure 10-1 for the estimated lateral and vertical extent of dredging and the areal extent of residuals cap placement. Note that extents are estimated using Thiessen polygons. Actual extents will be refined during design, in consultation with the USFWS.

Following the removal of 5,650 CY of contaminated sediment in the southeast corner of the lake (using the same RELs as Alternative 2), approximately 82,000 CY of sand for a residuals cap layer would be placed in a 6- to 12-inch-thick layer over most of Carty Lake. Because the lake is a quiescent environment, the residuals layer would provide the additional benefit of an isolation layer over impacted bottom sediments.

Sand placement for the residuals cap would require floating equipment for spreading sand hydraulically. Access improvements most likely would include clearing and grubbing and construction of a staging area to provide ingress to the entire lake for sand cap placement.

10.4 Detailed Alternative Analysis

The cleanup action alternatives related to Carty Lake sediments were evaluated using the SMS guidelines listed in WAC 173-204-560(4)(f)(iii) A through D, as described below. The SMS require that each cleanup study plan include an evaluation of alternative cleanup actions that protect human health and the environment by eliminating, reducing, or otherwise controlling risks posed by each exposure pathway and migration route.

10.4.1 SMS Evaluation Requirements

The proposed cleanup action alternatives must be evaluated consistent with the requirements of the SMS. The SMS requirements in WAC 173-204-560(4) are worded similar to MTCA evaluation requirements, although they are structured slightly differently. The SMS list the following evaluation criteria to assess the cleanup action alternatives that pass the initial screening (technology screen):

- Overall protection of human health and the environment
- Attainment of the cleanup standard(s) and compliance with applicable federal, state, and local laws
- Short-term effectiveness
- Long-term effectiveness

10.4.1.1 Protection of Human Health and the Environment

According to the SMS, considerations for the protection of human health and the environment include overall protectiveness of the alternative, time required to attain the cleanup standard(s), and on-site and off-site environmental impacts and risks to human health resulting from implementing the cleanup alternative.

Each of the four alternatives protects human health and the environment through compliance with cleanup standards, removal and capping of impacted sediment, and/or institutional controls to manage the potential for exposure to impacted sediment.

Alternative 1 (MNR) is somewhat protective of human health and the environment. This alternative consists of monitoring the natural recovery of sediment within the cleanup boundary and implementing institutional controls, including restrictions on current and future uses and on site access. Natural recovery of Carty Lake sediments would involve the slow deposition of clean sediment on top of existing impacted sediment, natural degradation of contaminants, and/or the natural dispersion of contaminated materials. Implementing the components associated with Alternative 1 would eventually prevent unacceptable exposure to the impacted sediment, relying in the short term on institutional controls. Alternative 1 has few to no on-site or off-site impacts resulting from implementation, as there is no handling of material, and exposure during implementation is limited to sampling events. Alternative 1 relies on natural processes to attenuate contamination in the sediment. This requires an extended time frame. Because there are few sediment inputs to Carty Lake, the time frame for attenuation could be extensive, increasing the possibility of exposure to contaminants and the likelihood that institutional controls will be ignored.

Alternative 2 (Focused Dredge and Limited Residuals Cap) is protective of human health and the environment. This alternative includes removal of sediments exceeding RELs, placement of a residuals cap layer of clean sand, and institutional controls to prevent human consumption of fish. Alternative 2 results in a SWAC of 24 ng/kg dioxin TEQ (see Appendix T). Implementation of Alternative 2 would have some on-site and off-site impacts, as the alternative includes handling, transportation, and off-site disposal of the sediment; however, proper controls during implementation can limit these exposure potentials. Implementing the alternative would, over the short and long terms, prevent exposure to contaminants in sediment exhibiting the highest concentrations. The residuals cap layer of clean sand placed directly over the dredged area would prevent contact with generated residuals.

Alternative 3 (Focused Dredge and Expanded Residuals Cap) is protective, incorporating the same processes and technologies as Alternative 2, but with additional ENR placement in areas of somewhat elevated dioxin concentrations (i.e., sample locations LRIS-CL-07 and LRIS-CL-09), and the SWAC of Carty Lake would be marginally less at 22 ng/kg dioxin TEQ.

Alternative 4 (Focused Dredge and Full Residuals Cap) is protective, as it removes impacted sediment and places a residuals cap layer over the entire Carty Lake footprint. All of the low-level impacts would be covered by the cap layer. The amount of highly impacted sediment removed from the lake would be the same as in Alternative 2; however, with the expanded placement of the sand cap, the SWAC is estimated to be significantly less at 12 ng/kg dioxin TEQ.

10.4.1.2 Compliance with Cleanup Standards and Applicable Federal, State, and Local Laws

This cleanup action is being conducted under the SMS (WAC 173-204). All cleanup alternatives will be conducted consistent with applicable state and federal laws.

The alternatives are anticipated to meet the CUL only after extended time frames. Alternatives 2, 3, and 4 are all anticipated to achieve RELs immediately upon completion of the active remedy. Alternative 1 (MNR) would require the longest time frame to meet the CUL and RELs; it is likely to require more than ten years to meet these levels, given the low level of sediment input to the lake. Alternative 4 (Focused Dredge and Full Residuals Cap) would require the shortest amount of time to reach the CUL because the initial placement of a clean layer of sand would cover all concentrations above the CUL. Alternatives 2 (Focused Dredge and Limited Residuals Cap) and 3 (Focused Dredge and Expanded Residuals Cap) are likely to result in similar time frames to achieve the CUL and would likely require less time than Alternative 1 and more time than Alternative 4.

10.4.1.3 Short-Term Effectiveness

According to the SMS, analysis of the short-term effectiveness includes consideration of the protection of human health and the environment during construction and implementation of the alternative.

Alternative 1 (MNR) provides little effective protection in the short term; however, exposure potentials are also lowest, as no construction activities would take place. Alternative 1 would take the longest to achieve overall protectiveness, as it relies on natural processes.

Alternative 2 (Focused Dredge and Limited Residuals Cap) provides short-term effectiveness because a residuals cap layer would be placed over dredged locations where elevated concentrations of contaminants had been removed and where residuals may occur. The residuals cap would act as a physical barrier between the environment and any remaining contamination. However, Alternative 2 leads to more short-term exposure to contaminants during construction and implementation because of dredging of the sediments and subsequent handling of the dredged material.

Alternative 3 (Focused Dredge and Expanded Residuals Cap) provides short-term effectiveness, incorporating the same processes and technologies as Alternative 2, but with placement of an additional ENR layer in areas of somewhat elevated dioxin concentrations. Alternative 3 leads to approximately the same amount of short-term exposure during implementation as Alternative 2.

Alternative 4 (Focused Dredge and Full Residuals Cap) allows for the same amount of short-term exposure during dredging as in Alternatives 2 and 3, with very slightly increased overall exposure potential during implementation due to more extensive cap placement. As in Alternative 2, the sand layer would act as a physical barrier between the environment and the contamination, but would be extended to all of Carty Lake and would function as a cap covering all sediment above the CUL, isolating surface contamination on a larger, more permanent scale. However, this extensive sand placement may significantly disturb benthic biota throughout the lake (and associated biota that rely on benthics).

10.4.1.4 Long-Term Effectiveness

Pursuant to the SMS, the following were considered in analyzing the alternatives for the threshold requirements pertaining to long-term effectiveness: degree of certainty that the alternative will be successful; long-term reliability; magnitude of residual, biological, and human health risk; and effectiveness of controls for ongoing discharges and/or controls required to manage treatment residues, remaining wastes cleanup, and/or disposal site risks.

Alternative 1 (MNR) can be effective in the long term, provided that the natural attenuation mechanisms are operating and are understood to the extent that a completion time frame can be predicted. The attenuation would be closely monitored to prove that recovery is occurring and that residual, biological, and human health risk is being mitigated. No disposal site risks are associated with this alternative. Restrictions would be placed on future uses in order to protect human receptors, increasing long-term effectiveness if the restrictions are followed.

Alternative 2 (Focused Dredge and Limited Residuals Cap) provides a higher degree of long-term effectiveness due to removal of highly impacted sediment and placement of a physical barrier over a selected area of residual impacted sediment. Removing the higher concentrations of dioxins and other contaminants in the southern portion of Carty Lake eliminates unacceptable risk to ecological receptors and reduces the long-term risk to human health. Protection of human health depends on effectiveness of institutional controls. The implementation of a residuals cap layer will mitigate the effect of post-dredging surface residuals. Additionally, the removal of the most impacted sediments eliminates the potential for future transport of these chemicals as a result of uncommon events, such as floods or seismic events. Dredging is common and has a relatively high degree of certainty for success, and the long-term reliability is high. The disposal site would be an operating landfill with established controls in place to adequately contain impacts associated with these sediments.

Alternative 3 (Focused Dredge and Expanded Residuals Cap) provides a slightly higher degree of long-term effectiveness due to removal of highly impacted sediment and placement of an additional ENR cap (compared to Alternative 2); the cap acts as a physical barrier over the selected area of residual impacted sediment. Alternative 3 incorporates the same processes and technologies as Alternative 2.

Alternative 4 (Focused Dredge and Full Residuals Cap) provides effectiveness comparable to that of Alternative 2, attributable to the removal of the most contaminated sediment. However, Alternative 4 improves on the long-term effectiveness of Alternatives 2 and 3 through the addition of a more extensive sediment cap layer, which would isolate surface concentrations on a wider, more permanent scale than with Alternative 2.

10.4.2 Cleanup Time Frame

WAC 173-204-580(3) contains guidance for determining reasonable time frames for completing cleanup actions. The cleanup action selected will provide for a reasonable time frame for completion of the cleanup action, based on the many factors addressed throughout this report as well as on the following: practicability of achieving the site cleanup standards in less than a ten-year period; current use of the Site and surrounding areas; and potential future use of the Site and surrounding areas.

Current sediment concentrations exceed CULs for protection of human health and the environment, requiring the shortest cleanup time frame practicable. Alternatives 2, 3, and 4 provide a relatively quick cleanup time frame, achieving the RELs (ecological cleanup standards) well within the ten-year time frame, while institutional controls would immediately take effect to protect human health.

Alternative 1 (MNR) relies on natural deposition to achieve site cleanup standards and likely would have a significantly longer cleanup time frame than Alternatives 2, 3, and 4 because the contaminated sediment would not be removed or capped. Natural attenuation through sedimentation may not occur in Carty Lake within the ten-year time frame because sediment inputs to the lake are limited. Extensive limitations on current and future site uses would be required.

Alternative 2 (Focused Dredge and Limited Residuals Cap) and Alternative 3 (Focused Dredge and Expanded Residuals Cap) would require relatively short and comparable cleanup time frames because of the removal of material and placement of clean sediment over any residual impacts in the dredge area (and additional areas, in the case of Alternative 3). Alternatives 2 and 3 would both achieve CULs protective of ecological receptors in well under ten years, accounting for pre-implementation sampling and planning, in addition to remedy implementation. Achieving the human health CUL (based on the PQL) in all lake sediments would rely on natural recovery and may exceed the ten-year time frame; however, institutional controls would take effect immediately to protect human health.

Alternative 4 (Focused Dredge and Full Residuals Cap) would achieve the shortest cleanup time frame because of the placement of the more extensive sediment cap, immediately isolating surface contaminant concentrations across the entire lake. However, while the SWAC would be lower upon remedy implementation than for Alternatives 2 and 3, it may still take a considerable amount of time for natural recovery to achieve the human health CUL (based on the PQL).

The current use of Carty Lake and surrounding areas allows for implementation of all of the action alternatives; however, the institutional controls implemented at Carty Lake are varied in their likely effectiveness and reliability.

10.4.3 Evaluation of Alternatives

In WAC 173-204-580(4), the SMS specifies that, in evaluating the alternatives, the net environmental effects, relative cost effectiveness, and relative technical effectiveness should be considered for the cleanup action alternatives. For the purposes of performing a comprehensive assessment, cost and technical effectiveness were evaluated together, using the MTCA DCA framework because it addresses the above SMS requirements as well as additional requirements found in WAC 173-204-560(4)(g-k).

10.4.3.1 Net Environmental Effects

This requirement includes consideration of the net environmental effects of the alternatives, including residual effects, recovery rates, and any adverse effects of cleanup construction or disposal activities.

The implementation of Alternative 1 (MNR) results in no net change to the existing environmental system, on site or off. The alternative relies purely on current natural processes and the monitoring of those processes to ensure that the RELs and the CUL are eventually achieved.

Alternatives 2 through 4 all pose a short-term risk associated with generated residuals; however, engineering controls and dredging best management practices would be part of the design. Specified dredging methods such as bucket types, precision targeted removal, number of passes, and the implementation of a residuals layer (to name a few) would all be employed to reduce and control the generation of residuals.

Alternative 2 (Focused Dredge and Limited Residuals Cap) has the potential for much greater environmental impacts than Alternative 1; however, it also achieves a greater level of long-term protectiveness. If properly managed, dredging and disposal of impacted sediment would not affect water quality and aquatic or terrestrial organisms. Comprehensive planning, design, and management of the project would allow disposal of dredged material in an efficient and environmentally appropriate manner. Alternative 2 would result in a greater benefit than Alternative 1 through the removal of a significant mass of contaminants and the immediate reduction of potential exposure to the highest levels of contamination.

Alternative 3 (Focused Dredge and Expanded Residuals Cap) has the same potential for environmental impacts as Alternative 2, as the same processes and technologies are involved.

Alternative 4 (Focused Dredge and Full Residuals Cap) would result in a marginal net environmental benefit over Alternatives 2 and 3, as it poses the same amount of risk associated with the removal of impacted sediments. More clean sand would be placed over the impacted sediments, resulting in a greater, areawide isolation of surface concentrations over the short and long terms; however, significantly greater disturbance of lake biota would occur than in Alternatives 1 and 2, given the large area that would be covered with an ENR layer. The clean sediment for the residuals cap likely would be a waste material from maintenance activities in the Columbia River channel, so an additional negative impact on the system would result from the additional transportation to Carty Lake.

10.4.3.2 Relative Cost and Technical Effectiveness

The MTCA DCA was implemented to evaluate the relative costs and benefits of the sediment remediation alternatives. The criteria for performing the DCA can be found below. All alternatives meet the threshold criteria and were included in the DCA.

Costs are determined to be disproportionate to benefits if the incremental cost of a more expensive alternative over that of a lower-cost alternative exceeds the incremental degree of benefits achieved by the more expensive alternative. The DCA includes evaluation criteria that are a mix of qualitative and quantitative factors, including protectiveness, permanence, long-term effectiveness, management of short-term risks, technical and administrative implementability, consideration of public concerns, and cost. A summary of the analysis is provided in Table 10-1. Detailed cost estimates are provided as Appendix R.

Protectiveness

Protectiveness of human health and the environment includes the degree to which existing risks are reduced; time required to reduce risk at the facility and attain cleanup standards; on-site and off-site risks resulting from implementing the cleanup action alternative; and improvement of the overall environmental quality.

As discussed in the evaluation requirements (Section 10.4.1), Alternatives 1, 2, 3, and 4 are protective of human health and the environment. The degree of protectiveness varies and the alternatives are scored in the following order:

Alternative 1 (MNR) is rated lower for protectiveness, as this alternative relies on natural processes to create a physical barrier, as well as on institutional controls to protect receptors.

Alternative 2 (Focused Dredge and Limited Residuals Cap) is rated in the middle for protectiveness, as contaminants would be removed to RELs and a residuals cap layer would limit exposure of residual impacts in the dredge area. Impacted sediments above the CUL would remain and institutional controls would be required to protect human health.

Alternative 3 (Focused Dredge and Expanded Residuals Cap) is rated in the middle for protectiveness because the only difference between Alternatives 2 and 3 is an increase in the amount of residuals cap coverage. The additional sand placement will result in a minimally reduced SWAC (see Table T-1, Appendix T).

Alternative 4 (Focused Dredge and Full Residuals Cap) is above the middle for protectiveness. The action consists of the same removal scenario as in Alternatives 2 and 3, with the addition of a sediment cap layer placed over most of the lake bottom, covering most impacted sediments.

Permanence

Permanence is a factor by which the cleanup action alternative permanently reduces the toxicity, mobility, or volume of hazardous substances. The adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and sources of releases, the degree of irreversibility of the waste-treatment process, and the characteristics and quantity of treatment residuals generated are all considered under this criterion.

Under the MTCA DCA process, preference is given to permanent solutions to the maximum extent practicable. A “permanent solution” is defined as a cleanup action in which the cleanup standards are met without further action being required at the site being cleaned up or at any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances.

Alternative 1 (MNR) has the lowest level of permanence and is rated as such. Sediment exceeding CULs would remain in place and would be accessible to biological and human receptors in the short and long terms. The alternative also must include continued monitoring of the deposited sediment, and must also rely on institutional controls to protect the sediment layer from damage.

Alternative 2 (Focused Dredge and Limited Residuals Cap) is rated in the middle under this criterion, as contaminated sediment is removed and (assumed) residuals are covered by a residuals cap layer. The relative longevity and effectiveness of the residuals cap layer will be less quantifiable, as it is not an engineered cap and cannot be relied upon as such; however, the fluvial environment in Carty Lake is not highly dynamic, and impairment to the residuals cap surface would not occur as a result of human activity (e.g., propeller wash).

Alternative 3 (Focused Dredge and Expanded Residuals Cap) is rated the same as Alternative 2 under this criterion. The two alternatives incorporate the same processes and technologies, with Alternative 3 increasing the amount of residuals cap placement. The alternative is still a partial capping alternative, however, and is not fundamentally different enough from Alternative 2 to be considered more permanent.

Alternative 4 (Focused Dredge and Full Residuals Cap) rates higher for permanence. The removal of sediment makes both Alternatives 2 and 3 highly permanent; however, the addition of a sediment cap over most of the Carty Lake bottom sediments results in Alternative 4 scoring the highest of the four alternatives under this criterion.

Effectiveness over the Long Term

In addition to the threshold requirements discussed in Section 10.4.1.4, long-term effectiveness in the DCA includes the degree of certainty that the alternative will be successful; the reliability of the alternative for the period of time during which hazardous substances are expected to remain on site at concentrations that exceed CULs; the magnitude of residual risk with the alternative in place; and the effectiveness of controls required to manage treatment residues or remaining wastes.

With proper implementation, all four alternatives can be effective over the long term under this criterion; therefore, they were rated based on the degree of certainty of effectiveness.

Alternative 1 (MNR) may be effective in the extreme long term, provided that the natural processes occur without incident and that the institutional controls are effective. These variables produce a great deal of uncertainty, resulting in the lowest rating of the four alternatives.

Alternative 2 (Focused Dredge and Limited Residuals Cap) is rated in the middle under this criterion, as the alternative removes contaminated sediment and adds a residuals cap layer for the purposes of managing residuals only in the dredged area, with the rest of the footprint of the lake relying on natural recovery over time and on institutional controls to protect human receptors. The degree of certainty in long-term effectiveness is somewhat lower because of the potentially slow process of sedimentation at the Site.

Alternative 3 (Focused Dredge and Expanded Residuals Cap) is rated the same as Alternative 2 for this criterion because the two alternatives are essentially the same. Because the dioxin TEQ SWAC is not meaningfully reduced by the additional cover of contaminated sediments, Alternative 3 does not result in a significant increase in long-term effectiveness.

Alternative 4 (Focused Dredge and Full Residuals Cap) is most effective over the long term, as contaminated sediment is removed and a cap is placed over the entire lake. This effectively isolates more impacted sediments relative to the other alternatives, and therefore scores higher.

Management of Short-Term Risks

As discussed in the evaluation requirements (Section 10.4.1.3), this factor addresses the risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that will be taken to manage such risks. Short-term risks to remediation workers, the general public, and the environment are assessed under this criterion. Generally, short-term risks are expected to be linearly related to the amount of material handled, treated, and/or transported/disposed of (e.g., worker injury/CY dredged [equipment failure], public exposure/CY per mile transported [highway accident], release to environment/gallons treated [treatment system upset]).

There are no construction-related short-term risks associated with Alternative 1 (MNR), and therefore Alternative 1 is rated the highest under this criterion.

Alternative 2 (Focused Dredge and Limited Residuals Cap) removes sediment, increasing the potential to detrimentally affect human health or the environment if the sediment is handled improperly, but is overall a much less intensive implementation process than Alternative 4, decreasing short-term risks associated with construction and resulting in a middle rating.

Alternative 3 (Focused Dredge and Expanded Residuals Cap) removes the same amount of sediment as in Alternative 2, but rates in the middle because of the increase in sand placement, which extends the construction time. The extended work period slightly increases the short-term risks associated with construction.

Alternative 4 (Dredge and Full Residuals Cap) is rated lowest, as a significantly larger amount of sand would be placed on site than in Alternative 2 or 3, greatly increasing the amount of construction activity associated with the alternative. The greater construction effort would result in an increased potential for risk exposure during implementation because of the longer construction period.

Technical and Administrative Implementability

This factor addresses whether the alternative can be implemented and is technically possible. Regulatory requirements, scheduling, access for construction operations and monitoring, integration with existing facility operations, and the availability of necessary materials must be considered.

All the alternatives use proven technologies for remediating sediment and have been employed at many sites. All three are implementable from a technical and administrative perspective.

Alternative 1 (MNR) entails significant administrative requirements such as placing and maintaining institutional controls at Carty Lake that restrict current uses and lake access and that place limits on biological intake, among other measures. Additionally, the ongoing monitoring plan and sampling events will add to the administrative components. Restrictions on future use will also be required and will rely on the long-term effectiveness of communicating the hazards associated with the lake sediments, resulting in a lower ranking for this alternative.

Alternative 2 (Focused Dredge and Limited Residuals Cap) is implementable, as mechanical dredging is straightforward. The alternative presents some difficulty in managing sediment for off-site disposal and in gaining access to Carty Lake, with limited impacts to the surrounding wetland area introducing some technical and logistical issues. In addition, Alternative 2 demands a significant number of administrative requirements, such as institutional controls and ongoing monitoring and maintenance of the residuals cap, in addition to monitoring the natural recovery of the remaining sediments. Alternative 2 is scored highest for this criterion.

Alternative 3 (Focused Dredge and Expanded Residuals Cap) is slightly less implementable than Alternative 2 because of the amount and location of sand placement. The enlarged placement area would require more access improvements as well as possible floating equipment for sand placement, increasing the technical demand.

Alternative 4 (Focused Dredge and Full Residuals Cap), like Alternatives 2 and 3, is implementable and poses the same type of complexities and site access limitations; however, Alternative 4 requires a great deal more access to the entirety of Carty Lake, causing increased logistical and site constraints over Alternative 2. Alternatives 2, 3, and 4 require ongoing administrative action in a shorter time frame than for Alternative 1, resulting in a higher ranking for these alternatives, with Alternative 2 ranking highest because of fewer site constraints during implementation.

Consideration of Public Concerns

This factor includes considering concerns from individuals, community groups, local governments, tribes, federal and state agencies, and any other organization that may have an interest in or knowledge of Carty Lake and that may have a preferred alternative.

Ecology has addressed community concerns throughout the history of this project. Additional issues or concerns will be evaluated by Ecology as part of the cleanup action selection process. This includes consideration of public use of Carty Lake. Remedy selection and potential institutional controls will be coordinated with the USFWS, particularly because remedy selection has the potential to impact RNWR plans for restoring the Carty Lake-Gee Creek connection. Public comments on the project and on this document will be solicited from the community during the formal comment period, following Ecology input. Common community concerns include noise and traffic, short- and long-term risks, and the time frame of any proposed cleanup actions. Community concerns will also be factored into local permit processes, including responding to the City's shoreline ordinance and development permitting. Alternative 1 has the potential to be less open to the public because it is unlikely that there will be permitting requirements that provide opportunities for public comment.

Cost

The detailed cost estimates for the alternatives are provided in Appendix R, Tables R-9 through R-12, respectively. Primary assumptions, unit costs, and number of units for all significant project elements are included. Net present value calculations are also included for operation, maintenance, and monitoring costs, if applicable. The estimated net present value costs for implementation, operation and maintenance, and monitoring are as follows:

• Alternative 1 (MNR):	$280,500
• Alternative 2 (Focused Dredge and Limited Residuals Cap):	$1.6 million
• Alternative 3 (Focused Dredge and Expanded Residuals Cap):	$2.3 million
• Alternative 4 (Focused Dredge and Full Residuals Cap):	$7.3 million

Alternative 2 provides a much greater degree of protectiveness and long-term effectiveness for an incremental cost of approximately $1.6 million when compared to Alternative 1. Alternative 3 costs nearly half again as much as Alternative 2 and results in nearly the same postremedial dioxin TEQ SWAC; therefore, Alternative 2, with less ENR placement, is more cost effective, and Alternative 3 is rejected as disproportionately costly. When considering Alternative 4's large cost discrepancy and its limited incremental benefit over the other alternatives, Alternative 4 is disproportionately costly and is rejected as an alternative.

11 DESCRIPTION OF PREFERRED ALTERNATIVE

The preferred remedial alternatives for the upland and in-water components of the LRIS and associated sites are described in this section. Remedy selection is based on the alternatives analysis and the associated criteria described in MTCA and SMS guidance documents. The upland on-property emergency and interim actions have already been implemented and/or approved and are identified below.

11.1 Soil

The FS was conducted to establish the optimum approach for cleanup activities on the LRIS and the upland off-property area in order to protect human health and the environment. The analyses for on-property soil are summarized in Section 7, and off-property soil analysis is presented in Section 8. As part of the FS, several remedial technologies were evaluated, and detailed remedial alternatives were investigated for each location at the Site: Cells 1 and 2, Cell 3, Cell 4, and the upland off-property area. The recommended alternatives of the on-property analyses and the off-property analysis are described below and are based on the results of the DCA and the comparative evaluation of the alternatives.

11.1.1 LRIS

The selected remedial actions for Cells 1, 2, 3, and 4 for soil included: removal of soil in the concrete pond source area, removal of soil outside the SER area that exceed preliminary RELs, and sitewide capping (Alternative 2B in the Cells 1 and 2 FS, Alternative 2 in the Cell 3 FS, and Alternative 2 in the Cell 4 FS). These actions were determined to be both cost effective and protective of human health and the environment. As indicated in the cell-specific FSs, the interim actions for the LRIS were anticipated to be the final actions for the LRIS.

The relative toxicity of the IHSs at the LRIS site is moderate to high. The interim cleanup actions in Cells 1 through 4 resulted in elimination of the potential risk posed by the IHSs to human health and the environment. Cell-specific interim actions are described in the subsections below. Overall LRIS interim actions will eliminate exposure to receptors by:

- Removal of all historical structures (e.g., buildings, railroad tracks, surface completions) except the Port office building
- Removal and off-site disposal of highly contaminated soils in the concrete pond source area
- Removal and off-site disposal of highly contaminated soils outside the SER area that exceed the preliminary RELs
- Capping contaminated soil within the LRIS property boundary

- Separation of the consolidated contaminated soil from sensitive receptors such as surface water bodies, terrestrial ecologic receptors, and drinking water sources
- Removal of the existing stormwater system and installation of a new stormwater system
- Implementing institutional controls to ensure containment of contaminated soil

The following summarizes the selected remedial alternative components.

11.1.1.1 Cells 1 and 2

Implementation of the selected interim action components is completed or is currently under way and scheduled for completion in 2013. Remedial action elements are as follows:

- Soil in the concrete pond area with observed NAPL impacts was excavated, transported, and disposed of at a Subtitle C landfill.
- Soil outside the SER area with IHSs above preliminary RELs was excavated and disposed of at a Subtitle C landfill. Confirmation sampling was conducted to confirm the final extent of the excavation areas.
- The SER treatment system was demobilized in spring 2012.
- Wells and monitoring points used during the SER were decommissioned. In addition, monitoring wells not used for POC monitoring were decommissioned.
- All soils are to be capped with a minimum of 2 feet of soil and a geotextile (i.e., a permeable cap) or an equivalent exposure barrier (e.g., liner, asphalt, concrete, building). Work in the area to be capped includes grading and capping the steeply sloped bank above ordinary high water to address bank erosion issues. This work is in progress.
- The existing stormwater system was removed and a new stormwater system incorporating engineering controls was installed.
- Institutional controls, an LRIS-wide SMP, and a cap maintenance plan will be implemented as part of the interim action for the LRIS.

The interim actions begun in Cells 1 and 2 during the summer and fall of 2012, which are to be completed in 2013, are consistent with the remedy described above. A construction completion report documenting the soil excavation and consolidation, construction of the engineered cap, and institutional controls is being prepared for submittal to Ecology.

11.1.1.2 Cells 3 and 4

The Cells 3 and 4 interim remedial actions were completed in 2010 and 2011 and involved the following remedial action elements:

- Soil exceeding the preliminary RELs was excavated and disposed of at a Subtitle C landfill. Confirmation sampling was conducted to confirm the final extent of the excavation areas.
- All soils were capped with a minimum of 2 feet of soil and a geotextile (i.e., a permeable cap).
- The existing stormwater system was removed and a new stormwater system incorporating engineering controls was installed.
- All structures, such as bulkhead, barge loading ramp, building, pilings, railroad tracks, and pavement, were removed.
- Monitoring wells not used for POC monitoring were decommissioned.

Institutional controls, an LRIS-wide SMP, and a cap maintenance plan will be implemented as part of the interim action for the LRIS.

The interim actions completed in Cells 3 and 4 during the summer and fall of 2010/2011 are consistent with the remedy described above. A construction completion report documenting the soil excavation and consolidation, construction of the engineered cap, and institutional controls is being prepared for submittal to Ecology.

11.1.2 Port-owned Properties

As presented in Section 8, Alternative 2 (Engineered Cap) is protective of both human health and the environment and complies with MTCA requirements and Ecology expectations. Alternative 2 is effective without being disproportionately costly and is identified as the preferred alternative to be implemented at the Port-owned Railroad Avenue site. Soil at this site does not exceed the $1x10^{-5}$ cumulative carcinogenic risk level.

The following is a summary of the recommended remedial alternative components:

- Placement of a 2-foot cap at the Port Railroad Avenue properties to mitigate ecological exposure to dioxins.
- The extent of the cap would include a portion of the Port-owned property and the City right-of-way, approximately 0.55 acres.
- For constructability, the entire site would receive a gravel operation surface and may require limited regarding, with the possible addition of a retaining wall.
- Annual cap monitoring and development of a site management plan.

11.2 Groundwater

The SER system treated the source area from 2004 through 2011. Steam was injected in the entire SER treatment area (Areas 1 through 4) to remove mobile contaminants from groundwater and the vadose zone. Active steam injection was shut down on June 30, 2011, after completion of Phase 1 (conduct pilot study), Phase 2 (complete treatment), and the polish stage (confirm diminishing returns). The groundwater and vapor extraction and treatment systems operated until October 2011 to reduce subsurface temperatures and capture chemicals that had been mobilized by the heat. Cleanout and demolition of the system began in November 2011 and was completed in May 2012, consistent with the final closure plan (Port and Ecology, 2012). The closure was certified by MFA in October 2012 and was approved by Ecology (Appendix A).

In Cells 1, 2, and 3 and the southern portion of the RNWR (i.e., Carty Unit), groundwater monitoring will be completed at existing monitoring wells defined as conditional POCs to assess natural contaminant attenuation rates and to verify that groundwater concentrations are stable or declining. Groundwater modeling indicates that current groundwater conditions will not adversely impact surface waters near the Site. Institutional controls preventing consumption of groundwater will be implemented.

In Cell 4, no IHSs were detected in groundwater above CULs; therefore, no remedial actions were identified for groundwater in Cell 4.

11.3 Sediment

11.3.1 Lake River

Alternative 4 (Dredge and ENR) is identified as the preferred in-water remediation alternative for the Lake River sediment. It is identified as the most protective of human health and the environment for the following reasons:

- Dioxin TEQ areawide concentrations will be significantly reduced to the extent technically feasible; subsequent natural attenuation is expected to achieve the CUL of 5 ng/kg.
- Dioxin congener areawide concentrations will be below CULs protective of ecological receptors.
- Dioxin TEQ sediment concentrations will be below the CUL protective against direct contact and incidental ingestion by recreational users.
- Other contaminants exceeding screening levels (i.e., TPAH, PCP, and m&p-cresol) will be removed.
- Contaminated dredged sediment will be permanently removed and will not be available for potential future exposure or transport.
- Residuals within the dredge footprint and sediment with slightly elevated dioxin concentrations adjacent to the dredge footprint will be managed through the placement of an ENR layer.
- Alternative 4 provides the highest degree of certainty for long-term protectiveness, combined with immediate short-term reductions in surface concentrations, and is proportionately cost effective when the benefits are considered. Alternatives 1 (MNR)

and 2 (EMNR) provide marginal levels of protectiveness over the short and long terms because high concentrations would remain in place. Alternative 3 (Sediment Cap) achieves a level of protectiveness similar to that of Alternative 4, with a similar level of disturbance to sediments and with a similar cost, while leaving high contaminant concentrations in place.

- Alternative 4 does not constrain future site uses or hinder dredging of the navigation channel, although evaluation of sediment conditions would be required before activities involving significant sediment disturbance are initiated.

The following is a summary of the recommended remedial alternative components:

- Dredge removal of Lake River sediment with dioxin TEQ exceeding 30 ng/kg. The extent of the dredge area will be refined during design. Dredging would also remove other contaminants above screening levels.
- ENR would be used in the dredged area and in undredged areas between 5 ng/kg and 30 ng/kg dioxin TEQ.
- Dredged material would be disposed of as nonhazardous material waste at a Subtitle D landfill facility. The dredged material would not be designated as either a RCRA-listed hazardous waste or a RCRA characteristic waste.
- Bank armor would be applied to stabilize the lower portions of the bank, which is currently not addressed by the upland interim remedial actions. The armor would be tied into the bank layback and extend down to overlap the dredged areas and the ENR layer. The armor would also act to tie in the upland cap, protecting against direct contact and erosion of bank soil.
- Before the start of dredge operations, remnants of historical infrastructure would be removed, including dolphins, pilings, and a dock (currently in operation).
- Best management practices for water quality would be considered and implemented during work; these may include silt curtains for containment; dredge methods; and turbidity monitoring before, during, and after construction.
- Natural recovery would be monitored.

11.3.2 Carty Lake

Alternative 2 (Focused Dredge and Limited Residuals Cap) is the preferred alternative. This alternative is found to be the most protective of human health and the environment relative to cost for the following reasons:

- Sediment with concentrations of dioxins above CULs protective of ecological receptors would be removed.
- Areawide dioxin concentrations would be significantly reduced, as all sediment exceeding 100 ng/kg dioxin TEQ would be removed.

- Dredging impacted dioxin areas would also remove all other contaminants above screening criteria.
- Sediment with the highest concentrations of dioxins would be permanently removed and would not be available for potential future exposure or transport.
- Carty Lake is not a significant fishing resource; institutional controls would be applied to continue to limit consumption of fish from Carty Lake.
- Residuals within the dredge footprint would be managed through the placement of a thin sand cap layer.
- Alternative 2 provides the appropriate level of long-term protectiveness and certainty. Alternative 1 (MNR) provides limited protectiveness only over the very long term, provided that natural deposition and mixing are occurring, which has not been verified. Alternative 3 costs nearly half again as much as Alternative 2 and results in nearly the same postremedial sediment concentrations. Alternative 4 (Focused Dredge and Full Residuals Cap) does achieve a very high level of protectiveness, but at significant additional cost and negative impact to the existing ecosystem of the lake.
- Alternative 2 would be implemented with appropriate institutional controls, including advisories on fish consumption to protect human health.

The following summarizes the recommended alternative components:

- Dredging and disposal of approximately 5,650 CY of lake sediment above RELs in the southern portion of the lake. The extent of the dredge area will be refined during design, in consultation with USFWS.
- Approximately 2,700 CY of sand for a residuals cap would be placed in a 6- to 12-inch-thick layer over dredged areas and the resulting residuals that are assumed to be contained within the dredge footprint.
- Dredged material would be disposed of as nonhazardous material waste at a Subtitle D landfill facility. The dredged material would not be designated as either a RCRA-listed hazardous waste or a RCRA characteristic waste.
- Best management practices for water quality would be implemented in the form of silt curtains for containment, as well as turbidity monitoring before, during, and after construction.
- Natural recovery would be monitored.
- Institutional controls to protect human receptors would be put into place. Advisories on fish consumption would be included as institutional controls.
- Additional evaluations may be necessary if the USFWS proceeds with plans to reconnect Carty Lake with Gee Creek. This action may change the fluvial environment and allow salmonids access to the lake.

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

REFERENCES

Anchor and MFA. 2011. Memorandum (re: sediment remedial investigation, Lake River industrial site). Prepared by Anchor QEA, LLC and Maul Foster & Alongi, Inc. for Port of Ridgefield and Union Pacific Railroad Company. February.

Avocet. 2011. Development of benthic SQVs for freshwater sediments in Washington, Oregon, and Idaho. Prepared for Washington State Department of Ecology. Avocet Consulting. November.

Bhagat, S. K., and J. F. Orsborn. 1971. Summary report on water quantity and quality studies of Vancouver Lake, Washington. Washington State University, College of Engineering Research Division. July.

Buck, J. 2000. Preliminary assessment to determine superfund site impacts on the Ridgefield National Wildlife Refuge. Project ID: 13420-1261-1C58. U.S. Fish and Wildlife Service, Portland, Oregon. June 27.

Buck, J. 2004. Environmental contaminants in aquatic resources from the Columbia River. Study identifiers: 1130-1F02 and 1261-1N04, on and off-refuge investigation. U.S. Fish and Wildlife Service, Portland, Oregon.

Chmielewski, A. 2011. Personal communication (re: fishing in Carty Lake) with M. Novak, Maul Foster & Alongi, Inc. August 4.

DEQ. 2007. Guidance for assessing bioaccumulative chemicals of concern in sediment. Oregon Department of Environmental Quality, Portland, Oregon. April.

E&E. 1991. RCRA preliminary assessment for Pacific Wood Treating Corporation. Prepared for U.S. Environmental Protection Agency. Ecology & Environment. February.

E&E. 1996. Pacific Wood Treating site assessment report. Prepared for U.S. Environmental Protection Agency. Ecology & Environment. March.

Ecology. 1994. Natural background soil metals concentrations in Washington State. Washington State Department of Ecology. October.

Ecology. 2008a. Electronic mail correspondence (re: Cell 3 RI—requested upland approval) to S. Taylor, Maul Foster & Alongi, Inc., and L. Olin, Port of Ridgefield, from L. Klasner, Washington State Department of Ecology, Yakima, Washington. February 11.

Ecology. 2008b. Letter (re: comments on the draft addendum to the remedial investigation work plan for Cells 1, 2, and 4) to B. Grening, Port of Ridgefield, from L. Klasner, Washington State Department of Ecology. February 26.

Ecology. 2009. Guidance for evaluating soil vapor intrusion in Washington State: investigation and remedial action. Publication No. 09-09-047. Washington State Department of Ecology. October.

Ecology. 2010a. Letter (re: Ecology acknowledgement of April 13, 2010, final terrestrial ecological evaluation report for the former Pacific Wood Treating Corporation site) to B. Grening, Port of Ridgefield, from C. Rankine, Washington State Department of Ecology. June 30.

Ecology. 2010b. Letter (re: Ecology approval of the November 29, 2010, cell 4 remedial investigation and feasibility study report for the former Pacific Wood Treating Corp. site, Ecology facility site identification number 1019) to B. Grening, Port of Ridgefield, from C. Rankine, Washington State Department of Ecology. December 17.

Ecology. 2011a. Electronic mail (re Lake River industrial site—Ecology comments on sediment remedial investigation) to A. Hughes, Maul Foster & Alongi, Inc., from J. Mercuri, Washington State Department of Ecology. May 26.

Ecology. 2011b. Letter (re: Ecology approval of the July 13, 2011, memorandum—discontinuation of steam injection at Port of Ridgefield) to B. Grening, Port of Ridgefield, from C. Rankine, Washington State Department of Ecology. July 14.

Ecology. 2011c. Fish consumption rates technical support document, a review of data and information about fish consumption in Washington. Vers. 1.0. Publication no. 11-09-050. Washington State Department of Ecology. September.

Ecology. 2011d. Letter (re: Ecology approval to implement steam enhanced remediation area post-operation soil and groundwater sampling at the former Pacific Wood Treating Corp. site) to B. Grening, Port of Ridgefield, from C. Rankine, Washington State Department of Ecology. November 3.

Ecology. 2011e. Cleanup levels and risk calculations (CLARC) under the Model Toxics Control Act Cleanup Regulation—Washington State Department of Ecology Toxics Cleanup Program. https://fortress.wa.gov/ecy/clarc/Reporting/CLARCReporting.aspx (accessed January 2012).

Ecology. 2012a. Electronic mail (re groundwater letter—Attachment A) to A. Hughes, Maul Foster & Alongi, Inc., from C. Rankine, Washington State Department of Ecology. May 16.

Ecology. 2012b. Letter (re: approval of July 3, 2012, final terrestrial ecological evaluation for the off-property former Pacific Wood Treating Co. site) to B. Grening, Port of Ridgefield, from C. Rankine, Washington State Department of Ecology. July 31.

Ecology. 2012c. Electronic mail (re installation of replacement well for MW-59) to A. Hughes, Maul Foster & Alongi, Inc., from C. Rankine, Washington State Department of Ecology. October 25.

Foster, E. P., D. Drake, and R. Farlow. 1999. Polychlorinated dibenzo-p-dioxin and polychlorinated dibenzofuran congener profiles in fish, crayfish, and sediment collected near a wood treating facility and a bleached kraft pulp mill. Bulletin of Environmental Contamination and Toxicology 62:239-46. March.

FRTR. 2008. Technology screening matrix. Federal Remediation Technologies Roundtable. http://www.frtr.gov/scrntools.htm (accessed November 3, 2010). July 14.

Gary Struthers Associates, Inc. 2005. Vancouver Lake restoration history. Port of Vancouver, Vancouver, Washington.

Hart Crowser, Inc. 1991. Phase II site characterization for Pacific Wood Treating, Ridgefield, Washington. Prepared for Schwab, Hilton & Howard, Portland, Oregon. Hart Crowser, Inc., Lake Oswego, Oregon. April 10.

Integral, Windward, Kennedy/Jenks, and Anchor, 2009. Portland Harbor RI/FS remedial investigation report IC09-0003. Prepared for the Lower Willamette Group, Portland Oregon, by Integral Consulting Inc., Portland, Oregon; Windward Environmental LLC, Inc., Seattle, Washington; Kennedy/Jenks Consultants, Portland, Oregon; and Anchor QEA LLC, Seattle, Washington, and Portland, Oregon. October.

Kleinfelder. 1993. RFI site characterization, Pacific Wood Treating, Ridgefield, Washington. Prepared for Pacific Wood Treating Company. Kleinfelder, Inc., Portland, Oregon. May 10.

MacDonald, D. D., C. G. Ingersoll, and T. A. Berger. 2000. Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Archives of Environmental Contamination and Toxicology 39:20–31.

Mercuri, J. 2012. Telephone communication (re Carty Lake exposure scenarios) with M. Novak, Maul Foster & Alongi, Inc. February 3.

MFA. 2002. Draft results of sediment sampling and analysis at Lake River stormwater outfalls, former Pacific Wood Treating Corporation facility, Ridgefield, Washington. May 28.

MFA. 2004. Remedial investigation and feasibility study workplan for Port of Ridgefield Lake River industrial site. Vol. I, Cells 1, 2, and 4. Vol. II, Cell 3. Vol. III, SAP, QAPP, and HASP. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. July 2.

MFA. 2007. Cell 3 remedial investigation and risk assessment report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc. February 23. Amended November 2, 2007.

MFA. 2009. Letter (re: dioxin/furan groundwater monitoring results) to L. Klasner, Washington State Department of Ecology, from A. Hughes and S. Taylor, Maul Foster & Alongi, Inc. October 8.

MFA. 2010a. Letter (re: final terrestrial ecological evaluation for the former Pacific Wood Treating Co. site) to C. Rankine, Washington State Department of Ecology, from S. Taylor and A. Hughes, Maul Foster & Alongi, Inc. April 13.

MFA. 2010b. Letter (re: supplemental soil sampling results at the former Pacific Wood Treating site) to C. Rankine, Washington State Department of Ecology, from A. Hughes and S. Taylor, Maul Foster & Alongi, Inc. May 17.

MFA. 2010c. Cells 3 and 4 interim action work plan, former Pacific Wood Treating Corporation. Prepared for Port of Ridgefield. Maul Foster & Alongi, Inc. May 27.

MFA. 2010d. Letter (re: off-property soil sampling results at the former Pacific Wood Treating site, Port of Ridgefield Lake River industrial site) to C. Rankine, Washington State Department of Ecology, from M. Novak and A. Hughes, Maul Foster & Alongi, Inc. November 9.

MFA. 2010e. Final Cell 4 remedial investigation and feasibility study report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. November 29.

MFA. 2011a. Draft Cells 1 and 2 remedial investigation and feasibility study report. Prepared for Port of Ridgefield. Maul Foster & Alongi, Inc. January 19.

MFA. 2011b. Cells 1 and 2 interim action work plan, former Pacific Wood Treating Corporation. Prepared for Port of Ridgefield. Maul Foster & Alongi, Inc. April 13.

MFA. 2011c. Cell 3 feasibility study report, Port of Ridgefield, Lake River industrial site. Maul Foster & Alongi, Inc. June 3.

MFA. 2011d. Memorandum (re: discontinuation of steam injection at Port of Ridgefield Lake River industrial site) to C. Rankine, Washington State Department of Ecology, from A. Hughes and J. King, Maul Foster & Alongi, Inc. July 13.

MFA. 2011e. Letter (re: additional off-property soil sampling results at former Pacific Wood Treating site) to C. Rankine, Washington State Department of Ecology, from M. Novak and A. Hughes, Maul Foster & Alongi, Inc. August 24.

MFA. 2011f. Letter (re: soil and groundwater sampling work plan at the SER system area at the former Pacific Wood Treating site) to C. Rankine, Washington State Department of Ecology, from S. Taylor and A. Hughes, Maul Foster & Alongi, Inc. September 9.

MFA. 2012a. Letter (re: supplemental Carty Lake sediment sampling results) to C. Rankine, Washington State Department of Ecology, from M. Novak and S. Taylor, Maul Foster & Alongi, Inc. January 9.

MFA. 2012b. Letter (re: data submittal for March 2012 investigation at former Park Laundry property) to G. Barrett, Washington State Department of Ecology, from M. D'Andrea and J. Maul, Maul Foster & Alongi, Inc. May 17.

MFA. 2012c. Letter (re: groundwater monitoring update through August 2011 for the former Pacific Wood Treating site) to C. Rankine, Washington State Department of Ecology, from S. Taylor and A. Hughes, Maul Foster & Alongi, Inc. May 24.

Mundorff, M. J. 1960. Geology and groundwater conditions of Clark County, Washington, with a description of a major alluvial aquifer along the Columbia River. U.S. Geological Survey Water Supply Paper 1600.

Paustenbach, D. J., K. Fehling, P. Scott, M. Harris, and B. Kerger. 2006. Identifying soil cleanup criteria for dioxins in urban residential soils: how have 20 years of research and risk assessment experience affected the analysis? Journal of Toxicology and Environmental Health, Part B 9:87–145.

Port and Ecology. 2012. Final closure plan, Port of Ridgefield steam enhanced remediation system. Prepared by K. Jolin, Port of Ridgefield, and C. Rankine, Washington State Department of Ecology. June 20.

SEA. 1986. Pacific Wood Treating Corporation Phase II ground water investigation status report. Prepared for Pacific Wood Treating Corporation. Sweet Edwards & Associates, Inc. September 18.

SEA. 1987. Pacific Wood Treating Corporation Phase II ground water investigation. Prepared for Pacific Wood Treating Corporation. Sweet Edwards & Associates, Inc. April 6.

USEPA. 1979. Final environmental impact statement for Vancouver Lake reclamation study. EPA-10-WA-CLARK-POV-CL-77. U.S. Environmental Protection Agency. June 13.

USEPA. 1989. Risk assessment guidance for superfund (RAGS). Vol. 1, human health evaluation manual (part A), interim final. EPA/540/I-89/002. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington, DC. December.

USEPA. 2006. An inventory of sources and environmental releases of dioxin-like compounds in the United States for the years 1987, 1995 and 2000. EPA/600/P-03/002F. U.S. Environmental Protection Agency National Center for Environmental Assessment, Washington, DC. Available from: National Technical Information Service, Springfield, Virginia, and online at http://epa.gov/ncea.

USEPA. 2008. Framework for application of the toxicity equivalence methodology for polychlorinated dioxins/furans, and biphenyls in ecological risk assessment. EPA/100/R-08/004. U.S. Environmental Protection Agency. June.

USEPA. 2009. National recommended water quality criteria. U.S. Environmental Protection Agency, Office of Water.

USFWS. 2010. Ridgefield National Wildlife Refuge comprehensive conservation plan. U.S. Fish and Wildlife Service. September.

USFWS. 2012. Personal communication (re: restoration worker exposure parameters) to M. Novak, Maul Foster & Alongi, Inc., from C. Lapp, U.S. Fish and Wildlife Service. February.

Van den Berg, M., L. S. Birnbaum, M. Denison, M. De Vito, W. Farland, and M. Feeley. 2006. The 2005 World Health Organization reevaluation of human and mammalian toxic equivalency factors for dioxins and dioxin-like compounds. Toxicological Sciences 93(2): 223-41. October.

Wall, S. 2006. Telephone communication (re: City of Ridgefield municipal water supply) with A. Hughes, Maul Foster & Alongi, Inc., Vancouver, Washington. June.

TABLES

Table 2-1
Monitoring Well Completion Details
Former PWT Site RI/FS

Monitoring Point	Coordinates		Measuring Point Elevation (ft NGVD)	Ground Surface Elevation (ft NGVD)	Total Depth Drilled (ft bgs)	Total Depth Casing (ft bgs)	Sump Interval (ft bgs)	Screened Interval (ft bgs)	Filter Pack Interval (ft bgs)	Secondary Filter Pack Interval (ft bgs)	Surface Seal (ft bgs)	Borehole Diameter (inches)	Well Diameter (inches)	Drilling Method	Date of Installation	Lithologic Unit Screened
	Northing	Easting														
Upper Water-Bearing Zone																
Shallow Upper Water-Bearing Zone																
MW-4	186140.94	1065969.68	24.28	23.71	56.5	18	--	18.5 - 27.5	13 - 32	--	0 -14	8	1.5	HSA	Jan-86	Alluvium
MW-5	186226.19	1066283.13	26.13	25.46	56.5	15	--	15 - 25	13 - 31.5	--	0 - 14	8	1.5	HSA	Jan-86	Alluvium
MW-7	185947.15	1067063.82	39.20	38.06	43.0	30	--	32 - 42	29 - 43	--	0 - 29	10.25	2	ODEX	Feb-86	Gravel
MW-9	10970.02	8981.84	26.98	27.46	31.5	15	--	15 - 30	14 - 31	--	0 - 14	8	2	HSA	Feb-91	Alluvium
MW-9S	184957.32	1066779.79	31.60	27.52	25.5	15	25 - 25.5	15 - 25	13 - 25.5	--	0 - 13	10.25	2	HSA	Jul-04	Alluvium
MW-10	185471.67	1066333.39	24.12	24.66	34.0	15	--	15 - 30	14 - 34	--	0 -14	8	2	HSA	Feb-91	Alluvium
MW-11s	12102.65	9065.51	29.49	30.23	26.5	15	--	16.5 - 26.5	13 - 26.5	--	0 - 13	8	2	HSA	Feb-93	Alluvium
MW-13	185752.25	1066743.48	27.08	27.65	30.0	18	--	18 - 28	16 - 30	--	0 - 16	8	2	HSA	Feb-93	Gravel
MW-14	185581.84	1066609.41	25.15	25.83	31.5	20	--	20 - 30	16 - 30	--	0 - 16	8	2	HSA	Feb-93	Alluvium
MW-16	186239.59	1066674.41	26.73	27.11	15.0	5	--	5 - 15	3 - 15	--	0 - 3	8	2	HSA	Feb-93	Alluvium
MW-17	186235.40	1066552.31	25.44	25.95	15.0	5	--	5 - 15	4 - 15	--	0 - 3	8	2	HSA	Feb-93	Alluvium
MW-18	186023.25	1066515.89	25.49	25.92	31.5	20	--	20 - 30	18 - 30	--	0 - 18	8	2	HSA	Feb-93	Alluvium
MW-20S	184679.65	1066637.77	20.17	20.62	31.5	20	--	20 - 30	18 - 31	--	0 - 18	8	2	HSA	Feb-93	Alluvium
MW-20R	184695.75	1066630.68	15.051	--	25.0	25	23.0 - 23.5	13.0 - 23.0	13.0 - 23.0	--	0 - 13.0	4	2	Geoprobe	Oct-10	Alluvium
MW-24	12166.48	8956.31	27.94	28.92	21.0	19	--	9 - 19	7 - 21	--	0 - 7	11	2	HSA	Jul-95	Gravel
MW-26	186054.86	1066543.72	25.76	26.21	30.5	19	--	19 - 29	17 - 30.5	--	0 - 17	11	2	HSA	Jul-95	Alluvium
MW-28S	11022.86	9149.42	30.55	30.78	20.5	9	--	9 - 19	7 - 20.5	--	0 - 7	11	2	HSA	Jul-95	Alluvium
MW-39	186298.37	1066755.92	30.68	28.33	27.5	16	26 - 26.5	16 - 26	15.1 - 27.5	12.2 - 15.1	0 - 12.2	8	2	Becker	Jul-02	Alluvium
MW-44	186019.83	1066934.09	33.18	30.51	25.3	14.8	24.8 - 25.3	14.8 - 24.8	12 - 25.3	--	0 - 12	8	2	Becker	Jul-02	Alluvium
MW-45S	185006.60	1066517.41	21.60	20.48	25.5	15	25 - 25.5	15 - 25	13 - 25.5	--	0 - 13	10.25	2	HSA	Jul-04	Alluvium
MW-46S	184843.90	1066565.10	15.33	19.65	25.5	15	25 - 25.5	15 - 25	13 - 25.5	--	0 - 13	10.25	2	HSA	Jul-04	Alluvium
MW-47S	184553.23	1066723.61	19.48	19.91	25.5	15	25 - 25.5	15 - 25	13 - 25.5	--	0 - 13	10.25	2	HSA	Jul-04	Alluvium
MW-48S	186355.5403	1066858.654	33.73	30.71	30.0	14.5	24.5 - 25	14.5 - 24.5	12.9 - 27	11 - 12.9	0 - 11	8	2	Sonic	Jul-08	Alluvium
MW-50S	186243.3801	1066592.931	28.84	25.93	30.0	15	25 - 25.5	15 - 25	13 - 27	11.4 - 13	0 - 11.4	8	2	Sonic	Jul-08	Alluvium
MW-53S	185905.3449	1066528.307	28.67	25.83	26.5	15	25 - 25.5	15 - 25	13.4 - 26.5	--	0 - 13.5	8	2	Sonic	Jul-08	Alluvium
MW-55S	185715.9599	1066288.645	26.88	24.27	31.3	30	30.9 - 30.4	20.9 - 30.9	18.0 - 31.3	--	0 - 18.0	6	2	Sonic	Aug-10	Alluvium
MW-57S	185715.4938	1066288.473	26.88	24.35	30.0	17	27 - 27.5	17 - 27	15 - 30	--	0 - 15	8	2	Sonic	Jun-08	Alluvium
PZ-06	185547.98	1066473.00	26.03	25.2	31.5	19	--	19 - 29	17 - 30	--	0 - 17	8	1.5	HSA	Jul-95	Alluvium
EPA-4S	186115.79	1067068.73	42.1722	--	34.2	--	--	--	--	--	--	10.25	2	HSA	--	Alluvium
EPA-5S	185586.81	1066910.82	30.5556	--	29.1	--	--	--	--	--	--	10.25	2	HSA	--	Alluvium
EPA-6S	186035.16	1066289.12	24.0639	--	24.6	--	--	--	--	--	--	10.25	2	HSA	--	Alluvium
PZ-7	186209.80	1066828.63	28.40	29.05	25.0	23	--	23 - 25	20.5 - 25.0	--	0 - 20.5	10.25	2	HSA	Feb-99	Alluvium
PZ-10	186218.97	1066709.07	27.75	28.10	17.5	15.3	--	15.3 - 17.3	14 -17.5	--	0.5 - 14	10.25	2	HSA	Dec-00	Silt
PZ-11	186211.67	1066709.38	27.79	28.07	27.0	24.3	--	24.3 - 26.3	22.8 - 27	--	0.5 - 22.8	10.25	2	HSA	Dec-00	Gravel
PZ-13	186266.24	1066562.68	25.87	25.87	10.0	7.1	--	7.1 - 9.9	6.9 - 10	--	0.5 - 6.9	10.25	2	HSA	Dec-00	Fill
PZ-14	186272.28	1066706.93	27.31	27.81	10.0	7.7	--	7.7 - 9.6	7.5 - 9.6	--	0.5 - 7.5	10.25	2	HAS	Dec-00	Fill
PZ-15	186255.92	1066822.00	28.48	28.89	10.0	8.1	--	8.1 - 9.8	7.6 - 10	--	0.5 - 7.6	10.25	2	HAS	Dec-00	Fill
VM-1	12265.70	9007.22	28.63	29.07	20.0	10	--	10 - 20	9.0 - 20.0	--	0 - 9.0	10.25	2	HSA	Feb-99	Alluvium
VM-2	12242.24	9037.20	29.01	29.53	20.0	10	--	10 - 20	8.8 - 20.0	--	0 - 8.8	10.25	2	HSA	Mar-99	Alluvium

Table 2-1
Monitoring Well Completion Details
Former PWT Site RI/FS

Monitoring Point	Coordinates		Measuring Point Elevation (ft NGVD)	Ground Surface Elevation (ft NGVD)	Total Depth Drilled (ft bgs)	Total Depth Casing (ft bgs)	Sump Interval (ft bgs)	Screened Interval (ft bgs)	Filter Pack Interval (ft bgs)	Secondary Filter Pack Interval (ft bgs)	Surface Seal (ft bgs)	Borehole Diameter (inches)	Well Diameter (inches)	Drilling Method	Date of Installation	Lithologic Unit Screened
	Northing	Easting														
Deep Upper Water-Bearing Zone																
PWT-1	12132.34	9146.20	33.46	--	37.0	30.5	--	30.5 - 35.5	none	--	0 - 20	6	6	Cable	Feb-71	Gravel
MW-8S	12180.16	9201.13	38.39	37.38	48.0	35	--	35 - 45	32 - 46	--	0 - 32	10.25	2	ODEX	Feb-86	Gravel
MW-12	11923.97	9068.01	30.29	30.5	50.0	38	--	38 - 48	36 - 50	--	0 - 36	8	2	HSA	Feb-93	Gravel
MW-15	185763.10	1066630.82	25.96	26.33	50.0	40	--	40 - 50	38 - 50	--	0 - 38	10.25	2	HSA	Feb-93	Gravel
MW-20D	184686.73	1066634.22	14.98	20.77	49.0	38	48 - 48.5	38 - 48	36 - 48.5	--	0 - 36	10.25	2	HSA	Jul-04	Gravel
MW-21	186234.80	1066675.02	26.60	27.09	50.0	40	--	40 - 50	37 - 50	--	0 - 36	10.25	2	HSA	Feb-93	Gravel
MW-23	185377.73	1066799.92	27.96	28.82	63.0	33	--	33 - 43	31 - 45	--	0 - 31	11	2	HSA	Jul-95	Gravel
MW-25	186347.32	1066852.18	30.09	30.38	57.0	50	--	50 - 55	48 - 57	--	0 - 48	10.25	2	HSA	Jul-95	Gravel
MW-27	186031.83	1066254.06	23.51	23.88	41.5	29	--	29 - 39	27 - 40.5	--	0 - 27	11	2	HSA	Jul-95	Alluvium
MW-29	10657.02	9161.44	22.01	22.59	57.0	50	--	50 - 55	48 - 57	--	0 - 48	10.25	2	Cable	Jul-95	Gravel
MW-29D	184616.22	1066953.26	25.42	23.23	53.5	43	53-53.5	43-53	40-53.5	--	0-40	8	2	Becker	Aug-04	Gravel
MW-38	186288.54	1066762.00	30.56	28.31	50.0	35	45 - 50*	35 - 45	34.1 - 45	32.1 - 34.1	0 - 32.1	8	2	Becker	Jul-02	Alluvium
MW-42	186032.11	1066914.92	32.80	30.13	50.7	35	45 - 50*	35 - 45	33.4 - 45	32. 2 - 33.4	0 - 23.2	8	2	Becker	Jul-02	Alluvium
MW-43	186032.97	1066928.91	29.27	30.48	35.8	24.8	34.8 - 35.8*	24.8 - 34.8	22.9 - 35.8	21.5 - 22.9	0 - 21.5	8	2	Becker	Jul-02	Alluvium
MW-45D	185011.82	1066517.56	22.16	20.42	50.0	38	48 - 48.5	38 - 48	36 - 48.5	--	2 - 36.0	10.25	2	HSA	Jul-04	Gravel
MW-46D	184839.34	1066567.00	14.18	19.52	50.0	38	48 - 48.5	38 - 48	36 - 48.5	--	2 - 36.0	10.25	2	HSA	Jul-04	Gravel
MW-47D	184558.46	1066722.03	19.56	19.95	53.5	41	51 - 51.5	41 - 51	39.5 - 51.5	--	2 - 39.5	10.25	2	HSA	Jul-04	Gravel
MW-49D	185850.3309	1066674.955	26.73	26.58	50.0	30.7	40.7 - 41.2	30.7 - 40.7	30 - 40.7	28.1 - 30	2 - 28.1	8	2	Sonic	Jul-08	Gravel
MW-51D	185530.6376	1066449.446	26.80	24.33	57.0	44.8	54.8 - 55.3	44.8 - 54.8	43.5 - 57	--	2 - 43.5	8	2	Sonic	Jun-08	Gravel
MW-52D	186061.753	1066535.667	26.00	25.95	50.0	33.2	43.2 - 43.7	33.2 - 43.2	31.8 - 45	29.8 - 31.8	2 - 29.8	8	2	Sonic	Jul-08	Gravel
MW-53D	185907.5635	1066523.615	28.65	25.89	60.0	34.5	44.5 - 45	34.5 - 44.5	33.2 - 47	--	3 - 33.2	8	2	Sonic	Jul-08	Gravel
MW-55D	185768.717	1066133.905	27.10	24.44	80.0	78.3	75.0 - 75.5	65.0 - 75.0	63.0 - 76.0	59.0 - 63.0	0 - 59.0	6	2	Sonic	Aug-10	Alluvium
MW-57D	185719.5269	1066292.568	26.45	24.21	80.0	74.9	74.4 - 75.9	64.4 - 74.4	65.1 - 77.9	--	3 - 65.1	8	2	Sonic	Jun-08	Gravel
MW-58D	186013.7436	1066028.897	27.73	24.32	75.0	64.3	74.3 - 74.8	64.3 - 74.3	62.5 - 75.0	--	2 - 62.5	8	2	Sonic	Jun-08	Gravel
EPA-4D	186121.2611	1067068.448	42.06	--	53.1	--	--	--	--	--	--	10.25	2	HSA	--	Gravel
EPA-5D	185592.8644	1066910.13	30.58	--	44.7	--	--	--	--	--	--	10.25	2	HSA	--	Gravel
EPA-6D	186028.7631	1066287.389	24.13	--	43.3	--	--	--	--	--	--	10.25	2	HSA	--	Alluvium
PZ-1	186224.86	1066675.91	26.75	--	105.0	34	--	34**	31.0-38.0	--	0-31.0	8	0.75	HSA	Feb-93	Alluvium
PZ-3	186128.79	1066924.94	30.38	--	65.0	28	--	28**	24.0-30.0	--	0-24.0	8	0.75	HSA	Mar-93	Alluvium
PZ-8	186210.28	1066823.36	28.36	28.75	42.0	40	--	40 - 42	37.9 - 42.0	--	0 - 37.9	10.25	2	HSA	Feb-99	Alluvium
PZ-9	186200.67	1066823.99	28.34	28.76	42.0	40	--	40 - 42	37.8 - 42.0	--	0 - 37.8	10.25	2	HSA	Feb-99	Alluvium
PZ-12	186216.29	1066708.70	27.8	28.05	46.5	42.3	--	42.3 - 44.1	39.8 - 44.3	--	0.5 - 39.8	10.25	2	HSA	Dec-00	Gravel

Table 2-1
Monitoring Well Completion Details
Former PWT Site RI/FS

Monitoring Point	Coordinates		Measuring Point Elevation (ft NGVD)	Ground Surface Elevation (ft NGVD)	Total Depth Drilled (ft bgs)	Total Depth Casing (ft bgs)	Sump Interval (ft bgs)	Screened Interval (ft bgs)	Filter Pack Interval (ft bgs)	Secondary Filter Pack Interval (ft bgs)	Surface Seal (ft bgs)	Borehole Diameter (inches)	Well Diameter (inches)	Drilling Method	Date of Installation	Lithologic Unit Screened
	Northing	Easting														
Carty Lake Wells: Shallow and Deep Upper Water-Bearing Zones																
MW-30	186315.25	1066507.10	15.19	12.74	28.0	17	--	17 - 27	15 - 28	--	0 - 15	11	2	HSA	Jul-95	Alluvium
MW-31	12303.94	8873.89	28.21	21.01	25.0	14	--	14 - 24	12 - 25	--	0 - 12	11	2	HSA	Jul-95	Alluvium
MW-32	186309.46	1066306.36	22.81	20.63	51.5	5	--	5 - 15	4 - 17	--	0 - 4	11	2	HSA	Jul-95	Alluvium
RMW-1S	186427.80	1066596.25	14.96	11.44	15.0	5	--	5 - 15	4 - 15	--	3 - 4	10.25	2	HSA	Nov-00	Gravel
RMW-1I	186430.28	1066599.69	14.78	11.55	23.0	13	--	13 - 23	11.0 - 23.0	--	3.0 - 11.0	10.25	2	HSA	Nov-00	Gravel
RMW-1D	186426.58	1066600.19	14.58	11.34	33.0	22.5	--	22.5 - 32.5	20.5 - 33.0	--	3.0 - 20.5	10.25	2	HSA	Nov-00	Gravel
RMW-2S	186524.85	1066680.83	16.66	13.39	15.0	5	--	5 - 15	4 - 15	--	3 - 4	10.25	2	HSA	Nov-00	Gravel
RMW-2I	186525.02	1066677.54	16.69	13.22	23.0	13	--	13 - 23	11 - 23	--	3 - 11	10.25	2	HSA	Nov-00	Gravel
RMW-2D	186528.30	1066680.01	17.24	13.44	31.5	19.5	--	19.5 - 29.5	17.5 - 31.5	--	3 - 17.5	10.25	2	HSA	Nov-00	Gravel
RMW-3S	186424.03	1066491.08	15.96	12.26	17.0	7	--	7 - 17	5 -17	--	3 - 5	10.25	2	HSA	Nov-00	Gravel
RMW-3I	186421.22	1066489.62	15.92	12.29	27.0	17	--	17 - 27	15 - 27	--	3 - 15	10.25	2	HSA	Nov-00	Gravel
RMW-3D	186423.94	1066487.56	15.69	12.36	37.5	27	--	27 - 37	25 - 37	--	3 - 25	10.25	2	HSA	Nov-00	Gravel
USDFW-1	186325.77	1066660.53	15.35	10.76	22.7	12.2	--	12.2 - 22.2	11.1 - 22.7	9.8 - 11.1	0 - 9.8	10.25	2	HSA	Oct-01	Gravel
USDFW-2	186571.20	1066549.37	15.55	11.26	26.0	15.5	--	15.5 - 25.5	13.3 - 26	--	3 - 13.3	10.25	2	HSA	Oct-01	Gravel
USDFW-3	186501.54	1066438.68	15.91	11.61	41.5	28	--	28 - 38	25.1 - 38.5	--	3 - 25.1	10.25	2	HSA	Oct-01	Silty Sand
Cells 1 and 2 Lower Water-Bearing Zone																
MW-8D	12180.67	9192.54	38.42	37.23	102.5	82	--	82 - 92	80 - 94	--	0 - 80	7	2	ODEX	Feb-86	Troutdale
MW-22	186224.43	1066675.98	26.67	26.94	105.0	90	--	90 - 105	87 - 105	--	0 - 87	8	2	HSA	Feb-93	Troutdale
MW-33	185590.07	1066924.82	32.14	30.72	82.0	52.8/60.8	--	60.8 - 80.8	57 - 82	55 - 57	0 - 55	7	2	Air R	Dec-98	Alluvium
MW-34	185743.20	1066537.65	27.53	27.51	109.0	43.6/86	--	86 - 106	84 - 109	80 - 84	0 - 80	7	2	Air R	Dec-98	Troutdale
MW-35	186054.54	1066379.18	26.93	25.23	97.0	45/75	--	75 - 95	73 - 97	68.5 - 73	0 - 68.5	7	2	Air R	Dec-98	Troutdale
MW-36	186232.57	1066591.44	27.57	25.99	112.0	54.5/90	--	90 - 110	88 - 112	84 - 88	0 - 84	7	2	Air R	Dec-98	Troutdale
MW-37	186365.25	1066851.89	31.94	30.41	108.0	38.3/86	--	86 - 106	84 - 108	80 - 84	0 - 80	7	2	Air R	Dec-98	Troutdale
MW-40	186007.44	1066937.74	32.85	30.33	79.0	50.4/52.4/66	78.8 - 79.3	68.8 - 78.8	67 - 79.3	66 - 67	0 - 66	8	2	Becker	Jul-02	Alluvium
MW-41	186019.33	1066905.00	33.00	30.46	96.0	50/52/63.5	95 - 95.5	85 - 95	84 - 96	82.3 - 84	0 - 82.3	8	2	Becker	Jul-02	Alluvium
MW-54	185535.4978	1066443.733	23.00	24.34	120.0	94.5	104.5 - 105	94.5 - 104.5	87.5 - 101	--	2 - 87.5	8	2	Sonic	Jun-08	Troutdale
MW-55	185758.1565	1066145.061	27.88	24.90	112.3	89	99 - 99.5	89 - 99	86 - 100.3	--	2 - 86.0	8	2	Sonic	Jun-08	Troutdale
MW-56	186004.6247	1066030.758	26.49	23.84	120.0	103	113 - 113.5	103 - 113	100.4 - 116	--	2 - 100.4	8	2	Sonic	Jun-08	Troutdale
MW-59	186273.7843	1066124.808	24.26	24.68	120.0	85.8	95.8 - 96.3	85.8 - 95.8	84.1 - 97.5	--	2 - 84.1	8	2	Sonic	Jun-08	Troutdale
MW-62	185309.338	1066390.093	27.439	24.631	121.0	117.8	114.6 - 115.1	104.6 - 114.6	102.0 - 116.5	96.0 - 102.0	0 - 96.0	6	2	Sonic	Aug-10	Troutdale
PZ-2	186222.51	1066674.45	26.75	--	105.0	83	--	83**	80.0-84.5	--	0-80.0	8	0.75	HSA	Feb-93	Alluvium
PZ-4	186128.61	1066924.99	29.99	--	65.0	65	--	65**	56.0-59.0	--	0-56.0	8	0.75	HSA	Mar-93	Alluvium

Table 2-1
Monitoring Well Completion Details
Former PWT Site RI/FS

Monitoring Point	Coordinates		Measuring Point Elevation (ft NGVD)	Ground Surface Elevation (ft NGVD)	Total Depth Drilled (ft bgs)	Total Depth Casing (ft bgs)	Sump Interval (ft bgs)	Screened Interval (ft bgs)	Filter Pack Interval (ft bgs)	Secondary Filter Pack Interval (ft bgs)	Surface Seal (ft bgs)	Borehole Diameter (inches)	Well Diameter (inches)	Drilling Method	Date of Installation	Lithologic Unit Screened
	Northing	Easting														
Carty Lake Lower Water-Bearing Zone																
MW-60	186433.6577	1066435.733	15.2682	12.46	90.0	63.5	73.5 - 74	63.5 - 73.5	61.9 - 75	--	3 - 61.9	8	2	Sonic	Jul-08	Gravel
MW-61	186698.58	1065859.148	18.298	15.79	104.5	104.5	102.0 - 102.5	92.0 - 102.0	90.5 - 103	--	0 - 90.5	6	2	Sonic	Aug-10	Troutdale

NOTES:

-- = not available or not applicable.

Air R = air rotary.

Becker = DR-24 air rotary.

Cable = cable tool.

ft bgs = feet below ground surface.

ft NGVD = feet National Geodetic Vertical Datum of 1927/1947.

HSA = hollow-stem auger.

ODEX = air rotary with ODEX underreamer.

Sonic = rotosonic.

*dense nonaqueous-phase liquid funnel installed at base of screened interval.

**open-ended casing; no screened interval.

Table 2-2
Extraction and Injection Well Completion Details
Former PWT Site RI/FS

Monitoring Point	Coordinates (Washington State Plane South)		Measuring Point Elevation (ft NGVD)	Ground Surface Elevation (ft NGVD)	Total Depth Drilled (ft bgs)	Total Depth Casing (ft bgs)	Sump Interval (ft bgs)	Screened Interval (ft bgs)	Filter Pack Interval (ft bgs)	Secondary Filter Pack Interval (ft bgs)	Surface Seal (ft bgs)	Borehole Diameter (inches)	Well Diameter (inches)	Drilling Method	Date of Installation	Lithologic Unit Screened
	Northing	Easting														
Extraction Wells																
DEW-2	186224.6	1066878.2	30.02	30.23	49.2	48.8	43.8 - 48.8	33.8 - 43.8	33.1 - 43.8	--	0 - 33.1	12	6	Cable	May-99	Alluvium
DEW-4	186217.1	1066723.7	31.00	28.01	54.0	54.0	49.0 - 54.0	9.0 - 49.0	8.0 - 49.0	--	0 - 8.0	12	6	Cable	May-99	Alluvium
SVE-1	186219.7	1066828.5	31.57	28.99	50.2	49.8	44.8 - 49.8	9.8 - 44.8	9.0 - 44.8	--	0 - 9.0	12	6	Cable	May-99	Alluvium
SVE-2	186225.6	1066872.0	29.21	29.80	35.0	33.1	28.1 - 33.1	8.1 - 28.1	8.1 - 33.0	--	0 - 8.1	12.25	6	HSA	Mar-99	Alluvium
E-1	186161.9	1066826.8	30.70	28.80	51.0	50.2	46.0 - 50.2	11.5 - 46.0	10.5 - 46.0	9.5 - 10.5	0 - 9.5	14	6	Cable	Apr-02	Alluvium
E-2	186115.7	1066836.0	30.82	28.92	53.0	50.5	46.5 - 50.5	10.0 - 46.5	9.0 - 47.2	8.0 - 9.0	0 - 8.0	12	6	Sonic	Apr-02	Alluvium
E-3	186068.9	1066877.3	32.76	30.16	51.0	49.9	45.8 - 49.9	9.9 - 45.8	9.0 - 47.0	8.0 - 9.0	0 - 8.0	14	6	Cable	May-02	Alluvium
E-4	186044.6	1066924.0	32.63	30.33	52.0	51.2	47.0 - 51.2	10.1 - 47.0	9.1 - 47.5	8.0 - 9.1	0 - 8.0	14	6	Cable	Jun-02	Alluvium
E-5	186026.0	1066980.4	32.71	31.71	54.0	53.3	49.0 - 53.3	10.1 - 49.0	9.0 - 48.4	8.1 - 9.0	0 - 8.1	14	6	Cable	Jun-02	Alluvium
E-6	185957.1	1066976.8	31.58	29.78	56.0	53.4	49.0 - 53.4	10.2 - 49.0	9.0 - 50.0	8.0 - 9.0	0 - 8.0	14	6	Cable	Apr-02	Alluvium
E-7	185958.7	1066907.0	32.57	30.27	53.0	52.2	48.0 - 52.2	10.1 - 48.0	9.0 - 48.5	8.0 - 9.0	0 - 8.0	14	6	Cable	Jun-02	Alluvium
E-8	185982.4	1066847.9	30.92	29.62	52.5	49.3	45.5 - 49.3	10.0 - 45.5	9.0 - 41.6	8.0 - 9.0	0 - 8.0	12	6	Sonic	Apr-02	Alluvium
E-9	186025.0	1066804.3	30.92	28.72	51.0	50.0	45.8 - 50.0	9.8 - 45.8	9.0 - 47.0	8.0 - 9.0	0 - 8.0	14	6	Cable	May-02	Alluvium
E-10	186080.2	1066777.8	30.60	27.90	51.0	50.0	46.0 - 50.0	10.1 - 46.0	9.0 - 47.0	7.9 - 9.0	0 - 7.9	14	6	Cable	May-02	Alluvium
E-11	186124.5	1066754.7	30.84	27.34	64.0	50.1	46.0 - 50.1	10.0 - 46.0	9.0 - 46.0	8.0 - 9.0	0 - 8.0	12	6	Sonic	Apr-02	Alluvium
E-12	186174.9	1066743.3	30.80	28.20	50.0	49.3	45.0 - 49.3	10.1 - 45.0	8.8 - 45.0	8.0 - 8.8	0 - 8.0	14	6	Cable	Jun-02	Alluvium
E-13 (DEW-3)	186223.7	1066724.0	30.98	27.65	55.0	54.5	49.5 - 54.5	39.5 -49.5	38.0 - 49.5	--	0 - 38.0	12	6	Cable	Apr-99	Alluvium
E-14	186251.1	1066748.9	30.69	28.09	50.0	49.3	45.0 - 49.3	10.0 - 45.0	9.0 - 45.5	7.5 - 9.0	0 - 8.0	14	6	Cable	May-02	Alluvium
E-15	186217.1	1066774.4	30.73	28.43	50.0	49.1	45.0 - 49.1	10.1 - 45.0	9.0 - 45.7	8.0 - 9.0	0 - 8.0	12	6	Sonic	Jun-02	Alluvium
E-16	186260.7	1066801.8	30.99	28.39	59.5	49.3	45.0 - 49.3	10.1 - 45.0	9.1 - 45.1	8.1 - 9.1	0 - 8.0	14	6	Cable	Jun-02	Alluvium
E-17 (DEW-1)	186226.0	1066822.5	31.10	28.92	50.8	50.8	45.8 - 50.8	35.8 -45.8	34.2 - 45.8	--	0 - 34.2	12.25	6	HSA	Mar-99	Alluvium
E-18	186094.1	1066817.0	31.92	--	46.0	46.0	45.0-46.0	10.0-45.0	9.0-45.0	7.0-9.0	0-7.0	8	4	Becker	Aug-04	Alluvium
E-19	186154.0	1066786.9	30.62	28.40	46.0	46.0	45.0-46.0	10.0-45.0	9.0-45.0	7.0-9.0	0-7.0	8	4	Becker	Aug-04	Alluvium
E-20	186095.3	1066920.6	34.25	32.33	47.0	46.0	45.0 - 46.0	11.0 - 45.0	9.0 - 47.0	8.0 - 9.0	0 - 8.0	8	4	Sonic	Sep-05	Alluvium
E-21	186109.8	1066944.9	34.10	31.98	47.0	46.8	45.8 - 46.8	11.8 - 45.8	9.8 - 47.0	8.3 - 9.8	0 - 8.3	8	4	Sonic	Sep-05	Alluvium
E-22	186112.8	1067016.9	35.53	33.65	50.0	49.9	48.9 - 49.9	14.9 - 48.9	12.0 - 50.0	10.9 - 12.0	0 - 10.9	8	4	Sonic	Sep-05	Alluvium
E-23	186061.7	1067014.3	35.54	33.66	47.0	46.3	45.3 - 46.3	11.3 - 45.3	10.0 - 47.0	9.0 - 10.0	0 - 9.0	8	4	Sonic	Sep-05	Alluvium
E-24	186053.4	1067040.8	35.60	33.61	50.0	49.4	48.4 - 49.4	14.4 - 48.4	13.0 - 50.0	12.0 - 13.0	0 - 12.0	8	4	Sonic	Oct-05	Alluvium
E-25	185966.8	1067042.6	33.53	31.38	51.0	50.0	49.0 - 50.0	15.0 - 49.0	13.0 - 51.0	12.0 - 13.0	0 - 12.0	8	4	Sonic	Oct-05	Alluvium
E-26	185991.1	1066998.0	33.62	31.44	49.0	48.2	47.2 - 48.2	13.2 - 47.2	10.0 - 49.0	9.0 - 10.0	0 - 9.0	8	4	Sonic	Sep-05	Alluvium
E-27	186158.9	1066939.5	34.15	32.29	48.0	46.6	45.6 - 46.6	11.6 - 45.6	9.0 - 48.0	8.0 - 9.0	0 - 8.0	8	4	Sonic	Nov-05	Alluvium
E-28	185919.4	1067040.1	33.04	31.05	50.0	48.7	47.7 - 48.7	13.7 - 47.7	12.0 - 50.0	11.0 - 12.0	0 - 11.0	8	4	Sonic	Oct-05	Alluvium
E-29	185884.3	1067025.6	32.75	30.88	51.0	50.0	49.0 - 50.0	15.0 - 49.0	13.0 - 51.0	12.0 - 13.0	0 - 12.0	8	4	Sonic	Oct-05	Alluvium
E-30	185893.5	1066975.9	32.88	30.88	48.0	46.6	45.6 - 46.6	11.6 - 45.6	10.0 - 48.0	9.0 - 10.0	0 - 9.0	8	4	Sonic	Oct-05	Alluvium
E-31	185840.8	1067033.9	33.24	31.07	50.0	49.6	48.6 - 49.6	14.6 - 48.6	12.0 - 50.0	11.0 - 12.0	0 - 11.0	8	4	Sonic	Oct-05	Alluvium
E-32	185745.3	1067046.4	33.03	31.03	50.0	48.6	47.6 - 48.6	13.6 - 47.6	11.0 - 50.0	10.0 - 11.0	0 - 10.0	8	4	Sonic	Oct-05	Alluvium
E-33	185736.1	1067009.2	33.07	31.07	49.0	46.4	45.6 - 46.4	11.4 - 45.4	8.8 - 49.0	7.7 - 8.8	0 - 7.7	8	4	Sonic	Oct-05	Alluvium
E-34	185789.7	1066996.7	32.96	--	49.0	48.0	47.0 - 48.0	13.0 - 47.0	11.0 - 49.0	9.9 - 11.0	0 - 9.9	8	4	Sonic	Oct-05	Alluvium
E-35	185865.5	1066941.9	32.68	30.68	49.5	49.4	48.4 - 49.4	14.4 - 48.4	12.4 - 49.5	11.4 - 12.4	0 - 11.4	8	4	Sonic	Oct-05	Alluvium

Table 2-2
Extraction and Injection Well Completion Details
Former PWT Site RI/FS

Monitoring Point	Coordinates (Washington State Plane South)		Measuring Point Elevation (ft NGVD)	Ground Surface Elevation (ft NGVD)	Total Depth Drilled (ft bgs)	Total Depth Casing (ft bgs)	Sump Interval (ft bgs)	Screened Interval (ft bgs)	Filter Pack Interval (ft bgs)	Secondary Filter Pack Interval (ft bgs)	Surface Seal (ft bgs)	Borehole Diameter (inches)	Well Diameter (inches)	Drilling Method	Date of Installation	Lithologic Unit Screened
	Northing	Easting														
E-36	185809.7	1066957.2	34.36	30.87	49.0	48.3	47.3 - 48.3	13.3 - 47.3	11.3 - 49.0	10.3 - 11.3	0 - 10.3	8	4	Sonic	Oct-05	Alluvium
E-37	185711.1	1066941.5	33.02	30.86	48.5	47.8	46.8 - 47.8	12.8 - 46.8	10.8 - 48.5	9.8 - 10.8	0 - 9.8	8	4	Sonic	Nov-05	Alluvium
E-38	185773.1	1066921.7	--	30.67	48.0	46.4	46.8 - 47.8	12.8 - 46.8	9.5 - 48.0	8.5 - 9.5	0 - 8.5	8	4	Sonic	Nov-05	Alluvium
E-39	185927.3	1066899.3	32.65	30.79	47.0	45.0	44.0 - 45.0	10.0 - 44.0	7.0 - 47.0	5.8 - 7.0	0 - 5.8	8	4	Sonic	Oct-05	Alluvium
E-40	185872.0	1066898.3	32.55	30.59	46.0	45.9	44.9 - 45.9	10.9 - 44.9	8.0 - 46.0	7.0 - 8.0	0 - 7.0	8	4	Sonic	Oct-05	Alluvium
E-41	185832.5	1066853.0	31.93	29.89	47.0	46.7	45.7 - 46.7	11.7 - 45.7	9.0 - 47.0	7.7 - 9.0	0 - 7.7	8	4	Sonic	Oct-05	Alluvium
E-42	185787.1	1066853.7	31.97	30.12	47.0	45.7	44.7 - 45.7	10.7 - 44.7	9.0 - 47.0	8.0 - 9.0	0 - 8.0	8	4	Sonic	Oct-05	Alluvium
E-43	185806.3	1066777.3	30.21	28.34	49.0	48.8	47.8 - 48.8	13.8 - 48.8	11.5 - 49.0	10.5 - 11.5	0 - 10.5	8	4	Sonic	Nov-05	Alluvium
E-44	185843.9	1066810.1	30.77	28.72	49.0	48.3	47.3 - 48.3	13.3 - 47.3	11.0 - 49.0	9.9 - 11.0	0 - 9.9	8	4	Sonic	Nov-05	Alluvium
E-45	185890.8	1066795.6	30.5	28.45	47.0	45.9	44.9 - 45.9	10.9 - 44.9	9.0 - 47.0	8.0 - 9.0	0 - 8.0	8	4	Sonic	Oct-05	Alluvium
E-46	185948.0	1066827.3	31.24	29.14	48.0	47.7	46.7 - 47.7	12.7 - 46.7	11.0 - 48.0	10.0 - 11.0	0 - 10.0	8	4	Sonic	Oct-05	Alluvium
E-47	185903.9	1066769.5	29.74	27.82	49.0	47.9	46.9 - 47.9	12.9 - 46.9	11.0 - 49.0	10.0 - 11.0	0 - 10.0	8	4	Sonic	Nov-05	Alluvium
E-48	185824.6	1066713.6	29.01	28.65	45.0	45.0	44.0 - 45.0	10.0 - 44.0	8.0 - 45.0	7.0 - 8.0	0 - 7.0	8	4	Sonic	Nov-05	Alluvium
E-49	185963.1	1066676.7	28.25	26.54	49.0	47.0	46.0 - 47.0	12.0 - 46.0	9.5 - 49.0	8.4 - 9.5	0 - 8.4	8	4	Sonic	Dec-06	Alluvium
E-50	185948.1	1066718.8	28.25	26.46	48.0	47.3	46.3 - 47.3	12.3 - 46.3	10.0 - 48.0	8.5 - 10.0	0 - 8.5	8	4	Sonic	Dec-06	Alluvium
E-51	185986.8	1066766.0	29.5	27.53	47.0	46.9	45.9 - 46.9	11.9 - 45.9	10.0 - 47.0	8.8 - 10.0	0 - 8.8	8	4	Sonic	Oct-05	Alluvium
E-52	186031.0	1066754.7	29.77	27.77	47.0	45.1	44.1 - 45.1	10.1 - 44.1	8.1 - 47.0	7.1 - 8.1	0 - 7.1	8	4	Sonic	Oct-05	Alluvium
E-53	186040.7	1066696.6	29.18	27.71	48.6	48.6	47.6 - 48.6	13.6 - 47.6	11.0 - 48.6	10.6 - 11.6	0 - 10.6	8	4	Sonic	Oct-05	Alluvium
E-54	186107.4	1066688.1	29.67	27.75	48.0	46.5	45.5 - 46.5	11.5 - 45.5	9.5 - 48.0	8.5 - 9.5	0 - 8.5	8	4	Sonic	Oct-05	Alluvium
E-55	186160.0	1066655.9	29.59	27.45	49.0	47.9	46.9 - 47.9	12.9 - 46.9	11.0 - 49.0	9.5 - 11.0	0 - 9.5	8	4	Sonic	Nov-05	Alluvium
E-56	186197.4	1066829.0	31.2	29.25	49.0	46.9	45.9 - 46.9	11.9 - 45.9	10.0 - 49.0	8.8 - 10.0	0 - 8.8	8	4	Sonic	Nov-05	Alluvium
E-57	186109.2	1066880.3	32.53	30.48	47.0	46.6	45.6 - 46.6	11.6 - 45.6	9.0 - 47.0	7.9 - 9.0	0 - 7.9	8	4	Sonic	Sep-05	Alluvium
E-58	186185.2	1066866.8	32.05	30.05	49.0	46.5	45.5 - 46.5	11.5 - 45.5	10.0 - 49.0	9.0 - 10.0	0 - 9.0	8	4	Sonic	Nov-05	Alluvium
E-59	186221.7	1066909.5	--	--	51.0	51.3	50.3 - 51.3	16.3 - 50.3	13.3 - 51.0	12.3 - 13.3	0 - 12.3	8	4	Sonic	Nov-05	Alluvium
M-3	186209.8	1066678.422	30.62	--	50.0	49.2	45.0-49.2	10.0-45.0	9.0-44.7	7.0-9.0	0-7.0	14	6	Cable	Jul-02	Alluvium
M-4	186264.5	1066693.857	27.00	--	58.0	48.4	44.0-48.4	12.1-44.0	10.9-43.8	10.2-10.9	0-10.2	14	6	Cable	Jul-02	Alluvium
M-5	186297.2	1066770.214	31.90	--	51.0	49.3	45.0-49.3	10.1-45.0	9.0-44.5	8.0-9.0	0-8.0	14	6	Cable	Jul-02	Alluvium
M-6	186303.9	1066816.504	32.74	29.18	51.0	49.0	45.0-49.0	10.0-45.0	9.0-45.0	8.5-9.0	0-8.5	14	6	Cable	Jul-02	Alluvium
M-7	186254.4	1066848.281	32.38	29.31	60.3	50.0	45.7-50.0	10.0-45.7	9.3-46.8	8.1-9.3	0-8.1	14	6	Cable	Jul-02	Alluvium
Injection Wells																
I-1	186168.1	1066788.7	31.38	28.52	52.0	37.8	46.0 - 50.6	37.8 - 46.0	34.0 - 44.0	32.8 - 34.0	0 - 32.8	14	4.5	Cable	Jul-02	Alluvium
I-2	186118.9	1066804.6	31.56	28.52	50.0	36.8	45.0 - 49.5	36.8 - 45.0	34.0 - 44.0	32.0 - 34.0	0 - 32.0	14	4.5	Cable	Jun-02	Alluvium
I-3	186075.5	1066825.7	32.08	29.03	50.0	36.5	45.0 - 49.3	36.5 - 45.0	34.0 - 45.4	32.0 - 34.0	0 - 32.0	14	4.5	Cable	Jul-02	Alluvium
I-4	186032.8	1066853.3	32.87	29.74	60.0	36.5	45.0 - 49.3	36.5 - 45.0	33.7 - 47.0	32.0 - 33.7	0 - 32.0	14	4.5	Cable	Jun-02	Alluvium
I-5	186005.4	1066894.7	33.43	30.35	54.5	40.8	49.0 - 53.5	40.8 - 49.0	37.1 - 48.0	35.9 - 37.1	0 - 35.9	14	4.5	Cable	Jul-02	Alluvium
I-6	185994.4	1066942.8	33.28	30.17	54.0	40.5	49.0 - 53.0	40.5 - 49.0	38.0 - 49.2	36.0 - 38.0	0 - 36.0	14	4.5	Cable	Jun-02	Alluvium
I-7	185993.4	1066934.6	33.4	31.15	17.0	17.0	--	13.0 - 17.0	11.0 - 17.0	10.0 - 11.0	0 - 10.0	7	4	Sonic	Oct-04	Alluvium
I-8	186073.7	1066965.7	35.8	32.66	47.0	46.3	45.3 - 46.3	36.3 - 45.3	34.3 - 47.0	33.3 - 34.3	0 - 33.3	7	4	Sonic	Sep-05	Alluvium
I-9	186099.2	1067048.5	37.18	34.30	50.0	50.0	49.0 - 50.0	40.0 - 49.0	38.0 - 50.0	37.0 - 38.0	0 - 37.0	7	4	Sonic	Oct-05	Alluvium
I-10	186014.3	1067033.5	35.39	32.34	47.0	46.0	45.0 - 46.0	36.0 - 45.0	34.0 - 47.0	33.0 - 34.0	0 - 33.0	7	4	Sonic	Sep-05	Alluvium

Table 2-2
Extraction and Injection Well Completion Details
Former PWT Site RI/FS

Monitoring Point	Coordinates (Washington State Plane South)		Measuring Point Elevation (ft NGVD)	Ground Surface Elevation (ft NGVD)	Total Depth Drilled (ft bgs)	Total Depth Casing (ft bgs)	Sump Interval (ft bgs)	Screened Interval (ft bgs)	Filter Pack Interval (ft bgs)	Secondary Filter Pack Interval (ft bgs)	Surface Seal (ft bgs)	Borehole Diameter (inches)	Well Diameter (inches)	Drilling Method	Date of Installation	Lithologic Unit Screened
	Northing	Easting														
I-11	185928.7	1067010.4	34.15	31.23	47.0	46.4	45.4 - 46.4	36.4 - 45.4	34.4 - 47.0	33.4 - 34.4	0 - 33.4	7	4	Sonic	Sep-05	Alluvium
I-12	185841.0	1066988.6	33.87	31.00	49.0	48.1	47.1 - 48.1	38.1 - 47.1	36.1 - 49.0	35.1 - 36.1	0 - 35.1	7	4	Sonic	Oct-05	Alluvium
I-13	185789.9	1067052.6	33.99	30.95	49.0	47.0	46.0 - 47.0	37.0 - 46.0	35.0 - 49.0	34..0 - 35.0	0 - 34.0	7	4	Sonic	Oct-05	Alluvium
I-14	185751.5	1066969.5	33.95	30.95	47.5	46.8	45.8 - 46.8	36.8 - 45.8	34.8 - 47.5	33.8 - 34.8	0 - 33.8	7	4	Sonic	Nov-05	Alluvium
I-15	185824.0	1066909.0	33.72	30.68	47.5	44.6	43.6 - 44.6	34.6 - 43.6	32.2 - 47.5	31.0 - 32.2	0 - 31.0	7	4	Sonic	Nov-05	Alluvium
I-16	185905.3	1066926.8	33.65	30.71	48.0	47.8	46.8 - 47.8	37.8 - 46.8	35.8 - 48.0	34.5 - 35.8	0 - 34.5	7	4	Sonic	Oct-05	Alluvium
I-17	185947.0	1066856.1	29.84	24.75	47.0	46.8	45.8 - 46.8	36.8 - 45.8	34.8 - 47.0	33.7 - 34.8	0 - 33.7	7	4	Sonic	Oct-05	Alluvium
I-18	185879.0	1066843.6	32.67	29.61	47.0	42.5	41.5 - 42.5	32.5 - 41.5	30.5 - 47.0	29.5 - 30.5	0 - 29.5	7	4	Sonic	Oct-05	Alluvium
I-19	185795.0	1066825.3	32.43	29.50	50.5	48.9	47.9 - 48.9	38.9 - 47.9	36.9 - 50.5	35.8 - 36.9	0 - 35.8	7	4	Sonic	Nov-05	Alluvium
I-20	185854.8	1066760.9	31.34	28.40	48.5	48.0	47.0 - 48.0	38.0 - 47.0	36.0 - 48.5	34.7 - 36.0	0 - 34.7	7	4	Sonic	Nov-05	Alluvium
I-21	185941.7	1066690.7	29.27	26.43	48.2	48.2	47.2 - 48.2	38.2 - 47.2	36.2 - 48.2	34.7 - 36.2	0 - 34.7	7	4	Sonic	Nov-05	Alluvium
I-22	185949.1	1066762.7	30.68	27.50	47.0	46.0	45.0 - 46.0	36.0 - 45.0	34.0 - 46.0	33.0 - 34.0	0 - 33.0	7	4	Sonic	Oct-05	Alluvium
I-23	185992.5	1066790.1	31.33	28.35	47.0	46.7	45.7 - 46.7	36.7 - 45.7	34.7 - 47.0	33.7 - 34.7	0 - 33.7	7	4	Sonic	Oct-05	Alluvium
I-24	186003.8	1066717.8	30.56	27.61	48.5	48.0	47.0 - 48.0	38.0 - 47.0	36.0 - 48.5	34.5 - 36.0	0 - 34.5	7	4	Sonic	Dec-06	Alluvium
I-25	186079.6	1066761.5	31.25	28.23	49.0	48.5	47.5 - 48.5	37.5 - 47.5	36.5 - 49.0	35.2 - 36.5	0 - 35.2	7	4	Sonic	Dec-05	Alluvium
I-26	186146.5	1066724.2	30.33	27.61	51.0	49.4	48.4 - 49.4	39.4 - 48.4	37.4 - 51.0	35.7 - 37.4	0 - 35.7	7	4	Sonic	Nov-05	Alluvium
I-27	186180.0	1066706.1	30.9	27.77	50.0	49.0	48.0 - 49.0	39.0 - 48.0	37.0 - 50.0	35.7 - 37.0	0 - 35.7	7	4	Sonic	Nov-05	Alluvium
I-28	186226.7	1066867.3	33.03	30.04	50.8	50.8	49.8 - 50.8	40.9 - 49.8	38.4 - 50.5	36.4 - 38.4	0 - 36.4	7	4	Sonic	Nov-05	Alluvium
I-29	186147.0	1066870.8	33.2	30.23	48.5	46.1	45.1 - 46.1	36.1 - 45.1	34.1 - 48.5	33.0 - 34.1	0 - 33.0	7	4	Sonic	Nov-05	Alluvium
I-30	186072.2	1066891.2	33.76	30.78	46.1	46.1	45.1 - 46.1	36.1 - 45.1	34.1 - 46.1	32.1 - 34.1	0 - 32.1	7	4	Sonic	Sep-05	Alluvium
I-31	186129.2	1066919.6	33.79	30.64	48.0	46.0	45.0 - 46.0	36.0 - 45.0	33.9 - 48.0	32.6 - 33.9	0 - 32.6	7	4	Sonic	Nov-05	Alluvium
I-32	186137.8	1066970.2	36.66	33.48	50.0	49.0	48.0 - 49.0	39.0 - 48.0	37.0 - 50.0	35.5 - 37.0	0 - 35.5	7	4	Sonic	Nov-05	Alluvium
I-33	185941.1	1066961.4	33.92	30.98	47.0	46.2	45.2 - 46.2	36.2 - 45.2	34.2 - 47.0	33.2 - 34.2	0 - 33.0	7	4	Sonic	Oct-05	Alluvium

NOTES:

-- = not available or not applicable.

Becker = DR-24 air rotary.

Cable = cable tool.

ft bgs = feet below ground surface.

ft NGVD = feet National Geodetic Vertical Datum of 1927/1947.

HSA = hollow-stem auger.

Sonic = rotosonic.

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
Shallow Upper Water-Bearing Zone						
EPA-4S						
08/04/2008	34.18	42.17	30.82	--	--	11.35
10/01/2008	34.18	42.17	32.17	--	--	10
01/20/2009	34.18	42.17	30.54	--	--	11.63
04/01/2009	34.18	42.17	31.17	--	--	11
07/30/2009	34.18	42.17	31.73	--	--	10.44
01/05/2010	34.18	42.17	34.18	--	--	7.99
08/10/2010	34.18	42.17	30.44	--	--	11.73
01/10/2011	34.18	42.17	29.28	--	--	12.89
08/02/2011	34.18	42.17	28.55	--	--	13.62
01/06/2012	34.18	42.17	30.46	--	--	11.71
EPA-5S						
08/04/2008	29.05	30.55	19.37	--	--	11.18
10/01/2008	29.05	30.55	20.79	--	--	9.76
01/20/2009	29.05	30.55	19.06	--	--	11.49
04/01/2009	29.05	30.55	19.8	--	--	10.75
07/30/2009	29.05	30.55	20.25	--	--	10.3
01/05/2010	29.05	30.55	20.42	--	--	10.13
08/10/2010	29.05	30.55	18.89	--	--	11.66
01/10/2011	29.05	30.55	17.71	--	--	12.84
08/02/2011	29.05	30.55	17.04	--	--	13.51
01/06/2012	29.05	30.55	18.9	--	--	11.65
EPA-6S						
08/04/2008	24.6	24.06	10.8	--	--	13.26
10/01/2008	24.6	24.06	11.76	--	--	12.3
01/20/2009	24.6	24.06	8.11	--	--	15.95
04/01/2009	24.6	24.06	9.56	--	--	14.5
07/30/2009	24.6	24.06	11.05	--	--	13.01
01/05/2010	24.6	24.06	9.64	--	--	14.42
08/10/2010	24.6	24.06	9.82	--	--	14.24
01/10/2011	24.6	24.06	7.49	--	--	16.57
08/02/2011	24.6	24.06	8.96	--	--	15.1
01/06/2012	24.6	24.06	7.78	--	--	16.28
MW-4						
08/06/2002	28.47	24.28	17.77	--	--	6.51
01/20/2004	28.47	24.44	16.91	--	--	7.53
04/26/2004	28.47	24.44	16.97	--	--	7.47
07/23/2004	28.47	24.44	18.39	--	--	6.05
10/18/2004	28.47	24.44	17.86	--	--	6.58
01/18/2005	28.47	24.44	16.59	--	--	7.85

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
04/25/2005	28.47	24.44	16.37	--	--	8.07
07/18/2005	28.47	24.44	17.4	--	--	7.04
10/17/2005	28.47	24.44	18.39	--	--	6.05
01/17/2006	28.47	24.44	11.84	--	--	12.6
04/24/2006	28.47	24.44	14.36	--	--	10.08
07/31/2006	28.47	24.44	17.55	--	--	6.89
10/23/2006	28.47	24.44	18.73	--	--	5.71
01/08/2007	28.47	24.44	13.91	--	--	10.53
04/09/2007	28.47	24.44	15.48	--	--	8.96
08/06/2007	28.47	24.44	17.85	--	--	6.59
01/07/2008	28.47	24.44	15	--	--	9.44
08/04/2008	28.47	24.44	17.35	--	--	7.09
10/01/2008	28.47	24.44	18.74	--	--	5.7
01/20/2009	28.47	24.44	15.79	--	--	8.65
04/01/2009	28.47	24.44	16.32	--	--	8.12
07/30/2009	28.47	24.44	17.82	--	--	6.62
01/05/2010	28.47	24.44	15.38	--	--	9.06
08/10/2010	28.47	24.44	17.37	--	--	7.07
01/10/2011	28.47	24.44	15.98	--	--	8.46
02/08/2011	28.47	24.44	15.51	--	--	8.93
01/06/2012	28.47	24.44	15.74	--	--	8.7
MW-5						
08/06/2002	28.52	26.13	13.51	--	--	12.62
01/20/2004	28.52	26.29	10.73	--	--	15.56
04/26/2004	28.52	26.29	12.27	--	--	14.02
07/23/2004	28.52	26.29	13.51	--	--	12.78
10/18/2004	28.52	26.29	13.81	--	--	12.48
01/18/2005	28.52	26.29	12.02	--	--	14.27
04/25/2005	28.52	26.29	11.72	--	--	14.57
07/18/2005	28.52	26.29	12.39	--	--	13.9
10/17/2005	28.52	26.29	13.88	--	--	12.41
01/17/2006	28.52	26.29	9.05	--	--	17.24
04/24/2006	28.52	26.29	11.06	--	--	15.23
07/31/2006	28.52	26.29	12.65	--	--	13.64
10/23/2006	28.52	26.29	13.72	--	--	12.57
01/08/2007	28.52	26.29	9.93	--	--	16.36
04/09/2007	28.52	26.29	10.89	--	--	15.4
08/06/2007	28.52	26.29	13.22	--	--	13.07
01/07/2008	28.52	26.29	10.03	--	--	16.26

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
08/04/2008	28.52	26.29	13.05	--	--	13.24
10/01/2008	28.52	26.29	14.02	--	--	12.27
01/20/2009	28.52	26.29	10.7	--	--	15.59
04/01/2009	28.52	26.29	11.72	--	--	14.57
07/30/2009	28.52	26.29	13.46	--	--	12.83
01/05/2010	28.52	26.29	10.78	--	--	15.51
08/10/2010	28.52	26.29	12.69	--	--	13.6
01/10/2011	28.52	26.29	10.16	--	--	16.13
08/02/2011	28.52	26.29	11.37	--	--	14.92
01/06/2012	28.52	26.29	10.15	--	--	16.14
PZ-06						
08/06/2002	30.98	26.03	12.67	--	--	13.36
04/26/2004	30.98	26.03	12.1	--	--	13.93
07/23/2004	30.98	26.03	12.9	--	--	13.13
10/18/2004	30.98	26.03	13.28	--	--	12.75
01/18/2005	30.98	26.03	12.54	--	--	13.49
04/25/2005	30.98	26.03	12.27	--	--	13.76
07/18/2005	30.98	26.03	12.48	--	--	13.55
10/17/2005	30.98	26.03	13.47	--	--	12.56
01/17/2006	30.98	26.03	9.68	--	--	16.35
04/24/2006	30.98	26.03	10.84	--	--	15.19
07/31/2006	30.98	26.03	12.5	--	--	13.53
10/23/2006	30.98	26.03	13.42	--	--	12.61
01/08/2007	30.98	26.03	10	--	--	16.03
04/09/2007	30.98	26.03	9.35	--	--	16.68
08/06/2007	30.98	26.03	12.37	--	--	13.66
01/07/2008	30.98	26.03	10.34	--	--	15.69
08/04/2008	30.98	26.03	12.41	--	--	13.62
10/01/2008	30.98	26.03	13.14	--	--	12.89
01/20/2009	30.98	26.03	10.64	--	--	15.39
04/01/2009	30.98	26.03	11.9	--	--	14.13
07/30/2009	30.98	26.03	12.86	--	--	13.17
01/05/2010	30.98	26.03	11.18	--	--	14.85
08/10/2010	30.98	26.03	12.08	--	--	13.95
01/10/2011	30.98	26.03	9.73	--	--	16.3
08/02/2011	30.98	26.03	10.7	--	--	15.33
01/06/2012	30.98	26.03	9.98	--	--	16.05

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
MW-7						
08/06/2002	43.87	39.2	27.21	--	--	11.99
01/20/2004	43.87	39.2	27.91	--	--	11.29
04/26/2004	43.87	39.2	26.88	--	--	12.32
07/23/2004	43.87	39.2	27.88	--	--	11.32
10/18/2004	43.87	39.2	29.18	--	--	10.02
01/18/2005	43.87	39.2	28.55	--	--	10.65
04/25/2005	43.87	39.2	28.36	--	--	10.84
07/18/2005	43.87	39.2	27.92	--	--	11.28
10/17/2005	43.87	39.2	29.2	--	--	10
01/17/2006	43.87	39.2	24.65	--	--	14.55
04/24/2006	43.87	39.2	25.74	--	--	13.46
07/31/2006	43.87	39.2	27.7	--	--	11.5
10/23/2006	43.87	39.2	29.27	--	--	9.93
01/08/2007	43.87	39.2	26.13	--	--	13.07
04/09/2007	43.87	39.2	26.43	--	--	12.77
08/06/2007	43.87	39.2	28.02	--	--	11.18
01/07/2008	43.87	39.2	27.37	--	--	11.83
08/04/2008	43.87	39.2	27.84	--	--	11.36
10/01/2008	43.87	39.2	29.36	--	--	9.84
01/20/2009	43.87	39.2	32.2	--	--	7
04/01/2009	43.87	39.2	28.33	--	--	10.87
07/30/2009	43.87	39.2	28.8	--	--	10.4
08/10/2010	43.87	39.2	27.51	--	--	11.69
01/10/2011	43.87	39.2	26.37	--	--	12.83
08/02/2011	43.87	39.2	25.61	--	--	13.59
01/06/2012	43.87	39.2	27.51	--	--	11.69
MW-9S						
07/23/2004	27.08	29.45	17.9	--	--	11.55
10/06/2004[a]	27.08	29.45	18.35	--	--	11.1
10/06/2004[b]	27.08	29.45	18.35	--	--	11.1
10/18/2004	27.08	29.45	18.42	--	--	11.03
01/18/2005	27.08	29.45	17.39	--	--	12.06
04/25/2005	27.08	29.45	16.84	--	--	12.61
07/18/2005	27.08	29.45	17.65	--	--	11.8
10/17/2005	27.08	29.45	18.74	--	--	10.71
01/17/2006	27.08	29.45	12.39	--	--	17.06
04/24/2006	27.08	29.45	15.16	--	--	14.29
07/31/2006	27.08	29.45	17.22	--	--	12.23
10/23/2006	27.08	29.45	18.78	--	--	10.67

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
01/08/2007	27.08	29.45	13.46	--	--	15.99
04/09/2007	27.08	29.45	15.08	--	--	14.37
08/06/2007	27.08	29.45	17.67	--	--	11.78
01/07/2008	27.08	29.45	13.69	--	--	15.76
08/04/2008	27.08	29.45	17.41	--	--	12.04
10/01/2008	27.08	29.45	18.57	--	--	10.88
01/20/2009	27.08	29.45	14.69	--	--	14.76
04/01/2009	27.08	29.45	16.65	--	--	12.8
07/30/2009	27.08	29.45	19.96	--	--	9.49
01/05/2010	27.08	29.45	15.87	--	--	13.58
01/10/2011[c]	30.29	31.59	18.1	--	--	13.49
08/02/2011	30.29	31.59	17.92	--	--	13.67
01/06/2012	30.29	31.59	18.59	--	--	13
MW-10						
08/06/2002	29.33	24.12	11.12	--	--	13
04/26/2004	29.33	24.12	10.1	--	--	14.02
07/23/2004	29.33	24.12	11.1	--	--	13.02
10/18/2004	29.33	24.12	11.63	--	--	12.49
01/18/2005	29.33	24.12	10.79	--	--	13.33
04/25/2005	29.33	24.12	10.42	--	--	13.7
07/18/2005	29.33	24.12	10.63	--	--	13.49
10/17/2005	29.33	24.12	11.92	--	--	12.2
01/17/2006	29.33	24.12	7.8	--	--	16.32
04/24/2006	29.33	24.12	8.93	--	--	15.19
07/31/2006	29.33	24.12	10.59	--	--	13.53
10/23/2006	29.33	24.12	11.9	--	--	12.22
01/08/2007	29.33	24.12	8.41	--	--	15.71
04/09/2007	29.33	24.12	7.4	--	--	16.72
08/06/2007	29.33	24.12	10.42	--	--	13.7
01/07/2008[d]	29.5	25.12	9.36	--	--	15.76
08/04/2008	29.5	25.12	11.37	--	--	13.75
10/01/2008	29.5	25.12	12.47	--	--	12.65
01/20/2009	29.5	25.12	9.58	--	--	15.54
04/01/2009	29.5	25.12	10.84	--	--	14.28
07/30/2009	29.5	25.12	11.9	--	--	13.22
01/05/2010	29.5	25.12	10.28	--	--	14.84
08/10/2010	29.5	25.12	11.03	--	--	14.09
01/10/2011	29.5	25.12	8.62	--	--	16.5
08/02/2011	29.5	25.12	9.5	--	--	15.62
01/06/2012	29.5	25.12	8.84	--	--	16.28

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
MW-13						
08/06/2002	28.51	27.08	14.43	--	--	12.65
01/20/2004	28.51	27.08	13.38	--	--	13.7
04/26/2004	28.51	27.08	13.5	--	--	13.58
07/23/2004	28.51	27.08	14.89	--	--	12.19
10/18/2004	28.51	27.08	16.34	--	--	10.74
01/18/2005	28.51	27.08	15.53	--	--	11.55
04/25/2005	28.51	27.08	15.34	--	--	11.74
07/18/2005	28.51	27.08	15.16	--	--	11.92
10/17/2005	28.51	27.08	16.27	--	--	10.81
01/17/2006	28.51	27.08	12.18	--	--	14.9
04/24/2006	28.51	27.08	12.36	--	--	14.72
07/31/2006	28.51	27.08	14.05	--	--	13.03
10/23/2006	28.51	27.08	16.58	--	--	10.5
01/08/2007	28.51	27.08	12.64	--	--	14.44
04/09/2007	28.51	27.08	12.69	--	--	14.39
08/06/2007	28.51	27.08	14.98	--	--	12.1
01/07/2008	28.51	27.08	13.36	--	--	13.72
08/04/2008	28.51	27.08	14.51	--	--	12.57
10/01/2008	28.51	27.08	14.5	--	--	12.58
01/20/2009	28.51	27.08	17.21	--	--	9.87
04/01/2009	28.51	27.08	16.94	--	--	10.14
07/30/2009	28.51	27.08	16.92	--	--	10.16
01/05/2010	28.51	27.08	17	--	--	10.08
08/10/2010	28.51	27.08	15.04	--	--	12.04
01/10/2011	28.51	27.08	13.45	--	--	13.63
08/02/2011	28.51	27.08	12.32	--	--	14.76
01/06/2012	28.51	27.08	14.17	--	--	12.91
MW-14						
08/06/2002	29.93	25.15	11.55	--	--	13.6
01/20/2004	29.93	25.15	10.56	--	--	14.59
04/26/2004	29.93	25.15	10.84	--	--	14.31
07/23/2004	29.93	25.15	11.51	--	--	13.64
10/18/2004	29.93	25.15	12.18	--	--	12.97
01/18/2005	29.93	25.15	11.5	--	--	13.65
04/25/2005	29.93	25.15	11.19	--	--	13.96
07/18/2005	29.93	25.15	11.31	--	--	13.84
10/17/2005	29.93	25.15	12.17	--	--	12.98
01/17/2006	29.93	25.15	8.95	--	--	16.2
04/24/2006	29.93	25.15	9.54	--	--	15.61

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
07/31/2006	29.93	25.15	11.1	--	--	14.05
10/23/2006	29.93	25.15	11.98	--	--	13.17
01/08/2007	29.93	25.15	9.1	--	--	16.05
04/09/2007	29.93	25.15	8.62	--	--	16.53
08/06/2007	29.93	25.15	11.15	--	--	14
01/07/2008[d]	30.11	26.10	9.63	--	--	16.47
08/04/2008	30.11	26.10	11.91	--	--	14.19
10/01/2008	30.11	26.10	12.6	--	--	13.5
01/20/2009	30.11	26.10	10.3	--	--	15.8
04/01/2009	30.11	26.10	11.19	--	--	14.91
07/30/2009	30.11	26.10	12.23	--	--	13.87
01/05/2010	30.11	26.10	10.82	--	--	15.28
08/10/2010	30.11	26.10	11.24	--	--	14.86
01/10/2011	30.18	26.10	9.06	--	--	17.04
08/02/2011	30.18	26.10	9.83	--	--	16.27
01/06/2012	30.18	26.10	9.63	--	--	16.47
MW-16						
08/06/2002	15.18	26.73	7.07	--	--	19.66
01/20/2004	15.18	26.73	5.3	NP	NP	21.43
04/26/2004	15.18	26.73	6.08	NP	NP	20.65
07/23/2004	15.18	26.73	7.52	NP	NP	19.21
10/18/2004	15.18	26.73	5.95	NP	NP	20.78
01/18/2005	15.18	26.73	5.5	NP	NP	21.23
04/25/2005	15.18	26.73	5.45	NP	NP	21.28
07/18/2005	15.18	26.73	6.67	NP	NP	20.06
10/17/2005	15.18	26.73	6.28	NP	NP	20.45
01/17/2006	15.18	26.73	5.25	NP	NP	21.48
04/24/2006	15.18	26.73	6.49	NP	NP	20.24
07/31/2006	15.18	26.73	6.9	NP	NP	19.83
10/23/2006	15.18	26.73	6.48	NP	NP	20.25
01/08/2007	15.18	26.73	5.76	NP	NP	20.97
04/09/2007	15.18	26.73	6.17	NP	NP	20.56
08/06/2007	15.18	26.73	6.9	NP	NP	19.83
01/07/2008	15.18	26.73	5.22	NP	NP	21.51
08/04/2008	15.18	26.73	7.3	NP	NP	19.43
10/01/2008	15.18	26.73	7.07	--	--	19.66
01/20/2009	15.18	26.73	6.31	--	--	20.42
04/01/2009	15.18	26.73	5.62	--	--	21.11
07/30/2009	15.18	26.73	6.81	--	--	19.92
01/05/2010	15.18	26.73	5.61	--	--	21.12

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
08/10/2010	15.18	26.73	6.67	--	--	20.06
01/10/2011	15.18	26.73	5.98	--	--	20.75
08/02/2011	15.18	26.73	6.89	--	--	19.84
01/06/2012	15.18	26.73	6.35	--	--	20.38
MW-17						
08/06/2002	15.23	25.44	8.06	--	--	17.38
01/20/2004	15.23	25.44	6.65	--	--	18.79
04/26/2004	15.23	25.44	7.04	--	--	18.4
07/23/2004	15.23	25.44	7.91	--	--	17.53
10/18/2004	15.23	25.44	7.32	--	--	18.12
01/18/2005	15.23	25.44	6.92	--	--	18.52
04/25/2005	15.23	25.44	6.87	--	--	18.57
07/18/2005	15.23	25.44	7.24	--	--	18.2
10/17/2005	15.23	25.44	7.42	--	--	18.02
01/17/2006	15.23	25.44	6.41	--	--	19.03
04/24/2006	15.23	25.44	7.14	--	--	18.3
07/31/2006	15.23	25.44	7.52	--	--	17.92
10/23/2006	15.23	25.44	7.2	--	--	18.24
01/08/2007	15.23	25.44	6.75	--	--	18.69
04/09/2007	15.23	25.44	6.82	--	--	18.62
08/06/2007	15.23	25.44	7.69	--	--	17.75
01/07/2008	15.23	25.44	6.96	--	--	18.48
08/04/2008	15.23	25.44	7.77	--	--	17.67
10/01/2008	15.23	25.44	8.07	--	--	17.37
01/20/2009	15.23	25.44	7.08	--	--	18.36
04/01/2009	15.23	25.44	7.13	--	--	18.31
07/30/2009	15.23	25.44	7.82	--	--	17.62
01/05/2010	15.23	25.44	6.95	--	--	18.49
08/10/2010	15.23	25.44	6.76	--	--	18.68
01/10/2011	15.23	25.44	6.8	--	--	18.64
08/02/2011	15.23	25.44	7.08	--	--	18.36
01/06/2012	15.23	25.44	7.34	--	--	18.1
MW-18						
04/26/2004	29.69	25.49	10.68	--	--	14.81
07/23/2004	29.69	25.49	11.76	--	--	13.73
10/18/2004	29.69	25.49	12.25	--	--	13.24
01/18/2005	29.69	25.49	11.04	--	--	14.45
04/25/2005	29.69	25.49	10.66	--	--	14.83
07/18/2005	29.69	25.49	11.06	--	--	14.43
10/17/2005	29.69	25.49	12.25	--	--	13.24

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
01/17/2006	29.69	25.49	7.73	--	--	17.76
04/24/2006	29.69	25.49	9.56	--	--	15.93
07/31/2006	29.69	25.49	11.05	--	--	14.44
10/23/2006	29.69	25.49	11.95	--	--	13.54
01/08/2007	29.69	25.49	8.24	--	--	17.25
04/09/2007	29.69	25.49	8.83	--	--	16.66
08/06/2007	29.69	25.49	11.22	--	--	14.27
01/07/2008	29.69	25.49	8.3	--	--	17.19
08/04/2008	29.69	25.49	11.45	--	--	14.04
10/01/2008	29.69	25.49	12.06	--	--	13.43
01/20/2009	29.69	25.49	8.99	--	--	16.5
04/01/2009	29.69	25.49	10.46	--	--	15.03
07/30/2009	29.69	25.49	11.56	--	--	13.93
08/10/2010	29.69	25.49	10.61	--	--	14.88
01/10/2011	29.69	25.49	8.13	--	--	17.36
08/02/2011	29.69	25.49	9.59	--	--	15.9
01/06/2012	29.69	25.49	8.38	--	--	17.11
MW-20S						
08/06/2002	30.08	20.17	14.88	--	--	5.29
01/20/2004	30.08	20.17	11.88	--	--	8.29
04/26/2004	30.08	20.17	11.76	--	--	8.41
07/23/2004	30.08	20.17	13.12	--	--	7.05
10/06/2004[a]	30.08	20.17	14.67	--	--	5.5
10/06/2004[b]	30.08	20.17	14.77	--	--	5.4
10/18/2004	30.08	20.17	14.23	--	--	5.94
01/18/2005	30.08	20.17	12.75	--	--	7.42
04/25/2005	30.08	20.17	13.1	--	--	7.07
07/18/2005	30.08	20.17	12.65	--	--	7.52
10/17/2005	30.08	20.17	13.96	--	--	6.21
01/17/2006	30.08	20.17	8.74	--	--	11.43
04/24/2006	30.08	20.17	9.3	--	--	10.87
07/31/2006	30.08	20.17	10.84	--	--	9.33
10/23/2006	30.08	20.17	14.4	--	--	5.77
01/08/2007	30.08	20.17	9.18	--	--	10.99
04/09/2007	30.08	20.17	13.65	--	--	6.52
08/06/2007	30.08	20.17	13.55	--	--	6.62
01/07/2008	30.08	20.17	11.98	--	--	8.19
08/04/2008	30.08	20.17	10.78	--	--	9.39
10/01/2008	30.08	20.17	14.53	--	--	5.64
01/20/2009	30.08	20.17	10.45	--	--	9.72

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
04/01/2009	30.08	20.17	12.98	--	--	7.19
07/30/2009	30.08	20.17	13.92	--	--	6.25
01/05/2010	30.08	20.17	9.79	--	--	10.38
MW-20R						
01/10/2011	25.36	15.05	6.98	--	--	8.07
08/02/2011	25.36	15.05	4.68	--	--	10.37
01/06/2012	25.36	15.05	5.55	--	--	9.5
MW-26						
01/20/2004	30.23	25.92	11.51	--	--	14.41
04/26/2004	30.23	25.92	12.2	--	--	13.72
07/23/2004	30.23	25.92	12.52	--	--	13.4
10/18/2004	30.23	25.92	13.32	--	--	12.6
01/18/2005	30.23	25.92	12.49	--	--	13.43
04/25/2005	30.23	25.92	12.12	--	--	13.8
07/18/2005	30.23	25.92	12.37	--	--	13.55
10/17/2005	30.23	25.92	13.51	--	--	12.41
01/17/2006	30.23	25.92	9.25	--	--	16.67
04/24/2006	30.23	25.92	10.43	--	--	15.49
07/31/2006	30.23	25.92	11.29	--	--	14.63
10/23/2006	30.23	25.92	13.63	--	--	12.29
01/08/2007	30.23	25.92	10.65	--	--	15.27
04/09/2007	30.23	25.92	10.9	--	--	15.02
08/06/2007	30.23	25.92	11.9	--	--	14.02
01/07/2008	30.23	25.92	10.45	--	--	15.47
08/04/2008	30.23	25.92	11.98	--	--	13.94
10/01/2008	30.23	25.92	12.23	--	--	13.69
01/20/2009	30.23	25.92	10.96	--	--	14.96
04/01/2009	30.23	25.92	11.7	--	--	14.22
07/30/2009	30.23	25.92	13.69	--	--	12.23
01/05/2010	30.23	25.92	11.55	--	--	14.37
08/10/2010	30.23	25.92	13.25	--	--	12.67
01/10/2011	30.23	25.92	8.89	--	--	17.03
08/02/2011	30.23	25.92	11.18	--	--	14.74
01/06/2012	30.23	25.92	9.74	--	--	16.18
MW-27						
01/20/2004	36.22	23.67	14.55	--	--	9.12
04/26/2004	36.22	23.67	15.23	--	--	8.44
07/23/2004	36.22	23.67	16.49	--	--	7.18
10/18/2004	36.22	23.67	16.63	--	--	7.04
01/18/2005	36.22	23.67	15.45	--	--	8.22

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
04/25/2005	36.22	23.67	15.27	--	--	8.4
07/18/2005	36.22	23.67	15.81	--	--	7.86
10/17/2005	36.22	23.67	16.67	--	--	7
01/17/2006	36.22	23.67	9.97	--	--	13.7
04/24/2006	36.22	23.67	12.83	--	--	10.84
07/31/2006	36.22	23.67	15.73	--	--	7.94
10/23/2006	36.22	23.67	17.45	--	--	6.22
01/08/2007	36.22	23.67	12.2	--	--	11.47
04/09/2007	36.22	23.67	14.94	--	--	8.73
08/06/2007	36.22	23.67	15.89	--	--	7.78
01/07/2008	36.22	23.67	13.44	--	--	10.23
08/04/2008	36.22	23.67	14.8	--	--	8.87
10/01/2008	36.22	23.67	17.1	--	--	6.57
01/20/2009	36.22	23.67	14.15	--	--	9.52
04/01/2009	36.22	23.67	15.15	--	--	8.52
07/30/2009	36.22	23.67	16.32	--	--	7.35
01/05/2010	36.22	23.67	14.24	--	--	9.43
08/10/2010	36.22	23.67	16.32	--	--	7.35
01/10/2011	36.22	23.67	15.04	--	--	8.63
08/02/2011	36.22	23.67	14.06	--	--	9.61
01/06/2012	36.22	23.67	14.51	--	--	9.16
MW-28S						
08/06/2002	20.11	30.55	18.45	--	--	12.1
01/20/2004	20.11	30.55	18.24	--	--	12.31
04/26/2004	20.11	30.55	18.16	--	--	12.39
07/23/2004	20.11	30.55	Dry	--	--	Dry
10/06/2004[a]	20.11	30.55	Dry	--	--	Dry
10/06/2004[b]	20.11	30.55	Dry	--	--	Dry
10/18/2004	20.11	30.55	Dry	--	--	Dry
01/18/2005	20.11	30.55	Dry	--	--	Dry
04/25/2005	20.11	30.55	Dry	--	--	Dry
07/18/2005	20.11	30.55	Dry	--	--	Dry
10/17/2005	20.11	30.55	Dry	--	--	Dry
01/17/2006	20.11	30.55	15.96	--	--	14.59
04/24/2006	20.11	30.55	16.9	--	--	13.65
07/31/2006	20.11	30.55	Dry	--	--	Dry
10/23/2006	20.11	30.55	Dry	--	--	Dry
01/08/2007	20.11	30.55	17.46	--	--	13.09
04/09/2007	20.11	30.55	17.74	--	--	12.81
08/06/2007	20.11	30.55	Dry	--	--	Dry

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
01/07/2008	20.11	30.55	Dry	--	--	Dry
08/04/2008	20.11	30.55	Dry	--	--	Dry
10/01/2008	20.11	30.55	Dry	--	--	Dry
01/20/2009	20.11	30.55	Dry	--	--	Dry
04/01/2009	20.11	30.55	Dry	--	--	Dry
07/30/2009	20.11	30.55	Dry	--	--	Dry
01/05/2010	36.22	23.67	14.24	--	--	9.43
MW-30						
08/06/2002	30.63	15.19	5.64	--	--	9.55
MW-39						
08/06/2002	28.9	30.68	18.68	NP	NP	12
01/20/2004	28.62	30.68	18.24	NP	NP	12.44
04/26/2004	28.62	30.68	18.34	NP	NP	12.34
07/23/2004	28.62	30.68	19.4	NP	NP	11.28
10/18/2004	28.9	30.68	20.63	NP	NP	10.05
01/18/2005	28.9	30.68	19.89	NP	NP	10.79
04/25/2005	28.9	30.68	19.74	NP	NP	10.94
07/18/2005	28.9	30.68	19.38	NP	NP	11.3
10/17/2005	28.9	30.68	20.63	NP	NP	10.05
01/17/2006	28.9	30.68	15.1	NP	NP	15.58
04/24/2006	28.9	30.68	17.27	NP	NP	13.41
07/31/2006	28.9	30.68	19.27	NP	NP	11.41
10/23/2006	28.79	30.68	20.91	NP	NP	9.77
01/08/2007	28.79	30.68	17.78	NP	NP	12.9
04/09/2007	28.79	30.68	17.98	NP	NP	12.7
08/06/2007	28.79	30.68	19.53	NP	NP	11.15
01/07/2008	28.79	30.68	18.96	NP	NP	11.72
08/04/2008	28.79	30.68	19.47	NP	NP	11.21
10/01/2008	28.79	30.68	20.94	--	--	9.74
01/20/2009	28.79	30.68	19.18	--	--	11.5
04/01/2009	28.79	30.68	20.13	--	--	10.55
07/30/2009	28.79	30.68	20.37	--	--	10.31
01/05/2010	28.79	30.68	20.61	--	--	10.07
08/10/2010	28.79	30.68	19.08	--	--	11.6
01/10/2011	28.79	30.68	17.94	--	--	12.74
08/02/2011	28.79	30.68	17.32	--	--	13.36
01/06/2012	28.79	30.68	19.07	--	--	11.61

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
MW-44						
08/06/2002	28.02	33.18	21.61	0.56	NP	12.1188
01/20/2004	28.02	33.18	21.02	0.28	NP	12.4344
04/26/2004	28.02	33.18	21.5	0.8	NP	12.464
07/23/2004	28.02	33.18	22.2	0.46	NP	11.4308
10/18/2004	28.02	33.18	23.52	0.48	NP	10.1304
01/18/2005	28.02	33.18	22.32	NP	NP	10.86
04/25/2005	28.02	33.18	22.32	NP	NP	10.86
07/18/2005	28.02	33.18	21.79	NP	NP	11.39
10/17/2005	28.02	33.18	23.07	NP	NP	10.11
01/17/2006	28.02	33.18	18.52	NP	NP	14.66
04/24/2006	28.02	33.18	19.57	NP	NP	13.61
07/31/2006	28.02	33.18	21.62	NP	NP	11.56
10/23/2006	28.02	33.18	23.26	NP	NP	9.92
01/08/2007	28.02	33.18	20.08	NP	NP	13.1
04/09/2007	28.02	33.18	20.38	NP	NP	12.8
08/06/2007	28.02	33.18	--	--	--	--
01/07/2008	28.02	33.18	--	--	--	--
08/04/2008	28.02	33.18	--	--	--	--
10/01/2008	28.02	33.18	--	--	--	--
01/20/2009	28.02	33.18	21.54	NP	NP	11.64
04/01/2009	28.02	33.18	--	--	--	--
07/30/2009	28.02	33.18	22.71	NP	NP	10.47
08/10/2010	28.02	33.18	21.37	NP	NP	11.81
01/10/2011	28.02	33.18	20.29	--	--	12.89
08/02/2011	28.02	33.18	17.73	NP	--	15.45
01/06/2012	28.02	33.18	21.54	--	--	11.64
MW-45S						
07/23/2004	26.91	22.23	15.92	--	--	6.31
10/06/2004[a]	26.91	22.23	17.45	--	--	4.78
10/06/2004[b]	26.91	22.23	17.42	--	--	4.81
10/18/2004	26.91	22.23	15.77	--	--	6.46
01/18/2005	26.91	22.23	15.16	--	--	7.07
04/25/2005	26.91	22.23	14.84	--	--	7.39
07/18/2005	26.91	22.23	15.64	--	--	6.59
10/17/2005	26.91	22.23	16.67	--	--	5.56
01/17/2006	26.91	22.23	9.58	--	--	12.65
04/24/2006	26.91	22.23	11.85	--	--	10.38
07/31/2006	26.91	22.23	16.16	--	--	6.07
10/23/2006	26.91	22.23	17.27	--	--	4.96

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
01/08/2007	26.91	22.23	11.79	--	--	10.44
04/09/2007	26.91	22.23	13.83	--	--	8.4
08/06/2007	26.91	22.23	16.48	--	--	5.75
01/07/2008	26.91	22.23	13.46	--	--	8.77
08/04/2008	26.91	22.23	16.09	--	--	6.14
10/01/2008	26.91	22.23	16.93	--	--	5.3
01/20/2009	26.91	22.23	14.65	--	--	7.58
04/01/2009	26.91	22.23	14.49	--	--	7.74
07/30/2009	26.91	22.23	16.38	--	--	5.85
01/05/2010	26.91	22.23	13.87	--	--	8.36
01/10/2011[c]	27.88	21.604	15.72	--	--	5.884
08/02/2011	27.88	21.6	14.43	--	--	7.17
01/06/2012	27.88	21.6	15.7	--	--	5.9
MW-46S						
07/23/2004	27.27	21.75	14.17	--	--	7.58
10/06/2004[a]	27.27	21.75	16.55	--	--	5.2
10/06/2004[b]	27.27	21.75	16.5	--	--	5.25
10/18/2004	27.27	21.75	14.41	--	--	7.34
01/18/2005	27.27	21.75	13.58	--	--	8.17
04/25/2005	27.27	21.75	13.38	--	--	8.37
07/18/2005	27.27	21.75	14.43	--	--	7.32
10/17/2005	27.27	21.75	16	--	--	5.75
01/17/2006	27.27	21.75	8.47	--	--	13.28
04/24/2006	27.27	21.75	10.88	--	--	10.87
07/31/2006	27.27	21.75	14.98	--	--	6.77
10/23/2006	27.27	21.75	16.53	--	--	5.22
01/08/2007	27.27	21.75	10.57	--	--	11.18
04/09/2007	27.27	21.75	12.72	--	--	9.03
08/06/2007	27.27	21.75	15.45	--	--	6.3
01/07/2008	27.27	21.75	12.23	--	--	9.52
08/04/2008	27.27	21.75	14.94	--	--	6.81
10/01/2008	27.27	21.75	16.18	--	--	5.57
01/20/2009	27.27	21.75	13.45	--	--	8.3
04/01/2009	27.27	21.75	13.96	--	--	7.79
07/30/2009	27.27	21.75	15.43	--	--	6.32
01/05/2010	27.27	21.75	12.79	--	--	8.96
01/10/2011[c]	21.86	15.328	8.44	--	--	6.888
08/02/2011	21.86	15.328	7.22	--	--	8.108
01/06/2012	21.86	15.328	8.42	--	--	6.908

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
MW-47S						
07/23/2004	24.64	19.48	16.38	--	--	3.1
10/06/2004[a]	24.64	19.48	13.15	--	--	6.33
10/06/2004[b]	24.64	19.48	13.15	--	--	6.33
10/18/2004	24.64	19.48	11.79	--	--	7.69
01/18/2005	24.64	19.48	10.64	--	--	8.84
04/25/2005	24.64	19.48	10.14	--	--	9.34
07/18/2005	24.64	19.48	10.14	--	--	9.34
10/17/2005	24.64	19.48	12.2	--	--	7.28
01/17/2006	24.64	19.48	4.18	--	--	15.3
04/24/2006	24.64	19.48	6.74	--	--	12.74
07/31/2006	24.64	19.48	8.91	--	--	10.57
10/23/2006	24.64	19.48	10.14	--	--	9.34
01/08/2007	24.64	19.48	5.39	--	--	14.09
04/09/2007	24.64	19.48	7.01	--	--	12.47
08/06/2007	24.64	19.48	9.87	--	--	9.61
01/07/2008	24.64	19.48	5.88	--	--	13.6
08/04/2008	24.64	19.48	9.79	--	--	9.69
10/01/2008	24.64	19.48	12.42	--	--	7.06
01/20/2009	24.64	19.48	8.14	--	--	11.34
04/01/2009	24.64	19.48	9.35	--	--	10.13
07/30/2009	24.64	19.48	11.39	--	--	8.09
01/05/2010	24.64	19.48	7.69	--	--	11.79
08/10/2010	24.64	19.48	10.14	--	--	9.34
01/10/2011	24.64	19.48	7.94	--	--	11.54
08/02/2011	24.64	19.48	8.18	--	--	11.3
01/06/2012	24.64	19.48	8.24	--	--	11.24
MW-48S						
08/04/2008	28.18	33.72	22.35	--	--	11.37
10/01/2008	28.18	33.72	23.86	--	--	9.86
01/20/2009	28.18	33.72	22.12	--	--	11.6
04/01/2009	28.18	33.72	22.87	--	--	10.85
07/30/2009	28.18	33.72	23.29	--	--	10.43
01/05/2010	28.18	33.72	23.52	--	--	10.2
08/10/2010	28.18	33.72	22	--	--	11.72
01/10/2011	28.18	33.72	20.87	--	--	12.85
08/02/2011	28.18	33.72	20.17	--	--	13.55
01/06/2012	28.18	33.72	22.03	--	--	11.69

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
MW-50S						
08/04/2008	28.55	28.83	16.18	--	--	12.65
10/01/2008	28.55	28.83	17.29	--	--	11.54
01/20/2009	28.55	28.83	15.4	--	--	13.43
04/01/2009	28.55	28.83	15.92	--	--	12.91
07/30/2009	28.55	28.83	17.13	--	--	11.7
01/05/2010	28.55	28.83	16.7	--	--	12.13
08/10/2010	28.55	28.83	15.93	--	--	12.9
01/10/2011	28.55	28.83	15.03	--	--	13.8
08/02/2011	28.55	28.83	15.14	--	--	13.69
01/06/2012	28.55	28.83	15.46	--	--	13.37
MW-53S						
08/04/2008	28.4	28.67	15.34	--	--	13.33
10/01/2008	28.4	28.67	16.35	--	--	12.32
01/20/2009	28.4	28.67	13.2	--	--	15.47
04/01/2009	28.4	28.67	14.95	--	--	13.72
07/30/2009	28.4	28.67	15.88	--	--	12.79
01/05/2010	28.4	28.67	14.15	--	--	14.52
08/10/2010	28.4	28.67	14.85	--	--	13.82
01/10/2011	28.4	28.67	12.11	--	--	16.56
08/02/2011	28.4	28.67	13.25	--	--	15.42
01/06/2012	28.4	28.67	12.44	--	--	16.23
MW-55S						
01/10/2011	34.33	26.67	15.37			11.3
08/02/2011	34.33	26.67	16.97	--	--	9.7
01/06/2012	34.33	26.67	17.17	--	--	9.5
MW-57S						
08/04/2008	29.91	26.88	14.11	--	--	12.77
10/01/2008	29.91	26.88	14.65	--	--	12.23
01/20/2009	29.91	26.88	11.48	--	--	15.4
04/01/2009	29.91	26.88	12.74	--	--	14.14
07/30/2009	29.91	26.88	14.04	--	--	12.84
01/05/2010	29.91	26.88	12.17	--	--	14.71
08/10/2010	29.91	26.88	13.13	--	--	13.75
01/10/2011	29.91	26.88	10.63	--	--	16.25
08/02/2011	29.91	26.88	11.61	--	--	15.27
01/06/2012	29.91	26.88	10.76	--	--	16.12

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
<u>Deep Upper Water-Bearing Zone</u>						
EPA-4D						
08/04/2008	53.07	42.05	30.73	--	--	11.32
10/01/2008	53.07	42.05	32.19	--	--	9.86
01/20/2009	53.07	42.05	30.47	--	--	11.58
04/01/2009	53.07	42.05	31.26	--	--	10.79
07/30/2009	53.07	42.05	31.65	--	--	10.4
01/05/2010	53.07	42.05	31.92	--	--	10.13
08/10/2010	53.07	42.05	30.39	--	--	11.66
01/10/2011	53.07	42.05	29.25	--	--	12.8
08/02/2011	53.07	42.05	28.38	--	--	13.67
01/06/2012	53.07	42.05	30.34	--	--	11.71
EPA-5D						
08/04/2008	44.7	30.58	19.56	--	--	11.02
10/01/2008	44.7	30.58	20.7	--	--	9.88
01/20/2009	44.7	30.58	19.35	--	--	11.23
04/01/2009	44.7	30.58	19.98	--	--	10.6
07/30/2009	44.7	30.58	20.14	--	--	10.44
01/05/2010	44.7	30.58	20.52	--	--	10.06
08/10/2010	44.7	30.58	18.83	--	--	11.75
01/10/2011	44.7	30.58	18.21	--	--	12.37
08/02/2011	44.7	30.58	16.75	--	--	13.83
01/06/2012	44.7	30.58	18.96	--	--	11.62
EPA-6D						
08/04/2008	43.33	24.12	16.14	--	--	7.98
10/01/2008	43.33	24.12	17.65	--	--	6.47
01/20/2009	43.33	24.12	14.43	--	--	9.69
04/01/2009	43.33	24.12	15.37	--	--	8.75
07/30/2009	43.33	24.12	16.72	--	--	7.4
01/05/2010	43.33	24.12	15.29	--	--	8.83
08/10/2010	43.33	24.12	16.15	--	--	7.97
01/10/2011	43.33	24.12	14.82	--	--	9.3
08/02/2011	43.33	24.12	14.02	--	--	10.1
01/06/2012	43.33	24.12	14.74	--	--	9.38
MW-8S						
08/06/2002	47.25	38.39	30.67	--	--	7.72

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
MW-15						
08/06/2002	48.98	25.96	15.69	--	--	10.27
01/20/2004	48.98	25.96	15.02	--	--	10.94
04/26/2004	48.98	25.96	15.41	--	--	10.55
07/23/2004	48.98	25.96	16.51	--	--	9.45
10/18/2004	48.98	25.96	17.14	--	--	8.82
01/18/2005	48.98	25.96	16.44	--	--	9.52
04/25/2005	48.98	25.96	16.19	--	--	9.77
07/18/2005	48.98	25.96	16.14	--	--	9.82
10/17/2005	48.98	25.96	17.15	--	--	8.81
01/17/2006	48.98	25.96	11.82	--	--	14.14
04/24/2006	48.98	25.96	13.15	--	--	12.81
07/31/2006	48.98	25.96	15.82	--	--	10.14
10/23/2006	48.98	25.96	17.45	--	--	8.51
01/08/2007	48.98	25.96	13.72	--	--	12.24
04/09/2007	48.98	25.96	14.38	--	--	11.58
08/06/2007	48.98	25.96	16.33	--	--	9.63
01/07/2008	48.98	25.96	15.1	--	--	10.86
08/04/2008	48.98	25.96	16.42	--	--	9.54
10/01/2008	48.98	25.96	17.95	--	--	8.01
01/20/2009	48.98	25.96	16.11	--	--	9.85
04/01/2009	48.98	25.96	16.51	--	--	9.45
07/30/2009	48.98	25.96	16.98	--	--	8.98
01/05/2010	48.98	25.96	16.88	--	--	9.08
08/10/2010	48.98	25.96	15.78	--	--	10.18
01/10/2011	48.98	25.96	14.73	--	--	11.23
08/02/2011	48.98	25.96	13.96	--	--	12
01/06/2012	48.98	25.96	15.47	--	--	10.49
MW-20D						
07/23/2004	48.94	22.4	17	--	--	5.4
10/06/2004[a]	48.94	22.4	18.13	--	--	4.27
10/06/2004[b]	48.94	22.4	17.78	--	--	4.62
10/18/2004	48.94	22.4	16.43	--	--	5.97
01/18/2005	48.94	22.4	15.3	--	--	7.1
04/25/2005	48.94	22.4	15.34	--	--	7.06
07/18/2005	48.94	22.4	16.28	--	--	6.12
10/17/2005	48.94	22.4	17.13	--	--	5.27
01/17/2006	48.94	22.4	9.95	--	--	12.45
04/24/2006	48.94	22.4	12.21	--	--	10.19
07/31/2006	48.94	22.4	16.56	--	--	5.84

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
10/23/2006	48.94	22.4	17.72	--	--	4.68
01/08/2007	48.94	22.4	12.15	--	--	10.25
04/09/2007	48.94	22.4	14.09	--	--	8.31
08/06/2007	48.94	22.4	16.78	--	--	5.62
10/01/2008	48.94	22.4	17.32	--	--	5.08
01/20/2009	48.94	22.4	14.98	--	--	7.42
07/30/2009	48.94	22.4	16.75	--	--	5.65
01/05/2010	48.94	22.4	14.15	--	--	8.25
08/10/2010[C]	48.94	14.98	NM	--	--	NM
01/10/2011	48.94	14.98	8.81	--	--	6.17
08/02/2011	48.94	14.98	7.46	--	--	7.52
01/06/2012	48.94	14.98	8.88	--	--	6.1
08/06/2002	50.24	26.6	16.82	--	--	9.78
04/26/2004	50.24	26.6	16.49	--	--	10.11
07/23/2004	50.24	26.6	17.89	--	--	8.71
10/18/2004	50.24	26.6	18.33	--	--	8.27
01/18/2005	50.24	26.6	17.62	--	--	8.98
04/25/2005	50.24	26.6	17.44	--	--	9.16
MW-21						
07/18/2005	50.24	26.6	17.57	--	--	9.03
10/17/2005	50.24	26.6	18.53	--	--	8.07
01/17/2006	50.24	26.6	13.08	--	--	13.52
04/24/2006	50.24	26.6	14.53	--	--	12.07
07/31/2006	50.24	26.6	17.54	--	--	9.06
10/23/2006	50.24	26.6	19.8	--	--	6.8
01/08/2007	50.24	26.6	15.02	--	--	11.58
04/09/2007	50.24	26.6	15.93	--	--	10.67
08/06/2007	50.24	26.6	17.98	--	--	8.62
01/07/2008	50.24	26.6	16.45	--	--	10.15
08/04/2008	50.24	26.6	17.94	--	--	8.66
10/01/2008	50.24	26.6	19	--	--	7.6
01/20/2009	50.24	26.6	16.97	--	--	9.63
04/01/2009	50.24	26.6	17.51	--	--	9.09
07/30/2009	50.24	26.6	18.46	--	--	8.14
01/05/2010	50.24	26.6	17.84	--	--	8.76
08/10/2010	50.24	26.6	16.84	--	--	9.76
01/10/2011	50.24	26.6	15.83	--	--	10.77
08/02/2011	50.24	26.6	14.95	--	--	11.65
01/06/2012	50.24	26.6	16.25	--	--	10.35

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
MW-23						
08/06/2002	42.45	27.96	16.05	--	--	11.91
01/20/2004	42.45	27.96	15.67	--	--	12.29
04/26/2004	42.45	27.96	15.63	--	--	12.33
07/23/2004	42.45	27.96	16.77	--	--	11.19
10/18/2004	42.45	27.96	17.9	--	--	10.06
01/18/2005	42.45	27.96	17.32	--	--	10.64
04/25/2005	42.45	27.96	17.06	--	--	10.9
07/18/2005	42.45	27.96	16.68	--	--	11.28
10/17/2005	42.45	27.96	17.98	--	--	9.98
01/17/2006	42.45	27.96	13.34	--	--	14.62
04/24/2006	42.45	27.96	14.29	--	--	13.67
07/31/2006	42.45	27.96	16.47	--	--	11.49
10/23/2006	42.45	27.96	18.28	--	--	9.68
01/08/2007	42.45	27.96	14.94	--	--	13.02
04/09/2007	42.45	27.96	15.21	--	--	12.75
08/06/2007	42.45	27.96	17.2	--	--	10.76
01/07/2008	42.45	27.96	16.18	--	--	11.78
08/04/2008	42.45	27.96	16.69	--	--	11.27
10/01/2008	42.45	27.96	18.29	--	--	9.67
01/20/2009	42.45	27.96	16.49	--	--	11.47
04/01/2009	42.45	27.96	17.26	--	--	10.7
07/30/2009	42.45	27.96	17.74	--	--	10.22
01/05/2010	42.45	27.96	17.82	--	--	10.14
08/10/2010	42.45	27.96	16.45	--	--	11.51
08/02/2011	42.45	27.96	NM	--	--	NA
01/06/2012	42.45	27.96	NA	--	--	NA
MW-25						
08/06/2002	56.04	32.08	23.01	--	--	9.07
01/20/2004	56.04	32.08	22.33	--	--	9.75
04/26/2004	56.04	32.08	22.82	--	--	9.26
07/23/2004	56.04	32.08	24	--	--	8.08
10/18/2004	56.04	32.08	24.14	--	--	7.94
01/18/2005	56.04	32.08	23.07	--	--	9.01
04/25/2005	56.04	32.08	23.14	--	--	8.94
07/18/2005	56.04	32.08	23.34	--	--	8.74
10/17/2005	56.04	32.08	24.4	--	--	7.68
01/17/2006	56.04	32.08	18.68	--	--	13.4
04/24/2006	56.04	32.08	20.22	--	--	11.86
07/31/2006	56.04	32.08	23.47	--	--	8.61

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
10/23/2006	56.04	32.08	24.85	--	--	7.23
01/08/2007	56.04	32.08	20.47	--	--	11.61
04/09/2007	56.04	32.08	21.55	--	--	10.53
08/06/2007	56.04	32.08	23.76	--	--	8.32
01/07/2008	56.04	32.08	21.65	--	--	10.43
08/04/2008	56.04	32.08	23.46	--	--	8.62
10/01/2008	56.04	32.08	24.42	--	--	7.66
01/20/2009	56.04	32.08	22.29	--	--	9.79
04/01/2009	56.04	32.08	22.85	--	--	9.23
07/30/2009	56.04	32.08	24.04	--	--	8.04
08/10/2010	56.04	32.08	23.08	--	--	9
01/10/2011	56.04	32.08	21.99	--	--	10.09
08/02/2011	56.04	32.08	20.98	--	--	11.1
01/06/2012	56.04	32.08	22.1	--	--	9.98
MW-29						
08/06/2002	54.56	22.01	12.17	--	--	9.84
01/20/2004	54.56	22.01	11.41	--	--	10.6
04/26/2004	54.56	22.01	11.79	--	--	10.22
MW-29D						
10/06/2004[a]	55.84	25.42	16.78	--	--	8.64
10/06/2004[b]	55.84	25.42	16.65	--	--	8.77
10/18/2004	55.84	25.42	16.35	--	--	9.07
01/18/2005	55.84	25.42	15.67	--	--	9.75
04/25/2005	55.84	25.42	15.43	--	--	9.99
07/18/2005	55.84	25.42	15.49	--	--	9.93
10/17/2005	55.84	25.42	16.62	--	--	8.8
01/17/2006	55.84	25.42	11.26	--	--	14.16
04/24/2006	55.84	25.42	12.66	--	--	12.76
07/31/2006	55.84	25.42	15.32	--	--	10.1
10/23/2006	55.84	25.42	17	--	--	8.42
01/08/2007	55.84	25.42	12.91	--	--	12.51
04/09/2007	55.84	25.42	13.78	--	--	11.64
08/06/2007	55.84	25.42	15.9	--	--	9.52
01/07/2008	55.84	25.42	14.37	--	--	11.05
08/04/2008	55.84	25.42	15.55	--	--	9.87
10/01/2008	55.84	25.42	16.79	--	--	8.63
01/20/2009	55.84	25.42	14.97	--	--	10.45
04/01/2009	55.84	25.42	15.49	--	--	9.93
07/30/2009	55.84	25.42	16.44	--	--	8.98
01/05/2010	55.84	25.42	15.67	--	--	9.75

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
08/10/2010^{C}	56.04	25.42	15.41	--	--	10.01
01/10/2011	56.04	25.42	14.7	--	--	10.72
08/02/2011	56.04	25.42	13.39	--	--	12.03
01/06/2012	56.04	25.42	15.09	--	--	10.33
MW-38						
08/06/2002	52.51	30.55	19.04	NP	NP	11.51
01/20/2004	52.51	30.55	18.52	NP	NP	12.03
04/26/2004	52.51	30.55	18.7	NP	NP	11.85
07/23/2004	52.51	30.55	19.82	NP	NP	10.73
10/18/2004	52.51	30.55	20.86	NP	NP	9.69
01/18/2005	52.51	30.55	20.15	NP	NP	10.4
04/25/2005	52.51	30.55	19.95	NP	NP	10.6
07/18/2005	52.51	30.55	19.66	NP	NP	10.89
10/17/2005	52.51	30.55	20.88	NP	NP	9.67
01/17/2006	52.51	30.55	16.22	NP	NP	14.33
04/24/2006	52.51	30.55	17.41	NP	NP	13.14
07/31/2006	52.51	30.55	19.65	NP	NP	10.9
10/23/2006	52.35	30.55	21.27	NP	NP	9.28
01/08/2007	52.35	30.55	18	NP	NP	12.55
04/09/2007	52.35	30.55	18.41	NP	NP	12.14
MW-38						
08/06/2007	52.35	30.55	20	NP	NP	10.55
01/07/2008	52.35	30.55	19.27	NP	NP	11.28
08/04/2008	52.35	30.55	19.87	NP	NP	10.68
10/01/2008	52.35	30.55	21.27	--	--	9.28
01/20/2009	52.35	30.55	19.47	--	--	11.08
04/01/2009	52.35	30.55	19.85	--	--	10.7
07/30/2009	52.35	30.55	20.69	--	--	9.86
01/05/2010	52.35	30.55	21.14	--	--	9.41
08/10/2010	52.35	30.55	19.51	--	--	11.04
01/10/2011	52.35	30.55	18.52	--	--	12.03
08/02/2011	52.35	30.55	17.84	--	--	12.71
01/06/2012	52.35	30.55	19.37	--	--	11.18
MW-42						
08/06/2002	50.69	32.8	20.72	NP	NP	12.08
01/20/2004	50.69	32.8	20.46	NP	NP	12.34
04/26/2004	50.69	32.8	20.45	NP	NP	12.35
07/23/2004	50.69	32.8	21.54	NP	NP	11.26
10/18/2004	50.69	32.8	22.75	NP	NP	10.05
01/18/2005	50.69	32.8	21.98	NP	NP	10.82
04/25/2005	50.69	32.8	21.8	NP	NP	11
07/18/2005	50.69	32.8	21.41	NP	NP	11.39

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
10/17/2005	50.69	32.8	22.74	NP	NP	10.06
01/17/2006	50.69	32.8	18.42	NP	NP	14.38
04/24/2006	50.69	32.8	19.3	NP	NP	13.5
07/31/2006	50.69	32.8	21.33	NP	NP	11.47
10/23/2006	50.65	32.8	22.92	NP	NP	9.88
01/08/2007	50.65	32.8	19.7	NP	NP	13.1
04/09/2007	50.65	32.8	20.03	NP	NP	12.77
08/06/2007	50.65	32.8	--	--	--	--
01/07/2008	50.65	32.8	--	--	--	--
08/04/2008	50.65	32.8	21.41	--	--	11.39
10/01/2008	50.65	32.8	22.96	--	--	9.84
01/20/2009	50.65	32.8	21.19	--	--	11.61
04/01/2009	50.65	32.8	21.93	--	--	10.87
07/30/2009	50.65	32.8	22.39	--	--	10.41
01/05/2010	50.65	32.8	22.56	--	--	10.24
08/10/2010	50.65	32.8	21.07	--	--	11.73
01/10/2011	50.65	32.8	19.95	--	--	12.85
08/02/2011	50.65	32.8	19.37	--	--	13.43
01/06/2012	50.65	32.8	21.22	--	--	11.58
MW-43						
08/06/2002	38.25	32.96	20.92	NP	NP	12.04
01/20/2004	38.25	32.96	20.6	NP	NP	12.36
04/26/2004	38.25	32.96	20.58	NP	NP	12.38
07/23/2004	38.25	32.96	21.68	NP	NP	11.28
10/18/2004	38.25	32.96	22.89	NP	NP	10.07
01/18/2005	38.25	32.96	22.15	NP	NP	10.81
04/25/2005	38.25	32.96	21.97	NP	NP	10.99
07/18/2005	38.25	32.96	21.6	NP	NP	11.36
10/17/2005	38.25	32.96	22.89	NP	NP	10.07
01/17/2006	38.25	32.96	18.35	NP	NP	14.61
04/24/2006	38.25	32.96	19.42	NP	NP	13.54
07/31/2006	38.25	32.96	21.46	NP	NP	11.5
10/23/2006	38.25	32.96	23.08	NP	NP	9.88
01/08/2007	38.25	32.96	19.92	NP	NP	13.04
04/09/2007	38.25	32.96	20.23	NP	NP	12.73
08/06/2007	38.25	32.96	--	--	--	--
01/07/2008	38.25	32.96	--	--	--	--
08/04/2008	38.25	32.96	21.5	--	--	11.46
10/01/2008	38.25	32.96	23.2	--	--	9.76
01/20/2009	38.25	32.96	21.38	--	--	11.58

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
04/01/2009	38.25	32.96	22.1	--	--	10.86
07/30/2009	38.25	32.96	22.55	--	--	10.41
08/10/2010	38.25	32.96	21.21	--	--	11.75
01/10/2011	38.25	32.96	20.13	--	--	12.83
08/02/2011	38.25	32.96	19.52	--	--	13.44
01/06/2012	38.25	32.96	21.37	--	--	11.59
MW-45D						
07/23/2004	50.12	22.06	16.68	--	--	5.38
10/06/2004[a]	50.12	22.06	17.61	--	--	4.45
10/06/2004[b]	50.12	22.06	17.3	--	--	4.76
10/18/2004	50.12	22.06	16.04	--	--	6.02
01/18/2005	50.12	22.06	14.94	--	--	7.12
04/25/2005	50.12	22.06	14.92	--	--	7.14
07/18/2005	50.12	22.06	15.81	--	--	6.25
10/17/2005	50.12	22.06	16.71	--	--	5.35
01/17/2006	50.12	22.06	10.53	--	--	11.53
04/24/2006	50.12	22.06	11.79	--	--	10.27
07/31/2006	50.12	22.06	16	--	--	6.06
10/23/2006	50.12	22.06	17.22	--	--	4.84
01/08/2007	50.12	22.06	11.71	--	--	10.35
04/09/2007	50.12	22.06	13.67	--	--	8.39
08/06/2007	50.12	22.06	16.32	--	--	5.74
01/07/2008	50.12	22.06	13.55	--	--	8.51
08/04/2008	50.12	22.06	16.09	--	--	5.97
10/01/2008	50.12	22.06	16.83	--	--	5.23
01/20/2009	50.12	22.06	14.51	--	--	7.55
04/01/2009	50.12	22.06	14.73	--	--	7.33
MW-45D						
07/30/2009	50.12	22.06	16.27	--	--	5.79
01/05/2010	50.12	22.06	13.78	--	--	8.28
1/10/2011[c]	50.82	22.15	15.23	--	--	6.92
08/02/2011	50.82	22.15	13.84	--	--	8.31
01/06/2012	50.82	22.15	15.3	--	--	6.85
MW-46D						
07/23/2004	50.09	21.2	15.93	--	--	5.27
10/06/2004[a]	50.09	21.2	16.9	--	--	4.3
10/06/2004[b]	50.09	21.2	16.6	--	--	4.6
10/18/2004	50.09	21.2	15.3	--	--	5.9
01/18/2005	50.09	21.2	14.14	--	--	7.06

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
04/25/2005	50.09	21.2	14.15	--	--	7.05
07/18/2005	50.09	21.2	15.07	--	--	6.13
10/17/2005	50.09	21.2	15.96	--	--	5.24
01/17/2006	50.09	21.2	8.74	--	--	12.46
04/24/2006	50.09	21.2	11.02	--	--	10.18
07/31/2006	50.09	21.2	15.37	--	--	5.83
10/23/2006	50.09	21.2	16.53	--	--	4.67
01/08/2007	50.09	21.2	10.95	--	--	10.25
04/09/2007	50.09	21.2	12.91	--	--	8.29
08/09/2007	50.09	21.2	15.58	--	--	5.62
01/07/2008	50.09	21.2	12.77	--	--	8.43
08/04/2008	50.09	21.2	15.42	--	--	5.78
10/01/2008	50.09	21.2	16.08	--	--	5.12
01/20/2009	50.09	21.2	13.76	--	--	7.44
04/01/2009	50.09	21.2	13.8	--	--	7.4
07/30/2009	50.09	21.2	15.22	--	--	5.98
01/05/2010	50.09	21.2	12.95	--	--	8.25
01/10/2011	50.09	14.18	8.69	--	--	5.49
08/02/2011	50.09	14.18	7.31	--	--	6.87
01/06/2012	50.09	14.18	8.71	--	--	5.47
MW-47D						
07/23/2004	50.81	19.56	14	--	--	5.56
10/06/2004[a]	50.81	19.56	14.9	--	--	4.66
10/06/2004[b]	50.81	19.56	14.67	--	--	4.89
10/18/2004	50.81	19.56	13.32	--	--	6.24
01/18/2005	50.81	19.56	12.35	--	--	7.21
04/25/2005	50.81	19.56	12.24	--	--	7.32
07/18/2005	50.81	19.56	13.13	--	--	6.43
10/17/2005	50.81	19.56	14	--	--	5.56
01/17/2006	50.81	19.56	7.04	--	--	12.52
04/24/2006	50.81	19.56	9.23	--	--	10.33
07/31/2006	50.81	19.56	13.48	--	--	6.08
10/23/2006	50.81	19.56	14.59	--	--	4.97
01/08/2007	50.81	19.56	9.2	--	--	10.36
04/09/2007	50.81	19.56	11.04	--	--	8.52
08/06/2007	50.81	19.56	13.72	--	--	5.84
01/07/2008	50.81	19.56	10.94	--	--	8.62
08/04/2008	50.81	19.56	13.6	--	--	5.96
10/01/2008	50.81	19.56	14.18	--	--	5.38
01/20/2009	50.81	19.56	12.01	--	--	7.55

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
04/01/2009	50.81	19.56	12.1	--	--	7.46
07/30/2009	50.81	19.56	13.84	--	--	5.72
01/05/2010	38.25	19.56	12.76	--	--	6.80
08/10/2010	38.25	19.56	13.35	--	--	6.21
01/10/2011	38.25	19.56	12.25	--	--	7.31
08/02/2011	38.25	19.56	11.08	--	--	8.48
01/06/2012	38.25	19.56	12.42	--	--	7.14
MW-49D						
08/04/2008	41.35	26.72	17.48	--	--	9.24
10/01/2008	41.35	26.72	18.5	--	--	8.22
01/20/2009	41.35	26.72	15.88	--	--	10.84
04/01/2009	41.35	26.72	16.3	--	--	10.42
07/30/2009	41.35	26.72	16.61	--	--	10.11
01/05/2010	41.35	26.72	15.86	--	--	10.86
08/10/2010	41.35	26.72	15.19	--	--	11.53
01/10/2011	41.35	26.72	14.15	--	--	12.57
08/02/2011	41.35	26.72	13.52	--	--	13.20
01/06/2012	41.35	26.72	15.06	--	--	11.66
MW-51D						
08/04/2008	57.56	26.8	19.67	--	--	7.13
10/01/2008	57.56	26.8	20.61	--	--	6.19
01/20/2009	57.56	26.8	18.38	--	--	8.42
04/01/2009	57.56	26.8	18.96	--	--	7.84
07/30/2009	57.56	26.8	19.95	--	--	6.85
01/05/2010	57.56	26.8	18.21	--	--	8.59
08/10/2010	57.56	26.8	19.32	--	--	7.48
01/10/2011	57.56	26.8	18.38	--	--	8.42
08/02/2011	57.56	26.8	17.12	--	--	9.68
01/06/2012	57.56	26.8	18.5	--	--	8.3
MW-52D						
08/04/2008	43.31	25.99	15.93	--	--	10.06
10/01/2008	43.31	25.99	18.23	--	--	7.76
01/20/2009	43.31	25.99	15.95	--	--	10.04
04/01/2009	43.31	25.99	16.77	--	--	9.22
07/30/2009	43.31	25.99	16.81	--	--	9.18
01/05/2010	43.31	25.99	16.72	--	--	9.27
08/10/2010	43.31	25.99	15.2	--	--	10.79
01/10/2011	43.31	25.99	14.05	--	--	11.94
08/02/2011	43.31	25.99	13.6	--	--	12.39
01/06/2012	43.31	25.99	14.92	--	--	11.07

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
MW-53D						
08/04/2008	47.8	28.64	19.34	--	--	9.3
10/01/2008	47.8	28.64	21.06	--	--	7.58
01/20/2009	47.8	28.64	18.69	--	--	9.95
04/01/2009	47.8	28.64	19.41	--	--	9.23
07/30/2009	47.8	28.64	19.53	--	--	9.11
01/05/2010	47.8	28.64	19.43	--	--	9.21
08/10/2010	47.8	28.64	17.97	--	--	10.67
01/10/2011	47.8	28.64	16.85	--	--	11.79
08/02/2011	47.8	28.64	16.38	--	--	12.26
01/06/2012	47.8	28.64	17.72	--	--	10.92
MW-55D						
01/10/2011	78.35	27.10	21.68	--	--	5.42
08/02/2011	78.35	27.10	19.98	--	--	7.12
01/06/2012	78.35	27.10	21.24	--	--	5.86
MW-57D						
08/04/2008	78.11	26.44	20.59	--	--	5.85
10/01/2008	78.11	26.44	21.26	--	--	5.18
01/20/2009	78.11	26.44	18.86	--	--	7.58
04/01/2009	78.11	26.44	19.47	--	--	6.97
07/30/2009	78.11	26.44	20.59	--	--	5.85
01/05/2010	78.11	26.44	18.3	--	--	8.14
08/10/2010	78.11	26.44	20.25	--	--	6.19
01/10/2011	78.11	26.44	19.4	--	--	7.04
08/02/2011	78.11	26.44	17.92	--	--	8.52
01/06/2012	78.11	26.44	19.19	--	--	7.25
MW-58D						
08/04/2008	78.23	27.73	22.58	--	--	5.15
10/01/2008	78.23	27.73	23.1	--	--	4.63
01/20/2009	78.23	27.73	20.53	--	--	7.2
04/01/2009	78.23	27.73	21.23	--	--	6.5
07/30/2009	78.23	27.73	22.31	--	--	5.42
01/05/2010	78.23	27.73	19.77	--	--	7.96
08/10/2010	78.23	27.73	22.16	--	--	5.57
01/10/2011	78.23	27.73	21.49	--	--	6.24
08/02/2011	78.23	27.73	19.66	--	--	8.07
01/06/2012	78.23	27.73	20.95	--	--	6.78

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
<u>Lower Water-Bearing Zone</u>						
MW-22						
08/06/2002	105.35	26.67	19.11	--	--	7.56
01/20/2004	105.35	26.67	18.32	--	--	8.35
04/26/2004	105.35	26.67	18.96	--	--	7.71
07/23/2004	105.35	26.67	20.17	--	--	6.5
10/18/2004	105.35	26.67	19.87	--	--	6.8
01/18/2005	105.35	26.67	18.82	--	--	7.85
04/25/2005	105.35	26.67	18.97	--	--	7.7
07/18/2005	105.35	26.67	19.39	--	--	7.28
10/17/2005	105.35	26.67	20.37	--	--	6.3
01/17/2006	105.35	26.67	13.94	--	--	12.73
04/24/2006	105.35	26.67	15.78	--	--	10.89
07/31/2006	105.35	26.67	19.63	--	--	7.04
10/23/2006	105.35	26.67	20.96	--	--	5.71
01/08/2007	105.35	26.67	15.95	--	--	10.72
04/09/2007	105.35	26.67	17.46	--	--	9.21
08/06/2007	105.35	26.67	20	--	--	6.67
01/07/2008	105.35	26.67	17.55	--	--	9.12
08/04/2008	105.35	26.67	19.72	--	--	6.95
10/01/2008	105.35	26.67	20.55	--	--	6.12
01/20/2009	105.35	26.67	18.15	--	--	8.52
04/01/2009	105.35	26.67	18.71	--	--	7.96
07/30/2009	105.35	26.67	19.95	--	--	6.72
01/05/2010	105.35	26.67	18.15	--	--	8.52
08/10/2010	105.35	26.67	19.12	--	--	7.55
01/10/2011	105.35	26.67	18.09	--	--	8.58
08/02/2011	105.35	26.67	16.74	--	--	9.93
01/06/2012	105.35	26.67	17.56	--	--	9.11
MW-33						
08/06/2002	81.62	32.14	23.98	--	--	8.16
01/20/2004	81.62	32.14	23.2	--	--	8.94
04/26/2004	81.62	32.14	23.76	--	--	8.38
07/23/2004	81.62	32.14	24.97	--	--	7.17
10/18/2004	81.62	32.14	24.8	--	--	7.34
01/18/2005	81.62	32.14	23.92	--	--	8.22
04/25/2005	81.62	32.14	23.74	--	--	8.4
07/18/2005	81.62	32.14	24.28	--	--	7.86
10/17/2005	81.62	32.14	25.22	--	--	6.92
01/17/2006	81.62	32.14	19.1	--	--	13.04

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
04/24/2006	81.62	32.14	20.87	--	--	11.27
07/31/2006	81.62	32.14	24.49	--	--	7.65
10/23/2006	81.62	32.14	25.73	--	--	6.41
01/08/2007	81.62	32.14	21.05	--	--	11.09
04/09/2007	81.62	32.14	22.39	--	--	9.75
08/06/2007	81.62	32.14	24.8	--	--	7.34
01/07/2008	81.62	32.14	22.51	--	--	9.63
08/04/2008	81.62	32.14	24.37	--	--	7.77
10/01/2008	81.62	32.14	25.37	--	--	6.77
01/20/2009	81.62	32.14	23.33	--	--	8.81
04/01/2009	81.62	32.14	23.57	--	--	8.57
07/30/2009	81.62	32.14	25	--	--	7.14
01/05/2010	81.62	32.14	23.22	--	--	8.92
08/10/2010	81.62	32.14	24.13	--	--	8.01
01/10/2011	81.62	32.14	23.08	--	--	9.06
08/02/2011	81.62	32.14	22.15	--	--	9.99
01/06/2012	81.62	32.14	23.39	--	--	8.75
MW-34						
08/06/2002	106.45	27.53	20.62	--	--	6.91
01/20/2004	106.45	27.53	19.74	--	--	7.79
04/26/2004	106.45	27.53	20.5	--	--	7.03
07/23/2004	106.45	27.53	21.63	--	--	5.9
10/18/2004	106.45	27.53	21.22	--	--	6.31
01/18/2005	106.45	27.53	20.13	--	--	7.4
04/25/2005	106.45	27.53	20.09	--	--	7.44
07/18/2005	106.45	27.53	20.82	--	--	6.71
10/17/2005	106.45	27.53	21.75	--	--	5.78
01/17/2006	106.45	27.53	14.94	--	--	12.59
04/24/2006	106.45	27.53	17.03	--	--	10.5
07/31/2006	106.45	27.53	21.1	--	--	6.43
10/23/2006	106.45	27.53	22.36	--	--	5.17
01/08/2007	106.45	27.53	17.04	--	--	10.49
04/09/2007	106.45	27.53	18.77	--	--	8.76
08/06/2007	106.45	27.53	21.37	--	--	6.16
01/07/2008	106.45	27.53	18.76	--	--	8.77
08/04/2008	106.45	27.53	21.18	--	--	6.35
10/01/2008	106.45	27.53	21.93	--	--	5.6
01/20/2009	106.45	27.53	19.69	--	--	7.84
04/01/2009	106.45	27.53	24.08	--	--	3.45
07/30/2009	106.45	27.53	21.41	--	--	6.12

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
01/05/2010	106.45	27.53	19.11	--	--	8.42
08/10/2010	106.45	27.53	20.85	--	--	6.68
01/10/2011	106.45	27.53	19.92	--	--	7.61
08/02/2011	106.45	27.53	18.64	--	--	8.89
01/06/2012	106.45	27.53	19.9	--	--	7.63
MW-35						
08/06/2002	92.12	26.93	20.1	--	--	6.83
01/20/2004	92.12	26.93	19.22	--	--	7.71
04/26/2004	92.12	26.93	20	--	--	6.93
07/23/2004	92.12	26.93	21.14	--	--	5.79
10/18/2004	92.12	26.93	20.73	--	--	6.2
01/18/2005	92.12	26.93	19.57	--	--	7.36
04/25/2005	92.12	26.93	19.65	--	--	7.28
07/18/2005	92.12	26.93	20.34	--	--	6.59
10/17/2005	92.12	26.93	21.34	--	--	5.59
01/17/2006	92.12	26.93	14.35	--	--	12.58
04/24/2006	92.12	26.93	16.45	--	--	10.48
07/31/2006	92.12	26.93	20.6	--	--	6.33
10/23/2006	92.12	26.93	21.89	--	--	5.04
01/08/2007	92.12	26.93	16.52	--	--	10.41
04/09/2007	92.12	26.93	18.25	--	--	8.68
08/06/2007	92.12	26.93	20.84	--	--	6.09
01/07/2008	92.12	26.93	18.24	--	--	8.69
08/04/2008	92.12	26.93	20.88	--	--	6.05
10/01/2008	92.12	26.93	21.48	--	--	5.45
01/20/2009	92.12	26.93	19.07	--	--	7.86
04/01/2009	92.12	26.93	19.6	--	--	7.33
07/30/2009	92.12	26.93	20.8	--	--	6.13
01/05/2010	92.12	26.93	18.72	--	--	8.21
08/10/2010	92.12	26.93	20.4	--	--	6.53
01/10/2011	92.12	26.93	19.51	--	--	7.42
08/02/2011	92.12	26.93	18.12	--	--	8.81
01/06/2012	92.12	26.93	19.31	--	--	7.62
MW-36						
08/06/2002	109.49	27.57	20.14	--	--	7.43
01/20/2004	109.49	27.57	18.94	--	--	8.63
04/26/2004	109.49	27.57	20.02	--	--	7.55
07/23/2004	109.49	27.57	21.19	--	--	6.38
10/18/2004	109.49	27.57	20.85	--	--	6.72
01/18/2005	109.49	27.57	19.78	--	--	7.79

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
04/25/2005	109.49	27.57	19.96	--	--	7.61
07/18/2005	109.49	27.57	20.41	--	--	7.16
10/17/2005	109.49	27.57	21.39	--	--	6.18
01/17/2006	109.49	27.57	14.83	--	--	12.74
04/24/2006	109.49	27.57	16.72	--	--	10.85
07/31/2006	109.49	27.57	20.63	--	--	6.94
10/23/2006	109.49	27.57	21.93	--	--	5.64
01/08/2007	109.49	27.57	16.87	--	--	10.7
04/09/2007	109.49	27.57	18.42	--	--	9.15
08/06/2007	109.49	27.57	21	--	--	6.57
01/07/2008	109.49	27.57	18.51	--	--	9.06
08/04/2008	109.49	27.57	20.6	--	--	6.97
10/01/2008	109.49	27.57	21.57	--	--	6
01/20/2009	109.49	27.57	19.16	--	--	8.41
04/01/2009	109.49	27.57	19.71	--	--	7.86
07/30/2009	109.49	27.57	20.97	--	--	6.6
01/05/2010	109.49	27.57	19.14	--	--	8.43
08/10/2010	109.49	27.57	20.36	--	--	7.21
01/10/2011	109.49	27.57	19.42	--	--	8.15
08/02/2011	109.49	27.57	18.3	--	--	9.27
01/06/2012	109.49	27.57	19.33	--	--	8.24
MW-37						
08/06/2002	108.77	31.94	23.71	--	--	8.23
01/20/2004	108.77	31.94	22.89	--	--	9.05
04/26/2004	108.77	31.94	23.43	--	--	8.51
07/23/2004	108.77	31.94	24.62	--	--	7.32
10/18/2004	108.77	31.94	24.57	--	--	7.37
01/18/2005	108.77	31.94	23.4	--	--	8.54
04/25/2005	108.77	31.94	23.53	--	--	8.41
07/18/2005	108.77	31.94	23.87	--	--	8.07
10/17/2005	108.77	31.94	24.9	--	--	7.04
01/17/2006	108.77	31.94	18.92	--	--	13.02
04/24/2006	108.77	31.94	20.54	--	--	11.4
07/31/2006	108.77	31.94	24.09	--	--	7.85
10/23/2006	108.77	31.94	25.4	--	--	6.54
01/08/2007	108.77	31.94	20.71	--	--	11.23
04/09/2007	108.77	31.94	22	--	--	9.94
08/06/2007	108.77	31.94	24.39	--	--	7.55
01/07/2008	108.77	31.94	21.97	--	--	9.97
08/04/2008	108.77	31.94	24.07	--	--	7.87

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
10/01/2008	108.77	31.94	24.9	--	--	7.04
01/20/2009	108.77	31.94	22.64	--	--	9.3
04/01/2009	108.77	31.94	23.19	--	--	8.75
07/30/2009	108.77	31.94	24.54	--	--	7.4
01/05/2010	108.77	31.94	22.93	--	--	9.01
08/10/2010	108.77	31.94	23.77	--	--	8.17
01/10/2011	108.77	31.94	22.71	--	--	9.23
08/02/2011	108.77	31.94	21.7	--	--	10.24
01/06/2012	108.77	31.94	22.62	--	--	9.32
MW-40						
08/06/2002	81.48	32.85	24.73	--	--	8.12
01/20/2004	81.48	32.85	23.93	--	--	8.92
04/26/2004	81.48	32.85	24.52	--	--	8.33
07/23/2004	81.48	32.85	25.85	--	--	7
10/18/2004	81.48	32.85	25.61	--	--	7.24
01/18/2005	81.48	32.85	23.7	--	--	9.15
04/25/2005	81.48	32.85	23.98	--	--	8.87
07/18/2005	81.48	32.85	24.6	--	--	8.25
10/17/2005	81.48	32.85	25.91	--	--	6.94
01/17/2006	81.48	32.85	19.61	--	--	13.24
04/24/2006	81.48	32.85	21.29	--	--	11.56
07/31/2006	81.48	32.85	24.92	--	--	7.93
10/23/2006	81.48	32.85	26.19	--	--	6.66
01/08/2007	81.48	32.85	21.32	--	--	11.53
04/09/2007	81.48	32.85	22.79	--	--	10.06
08/06/2007	81.48	32.85	--	--	--	--
01/07/2008	81.48	32.85	22.6	--	--	10.25
08/04/2008	81.48	32.85	25	--	--	7.85
10/01/2008	81.48	32.85	25.8	--	--	7.05
01/20/2009	81.48	32.85	23.49	--	--	9.36
04/01/2009	81.48	32.85	22.1	--	--	10.75
07/30/2009	81.48	32.85	25.4	--	--	7.45
01/05/2010	81.48	32.85	23.74	--	--	9.11
08/10/2010	81.48	32.85	24.55	--	--	8.3
01/10/2011	81.48	32.85	23.46	--	--	9.39
08/02/2011	81.48	32.85	22.5	--	--	10.35
01/06/2012	81.48	32.85	23.43	--	--	9.42

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
MW-41						
08/06/2002	95.43	33	24.99	--	--	8.01
01/20/2004	95.43	33	24.22	--	--	8.78
04/26/2004	95.43	33	24.89	--	--	8.11
07/23/2004	95.43	33	25.85	--	--	7.15
10/18/2004	95.43	33	25.76	--	--	7.24
01/18/2005	95.43	33	24.7	--	--	8.3
04/25/2005	95.43	33	24.38	--	--	8.62
07/18/2005	95.43	33	24.82	--	--	8.18
10/17/2005	95.43	33	26.15	--	--	6.85
01/17/2006	95.43	33	19.92	--	--	13.08
04/24/2006	95.43	33	21.29	--	--	11.71
07/31/2006	95.43	33	25.15	--	--	7.85
10/23/2006	95.43	33	26.19	--	--	6.81
01/08/2007	95.43	33	21.42	--	--	11.58
04/09/2007	95.43	33	22.52	--	--	10.48
08/06/2007	95.43	33	--	--	--	--
01/07/2008	95.43	33	24.72	--	--	8.28
08/04/2008	95.43	33	22.45	--	--	10.55
10/01/2008	95.43	33	23.27	--	--	9.73
01/20/2009	95.43	33	23.67	--	--	9.33
04/01/2009	95.43	33	23.77	--	--	9.23
07/30/2009	95.43	33	23.64	--	--	9.36
01/05/2010	95.43	33	23.76	--	--	9.24
08/10/2010	95.43	33	26.02	--	--	6.98
01/10/2011	95.43	33	28.4	--	--	4.6
08/02/2011	95.43	33	28.14	--	--	4.86
01/06/2012	95.43	33	27.95	--	--	5.05
MW-54						
08/04/2008	103.5	27.05	20.9	--	--	6.15
10/01/2008	103.5	27.05	21.58	--	--	5.47
01/20/2009	103.5	27.05	19.26	--	--	7.79
04/01/2009	103.5	27.05	19.81	--	--	7.24
07/30/2009	103.5	27.05	21.01	--	--	6.04
01/05/2010	103.5	27.05	18.76	--	--	8.29
08/10/2010	103.5	27.05	20.54	--	--	6.51
01/10/2011	103.5	27.05	19.6	--	--	7.45
08/02/2011	103.5	27.05	18.28	--	--	8.77
01/06/2012	103.5	27.05	19.53	--	--	7.52

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
MW-55						
08/04/2008	102.6	27.87	22.34	--	--	5.53
10/01/2008	102.6	27.87	22.91	--	--	4.96
01/20/2009	102.6	27.87	20.44	--	--	7.43
04/01/2009	102.6	27.87	21.12	--	--	6.75
07/30/2009	102.6	27.87	22.19	--	--	5.68
01/05/2010	102.6	27.87	19.8	--	--	8.07
08/10/2010	102.6	27.87	21.96	--	--	5.91
01/10/2011	102.6	27.87	21.14	--	--	6.73
08/02/2011	102.6	27.87	19.55	--	--	8.32
01/06/2012	102.6	27.87	20.82	--	--	7.05
MW-56						
08/04/2008	116.1	26.48	20.85	--	--	5.63
10/01/2008	116.1	26.48	21.42	--	--	5.06
01/20/2009	116.1	26.48	18.96	--	--	7.52
04/01/2009	116.1	26.48	19.59	--	--	6.89
07/30/2009	116.1	26.48	20.71	--	--	5.77
01/05/2010	116.1	26.48	18.37	--	--	8.11
08/10/2010	116.1	26.48	20.43	--	--	6.05
01/10/2011	116.1	26.48	19.64	--	--	6.84
08/02/2011	116.1	26.48	18.05	--	--	8.43
01/06/2012	116.1	26.48	19.31	--	--	7.17
MW-59						
08/04/2008	95.85	24.26	17.35	--	--	6.91
10/01/2008	95.85	24.26	18.88	--	--	5.38
01/20/2009	95.85	24.26	16.49	--	--	7.77
04/01/2009	95.85	24.26	17.03	--	--	7.23
07/30/2009	95.85	24.26	18.2	--	--	6.06
01/05/2010	95.85	24.26	16	--	--	8.26
08/10/2010	95.85	24.26	17.82	--	--	6.44
01/10/2011	95.85	24.26	16.98	--	--	7.28
08/02/2011	95.85	24.26	15.53	--	--	8.73
01/06/2012	95.85	24.26	16.68			7.58
MW-60						
08/04/2008	76.8	15.26	8.11	--	--	7.15
10/01/2008	76.8	15.26	9.74	--	--	5.52
01/20/2009	76.8	15.26	7	--	--	8.26
04/01/2009	76.8	15.26	7.52	--	--	7.74
07/30/2009	76.8	15.26	8.87	--	--	6.39
01/05/2010	76.8	15.26	6.91	--	--	8.35
08/10/2010	76.8	15.26	8.64	--	--	6.62

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
01/10/2011	76.8	15.26	7.39	--	--	7.87
08/02/2011	76.8	15.26	6.25	--	--	9.01
01/06/2012	76.8	15.26	7.03	--	--	8.23
MW-61						
01/10/2011	105.37	18.3	12.4	--	--	5.9
08/02/2011	105.37	18.3	14.18	--	--	4.12
01/06/2012	105.37	18.3	11.94	--	--	6.36
MW-62						
01/10/2011	117.81	27.44	21.22	--	--	6.22
08/02/2011	117.81	27.44	19.78	--	--	7.66
01/06/2012	117.81	27.44	21	--	--	6.44
Carty Lake Wells: Shallow and Deep Upper Water-Bearing Zone						
MW-32						
08/06/2002	18.16	22.81	11.53	--	--	11.28
01/20/2004	18.16	22.81	8.91	--	--	13.9
04/26/2004	18.16	22.81	10.6	--	--	12.21
07/23/2004	18.16	22.81	11.62	--	--	11.19
10/18/2004	18.16	22.81	11.8	--	--	11.01
01/18/2005	18.16	22.81	10.05	--	--	12.76
04/25/2005	18.16	22.81	9.69	--	--	13.12
07/18/2005	18.16	22.81	10.9	--	--	11.91
10/17/2005	18.16	22.81	11.77	--	--	11.04
01/17/2006	18.16	22.81	8.31	--	--	14.5
04/24/2006	18.16	22.81	9.87	--	--	12.94
07/31/2006	18.16	22.81	10.87	--	--	11.94
10/23/2006	18.16	22.81	11.74	--	--	11.07
01/08/2007	18.16	22.81	8.54	--	--	14.27
04/09/2007	18.16	22.81	9.83	--	--	12.98
08/06/2007	18.16	22.81	11.62	--	--	11.19
01/07/2008	18.16	22.81	8.88	--	--	13.93
08/04/2008	18.16	22.81	11.41	--	--	11.4
10/01/2008	18.16	22.81	12.21	--	--	10.6
01/20/2009	18.16	22.81	9.81	--	--	13
04/01/2009	18.16	22.81	10.14	--	--	12.67
07/30/2009	18.16	22.81	12.02	--	--	10.79
01/05/2010	18.16	22.81	9.41	--	--	13.4
08/10/2010	18.16	22.81	11.12	--	--	11.69
01/10/2011	18.16	22.81	9.6	--	--	13.21
08/02/2011	18.16	22.81	10.39	--	--	12.42
01/06/2012	18.16	22.81	9.87	--	--	12.94

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
USDFW-1						
08/06/2002	22.7	15.35	4.26	--	--	11.09
01/20/2004	22.7	15.35	3.65	--	--	11.7
04/26/2004	22.7	15.35	3.89	--	--	11.46
07/23/2004	22.7	15.35	5.05	--	--	10.3
10/18/2004	22.7	15.35	5.84	--	--	9.51
01/18/2005	22.7	15.35	5.16	--	--	10.19
04/25/2005	22.7	15.35	4.88	--	--	10.47
07/18/2005	22.7	15.35	4.65	--	--	10.7
10/17/2005	22.7	15.35	5.9	--	--	9.45
01/31/2006	22.7	15.35	3.32	--	--	12.03
04/24/2006	22.7	15.35	2.47	--	--	12.88
07/31/2006	22.7	15.35	4.76	--	--	10.59
10/23/2006	22.7	15.35	6.3	--	--	9.05
01/08/2007	22.7	15.35	2.86	--	--	12.49
04/09/2007	22.7	15.35	3.41	--	--	11.94
08/06/2007	22.7	15.35	5.2	--	--	10.15
01/07/2008	22.7	15.35	4.11	--	--	11.24
08/04/2008	22.7	15.35	5.08	--	--	10.27
10/01/2008	22.7	15.35	6.4	--	--	8.95
01/20/2009	22.7	15.35	4.42	--	--	10.93
04/01/2009	22.7	15.35	5.04	--	--	10.31
07/30/2009	22.7	15.35	5.91	--	--	9.44
01/05/2010	22.7	15.35	5.94	--	--	9.41
08/10/2010	22.7	15.35	4.72	--	--	10.63
01/10/2011	22.7	15.35	3.67	--	--	11.68
08/02/2011	22.7	15.35	3.1	--	--	12.25
01/06/2012	22.7	15.35	4.37	--	--	10.98
USDFW-2						
08/06/2002	26	15.55	7.14	--	--	8.41
01/20/2004	26	15.55	5.97	--	--	9.58
04/26/2004	26	15.55	6.41	--	--	9.14
07/23/2004	26	15.55	7.8	--	--	7.75
10/18/2004	26	15.55	7.67	--	--	7.88
01/18/2005	26	15.55	6.61	--	--	8.94
04/25/2005	26	15.55	6.53	--	--	9.02
07/18/2005	26	15.55	6.75	--	--	8.8
10/17/2005	26	15.55	7.98	--	--	7.57
01/31/2006	26	15.55	2.68	--	--	12.87
04/24/2006	26	15.55	4.06	--	--	11.49

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
07/31/2006	26	15.55	7.25	--	--	8.3
10/23/2006	26	15.55	8.32	--	--	7.23
01/08/2007	26	15.55	4.17	--	--	11.38
04/09/2007	26	15.55	5.26	--	--	10.29
08/06/2007	26	15.55	7.58	--	--	7.97
01/07/2008	26	15.55	5.35	--	--	10.2
08/04/2008	26	15.55	7.26	--	--	8.29
10/01/2008	26	15.55	8.16	--	--	7.39
01/20/2009	26	15.55	5.88	--	--	9.67
04/01/2009	26	15.55	6.3	--	--	9.25
07/30/2009	26	15.55	7.73	--	--	7.82
01/05/2010	26	15.55	6.41	--	--	9.14
08/10/2010	26	15.55	6.81	--	--	8.74
01/10/2011	26	15.55	5.83	--	--	9.72
08/02/2011	26	15.55	5.17	--	--	10.38
01/06/2012	26	15.55	5.79	--	--	9.76
USDFW-3						
08/06/2002	38.5	15.91	9.03	--	--	6.88
01/20/2004	38.5	15.91	7.7	--	--	8.21
04/26/2004	38.5	15.91	8.39	--	--	7.52
07/23/2004	38.5	15.91	9.75	--	--	6.16
10/18/2004	38.5	15.91	9.4	--	--	6.51
01/18/2005	38.5	15.91	8.08	--	--	7.83
04/25/2005	38.5	15.91	8.39	--	--	7.52
07/18/2005	38.5	15.91	8.51	--	--	7.4
10/17/2005	38.5	15.91	9.91	--	--	6
01/31/2006	38.5	15.91	1.01	--	--	14.9
04/24/2006	38.5	15.91	5.16	--	--	10.75
07/31/2006	38.5	15.91	9.14	--	--	6.77
10/23/2006	38.5	15.91	10.38	--	--	5.53
01/08/2007	38.5	15.91	5.27	--	--	10.64
04/09/2007	38.5	15.91	6.85	--	--	9.06
08/06/2007	38.5	15.91	9.39	--	--	6.52
01/07/2008	38.5	15.91	6.72	--	--	9.19
08/04/2008	38.5	15.91	9.09	--	--	6.82
10/01/2008	38.5	15.91	10.17	--	--	5.74
01/20/2009	38.5	15.91	7.53	--	--	8.38
04/01/2009	38.5	15.91	8.01	--	--	7.9
07/30/2009	38.5	15.91	9.35	--	--	6.56
01/05/2010	38.5	15.91	7.53	--	--	8.38

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
08/10/2010	38.5	15.91	9.03	--	--	6.88
01/10/2011	38.5	15.91	7.92	--	--	7.99
08/02/2011	38.5	15.91	6.78	--	--	9.13
01/06/2012	38.5	15.91	7.61	--	--	8.3
RMW-1d						
08/06/2002	36.34	14.58	6.16	--	--	8.42
10/18/2004	36.34	14.58	6.86	--	--	7.72
01/18/2005	36.34	14.58	5.74	--	--	8.84
04/25/2005	36.34	14.58	5.85	--	--	8.73
07/18/2005	36.34	14.58	5.92	--	--	8.66
10/17/2005	36.34	14.58	7.18	--	--	7.4
01/17/2006	36.34	14.58	1.42	--	--	13.16
04/24/2006	36.34	14.58	2.95	--	--	11.63
07/31/2006	36.34	14.58	6.28	--	--	8.3
10/23/2006	36.34	14.58	7.57	--	--	7.01
01/08/2007	36.34	14.58	3.22	--	--	11.36
04/09/2007	36.34	14.58	4.33	--	--	10.25
08/06/2007	36.34	14.58	6.61	--	--	7.97
01/07/2008	36.34	14.58	4.47	--	--	10.11
08/04/2008	36.34	14.58	6.33	--	--	8.25
10/01/2008	36.34	14.58	7.38	--	--	7.2
01/20/2009	36.34	14.58	5.03	--	--	9.55
04/01/2009	36.34	14.58	5.57	--	--	9.01
07/30/2009	36.34	14.58	6.82	--	--	7.76
01/05/2010	36.34	14.58	5.46	--	--	9.12
08/10/2010	36.34	14.58	6.1	--	--	8.48
01/10/2011	36.34	14.58	4.86	--	--	9.72
08/02/2011	36.34	14.58	4.12	--	--	10.46
01/06/2012	36.34	14.58	4.99	--	--	9.59
RMW-1i						
08/06/2002	25.79	14.78	6.23	--	--	8.55
10/18/2004	25.79	14.78	6.87	--	--	7.91
01/18/2005	25.79	14.78	5.73	--	--	9.05
04/25/2005	25.79	14.78	5.82	--	--	8.96
07/18/2005	25.79	14.78	5.94	--	--	8.84
10/17/2005	25.79	14.78	7.19	--	--	7.59
01/17/2006	25.79	14.78	1.58	--	--	13.2
04/24/2006	25.79	14.78	3.07	--	--	11.71
07/31/2006	25.79	14.78	6.26	--	--	8.52
10/23/2006	25.79	14.78	7.52	--	--	7.26

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
01/08/2007	25.79	14.78	3.2	--	--	11.58
04/09/2007	25.79	14.78	4.28	--	--	10.5
08/06/2007	25.79	14.78	6.48	--	--	8.3
01/07/2008	25.79	14.78	4.38	--	--	10.4
08/04/2008	25.79	14.78	6.14	--	--	8.64
10/01/2008	25.79	14.78	7.23	--	--	7.55
01/20/2009	25.79	14.78	4.83	--	--	9.95
04/01/2009	25.79	14.78	5.32	--	--	9.46
07/30/2009	25.79	14.78	6.61	--	--	8.17
01/05/2010	25.79	14.78	5.2	--	--	9.58
08/10/2010	25.79	14.78	5.56	--	--	9.22
01/10/2011	25.79	14.78	4.21	--	--	10.57
08/02/2011	25.79	14.78	3.77	--	--	11.01
01/06/2012	25.79	14.78	4.56	--	--	10.22
RMW-1s						
08/06/2002	18.04	14.96	5.07	--	--	9.89
10/18/2004	18.04	14.96	5.39	--	--	9.57
01/18/2005	18.04	14.96	4.61	--	--	10.35
04/25/2005	18.04	14.96	4.12	--	--	10.84
07/18/2005	18.04	14.96	4.5	--	--	10.46
10/17/2005	18.04	14.96	5.52	--	--	9.44
01/17/2006	18.04	14.96	2.53	--	--	12.43
04/24/2006	18.04	14.96	2.94	--	--	12.02
07/31/2006	18.04	14.96	4.81	--	--	10.15
10/23/2006	18.04	14.96	5.77	--	--	9.19
01/08/2007	18.04	14.96	2.96	--	--	12
04/09/2007	18.04	14.96	3.35	--	--	11.61
08/06/2007	18.04	14.96	5.14	--	--	9.82
01/07/2008	18.04	14.96	3.32	--	--	11.64
08/04/2008	18.04	14.96	4.8	--	--	10.16
10/01/2008	18.04	14.96	6.03	--	--	8.93
01/20/2009	18.04	14.96	3.36	--	--	11.6
04/01/2009	18.04	14.96	4.08	--	--	10.88
07/30/2009	18.04	14.96	5.84	--	--	9.12
01/05/2010	18.04	14.96	4.27	--	--	10.69
08/10/2010	18.04	14.96	4.44	--	--	10.52
01/10/2011	18.04	14.96	3.22	--	--	11.74
08/02/2011	18.04	14.96	3.35	--	--	11.61
01/06/2012	18.04	14.96	3.68	--	--	11.28

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
RMW-2d						
08/06/2002	32.2	17.24	6.6	--	--	10.64
10/18/2004	32.2	17.24	7.94	--	--	9.3
01/18/2005	32.2	17.24	7.05	--	--	10.19
04/25/2005	32.2	17.24	6.94	--	--	10.3
07/18/2005	32.2	17.24	6.86	--	--	10.38
10/17/2005	32.2	17.24	8.14	--	--	9.1
01/17/2006	32.2	17.24	3.15	--	--	14.09
04/24/2006	32.2	17.24	4.58	--	--	12.66
07/31/2006	32.2	17.24	7	--	--	10.24
10/23/2006	32.2	17.24	8.44	--	--	8.8
01/08/2007	32.2	17.24	4.84	--	--	12.4
04/09/2007	32.2	17.24	5.47	--	--	11.77
08/06/2007	32.2	17.24	7.28	--	--	9.96
01/07/2008	32.2	17.24	6.02	--	--	11.22
08/04/2008	32.2	17.24	7.02	--	--	10.22
10/01/2008	32.2	17.24	8.06	--	--	9.18
01/20/2009	32.2	17.24	6.17	--	--	11.07
04/01/2009	32.2	17.24	6.71	--	--	10.53
07/30/2009	32.2	17.24	7.57	--	--	9.67
01/05/2010	32.2	17.24	7.2	--	--	10.04
08/10/2010	32.2	17.24	6.4	--	--	10.84
01/10/2011	32.2	17.24	5.28	--	--	11.96
08/02/2011	32.2	17.24	4.73	--	--	12.51
01/06/2012	32.2	17.24	6.09	--	--	11.15
RMW-2i						
08/06/2002	25.04	16.69	5.22	--	--	11.47
10/18/2004	25.04	16.69	7.13	--	--	9.56
01/18/2005	25.04	16.69	6.21	--	--	10.48
04/25/2005	25.04	16.69	6.08	--	--	10.61
07/18/2005	25.04	16.69	5.97	--	--	10.72
10/17/2005	25.04	16.69	7.22	--	--	9.47
01/17/2006	25.04	16.69	2.45	--	--	14.24
04/24/2006	25.04	16.69	3.82	--	--	12.87
07/31/2006	25.04	16.69	6.05	--	--	10.64
10/23/2006	25.04	16.69	7.13	--	--	9.56
01/08/2007	25.04	16.69	4.11	--	--	12.58
04/09/2007	25.04	16.69	4.16	--	--	12.53
08/06/2007	25.04	16.69	6.37	--	--	10.32
01/07/2008	25.04	16.69	5.28	--	--	11.41

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
08/04/2008	25.04	16.69	6.17	--	--	10.52
10/01/2008	25.04	16.69	7.37	--	--	9.32
01/20/2009	25.04	16.69	5.49	--	--	11.2
04/01/2009	25.04	16.69	5.99	--	--	10.7
07/30/2009	25.04	16.69	6.86	--	--	9.83
01/05/2010	25.04	16.69	6.58	--	--	10.11
08/10/2010	25.04	16.69	5.68	--	--	11.01
01/10/2011	25.04	16.69	4.59	--	--	12.1
08/02/2011	25.04	16.69	4.04	--	--	12.65
01/06/2012	25.04	16.69	5.42	--	--	11.27
RMW-2s						
08/06/2002	17.84	16.66	6.76	--	--	9.9
10/18/2004	17.84	16.66	6.6	--	--	10.06
01/18/2005	17.84	16.66	5.57	--	--	11.09
04/25/2005	17.84	16.66	5.41	--	--	11.25
07/18/2005	17.84	16.66	5.58	--	--	11.08
10/17/2005	17.84	16.66	6.78	--	--	9.88
01/17/2006	17.84	16.66	2.74	--	--	13.92
04/24/2006	17.84	16.66	3.8	--	--	12.86
07/31/2006	17.84	16.66	5.72	--	--	10.94
10/23/2006	17.84	16.66	7.14	--	--	9.52
01/08/2007	17.84	16.66	3.98	--	--	12.68
04/09/2007	17.84	16.66	4.31	--	--	12.35
08/06/2007	17.84	16.66	6.04	--	--	10.62
01/07/2008	17.84	16.66	4.87	--	--	11.79
08/04/2008	17.84	16.66	5.8	--	--	10.86
10/01/2008	17.84	16.66	7.18	--	--	9.48
01/20/2009	17.84	16.66	5.26	--	--	11.4
04/01/2009	17.84	16.66	5.58	--	--	11.08
07/30/2009	17.84	16.66	6.67	--	--	9.99
01/05/2010	17.84	16.66	6.16	--	--	10.5
08/10/2010	17.84	16.66	5.35	--	--	11.31
01/10/2011	17.84	16.66	4.29	--	--	12.37
08/02/2011	17.84	16.66	3.85	--	--	12.81
01/06/2012	17.84	16.66	5.17	--	--	11.49
RMW-3d						
08/06/2002	39.15	15.69	7.78	--	--	7.91
10/18/2004	39.15	15.69	--	--	--	--
01/18/2005	39.15	15.69	--	--	--	--
04/25/2005	39.15	15.69	7.27	--	--	8.42

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
07/18/2005	39.15	15.69	7.47	--	--	8.22
10/17/2005	39.15	15.69	8.72	--	--	6.97
01/17/2006	39.15	15.69	2.76	--	--	12.93
04/24/2006	39.15	15.69	4.35	--	--	11.34
07/31/2006	39.15	15.69	7.89	--	--	7.8
10/23/2006	39.15	15.69	9.13	--	--	6.56
01/08/2007	39.15	15.69	4.56	--	--	11.13
04/09/2007	39.15	15.69	5.81	--	--	9.88
08/06/2007	39.15	15.69	8.17	--	--	7.52
01/07/2008	39.15	15.69	5.84	--	--	9.85
08/04/2008	39.15	15.69	7.95	--	--	7.74
10/01/2008	39.15	15.69	9	--	--	6.69
01/20/2009	39.15	15.69	6.53	--	--	9.16
04/01/2009	39.15	15.69	7	--	--	8.69
07/30/2009	39.15	15.69	8.38	--	--	7.31
01/05/2010	39.15	15.69	6.82	--	--	8.87
08/10/2010	39.15	15.69	7.7	--	--	7.99
01/10/2011	39.15	15.69	6.53	--	--	9.16
08/02/2011	39.15	15.69	5.67	--	--	10.02
01/06/2012	39.15	15.69	6.64	--	--	9.05
RMW-3i						
08/06/2002	30.69	15.92	5.91	--	--	10.01
10/18/2004	30.69	15.92	--	--	--	--
01/18/2005	30.69	15.92	--	--	--	--
04/25/2005	30.69	15.92	4.48	--	--	11.44
07/18/2005	30.69	15.92	5.08	--	--	10.84
10/17/2005	30.69	15.92	6.17	--	--	9.75
01/17/2006	30.69	15.92	3.52	--	--	12.4
04/24/2006	30.69	15.92	4.01	--	--	11.91
07/31/2006	30.69	15.92	5.53	--	--	10.39
10/23/2006	30.69	15.92	6.42	--	--	9.5
01/08/2007	30.69	15.92	3.92	--	--	12
04/09/2007	30.69	15.92	2.38	--	--	13.54
08/06/2007	30.69	15.92	5.98	--	--	9.94
01/07/2008	30.69	15.92	4.2	--	--	11.72
08/04/2008	30.69	15.92	5.68	--	--	10.24
10/01/2008	30.69	15.92	6.78	--	--	9.14
01/20/2009	30.69	15.92	4.8	--	--	11.12
04/01/2009	30.69	15.92	4.69	--	--	11.23
07/30/2009	30.69	15.92	6.58	--	--	9.34

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
01/05/2010	30.69	15.92	5.05	--	--	10.87
08/10/2010	30.69	15.92	5.41	--	--	10.51
01/10/2011	30.69	15.92	4.52	--	--	11.4
08/02/2011	30.69	15.92	4.54	--	--	11.38
01/06/2012	30.69	15.92	4.64	--	--	11.28
RMW-3s						
08/06/2002	20.23	15.96	5.8	--	--	10.16
10/18/2004	20.23	15.96	--	--	--	--
01/18/2005	20.23	15.96	--	--	--	--
04/25/2005	20.23	15.96	4.31	--	--	11.65
07/18/2005	20.23	15.96	4.92	--	--	11.04
10/17/2005	20.23	15.96	6	--	--	9.96
01/17/2006	20.23	15.96	3.59	--	--	12.37
04/24/2006	20.23	15.96	3.99	--	--	11.97
07/31/2006	20.23	15.96	5.37	--	--	10.59
10/23/2006	20.23	15.96	6.21	--	--	9.75
01/08/2007	20.23	15.96	3.87	--	--	12.09
04/09/2007	20.23	15.96	4.06	--	--	11.9
08/06/2007	20.23	15.96	5.72	--	--	10.24
01/07/2008	20.23	15.96	3.98	--	--	11.98
08/04/2008	20.23	15.96	5.36	--	--	10.6
10/01/2008	20.23	15.96	6.44	--	--	9.52
01/20/2009	20.23	15.96	4.24	--	--	11.72
04/01/2009	20.23	15.96	4.31	--	--	11.65
07/30/2009	20.23	15.96	6.24	--	--	9.72
01/05/2010	20.23	15.96	4.66	--	--	11.3
08/10/2010	20.23	15.96	5.04	--	--	10.92
01/10/2011	20.23	15.96	4.07	--	--	11.89
08/02/2011	20.23	15.96	4.3	--	--	11.66
01/06/2012	20.23	15.96	4.23	--	--	11.73
<u>Surface Water</u>						
CL-1	(Carty Lake-1)					
01/20/2004	--	16.88 @ 7' mark	1.92	--	--	11.8
04/26/2004	--	16.88 @ 7' mark	2	--	--	11.88
07/23/2004	--	16.88 @ 7' mark	1.3	--	--	11.18
10/18/2004	--	16.88 @ 7' mark	1.3	--	--	11.18
01/18/2005	--	16.88 @ 7' mark	1.51	--	--	11.39
04/25/2005	--	16.88 @ 7' mark	2.22	--	--	12.1
07/18/2005	--	16.88 @ 7' mark	1.6	--	--	11.48
10/17/2005	--	16.88 @ 7' mark	Dry	--	--	Dry

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
01/17/2006	--	16.88 @ 7' mark	2.55	--	--	12.43
04/24/2006	--	16.88 @ 7' mark	2.25	--	--	12.13
07/31/2006	--	16.88 @ 7' mark	1.3	--	--	11.18
10/23/2006	--	16.88 @ 7' mark	1.4	--	--	11.28
01/08/2007	--	16.88 @ 7' mark	2.4	--	--	12.28
04/09/2007	--	16.88 @ 7' mark	2.38	--	--	12.26
08/06/2007	--	16.88 @ 7' mark	Dry	--	--	Dry
01/07/2008	--	16.88 @ 7' mark	2.4	--	--	12.28
08/04/2008	--	16.88 @ 7' mark	1.3	--	--	11.18
10/01/2008	--	16.88 @ 7' mark	Dry	--	--	Dry
01/20/2009	--	16.88 @ 7' mark	2.2	--	--	12.08
04/01/2009	--	16.88 @ 7' mark	2.1	--	--	11.98
07/30/2009	--	16.88 @ 7' mark	Dry	--	--	Dry
01/05/2010	--	16.88 @ 7' mark	1.7	--	--	11.58
08/10/2010	--	16.88 @ 7' mark	0.6	--	--	10.48
01/10/2011	--	16.88 @ 7' mark	2.4	--	--	12.28
08/02/2011	--	16.88 @ 7' mark	2	--	--	11.88
01/06/2012	--	16.88 @ 7' mark	3.2	--	--	13.08
CL-3	(Carty Lake-3)					
08/06/2002	--	3.34 @ 3.89'mar	1.1	--	--	10.55
01/20/2004	--	3.34 @ 3.89'mar	2.19	--	--	11.64
04/26/2004	--	3.34 @ 3.89'mar	3.3	--	--	12.75
07/23/2004	--	3.34 @ 3.89'mar	1.2	--	--	10.65
10/18/2004	--	3.34 @ 3.89'mar	0.8	--	--	10.25
01/18/2005	--	3.34 @ 3.89'mar	1.8	--	--	11.25
04/25/2005	--	3.34 @ 3.89'mar	2.49	--	--	11.94
07/18/2005	--	3.34 @ 3.89'mar	1.8	--	--	11.25
10/17/2005	--	3.34 @ 3.89'mar	0.8	--	--	10.25
01/17/2006	--	3.34 @ 3.89'mar	2.81	--	--	12.26
04/24/2006	--	3.34 @ 3.89'mar	2.55	--	--	12
07/31/2006	--	3.34 @ 3.89'mar	1.5	--	--	10.95
10/23/2006	--	3.34 @ 3.89'mar	0.7	--	--	10.15
01/08/2007	--	3.34 @ 3.89'mar	2.68	--	--	12.13
04/09/2007	--	3.34 @ 3.89'mar	2.65	--	--	12.1
08/06/2007	--	3.34 @ 3.89'mar	1.25	--	--	10.7
01/07/2008	--	3.34 @ 3.89'mar	2.7	--	--	12.15
08/04/2008	--	3.34 @ 3.89'mar	1.5	--	--	10.95
10/01/2008	--	3.34 @ 3.89'mar	0.8	--	--	10.25
01/20/2009	--	3.34 @ 3.89'mar	2.5	--	--	11.95

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
04/01/2009	--	3.34 @ 3.89'mar	2.4	--	--	11.85
07/30/2009	--	3.34 @ 3.89'mar	0.95	--	--	10.4
01/05/2010	--	3.34 @ 3.89'mar	2	--	--	11.45
08/10/2010	--	3.34 @ 3.89'mar	1.7	--	--	11.15
01/10/2011	--	3.34 @ 3.89'mar	2.6	--	--	12.05
08/02/2011	--	3.34 @ 3.89'mar	2.3	--	--	11.75
01/06/2012	--	3.34 @ 3.89'mar	NA	--	--	NA
Pump House River Gauge—Lake River						
08/06/2002	NA	26.79	21.7	--	--	5.09
01/20/2004	NA	26.79	20.83	--	--	5.96
01/20/2004	NA	26.79	18.88	--	--	7.91
04/26/2004	NA	26.79	20.93	--	--	5.86
04/26/2004	NA	26.79	21.77	--	--	5.02
07/23/2004	NA	26.79	21.62	--	--	5.17
07/23/2004	NA	26.79	23.54	--	--	3.25
10/06/2004[a]	NA	26.79	24.11	--	--	2.68
10/06/2004[b]	NA	26.79	22.75	--	--	4.04
10/18/2004	NA	26.79	20.87	--	--	5.92
10/18/2004	NA	26.79	22.42	--	--	4.37
01/18/2005	NA	26.79	19.56	--	--	7.23
01/18/2005	NA	26.79	19.92	--	--	6.87
04/25/2005	NA	26.79	20.21	--	--	6.58
04/25/2005	NA	26.79	21.77	--	--	5.02
07/18/2005	NA	26.79	21.52	--	--	5.27
07/18/2005	NA	26.79	21.15	--	--	5.64
10/17/2005	NA	26.79	22.39	--	--	4.4
10/17/2005	NA	26.79	22.48	--	--	4.31
01/17/2006	NA	26.79	14.49	--	--	12.3
01/17/2006	NA	26.79	14.93	--	--	11.86
04/24/2006	NA	26.79	17.05	--	--	9.74
04/24/2006	NA	26.79	16.6	--	--	10.19
07/31/2006	NA	26.79	21.15	--	--	5.64
07/31/2006	NA	26.79	22.68	--	--	4.11
10/23/2006	NA	26.79	22.95	--	--	3.84
10/23/2006	NA	26.79	23.38	--	--	3.41
01/08/2007	NA	26.79	16.91	--	--	9.88
01/08/2007	NA	26.79	17.49	--	--	9.3
04/09/2007	NA	26.79	18.65	--	--	8.14
04/09/2007	NA	26.79	19.58	--	--	7.21
08/06/2007	NA	26.79	21.61	--	--	5.18

Table 2-3
Water Level Elevation Summary
Former PWT Site RI/FS

Date	Depth to Bottom (ft TOC)	TOC (ft NGVD)	Depth to Water (ft TOC)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	Corrected Water Level Elevation (ft NGVD)
08/06/2007	NA	26.79	22.57	--	--	4.22
01/07/2008	NA	26.79	19.23	--	--	7.56
01/07/2008	NA	26.79	17.95	--	--	8.84
08/04/2008	NA	26.79	22.27	--	--	4.52
08/04/2008	NA	26.79	22.87	--	--	3.92
10/01/2008	NA	26.79	22.11	--	--	4.68
10/01/2008	NA	26.79	23.88	--	--	2.91
01/20/2009	NA	26.79	20.23	--	--	6.56
01/20/2009	NA	26.79	19.99	--	--	6.8
04/01/2009	NA	26.79	19.98	--	--	6.81
04/01/2009	NA	26.79	21.15	--	--	5.64
07/30/2009	NA	26.79	22.14	--	--	4.65
07/30/2009	NA	26.79	21.52	--	--	5.27
01/05/2010	NA	26.79	18.83	--	--	7.96
01/05/2010	NA	26.79	19.73	--	--	7.06
08/10/2010	NA	26.79	21.3	--	--	5.49
08/10/2010	NA	26.79	23.12	--	--	3.67
01/10/2011	NA	26.79	20.04	--	--	6.75
01/10/2011	NA	26.79	21.08	--	--	5.71
08/02/2011	NA	26.79	18.48	--	--	8.31
08/02/2011	NA	26.79	19.9	--	--	6.89
01/06/2012	NA	26.79	20.93	--	--	5.86
01/06/2012	NA	26.79	19.16	--	--	7.63

NOTES:

Depth to bottom measurements are historical, except when DNAPL is checked for in wells.

WLE are corrected for LNAPL by the following formula:

Corrected WLE = (LNAPL thickness x 0.98) + (TOC - Depth to water).

0.98 equals the approximate specific gravity [dimensionless] of the LNAPL.

-- = not measured.

DNAPL = dense nonaqueous-phase liquid.

ft = feet.

LNAPL = light nonaqueous-phase liquid.

NA = not available.

NGVD = National Geodetic Vertical Datum of 1927/1947.

NP = not present.

TOC = top of casing.

WLE = water level elevations.

[a] Water level collected during approximate low tide.

[b] Water level collected during approximate high tide.

[c] Monitoring wells were modified as a result of Cell 3 interim actions.

[d] Monitoring well monument was repaired and additional well casing was added to top of well.

Table 2-4
Comparison of Hydraulic Heads in Shallow and Deep UWBZ
Former PWT Site RI/FS

Date	Shallow UWBZ WLE (ft NGVD)	Deep UWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
MW-26 and MW-52D			
08/04/2008	13.94	10.06	3.88
10/01/2008	13.69	7.76	5.93
01/20/2009	14.96	10.04	4.92
04/01/2009	14.22	9.22	5.00
07/30/2009	12.23	9.18	3.05
01/05/2010	14.37	9.27	5.10
08/10/2010	12.67	10.79	1.88
01/10/2011	17.03	11.94	5.09
08/02/2011	14.74	12.39	2.35
01/06/2012	16.18	11.07	5.11
MW-39 and MW-38			
08/06/2002	12.00	11.51	0.49
01/20/2004	12.44	12.03	0.41
04/26/2004	12.34	11.85	0.49
07/23/2004	11.28	10.73	0.55
10/18/2004	10.05	9.69	0.36
01/18/2005	10.79	10.40	0.39
04/25/2005	10.94	10.60	0.34
07/18/2005	11.30	10.89	0.41
10/17/2005	10.05	9.67	0.38
01/17/2006	15.58	14.33	1.25
04/24/2006	13.41	13.14	0.27
07/31/2006	11.41	10.90	0.51
10/23/2006	9.77	9.28	0.49
01/08/2007	12.90	12.55	0.35
04/09/2007	12.70	12.14	0.56
08/06/2007	11.15	10.55	0.60
01/07/2008	11.72	11.28	0.44
08/04/2008	11.21	10.68	0.53
10/01/2008	9.74	9.28	0.46
01/20/2009	11.50	11.08	0.42
04/01/2009	10.55	10.70	-0.15
07/30/2009	10.31	9.86	0.45
01/05/2010	10.07	9.41	0.66
08/10/2010	11.60	11.04	0.56
01/10/2011	12.74	12.03	0.71
08/02/2011	13.36	12.71	0.65
01/06/2012	11.61	11.18	0.43

Table 2-4
Comparison of Hydraulic Heads in Shallow and Deep UWBZ
Former PWT Site RI/FS

Date	Shallow UWBZ WLE (ft NGVD)	Deep UWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
MW-53S and MW-53D			
08/04/2008	13.33	9.30	4.03
10/01/2008	12.32	7.58	4.74
01/20/2009	15.47	9.95	5.52
04/01/2009	13.72	9.23	4.49
07/30/2009	12.79	9.11	3.68
01/05/2010	14.52	9.21	5.31
08/10/2010	13.82	10.67	3.15
01/10/2011	16.56	11.79	4.77
08/02/2011	15.42	12.26	3.16
01/06/2012	16.23	10.92	5.31
MW-55S and MW-55D			
01/10/2011	11.30	5.42	5.88
08/02/2011	9.70	7.12	2.58
01/06/2012	9.50	5.86	3.64
PZ-6 and MW-51D			
08/04/2008	13.62	7.13	6.49
10/01/2008	12.89	6.19	6.70
01/20/2009	15.39	8.42	6.97
04/01/2009	14.13	7.84	6.29
07/30/2009	13.17	6.85	6.32
01/05/2010	14.85	8.59	6.26
08/10/2010	13.95	7.48	6.47
01/10/2011	16.30	8.42	7.88
08/02/2011	15.33	9.68	5.65
01/06/2012	16.05	8.30	7.75
MW-57S and MW-57D			
08/04/2008	12.77	5.85	6.92
10/01/2008	12.23	5.18	7.05
01/20/2009	15.40	7.58	7.82
04/01/2009	14.14	6.97	7.17
07/30/2009	12.84	5.85	6.99
01/05/2010	14.71	8.14	6.57
08/10/2010	13.75	6.19	7.56
01/10/2011	16.25	7.04	9.21
08/02/2011	15.27	8.52	6.75
01/06/2012	16.12	7.25	8.87
EPA-4S and EPA-4D			
08/04/2008	11.35	11.32	0.03
10/01/2008	10.00	9.86	0.14
01/20/2009	11.63	11.58	0.05
04/01/2009	11.00	10.79	0.21

Table 2-4
Comparison of Hydraulic Heads in Shallow and Deep UWBZ
Former PWT Site RI/FS

Date	Shallow UWBZ WLE (ft NGVD)	Deep UWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
07/30/2009	10.44	10.40	0.04
01/05/2010	7.99	10.13	-2.14
08/10/2010	11.73	11.66	0.07
01/10/2011	12.89	12.80	0.09
08/02/2011	13.62	13.67	-0.05
01/06/2012	11.71	11.71	0.00
EPA-5S and EPA-5D			
08/04/2008	11.18	11.02	0.16
10/01/2008	9.76	9.88	-0.12
01/20/2009	11.49	11.23	0.26
04/01/2009	10.75	10.60	0.15
07/30/2009	10.30	10.44	-0.14
01/05/2010	10.13	10.06	0.07
08/10/2010	11.66	11.75	-0.09
01/10/2011	12.84	12.37	0.47
08/02/2011	13.51	13.83	-0.32
01/06/2012	11.65	11.62	0.03
EPA-6S and EPA-6D			
08/04/2008	13.26	7.98	5.28
10/01/2008	12.30	6.47	5.83
01/20/2009	15.95	9.69	6.26
04/01/2009	14.50	8.75	5.75
07/30/2009	13.01	7.40	5.61
01/05/2010	14.42	8.83	5.59
08/10/2010	14.24	7.97	6.27
01/10/2011	16.57	9.30	7.27
08/02/2011	15.10	10.10	5.00
01/06/2012	16.28	9.38	6.90
RMW-1S and RMW-1D			
08/06/2002	9.89	8.42	1.47
10/18/2004	9.57	7.72	1.85
01/18/2005	10.35	8.84	1.51
04/25/2005	10.84	8.73	2.11
07/18/2005	10.46	8.66	1.80
10/17/2005	9.44	7.40	2.04
01/17/2006	12.43	13.16	-0.73
04/24/2006	12.02	11.63	0.39
07/31/2006	10.15	8.30	1.85
10/23/2006	9.19	7.01	2.18
01/08/2007	12.00	11.36	0.64
04/09/2007	11.61	10.25	1.36
08/06/2007	9.82	7.97	1.85

Table 2-4
Comparison of Hydraulic Heads in Shallow and Deep UWBZ
Former PWT Site RI/FS

Date	Shallow UWBZ WLE (ft NGVD)	Deep UWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
01/07/2008	11.64	10.11	1.53
08/04/2008	10.16	8.25	1.91
10/01/2008	8.93	7.20	1.73
01/20/2009	11.60	9.55	2.05
04/01/2009	10.88	9.01	1.87
07/30/2009	9.12	7.76	1.36
01/05/2010	10.69	9.12	1.57
08/10/2010	10.52	8.48	2.04
01/10/2011	11.74	9.72	2.02
08/02/2011	11.61	10.46	1.15
01/06/2012	11.28	9.59	1.69
RMW-2S and RMW-2D			
08/06/2002	9.90	10.64	-0.74
10/18/2004	10.06	9.30	0.76
01/18/2005	11.09	10.19	0.90
04/25/2005	11.25	10.30	0.95
07/18/2005	11.08	10.38	0.70
10/17/2005	9.88	9.10	0.78
01/17/2006	13.92	14.09	-0.17
04/24/2006	12.86	12.66	0.20
07/31/2006	10.94	10.24	0.70
10/23/2006	9.52	8.80	0.72
01/08/2007	12.68	12.40	0.28
04/09/2007	12.35	11.77	0.58
08/06/2007	10.62	9.96	0.66
01/07/2008	11.79	11.22	0.57
08/04/2008	10.86	10.22	0.64
10/01/2008	9.48	9.18	0.30
01/20/2009	11.40	11.07	0.33
04/01/2009	11.08	10.53	0.55
07/30/2009	9.99	9.67	0.32
01/05/2010	10.50	10.04	0.46
08/10/2010	11.31	10.84	0.47
01/10/2011	12.37	11.96	0.41
08/02/2011	12.81	12.51	0.30
01/06/2012	11.49	11.15	0.34
RMW-3S and RMW-3D			
08/06/2002	10.16	7.91	2.25
04/25/2005	11.65	8.42	3.23
07/18/2005	11.04	8.22	2.82
10/17/2005	9.96	6.97	2.99
01/17/2006	12.37	12.93	-0.56

Table 2-4
Comparison of Hydraulic Heads in Shallow and Deep UWBZ
Former PWT Site RI/FS

Date	Shallow UWBZ WLE (ft NGVD)	Deep UWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
04/24/2006	11.97	11.34	0.63
07/31/2006	10.59	7.80	2.79
10/23/2006	9.75	6.56	3.19
01/08/2007	12.09	11.13	0.96
04/09/2007	11.90	9.88	2.02
08/06/2007	10.24	7.52	2.72
01/07/2008	11.98	9.85	2.13
08/04/2008	10.60	7.74	2.86
10/01/2008	9.52	6.69	2.83
01/20/2009	11.72	9.16	2.56
04/01/2009	11.65	8.69	2.96
07/30/2009	9.72	7.31	2.41
01/05/2010	11.30	8.87	2.43
08/10/2010	10.92	7.99	2.93
01/10/2011	11.89	9.16	2.73
08/02/2011	11.66	10.02	1.64
01/06/2012	11.73	9.05	2.68

NOTES:

Difference in Hydraulic Head

Positive numbers represent a downward flow of groundwater.

Negative numbers represent an upward flow of groundwater.

D = Monitoring well screened in the deep portion of the UWBZ.

ft = feet.

NGVD = National Geodetic Vertical Datum of 1927/1947.

S = Monitoring well screened in the shallow portion of the UWBZ.

UWBZ = upper water-bearing zone.

WLE = water level elevation.

Table 2-5
Comparison of Hydraulic Heads in Deep UWBZ and LWBZ
Former PWT Site RI/FS

Date	Deep UWBZ WLE (ft NGVD)	LWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
MW-21 and MW-22			
07/18/2005	9.03	7.28	1.75
10/17/2005	8.07	6.3	1.77
01/17/2006	13.52	12.73	0.79
04/24/2006	12.07	10.89	1.18
07/31/2006	9.06	7.04	2.02
10/23/2006	6.8	5.71	1.09
01/08/2007	11.58	10.72	0.86
04/09/2007	10.67	9.21	1.46
08/06/2007	8.62	6.67	1.95
01/07/2008	10.15	9.12	1.03
08/04/2008	8.66	6.95	1.71
10/01/2008	7.6	6.12	1.48
01/20/2009	9.63	8.52	1.11
04/01/2009	9.09	7.96	1.13
07/30/2009	8.14	6.72	1.42
01/05/2010	8.76	8.52	0.24
08/10/2010	9.76	7.55	2.21
01/10/2011	10.77	8.58	2.19
08/02/2011	11.65	9.93	1.72
01/06/2012	10.35	9.11	1.24
EPA-5D and MW-33			
08/04/2008	11.02	7.77	3.25
10/01/2008	9.88	6.77	3.11
01/20/2009	11.23	8.81	2.42
04/01/2009	10.6	8.57	2.03
07/30/2009	10.44	7.14	3.3
01/05/2010	10.06	8.92	1.14
08/10/2010	11.75	8.01	3.74
01/10/2011	12.37	9.06	3.31
08/02/2011	13.83	9.99	3.84
01/06/2012	11.62	8.75	2.87
MW-15 and MW-34			
08/06/2002	10.27	6.91	3.36
01/20/2004	10.94	7.79	3.15
04/26/2004	10.55	7.03	3.52
07/23/2004	9.45	5.9	3.55
10/18/2004	8.82	6.31	2.51
01/18/2005	9.52	7.4	2.12
04/25/2005	9.77	7.44	2.33
07/18/2005	9.82	6.71	3.11

Table 2-5
Comparison of Hydraulic Heads in Deep UWBZ and LWBZ
Former PWT Site RI/FS

Date	Deep UWBZ WLE (ft NGVD)	LWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
10/17/2005	8.81	5.78	3.03
01/17/2006	14.14	12.59	1.55
04/24/2006	12.81	10.5	2.31
07/31/2006	10.14	6.43	3.71
10/23/2006	8.51	5.17	3.34
01/08/2007	12.24	10.49	1.75
04/09/2007	11.58	8.76	2.82
08/06/2007	9.63	6.16	3.47
01/07/2008	10.86	8.77	2.09
08/04/2008	9.54	6.35	3.19
10/01/2008	8.01	5.6	2.41
01/20/2009	9.85	7.84	2.01
04/01/2009	9.45	3.45	6
07/30/2009	8.98	6.12	2.86
01/05/2010	9.08	8.42	0.66
08/10/2010	10.18	6.68	3.5
01/10/2011	11.23	7.61	3.62
08/02/2011	12.00	8.89	3.11
01/06/2012	10.49	7.63	2.86
MW-42 and MW-40			
08/06/2002	12.08	8.12	3.96
01/20/2004	12.34	8.92	3.42
04/26/2004	12.35	8.33	4.02
07/23/2004	11.26	7.00	4.26
10/18/2004	10.05	7.24	2.81
01/18/2005	10.82	9.15	1.67
04/25/2005	11.00	8.87	2.13
07/18/2005	11.39	8.25	3.14
10/17/2005	10.06	6.94	3.12
01/17/2006	14.38	13.24	1.14
04/24/2006	13.50	11.56	1.94
07/31/2006	11.47	7.93	3.54
10/23/2006	9.88	6.66	3.22
01/08/2007	13.10	11.53	1.57
04/09/2007	12.77	10.06	2.71
08/04/2008	11.39	7.85	3.54
10/01/2008	9.84	7.05	2.79
01/20/2009	11.61	9.36	2.25
04/01/2009	10.87	10.75	0.12
07/30/2009	10.41	7.45	2.96
01/05/2010	10.24	9.11	1.13

Table 2-5
Comparison of Hydraulic Heads in Deep UWBZ and LWBZ
Former PWT Site RI/FS

Date	Deep UWBZ WLE (ft NGVD)	LWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
08/10/2010	11.73	8.30	3.43
01/10/2011	12.85	9.39	3.46
08/02/2011	13.43	10.35	3.08
01/06/2012	11.58	9.42	2.16
MW-51D and MW-54			
08/04/2008	7.13	6.15	0.98
10/01/2008	6.19	5.47	0.72
01/20/2009	8.42	7.79	0.63
04/01/2009	7.84	7.24	0.60
07/30/2009	6.85	6.04	0.81
01/05/2010	8.59	8.29	0.30
08/10/2010	7.48	6.51	0.97
01/10/2011	8.42	7.45	0.97
08/02/2011	9.68	8.77	0.91
01/06/2012	8.3	7.52	0.78
MW-55D and MW-55			
01/10/2011	5.42	6.73	-1.31
08/02/2011	7.12	8.32	-1.20
01/06/2012	5.86	7.05	-1.19
MW-58D and MW-56			
08/04/2008	5.15	5.63	-0.48
10/01/2008	4.63	5.06	-0.43
01/20/2009	7.2	7.52	-0.32
04/01/2009	6.5	6.89	-0.39
07/30/2009	5.42	5.77	-0.35
01/05/2010	7.96	8.11	-0.15
08/10/2010	5.57	6.05	-0.48
01/10/2011	6.24	6.84	-0.60
08/02/2011	8.07	8.43	-0.36
01/06/2012	6.78	7.17	-0.39

NOTES:

Difference in Hydraulic Head

Positive numbers represent a downward flow of groundwater.

Negative numbers represent an upward flow of groundwater.

D = Monitoring well screened in the deep portion of the UWBZ.

ft = feet.

LWBZ = lower water-bearing zone.

NGVD = National Geodetic Vertical Datum of 1927/1947.

UWBZ = upper water-bearing zone.

WLE = water level elevation.

Table 2-5
Comparison of Hydraulic Heads in Deep UWBZ and LWBZ
Former PWT Site RI/FS

Date	Deep UWBZ WLE (ft NGVD)	LWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
MW-21 and MW-22			
07/18/2005	9.03	7.28	1.75
10/17/2005	8.07	6.3	1.77
01/17/2006	13.52	12.73	0.79
04/24/2006	12.07	10.89	1.18
07/31/2006	9.06	7.04	2.02
10/23/2006	6.8	5.71	1.09
01/08/2007	11.58	10.72	0.86
04/09/2007	10.67	9.21	1.46
08/06/2007	8.62	6.67	1.95
01/07/2008	10.15	9.12	1.03
08/04/2008	8.66	6.95	1.71
10/01/2008	7.6	6.12	1.48
01/20/2009	9.63	8.52	1.11
04/01/2009	9.09	7.96	1.13
07/30/2009	8.14	6.72	1.42
01/05/2010	8.76	8.52	0.24
08/10/2010	9.76	7.55	2.21
01/10/2011	10.77	8.58	2.19
08/02/2011	11.65	9.93	1.72
01/06/2012	10.35	9.11	1.24
EPA-5D and MW-33			
08/04/2008	11.02	7.77	3.25
10/01/2008	9.88	6.77	3.11
01/20/2009	11.23	8.81	2.42
04/01/2009	10.6	8.57	2.03
07/30/2009	10.44	7.14	3.3
01/05/2010	10.06	8.92	1.14
08/10/2010	11.75	8.01	3.74
01/10/2011	12.37	9.06	3.31
08/02/2011	13.83	9.99	3.84
01/06/2012	11.62	8.75	2.87
MW-15 and MW-34			
08/06/2002	10.27	6.91	3.36
01/20/2004	10.94	7.79	3.15
04/26/2004	10.55	7.03	3.52
07/23/2004	9.45	5.9	3.55
10/18/2004	8.82	6.31	2.51
01/18/2005	9.52	7.4	2.12
04/25/2005	9.77	7.44	2.33
07/18/2005	9.82	6.71	3.11

Table 2-5
Comparison of Hydraulic Heads in Deep UWBZ and LWBZ
Former PWT Site RI/FS

Date	Deep UWBZ WLE (ft NGVD)	LWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
10/17/2005	8.81	5.78	3.03
01/17/2006	14.14	12.59	1.55
04/24/2006	12.81	10.5	2.31
07/31/2006	10.14	6.43	3.71
10/23/2006	8.51	5.17	3.34
01/08/2007	12.24	10.49	1.75
04/09/2007	11.58	8.76	2.82
08/06/2007	9.63	6.16	3.47
01/07/2008	10.86	8.77	2.09
08/04/2008	9.54	6.35	3.19
10/01/2008	8.01	5.6	2.41
01/20/2009	9.85	7.84	2.01
04/01/2009	9.45	3.45	6
07/30/2009	8.98	6.12	2.86
01/05/2010	9.08	8.42	0.66
08/10/2010	10.18	6.68	3.5
01/10/2011	11.23	7.61	3.62
08/02/2011	12.00	8.89	3.11
01/06/2012	10.49	7.63	2.86
MW-42 and MW-40			
08/06/2002	12.08	8.12	3.96
01/20/2004	12.34	8.92	3.42
04/26/2004	12.35	8.33	4.02
07/23/2004	11.26	7.00	4.26
10/18/2004	10.05	7.24	2.81
01/18/2005	10.82	9.15	1.67
04/25/2005	11.00	8.87	2.13
07/18/2005	11.39	8.25	3.14
10/17/2005	10.06	6.94	3.12
01/17/2006	14.38	13.24	1.14
04/24/2006	13.50	11.56	1.94
07/31/2006	11.47	7.93	3.54
10/23/2006	9.88	6.66	3.22
01/08/2007	13.10	11.53	1.57
04/09/2007	12.77	10.06	2.71
08/04/2008	11.39	7.85	3.54
10/01/2008	9.84	7.05	2.79
01/20/2009	11.61	9.36	2.25
04/01/2009	10.87	10.75	0.12
07/30/2009	10.41	7.45	2.96
01/05/2010	10.24	9.11	1.13

Table 2-5
Comparison of Hydraulic Heads in Deep UWBZ and LWBZ
Former PWT Site RI/FS

Date	Deep UWBZ WLE (ft NGVD)	LWBZ WLE (ft NGVD)	Difference in Hydraulic Head (ft)
08/10/2010	11.73	8.30	3.43
01/10/2011	12.85	9.39	3.46
08/02/2011	13.43	10.35	3.08
01/06/2012	11.58	9.42	2.16
MW-51D and MW-54			
08/04/2008	7.13	6.15	0.98
10/01/2008	6.19	5.47	0.72
01/20/2009	8.42	7.79	0.63
04/01/2009	7.84	7.24	0.60
07/30/2009	6.85	6.04	0.81
01/05/2010	8.59	8.29	0.30
08/10/2010	7.48	6.51	0.97
01/10/2011	8.42	7.45	0.97
08/02/2011	9.68	8.77	0.91
01/06/2012	8.3	7.52	0.78
MW-55D and MW-55			
01/10/2011	5.42	6.73	-1.31
08/02/2011	7.12	8.32	-1.20
01/06/2012	5.86	7.05	-1.19
MW-58D and MW-56			
08/04/2008	5.15	5.63	-0.48
10/01/2008	4.63	5.06	-0.43
01/20/2009	7.2	7.52	-0.32
04/01/2009	6.5	6.89	-0.39
07/30/2009	5.42	5.77	-0.35
01/05/2010	7.96	8.11	-0.15
08/10/2010	5.57	6.05	-0.48
01/10/2011	6.24	6.84	-0.60
08/02/2011	8.07	8.43	-0.36
01/06/2012	6.78	7.17	-0.39

NOTES:

Difference in Hydraulic Head

Positive numbers represent a downward flow of groundwater.

Negative numbers represent an upward flow of groundwater.

D = Monitoring well screened in the deep portion of the UWBZ.

ft = feet.

LWBZ = lower water-bearing zone.

NGVD = National Geodetic Vertical Datum of 1927/1947.

UWBZ = upper water-bearing zone.

WLE = water level elevation.

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
Shallow UWBZ (Lake River) **MW-4**			
08/06/2002	6.51	5.09	1.42
01/20/2004	7.53	5.96	1.57
04/26/2004	7.47	5.02	2.45
07/23/2004	6.05	3.25	2.80
10/18/2004	6.58	4.37	2.21
01/18/2005	7.85	6.87	0.98
04/25/2005	8.07	5.02	3.05
07/18/2005	7.04	5.27	1.77
10/17/2005	6.05	4.31	1.74
01/17/2006	12.60	11.86	0.74
04/24/2006	10.08	9.74	0.34
07/31/2006	6.89	4.11	2.78
10/23/2006	5.71	3.41	2.30
01/08/2007	10.53	9.30	1.23
04/09/2007	8.96	7.21	1.75
08/06/2007	6.59	4.22	2.37
01/07/2008	9.44	7.56	1.88
08/04/2008	7.09	3.92	3.17
10/01/2008	5.70	2.91	2.79
01/20/2009	8.65	6.56	2.09
04/01/2009	8.12	5.64	2.48
07/30/2009	6.62	4.65	1.97
01/05/2010	9.06	7.06	2.00
08/10/2010	7.07	3.67	3.40
01/10/2011	8.46	5.71	2.75
02/08/2011	8.93	6.89	2.04
01/06/2012	8.70	5.86	2.84
MW-20S/R			
08/06/2002	5.29	5.09	0.20
01/20/2004	8.29	5.96	2.33
04/26/2004	8.41	5.02	3.39
07/23/2004	7.05	3.25	3.80
10/06/2004[b]	5.50	2.68	2.82
10/06/2004[c]	5.40	4.04	1.36
10/18/2004	5.94	4.37	1.57
01/18/2005	7.42	6.87	0.55
04/25/2005	7.07	5.02	2.05
07/18/2005	7.52	5.27	2.25

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
10/17/2005	6.21	4.31	1.90
01/17/2006	11.43	11.86	-0.43
04/24/2006	10.87	9.74	1.13
07/31/2006	9.33	4.11	5.22
10/23/2006	5.77	3.41	2.36
01/08/2007	10.99	9.30	1.69
04/09/2007	6.52	7.21	-0.69
08/06/2007	6.62	4.22	2.40
01/07/2008	8.19	7.56	0.63
08/04/2008	9.39	3.92	5.47
10/01/2008	5.64	2.91	2.73
01/20/2009	9.72	6.56	3.16
04/01/2009	7.19	5.64	1.55
07/30/2009	6.25	4.65	1.60
01/05/2010	10.38	7.06	3.32
01/10/2011	8.07	5.71	2.36
08/02/2011	10.37	6.89	3.48
01/06/2012	9.50	5.86	3.64
MW-45S			
07/23/2004	6.31	3.25	3.06
10/06/2004[b]	4.78	2.68	2.10
10/06/2004[c]	4.81	4.04	0.77
10/18/2004	6.46	4.37	2.09
01/18/2005	7.07	6.87	0.20
04/25/2005	7.39	5.02	2.37
07/18/2005	6.59	5.27	1.32
10/17/2005	5.56	4.31	1.25
01/17/2006	12.65	11.86	0.79
04/24/2006	10.38	9.74	0.64
07/31/2006	6.07	4.11	1.96
10/23/2006	4.96	3.41	1.55
01/08/2007	10.44	9.30	1.14
04/09/2007	8.40	7.21	1.19
08/06/2007	5.75	4.22	1.53
01/07/2008	8.77	7.56	1.21
08/04/2008	6.14	3.92	2.22
10/01/2008	5.30	2.91	2.39
01/20/2009	7.58	6.56	1.02
04/01/2009	7.74	5.64	2.10
07/30/2009	5.85	4.65	1.20

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
01/05/2010	8.36	7.06	1.30
01/10/2011	5.88	5.71	0.17
08/02/2011	7.17	6.89	0.28
01/06/2012	5.90	5.86	0.04
MW-46S			
07/23/2004	7.58	3.25	4.33
10/06/2004[b]	5.20	2.68	2.52
10/06/2004[c]	5.25	4.04	1.21
10/18/2004	7.34	4.37	2.97
01/18/2005	8.17	6.87	1.30
04/25/2005	8.37	5.02	3.35
07/18/2005	7.32	5.27	2.05
10/17/2005	5.75	4.31	1.44
01/17/2006	13.28	11.86	1.42
04/24/2006	10.87	9.74	1.13
07/31/2006	6.77	4.11	2.66
10/23/2006	5.22	3.41	1.81
01/08/2007	11.18	9.30	1.88
04/09/2007	9.03	7.21	1.82
08/06/2007	6.30	4.22	2.08
01/07/2008	9.52	7.56	1.96
08/04/2008	6.81	3.92	2.89
10/01/2008	5.57	2.91	2.66
01/20/2009	8.30	6.56	1.74
04/01/2009	7.79	5.64	2.15
07/30/2009	6.32	4.65	1.67
01/05/2010	8.96	7.06	1.90
01/10/2011	6.89	5.71	1.18
08/02/2011	8.11	6.89	1.22
01/06/2012	6.91	5.86	1.05
MW-47S			
07/23/2004	3.10	3.25	-0.15
10/06/2004[b]	6.33	2.68	3.65
10/06/2004[c]	6.33	4.04	2.29
10/18/2004	7.69	4.37	3.32
01/18/2005	8.84	6.87	1.97
04/25/2005	9.34	5.02	4.32
07/18/2005	9.34	5.27	4.07
10/17/2005	7.28	4.31	2.97

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
01/17/2006	15.30	11.86	3.44
04/24/2006	12.74	9.74	3.00
07/31/2006	10.57	4.11	6.46
10/23/2006	9.34	3.41	5.93
01/08/2007	14.09	9.30	4.79
04/09/2007	12.47	7.21	5.26
08/06/2007	9.61	4.22	5.39
01/07/2008	13.60	7.56	6.04
08/04/2008	9.69	3.92	5.77
10/01/2008	7.06	2.91	4.15
01/20/2009	11.34	6.56	4.78
04/01/2009	10.13	5.64	4.49
07/30/2009	8.09	4.65	3.44
01/05/2010	11.79	7.06	4.73
08/10/2010	9.34	3.67	5.67
01/10/2011	11.54	5.71	5.83
08/02/2011	11.30	6.89	4.41
01/06/2012	11.24	5.86	5.38
MW-55S			
08/10/2010	8.01	3.67	4.34
01/10/2011	11.30	5.71	5.59
08/02/2011	9.70	6.89	2.81
01/06/2012	9.50	5.86	3.64
Deep UWBZ (Lake River)			
MW-20D			
07/23/2004	5.40	3.25	2.15
10/06/2004[b]	4.27	2.68	1.59
10/06/2004[c]	4.62	4.04	0.58
10/18/2004	5.97	4.37	1.60
01/18/2005	7.10	6.87	0.23
04/25/2005	7.06	5.02	2.04
07/18/2005	6.12	5.27	0.85
10/17/2005	5.27	4.31	0.96
01/17/2006	12.45	11.86	0.59
04/24/2006	10.19	9.74	0.45
07/31/2006	5.84	4.11	1.73
10/23/2006	4.68	3.41	1.27
01/08/2007	10.25	9.30	0.95
04/09/2007	8.31	7.21	1.10
08/06/2007	5.62	4.22	1.40

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
10/01/2008	5.08	2.91	2.17
01/20/2009	7.42	6.56	0.86
07/30/2009	5.65	4.65	1.00
01/05/2010	8.25	7.06	1.19
01/10/2011	6.17	5.71	0.46
08/02/2011	7.52	6.89	0.63
01/06/2012	6.10	5.86	0.24
MW-45D			
07/23/2004	5.38	3.25	2.13
10/06/2004[b]	4.45	2.68	1.77
10/06/2004[c]	4.76	4.04	0.72
10/18/2004	6.02	4.37	1.65
01/18/2005	7.12	6.87	0.25
04/25/2005	7.14	5.02	2.12
07/18/2005	6.25	5.27	0.98
10/17/2005	5.35	4.31	1.04
01/17/2006	11.53	11.86	-0.33
04/24/2006	10.27	9.74	0.53
07/31/2006	6.06	4.11	1.95
10/23/2006	4.84	3.41	1.43
01/08/2007	10.35	9.30	1.05
04/09/2007	8.39	7.21	1.18
08/06/2007	5.74	4.22	1.52
01/07/2008	8.51	7.56	0.95
08/04/2008	5.97	3.92	2.05
10/01/2008	5.23	2.91	2.32
01/20/2009	7.55	6.56	0.99
04/01/2009	7.33	5.64	1.69
07/30/2009	5.79	4.65	1.14
01/05/2010	8.28	7.06	1.22
01/10/2011	6.92	5.71	1.21
08/02/2011	8.31	6.89	1.42
01/06/2012	6.85	5.86	0.99
MW-46D			
07/23/2004	5.27	3.25	2.02
10/06/2004[b]	4.30	2.68	1.62
10/06/2004[c]	4.60	4.04	0.56
10/18/2004	5.90	4.37	1.53
01/18/2005	7.06	6.87	0.19
04/25/2005	7.05	5.02	2.03

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
07/18/2005	6.13	5.27	0.86
10/17/2005	5.24	4.31	0.93
01/17/2006	12.46	11.86	0.60
04/24/2006	10.18	9.74	0.44
07/31/2006	5.83	4.11	1.72
10/23/2006	4.67	3.41	1.26
01/08/2007	10.25	9.30	0.95
04/09/2007	8.29	7.21	1.08
08/09/2007	5.62	4.22	1.40
01/07/2008	8.43	7.56	0.87
08/04/2008	5.78	3.92	1.86
10/01/2008	5.12	2.91	2.21
01/20/2009	7.44	6.56	0.88
04/01/2009	7.40	5.64	1.76
07/30/2009	5.98	4.65	1.33
01/05/2010	8.25	7.06	1.19
01/10/2011	5.49	5.71	-0.22
08/02/2011	6.87	6.89	-0.02
01/06/2012	5.47	5.86	-0.39
MW-47D			
07/23/2004	5.56	3.25	2.31
10/06/2004[b]	4.66	2.68	1.98
10/06/2004[c]	4.89	4.04	0.85
10/18/2004	6.24	4.37	1.87
01/18/2005	7.21	6.87	0.34
04/25/2005	7.32	5.02	2.30
07/18/2005	6.43	5.27	1.16
10/17/2005	5.56	4.31	1.25
01/17/2006	12.52	11.86	0.66
04/24/2006	10.33	9.74	0.59
07/31/2006	6.08	4.11	1.97
10/23/2006	4.97	3.41	1.56
01/08/2007	10.36	9.30	1.06
04/09/2007	8.52	7.21	1.31
08/06/2007	5.84	4.22	1.62
01/07/2008	8.62	7.56	1.06
08/04/2008	5.96	3.92	2.04
10/01/2008	5.38	2.91	2.47
01/20/2009	7.55	6.56	0.99
04/01/2009	7.46	5.64	1.82

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation^{a} (ft NGVD)	Difference in Levels (ft)
07/30/2009	5.72	4.65	1.07
01/05/2010	6.80	7.06	-0.26
08/10/2010	6.21	3.67	2.54
01/10/2011	7.31	5.71	1.60
08/02/2011	8.48	6.89	1.59
01/06/2012	7.14	5.86	1.28
MW-55D			
08/10/2010	3.00	3.67	-0.67
01/10/2011	5.42	5.71	-0.29
08/02/2011	7.12	6.89	0.23
01/06/2012	5.86	5.86	0.00
MW-58D			
08/04/2008	5.15	3.92	1.23
10/01/2008	4.63	2.91	1.72
01/20/2009	7.20	6.56	0.64
04/01/2009	6.50	5.64	0.86
07/30/2009	5.42	4.65	0.77
01/05/2010	7.96	7.06	0.90
08/10/2010	5.57	3.67	1.90
01/10/2011	6.24	5.71	0.53
08/02/2011	8.07	6.89	1.18
01/06/2012	6.78	5.86	0.92
LWBZ (Lake River) **MW-55**			
08/04/2008	5.53	3.92	1.61
10/01/2008	4.96	2.91	2.05
01/20/2009	7.43	6.56	0.87
04/01/2009	6.75	5.64	1.11
07/30/2009	5.68	4.65	1.03
01/05/2010	8.07	7.06	1.01
08/10/2010	5.91	3.67	2.24
01/10/2011	6.73	5.71	1.02
08/02/2011	8.32	6.89	1.43
01/06/2012	7.05	5.86	1.19
MW-56			
08/04/2008	5.63	3.92	1.71
10/01/2008	5.06	2.91	2.15
01/20/2009	7.52	6.56	0.96
04/01/2009	6.89	5.64	1.25
07/30/2009	5.77	4.65	1.12
01/05/2010	8.11	7.06	1.05

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation^a (ft NGVD)	Difference in Levels (ft)
08/10/2010	6.05	3.67	2.38
01/10/2011	6.84	5.71	1.13
08/02/2011	8.43	6.89	1.54
01/06/2012	7.17	5.86	1.31
MW-61			
08/10/2010	3.76	3.67	0.09
01/10/2011	5.90	5.71	0.19
08/02/2011	4.12	6.89	-2.77
01/06/2012	6.36	5.86	0.50
MW-62			
08/10/2010	4.58	3.67	-0.91
01/10/2011	6.22	5.71	0.51
08/02/2011	7.66	6.89	0.77
01/06/2012	6.44	5.86	0.58
Shallow and Deep UWBZ (Carty Lake) **RMW-1D**			
08/06/2002	8.42	10.55	-2.13
10/18/2004	7.72	10.25	-2.53
01/18/2005	8.84	11.25	-2.41
04/25/2005	8.73	11.94	-3.21
07/18/2005	8.66	11.25	-2.59
10/17/2005	7.40	10.25	-2.85
01/17/2006	13.16	12.26	0.90
04/24/2006	11.63	12.00	-0.37
07/31/2006	8.30	10.95	-2.65
10/23/2006	7.01	10.15	-3.14
01/08/2007	11.36	12.13	-0.77
04/09/2007	10.25	12.10	-1.85
08/06/2007	7.97	10.70	-2.73
01/07/2008	10.11	12.15	-2.04
08/04/2008	8.25	10.95	-2.70
10/01/2008	7.20	10.25	-3.05
01/20/2009	9.55	11.95	-2.40
04/01/2009	9.01	11.85	-2.84
07/30/2009	7.76	10.40	-2.64
01/05/2010	9.12	11.45	-2.33
08/10/2010	8.48	11.15	-2.67
01/10/2011	9.72	12.05	-2.33
08/02/2011	10.46	11.75	-1.29
08/02/2011	10.46	11.75	-1.29
01/06/2012	9.59	NA	NA

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
RMW-1S			
08/06/2002	9.89	10.55	-0.66
10/18/2004	9.57	10.25	-0.68
01/18/2005	10.35	11.25	-0.90
04/25/2005	10.84	11.94	-1.10
07/18/2005	10.46	11.25	-0.79
10/17/2005	9.44	10.25	-0.81
01/17/2006	12.43	12.26	0.17
04/24/2006	12.02	12.00	0.02
07/31/2006	10.15	10.95	-0.80
10/23/2006	9.19	10.15	-0.96
01/08/2007	12.00	12.13	-0.13
04/09/2007	11.61	12.10	-0.49
08/06/2007	9.82	10.70	-0.88
01/07/2008	11.64	12.15	-0.51
08/04/2008	10.16	10.95	-0.79
10/01/2008	8.93	10.25	-1.32
01/20/2009	11.60	11.95	-0.35
04/01/2009	10.88	11.85	-0.97
07/30/2009	9.12	10.40	-1.28
01/05/2010	10.69	11.45	-0.76
08/10/2010	10.52	11.15	-0.63
01/10/2011	11.74	12.05	-0.31
08/02/2011	11.61	11.75	-0.14
01/06/2012	11.28	NA	NA
RMW-2D			
08/06/2002	10.64	10.55	0.09
10/18/2004	9.30	10.25	-0.95
01/18/2005	10.19	11.25	-1.06
04/25/2005	10.30	11.94	-1.64
07/18/2005	10.38	11.25	-0.87
10/17/2005	9.10	10.25	-1.15
01/17/2006	14.09	12.26	1.83
04/24/2006	12.66	12.00	0.66
07/31/2006	10.24	10.95	-0.71
10/23/2006	8.80	10.15	-1.35
01/08/2007	12.40	12.13	0.27
04/09/2007	11.77	12.10	-0.33
08/06/2007	9.96	10.70	-0.74
01/07/2008	11.22	12.15	-0.93
08/04/2008	10.22	10.95	-0.73

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
10/01/2008	9.18	10.25	-1.07
01/20/2009	11.07	11.95	-0.88
04/01/2009	10.53	11.85	-1.32
07/30/2009	9.67	10.40	-0.73
01/05/2010	10.04	11.45	-1.41
08/10/2010	10.84	11.15	-0.31
01/10/2011	11.96	12.05	-0.09
08/02/2011	12.51	11.75	0.76
01/06/2012	11.15	NA	NA
RMW-2S			
08/06/2002	9.90	10.55	-0.65
10/18/2004	10.06	10.25	-0.19
01/18/2005	11.09	11.25	-0.16
04/25/2005	11.25	11.94	-0.69
07/18/2005	11.08	11.25	-0.17
10/17/2005	9.88	10.25	-0.37
01/17/2006	13.92	12.26	1.66
04/24/2006	12.86	12.00	0.86
07/31/2006	10.94	10.95	-0.01
10/23/2006	9.52	10.15	-0.63
01/08/2007	12.68	12.13	0.55
04/09/2007	12.35	12.10	0.25
08/06/2007	10.62	10.70	-0.08
01/07/2008	11.79	12.15	-0.36
08/04/2008	10.86	10.95	-0.09
10/01/2008	9.48	10.25	-0.77
01/20/2009	11.40	11.95	-0.55
04/01/2009	11.08	11.85	-0.77
07/30/2009	9.99	10.40	-0.41
01/05/2010	10.50	11.45	-0.95
08/10/2010	11.31	11.15	0.16
01/10/2011	12.37	12.05	0.32
08/02/2011	12.81	11.75	1.06
01/06/2012	11.49	NA	NA
RMW-3D			
08/06/2002	7.91	10.55	-2.64
10/18/2004	NA	10.25	NA
01/18/2005	NA	11.25	NA
04/25/2005	8.42	11.94	-3.52
07/18/2005	8.22	11.25	-3.03
10/17/2005	6.97	10.25	-3.28

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
01/17/2006	12.93	12.26	0.67
04/24/2006	11.34	12.00	-0.66
07/31/2006	7.80	10.95	-3.15
10/23/2006	6.56	10.15	-3.59
01/08/2007	11.13	12.13	-1.00
04/09/2007	9.88	12.10	-2.22
08/06/2007	7.52	10.70	-3.18
01/07/2008	9.85	12.15	-2.30
08/04/2008	7.74	10.95	-3.21
10/01/2008	6.69	10.25	-3.56
01/20/2009	9.16	11.95	-2.79
04/01/2009	8.69	11.85	-3.16
07/30/2009	7.31	10.40	-3.09
01/05/2010	8.87	11.45	-2.58
08/10/2010	7.99	11.15	-3.16
01/10/2011	9.16	12.05	-2.89
08/02/2011	10.02	11.75	-1.73
01/06/2012	9.05	NA	NA
RMW-3S			
08/06/2002	10.16	10.55	-0.39
10/18/2004	NA	10.25	NA
01/18/2005	NA	11.25	NA
04/25/2005	11.65	11.94	-0.29
07/18/2005	11.04	11.25	-0.21
10/17/2005	9.96	10.25	-0.29
01/17/2006	12.37	12.26	0.11
04/24/2006	11.97	12.00	-0.03
07/31/2006	10.59	10.95	-0.36
10/23/2006	9.75	10.15	-0.40
01/08/2007	12.09	12.13	-0.04
04/09/2007	11.90	12.10	-0.20
08/06/2007	10.24	10.70	-0.46
01/07/2008	11.98	12.15	-0.17
08/04/2008	10.60	10.95	-0.35
10/01/2008	9.52	10.25	-0.73
01/20/2009	11.72	11.95	-0.23
04/01/2009	11.65	11.85	-0.20
07/30/2009	9.72	10.40	-0.68
01/05/2010	11.30	11.45	-0.15
08/10/2010	10.92	11.15	-0.23
01/10/2011	11.89	12.05	-0.16

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
08/02/2011	11.66	11.75	-0.09
01/06/2012	11.73	NA	NA
MW-38			
08/06/2002	11.51	10.55	0.96
01/20/2004	12.03	NA	NA
04/26/2004	11.85	NA	NA
07/23/2004	10.73	NA	NA
10/18/2004	9.69	10.25	-0.56
01/18/2005	10.40	11.25	-0.85
04/25/2005	10.60	11.94	-1.34
07/18/2005	10.89	11.25	-0.36
10/17/2005	9.67	10.25	-0.58
01/17/2006	14.33	12.26	2.07
04/24/2006	13.14	12.00	1.14
07/31/2006	10.90	10.95	-0.05
10/23/2006	9.28	10.15	-0.87
01/08/2007	12.55	12.13	0.42
04/09/2007	12.14	12.10	0.04
08/06/2007	10.55	10.70	-0.15
01/07/2008	11.28	12.15	-0.87
08/04/2008	10.68	10.95	-0.27
10/01/2008	9.28	10.25	-0.97
01/20/2009	11.08	11.95	-0.87
04/01/2009	10.70	11.85	-1.15
07/30/2009	9.86	10.40	-0.54
01/05/2010	9.41	11.45	-2.04
08/10/2010	11.04	11.15	-0.11
01/10/2011	12.03	12.05	-0.02
08/02/2011	12.71	11.75	0.96
01/06/2012	11.18	NA	NA
MW-39			
08/06/2002	12.00	10.55	1.45
01/20/2004	12.44	NA	NA
04/26/2004	12.34	NA	NA
07/23/2004	11.28	NA	NA
10/18/2004	10.05	10.25	-0.20
01/18/2005	10.79	11.25	-0.46
04/25/2005	10.94	11.94	-1.00
07/18/2005	11.30	11.25	0.05
10/17/2005	10.05	10.25	-0.20
01/17/2006	15.58	12.26	3.32

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation^{a} (ft NGVD)	Difference in Levels (ft)
04/24/2006	13.41	12.00	1.41
07/31/2006	11.41	10.95	0.46
10/23/2006	9.77	10.15	-0.38
01/08/2007	12.90	12.13	0.77
04/09/2007	12.70	12.10	0.60
08/06/2007	11.15	10.70	0.45
01/07/2008	11.72	12.15	-0.43
08/04/2008	11.21	10.95	0.26
10/01/2008	9.74	10.25	-0.51
01/20/2009	11.50	11.95	-0.45
04/01/2009	10.50	11.85	-1.35
07/30/2009	10.31	10.40	-0.09
01/05/2010	10.07	11.45	-1.38
08/10/2010	11.60	11.15	0.45
01/10/2011	11.89	12.05	-0.16
08/02/2011	11.66	11.75	-0.09
01/06/2012	11.73	NA	NA
USDFW-1			
08/06/2002	11.09	10.55	0.54
01/20/2004	11.70	11.64	0.06
04/26/2004	11.46	12.75	-1.29
07/23/2004	10.30	10.65	-0.35
10/18/2004	9.51	10.25	-0.74
01/18/2005	10.19	11.25	-1.06
04/25/2005	10.47	11.94	-1.47
07/18/2005	10.70	11.25	-0.55
10/17/2005	9.45	10.25	-0.80
01/31/2006	12.03	12.26	-0.23
04/24/2006	12.88	12.00	0.88
07/31/2006	10.59	10.95	-0.36
10/23/2006	9.05	10.15	-1.10
01/08/2007	12.49	12.13	0.36
04/09/2007	11.94	12.10	-0.16
08/06/2007	10.15	10.70	-0.55
01/07/2008	11.24	12.15	-0.91
08/04/2008	10.27	10.95	-0.68
10/01/2008	8.95	10.25	-1.30
01/20/2009	10.93	11.95	-1.02
04/01/2009	10.31	11.85	-1.54
07/30/2009	9.44	10.40	-0.96
01/05/2010	9.41	11.45	-2.04

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
08/10/2010	10.63	11.15	-0.52
01/10/2011	11.68	12.05	-0.37
08/02/2011	12.25	11.75	0.50
01/06/2012	10.98	NA	NA
USDFW-2			
08/06/2002	8.41	10.55	-2.14
01/20/2004	9.58	11.64	-2.06
04/26/2004	9.14	12.75	-3.61
07/23/2004	7.75	10.65	-2.90
10/18/2004	7.88	10.25	-2.37
01/18/2005	8.94	11.25	-2.31
04/25/2005	9.02	11.94	-2.92
07/18/2005	8.80	11.25	-2.45
10/17/2005	7.57	10.25	-2.68
01/31/2006	12.87	12.26	0.61
04/24/2006	11.49	12.00	-0.51
07/31/2006	8.30	10.95	-2.65
10/23/2006	7.23	10.15	-2.92
01/08/2007	11.38	12.13	-0.75
04/09/2007	10.29	12.10	-1.81
08/06/2007	7.97	10.70	-2.73
01/07/2008	10.20	12.15	-1.95
08/04/2008	8.29	10.95	-2.66
10/01/2008	7.39	10.25	-2.86
01/20/2009	9.67	11.95	-2.28
04/01/2009	9.25	11.85	-2.60
07/30/2009	7.82	10.40	-2.58
01/05/2010	9.14	11.45	-2.31
08/10/2010	8.74	11.15	-2.41
01/10/2011	9.72	12.05	-2.33
08/02/2011	10.38	11.75	-1.37
01/06/2012	9.76	NA	NA
USDFW-3			
08/06/2002	6.88	10.55	-3.67
01/20/2004	8.21	11.64	-3.43
04/26/2004	7.52	12.75	-5.23
07/23/2004	6.16	10.65	-4.49
10/18/2004	6.51	10.25	-3.74
01/18/2005	7.83	11.25	-3.42
04/25/2005	7.52	11.94	-4.42
07/18/2005	7.40	11.25	-3.85

Table 2-6
Comparison of Hydraulic Heads between WBZs and Surface Water Bodies
Former PWT Site RI/FS

Date	Water Level Elevation (ft NGVD)	Surface Water Gauge Elevation[a] (ft NGVD)	Difference in Levels (ft)
10/17/2005	6.00	10.25	-4.25
01/31/2006	14.90	12.26	2.64
04/24/2006	10.75	12.00	-1.25
07/31/2006	6.77	10.95	-4.18
10/23/2006	5.53	10.15	-4.62
01/08/2007	10.64	12.13	-1.49
04/09/2007	9.06	12.10	-3.04
08/06/2007	6.52	10.70	-4.18
01/07/2008	9.19	12.15	-2.96
08/04/2008	6.82	10.95	-4.13
10/01/2008	5.74	10.25	-4.51
01/20/2009	8.38	11.95	-3.57
04/01/2009	7.90	11.85	-3.95
07/30/2009	6.56	10.40	-3.84
01/05/2010	8.38	11.45	-3.07
08/10/2010	6.88	11.15	-4.27
01/10/2011	7.99	12.05	-4.06
08/02/2011	9.13	11.75	-2.62
01/06/2012	8.30	NA	NA

NOTES:

D = Monitoring well screened in the deep portion of the WBZ.

ft = feet.

LWBZ = lower water-bearing zone.

NA = not available.

NGVD = National Geodetic Vertical Datum of 1927/1947.

S = Monitoring well screened in the shallow portion of the WBZ.

UWBZ = upper water-bearing zone.

WBZ = water-bearing zone

[a] Surface water elevations used from Lake River (low value) and Carty Lake as indicated. The lower water elevation of the two Lake River measurements was used for the comparison.

[b] Water levels obtained during low tide conditions.

[c] Water levels obtained during high tide conditions.

Table 2-7
Lake River Surface Sediment Characteristics
Former PWT Site RI/FS

Location ID	LRIS-LR-01	LRIS-LR-02	LRIS-LR-03	LRIS-LR-04	LRIS-LR-05	LRIS-LR-06	LRIS-LR-07	LRIS-LR-08	LRIS-LR-09	LRIS-LR-10	LRIS-LR-11	LRIS-LR-12	LRIS-LR-13	LRIS-LR-14	LRIS-LR-15
Sample ID	LRIS-LR-01-SS	LRIS-LR-02-SS	LRIS-LR-03-SS	LRIS-LR-04-SS	LRIS-LR-05-SS	LRIS-LR-06-SS	LRIS-LR-07-SS	LRIS-LR-08-SS	LRIS-LR-09-SS	LRIS-LR-10-SS	LRIS-LR-11-SS	LRIS-LR-12-SS	LRIS-LR-13-SS	LRIS-LR-14-SS	LRIS-LR-15-SS
Sample Date	04/19/2010	04/19/2010	04/19/2010	04/19/2010	04/19/2010	04/19/2010	04/19/2010	04/19/2010	04/19/2010	04/19/2010	04/20/2010	04/20/2010	04/20/2010	04/20/2010	04/20/2010
Sample Depth	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm
Conventional Parameters															
Total organic carbon (%)	1.3	1.9	1.1	2.1	1.8	1.6	0.87	0.84	1	1	1.4	0.36	1.2	1.1	1.1
Total solids (%)	54	44	54	44	46	49	56	59	56	55	51	70	53	56	54
Total volatile solids (%)	4.6	5.5	3.5	5.3	4.9	4.5	3.1	3.2	3.2	3.4	3.8 J	1.2 J	3.8 J	2.8 J	3.4 J
Ammonia (mg/kg)	R	R	R	600 J	R	R	R	R	R	R	R	22 UJ	33 J	28 UJ	39 J
Sulfide (mg/kg)	12	9.1 J	9.3 U	5.5 J	11 U	10 U	9 U	12	11	7.4 J	9.7 UJ	21 J	15 J	4.3 J	7.4 J
Grain Size (%)															
Clay	6.4	11	7.6	11	11	9.2	8	5.9	6.6	0.96	8.9	1.6	7.4	5.7	9
Gravel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sand, Coarse	0	0	0	0	0	0	0	0	0	0	0	0.7	0	0	0
Sand, Fine	32	18	31	29	18	28	54	76	40	50	38	84	42	58	49
Sand, Medium	0.8	0.5	0.6	0.5	0.7	0.8	0.5	1.3	0.7	0.7	0.6	9.4	0.8	1.7	0.6
Sand, Very Fine	9.7	9.8	13	11	9.5	11	14	5	14	7.5	12	2.1	12	5.7	13
Silt	51	61	48	49	61	52	23	12	39	41	41	2.7	38	29	28
Total Clay	6.4	11	7.6	11	11	9.2	8	5.9	6.6	0.96	8.9	1.6	7.4	5.7	9
Total Fines (silt + clay)	57.4	72	55.6	60	72	61.2	31	17.9	45.6	42.0	49.9	4.3	45.4	34.7	37
Total Gravel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Sand	42.5	28.3	44.6	40.5	28.2	39.8	68.5	82.3	54.7	58.2	50.6	96.2	54.8	65.4	62.6
Total Silt	51	61	48	49	61	52	23	12	39	41	41	2.7	38	29	28
Total Grain Size	99.9	100.3	100.2	100.5	100.2	101	99.5	100.2	100.3	100.2	100.5	100.5	100.2	100.1	99.6

Table 2-7
Lake River Surface Sediment Characteristics
Former PWT Site RI/FS

Location ID	LRIS-LR-15	LRIS-LR-16	LRIS-LR-17	LRIS-LR-18	LRIS-LR-19	LRIS-LR-20	LRIS-LR-21	LRIS-LR-22	LRIS-LR-23	LRIS-LR-23	LRIS-LR-24	LRIS-LR-25	LRIS-LR-26	LRIS-LR-27	LRIS-LR-28
Sample ID	LRIS-LR-65-SS	LRIS-LR-16-SS	LRIS-LR-17-SS	LRIS-LR-18-SS	LRIS-LR-19-SS	LRIS-LR-20-SS	LRIS-LR-21-SS	LRIS-LR-22-SS	LRIS-LR-23-SS	LRIS-LR-73-SS	LRIS-LR-24-SS	LRIS-LR-25-SS	LRIS-LR-26-SS	LRIS-LR-27-SS	LRIS-LR-28-SS
Sample Date	04/20/2010	04/20/2010	04/20/2010	04/20/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010
Sample Depth	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm
Conventional Parameters															
Total organic carbon (%)	1.3	3.2	0.77	1.2	2.1 J	2.4 J	0.63 J	1.6 J	0.49 J	0.57	1.9	1.3	0.97	0.99	0.34
Total solids (%)	55	37	64	58	57	49	64	62	65	64	55	54	67	60	71
Total volatile solids (%)	3.4 J	7.4 J	2.2 J	2.9 J	3.7	5	1.4	2.5	1.3	1.1	3.4	5.4	1.6	1.9	0.87
Ammonia (mg/kg)	45 J	54 UJ	30 UJ	40 J	39 J	25 J	R	35 J	27 J	21 J	37 J	26 J	R	20 J	R
Sulfide (mg/kg)	13 J	13 UJ	10 J	9.6 J	13 J	6.6 J	13 J	12 J	11 J	6.3 J	26 J	9.3 UJ	11 J	13 J	7.9 J
Grain Size (%)															
Clay	9.6	14	6.7	11	6.4	7.8	4.6	3.2	5.2	4.2	4.3	1.2	1.7	5.4	3.1
Gravel	0	0	0	0.9	0	0	0	0	0	0	0	0	0	0	0
Sand, Coarse	0	0	0	3.3	0	0	0	0	0	0	0	0	0	0	0
Sand, Fine	46	43	70	44	47	37	67	70	66	67	43	61	75	42	86
Sand, Medium	0.8	2.7	0.8	5.1	1.5	2	0.2	2.3	0.3	0.3	1.5	7.2	1.7	0.3	0.9
Sand, Very Fine	12	6.5	7.9	5.7	7.4	7.5	7.5	3.8	8.7	8.7	10	3.8	4.9	12	2.7
Silt	31	34	15	30	38	46	21	20	20	20	41	27	17	40	6.8
Total Clay	9.6	14	6.7	11	6.4	7.8	4.6	3.2	5.2	4.2	4.3	1.2	1.7	5.4	3.1
Total Fines (silt + clay)	40.6	48	21.7	41	44.4	53.8	25.6	23.2	25.2	24.2	45.3	28.2	18.7	45.4	9.9
Total Gravel	0	0	0	0.9	0	0	0	0	0	0	0	0	0	0	0
Total Sand	58.8	52.2	78.7	58.1	55.9	46.5	74.7	76.1	75	76	54.5	72	81.6	54.3	89.6
Total Silt	31	34	15	30	38	46	21	20	20	20	41	27	17	40	6.8
Total Grain Size	99.4	100.2	100.4	100	100.3	100.3	100.3	99.3	100.2	100.2	99.8	100.2	100.3	99.7	99.5

NOTES:

cm = centimeter(s).

J = estimated value.

mg/kg = milligrams per kilogram.

R = data rejected during data quality review.

U = Compound analyzed, but not detected above detection limit.

UJ = Compound analyzed, but not detected above estimated detection limit.

Table 2-8
Lake River Subsurface Sediment Characteristics
Former PWT Site RI/FS

Location ID	LRIS-LR-01	LRIS-LR-01	LRIS-LR-03	LRIS-LR-03	LRIS-LR-05	LRIS-LR-05	LRIS-LR-05	LRIS-LR-06	LRIS-LR-06	LRIS-LR-08
Sample ID	LRIS-LR-01-SB-1-2	LRIS-LR-01-SB-4-5	LRIS-LR-03-SB-1-2	LRIS-LR-03-SB-3-4	LRIS-LR-05-SB-1-2	LRIS-LR-05-SB-9-10.5	LRIS-LR-55-SB-9-10.5	LRIS-LR-06-SB-1-2	LRIS-LR-06-SB-3-4	LRIS-LR-08-SB-1-2
Sample Date	04/26/2010	04/26/2010	04/27/2010	04/27/2010	04/27/2010	04/27/2010	04/27/2010	04/28/2010	04/28/2010	04/28/2010
Sample Depth	1-2 ft	4-5 ft	1-2 ft	3-4 ft	1-2 ft	9-10.5 ft	9-10.5 ft	1-2 ft	3-4 ft	1-2 ft
Conventional Parameters										
Total organic carbon (%)	1.4	0.84	1.4	1.4	1.3	0.3	0.13 J	0.93	1.5	1.2
Total solids (%)	60	72	59	63	64	82	81	64	62	77
Total volatile solids (%)	4	2.3	4.2	4	4.5	0.97	0.95	3	5.3	1.4
Grain Size (%)										
Clay	17 J	6.7	20	15	21	1.9	1.1	17	22	2.6
Gravel	0	0	0	0	0	0	0	0	0	47
Sand, Coarse	0	0	0	0	0	0	0	0	0	8.2
Sand, Fine	18	58	9.3	22	24	85	85	34	17	33
Sand, Medium	0.5	0.1	0.4	0.4	1.1	7.9	8.6	0.7	0.5	7.2
Sand, Very Fine	5.1	9.2	6.3	4.6	6.3	0.41	0.5	7.6	3.5	1.5
Silt	60	26	64	58	48	4.6	4.6	41	57	0.44
Total Clay	17 J	6.7	20	15	21	1.9	1.1	17	22	2.6
Total Fines (silt + clay)	77	32.7	84	73	69	6.5	5.7	58	79	3.04
Total Gravel	0	0	0	0	0	0	0	0	0	47
Total Sand	23.6	67.3	16	27	31.4	93.31	94.1	42.3	21	49.9
Total Silt	60	26	64	58	48	4.6	4.6	41	57	0.44
Total Grain Size	100.6	100	100	100	100.4	99.81	99.8	100.3	100	99.94

Table 2-8
Lake River Subsurface Sediment Characteristics
Former PWT Site RI/FS

Location ID	LRIS-LR-08	LRIS-LR-09	LRIS-LR-09	LRIS-LR-10	LRIS-LR-10	LRIS-LR-12	LRIS-LR-12	LRIS-LR-14	LRIS-LR-14
Sample ID	LRIS-LR-08-SB-3-4	LRIS-LR-09-SB-1-2	LRIS-LR-09-SB-4-5	LRIS-LR-10-SB-1-2	LRIS-LR-10-SB-5-6	LRIS-LR-12-SB-1-2	LRIS-LR-12-SB-4-5	LRIS-LR-14-SB-1-2	LRIS-LR-14-SB-4-5
Sample Date	04/28/2010	04/29/2010	04/29/2010	04/28/2010	04/28/2010	04/28/2010	04/28/2010	04/28/2010	04/28/2010
Sample Depth	3-4 ft	1-2 ft	4-5 ft	1-2 ft	5-6 ft	1-2 ft	4-5 ft	1-2 ft	4-5 ft
Conventional Parameters									
Total organic carbon (%)	3	0.87	1.3	1.2	2.3	2.4	1.9	0.79	2
Total solids (%)	60	66	61	61	67	59	64	67	58
Total volatile solids (%)	9.4	2.6	4.1	3	6	5.8	5.1	2.7	4.6
Grain Size (%)									
Clay	15	7.1 J	18.3	9.1	9.5	2.6	10	12	24
Gravel	0	0	0	0	0	0	0	0	0
Sand, Coarse	0	0	0	0	0	0	0	0	0
Sand, Fine	31	46.7	11.3	36	37	60	39	53	20
Sand, Medium	2.4	0.2	0.1	0.9	5	5.3	1.8	1.7	0.6
Sand, Very Fine	5.2	9.1	6.1	9.3	5.8	6	8.1	4.7	4.5
Silt	46	36.9	64.2	45	43	26	41	28	51
Total Clay	15	7.1 J	18.3	9.1	9.5	2.6	10	12	24
Total Fines (silt + clay)	61	44	82.5	54.1	52.5	28.6	51	40	75
Total Gravel	0	0	0	0	0	0	0	0	0
Total Sand	38.6	56	17.5	46.2	47.8	71.3	48.9	59.4	25.1
Total Silt	46	36.9	64.2	45	43	26	41	28	51
Total Grain Size	99.6	100	100	100.3	100.3	99.9	99.9	99.4	100.1

NOTES:

ft = feet.

J = estimated value.

Table 2-9
Carty Lake Sediment Characteristics
Former PWT Site RI/FS

Location ID	LRIS-BKG-04	LRIS-CL-01	LRIS-CL-01	LRIS-CL-02	LRIS-CL-02	LRIS-CL-02	LRIS-CL-03	LRIS-CL-03	LRIS-CL-04	LRIS-CL-04	LRIS-CL-05	LRIS-CL-05
Sample ID	LRIS-BKG-04-SS	LRIS-CL-01-SS	LRIS-CL-01-SB-1-2	LRIS-CL-02-SS	LRIS-CL-02-SB-1-2	LRIS-CL-02-SB-2-3	LRIS-CL-03-SS	LRIS-CL-03-SB-1-2	LRIS-CL-04-SS	LRIS-CL-04-SB-1-2	LRIS-CL-05-SS	LRIS-CL-05-SB-1-2
Sample Date	04/16/2010	04/15/2010	04/15/2010	04/15/2010	04/15/2010	09/01/2011	04/15/2010	04/15/2010	04/15/2010	04/15/2010	04/15/2010	04/15/2010
Sample Depth	0-10 cm	0-10 cm	1-2 ft	0-10 cm	1-2 ft	2-3 ft	0-10 cm	1-2 ft	0-10 cm	1-2 ft	0-10 cm	1-2 ft
Conventional Parameters												
Total organic carbon (%)	3.2	4.5	NV	5.4	2.8	0.84	3.6	NV	4.9	1.4	1.3	NV
Grain Size (%)												
Clay	20	34	NV	43	34	38.8	29	NV	22	32	25	NV
Gravel	0	0	NV	0	0	0	0	NV	0	0	0	NV
Sand, Coarse	0	0	NV	0	0	0	0	NV	0	0	0	NV
Sand, Fine	23	14	NV	4.6	8 J	3.1	25	NV	18	5.5	14	NV
Sand, Medium	1.2	0.9	NV	1.6	1.6	0.9	1	NV	2	0.7	1.8	NV
Sand, Very Fine	7.7	6	NV	1.3	2.8 J	NV	8.3	NV	5.4	2.4	5.5	NV
Silt	48	44	NV	50	53	57.2	36	NV	53	59	54	NV
Total Clay	20	34	NV	43	34	38.8	29	NV	22	32	25	NV
Total Fines (silt + clay)	68	78	NV	93	87	96	65	NV	75	91	79	NV
Total Gravel	0	0	NV	0	0	0	0	NV	0	0	0	NV
Total Sand	31.9	20.9	NV	7.5	12.4	4	34.3	NV	25.4	8.6	21.3	NV
Total Silt	48	44	NV	50	53	57.2	36	NV	53	59	54	NV
Total Grain Size	99.9	98.9	NV	100.5	99.4	100	99.3	NV	100.4	99.6	100.3	NV

Table 2-9
Carty Lake Sediment Characteristics
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	LRIS-CL-06 LRIS-CL-06-SS 04/15/2010 0-10 cm	LRIS-CL-06 LRIS-CL-06-SB-1-2 04/15/2010 1-2 ft	LRIS-CL-07 LRIS-CL-07-SS 04/15/2010 0-10 cm	LRIS-CL-07 LRIS-CL-07-SB-1-2 04/15/2010 1-2 ft	LRIS-CL-08 LRIS-CL-08-SS 09/01/2011 0-10 cm	LRIS-CL-09 LRIS-CL-09-SS 09/01/2011 0-10 cm	LRIS-CL-10 LRIS-CL-10-SS 09/01/2011 0-10 cm	LRIS-CL-11 LRIS-CL-11-SS 09/01/2011 0-10 cm	LRIS-CL-12 LRIS-CL-12-SS 09/01/2011 0-10 cm	LRIS-CL-13 LRIS-CL-13-SS 09/01/2011 0-10 cm	LRIS-CL-14 LRIS-CL-14-SS 09/01/2011 0-10 cm	LRIS-CL-15 LRIS-CL-15-SS 09/01/2011 0-10 cm
Conventional Parameters												
Total organic carbon (%)	2.4	NV	1.7	NV	2.1	3.2	1.5	2.6	2.1	1.3	2.8	3.5
Grain Size (%)												
Clay	20	NV	23	NV	8.7	17.5	8.1	14.2	12.5	21.2	11.5	17.8
Gravel	0	NV	0	NV	0	0	0	0	0	0	0	0
Sand, Coarse	0	NV	0	NV	0	0	0	0	0	0	0	0
Sand, Fine	24	NV	36	NV	16.4	8.5	21.6	22.8	27.8	11.9	19.6	26.6
Sand, Medium	1.8	NV	1	NV	0.6	0.4	8	0.4	0.2	0.4	0.6	4
Sand, Very Fine	4.8	NV	6.2	NV	NV	NV	NV	NV	NV	NV	NV	NV
Silt	50	NV	33	NV	74.3	73.6	62.3	62.6	59.5	66.5	68.3	51.6
Total Clay	20	NV	23	NV	8.7	17.5	8.1	14.2	12.5	21.2	11.5	17.8
Total Fines (silt + clay)	70	NV	56	NV	83	91.1	70.4	76.8	72	87.7	79.8	69.4
Total Gravel	0	NV	0	NV	0	0	0	0	0	0	0	0
Total Sand	30.6	NV	43.2	NV	17	8.9	29.6	23.2	28	12.3	20.2	30.6
Total Silt	50	NV	33	NV	74.3	73.6	62.3	62.6	59.5	66.5	68.3	51.6
Total Grain Size	100.6	NV	99.2	NV	100	100	100	100	100	100	100	100

NOTES:

cm = centimeter(s).

ft = feet.

J = estimated value.

NV = no value.

Table 3-1
Arsenic in 2011 SER Interim Action Soil Samples (mg/kg)
Former PWT Site RI/FS

2011 Location	Historical Sample Location	Sample Name	Date	Depth (ft. bgs)	Arsenic
Clark County Natural Background Concentration*					5.8
MTCA Method C Industrial Soil CUL					88
Previous Interim Action Samples					
B-316	--	B316-S-2	11/17/2011	2.0	**11.5**
B-317	--	B317-S-1.25	11/17/2011	1.3	**140**
B-318	--	B318-S-1.75	11/17/2011	1.8	**10.2**
B-319	--	B319-S-2	11/17/2011	2.0	**7.84**
B-320	--	B320-S-2.25	11/17/2011	2.3	**10.2**
Discrete Samples					
B-321	--	B321-S-2	11/17/2011	2.0	4.02
--	SS-3B	SS-3	07/16/2008	1.5	**294**
B-322	--	B322-S-2.5	11/17/2011	2.5	**241**
--	B-306	B306-S-2.5	03/11/2009	2.5	**592**
B-325	--	B325-S-8.5	11/17/2011	8.5	**6.79**
--	TP-10	TP10-8.5	05/03/1993	8.5	**622**
B-326	--	B326-S-4.5	11/17/2011	4.5	**17.8**
--	B-52	CELL 42-S-3.5	11/20/1997	3.5	**101**

NOTES:

Bold numbers indicate values that exceed MTCA Method B or applicable screening levels.

Highlighted numbers indicate values that exceed MTCA Method C CULs.

-- = Does not apply.

CUL = cleanup level.

ft. bgs = feet below ground surface.

mg/kg = milligrams per kilogram.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

SER = steam-enhanced remediation.

*CUL for arsenic is the 90th Percentile Background Concentration for Clark County, since it is greater than the Method B CUL.

Table 3-2
Petroleum Hydrocarbons in 2011 SER Interim Action Soil Samples (mg/kg)
Former PWT Site RI/FS

2011 Location	Historical Sample Location	Sample Name	Date	Depth (ft. bgs)	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Unrestricted Use Soil CUL					2,000	2,000
MTCA Method B Unrestricted Use Soil CUL					NV	NV
MTCA Method C Industrial Use Soil CUL					NV	NV
Previous Interim Action Samples						
B-316	--	B316-S-2	11/17/2011	2.0	17.8	242
B-317	--	B317-S-1.25	11/17/2011	1.3	412	257
B-318	--	B318-S-1.75	11/17/2011	1.8	94.2	125
B-319	--	B319-S-2	11/17/2011	2.0	46.4	246
B-320	--	B320-S-2.25	11/17/2011	2.3	268	698

NOTES:

-- = Does not apply.

CUL = cleanup level.

ft. bgs = feet below ground surface.

mg/kg = milligrams per kilogram.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

NV = no value.

SER = steam-enhanced remediation.

Table 3-3
Semivolatile Organic Compounds in 2011 SER Interim Action Soil Samples (µg/kg)
Former PWT Site RI/FS

2011 Location	Historical Sample Location	Sample Name	Date	Depth (ft. bgs)	Pentachloro-phenol	cPAHs							
						Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene	cPAH TEQ
MTCA Method B Unrestricted Use Soil CUL					8,300	NV	140	NV	NV	NV	NV	NV	140
MTCA Method C Industrial Use Soil CUL					1,100,000	NV	18,000	NV	NV	NV	NV	NV	18,000
Previous Interim Samples													
B-316	--	B316-S-2	11/17/2011	2.0	842	27	21	79.4	19.5	27	18	25.5	38.21
B-317	--	B317-S-1.25	11/17/2011	1.3	5,890	1,580	**510**	1,230	363	1,510	116	209	**874.9**
B-318	--	B318-S-1.75	11/17/2011	1.8	**13,700**	97.8	68.6	169	48.2	106	33.6	58.4	110.36
B-319	--	B319-S-2	11/17/2011	2.0	3,260	24	53.2	151	31.5	21	31.5	47.2	81.93
B-320	--	B320-S-2.25	11/17/2011	2.3	**52,300**	209	**184**	383	119	185	53.8	84.1	**270.74**
Discrete Samples													
B-321	--	B321-S-2	11/17/2011	2.0	NA	386	**147**	223	74	301	23	44	**225**
--	SS-3B	SS-3	07/16/2008	1.5	NA	49,800	**17,800**	28,700	7,040	34,000	2,130	4,850	**27,392**
B-322	--	B322-S-2.5	11/17/2011	2.5	NA	28,900	**9,070**	21,700	6,720	28,200	1,930	3,490	**15,626**
--	B-306	B306-S-2.5	03/11/2009	2.5	NA	49,100	**15,700**	39,600	10,700	50,700	4,300	7,630	**27,340**
B-323	--	B323-S-1	11/17/2011	1.0	**8,380**	NA	NA	NA	NA	NA	NA	NA	NA
--	P-01 (P/01)	HC-P/01	02/06/1991	0.0	**10,000,000**	NA	NA	NA	NA	NA	NA	NA	NA
--	P-02 (P/02)	HC-P/02	02/06/1991	0.0	**13,000,000**	NA	NA	NA	NA	NA	NA	NA	NA
B-324	--	B324-S-0.5	11/17/2011	0.5	61.5 U	8	16	30	8.2 U	8.2 U	12	18	24
--	MW-11S	PR11S,PR11D	10/23/1997	0.0	**1,800,000**	1,300,000	**590,000**	590,000	570,000	1,200,000	100,000 U	190,000	**872,000**
B-325	--	B325-S-10	11/17/2011	10.0	NA	8.02 U	8.02 U	8.02 U	8.02 U	8.02 U	11	10	7
--	B-85	B-85-S-10.0	06/23/1998	10.0	NA	30,000	**120,000**	9,800	13,000	28,000	610	4,300	**126,051**

Semivolatile Organic Compounds in 2011 SER Interim Action Soil Samples (µg/kg)

2011 Location	Historical Sample Location	Sample Name	Date	Depth (ft. bgs)	Noncarcinogenic PAHs											
					Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Fluor-anthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Unrestricted Use Soil CUL					160,000	NV	320,000	4,800,000	NV	24,000,000	NV	3,200,000	3,200,000	1,600,000	NV	2,400,000
MTCA Method C Industrial Use Soil CUL					7,000,000	NV	14,000,000	210,000,000	NV	1,100,000,000	NV	140,000,000	140,000,000	70,000,000	NV	110,000,000
Previous Interim Samples																
B-316	--	B316-S-2	11/17/2011	2.0	NA	7.49 U	8.99	40.4	10.5	41.2	32.2	121	19.5	8.99	95.9	94.4
B-317	--	B317-S-1.25	11/17/2011	1.3	NA	721	1,440	1,920	56.3	1,080	174	11,100	1,580	1,780	10,100	6,910
B-318	--	B318-S-1.75	11/17/2011	1.8	NA	21.9	24.1	78.1	19.7	118	50.4	672	112	33.6	704	483
B-319	--	B319-S-2	11/17/2011	2.0	NA	7.5 U	7.5 U	7.5 U	20.2	48.7	50.2	127	7.5 U	7.5 U	16.5	72.7
B-320	--	B320-S-2.25	11/17/2011	2.3	NA	50.9	86.3	220	41.3	232	87.8	2,140	204	255	937	1,810
Discrete Samples																
B-321	--	B321-S-2	11/17/2011	2.0	NA	201	342	1,300	12	432	39	2,520	1,230	347	3,820	1,500
--	SS-3B	SS-3	07/16/2008	1.5	NA	40,500	54,300	197,000	2,180	58,600	1,110	224,000	106,000	38,400	279,000	162,000
B-322	--	B322-S-2.5	11/17/2011	2.5	NA	10,000	10,300	73,900	2,870	34,300	2,740	189,000	35,500	3,780	178,000	130,000
--	B-306	B306-S-2.5	03/11/2009	2.5	NA	NA	NA	36,000	1,880	77,700	5,770	310,000	13,400	863	86,900	194,000
B-323	--	B323-S-1	11/17/2011	1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
--	P-01 (P/01)	HC-P/01	02/06/1991	0.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
--	P-02 (P/02)	HC-P/02	02/06/1991	0.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-324	--	B324-S-0.5	11/17/2011	0.5	41 U	8.2 U	8.2 U	8.2 U	8.2 U	8	18	26	8.2 U	8.2 U	16	20
--	MW-11S	PR11S,PR11D	10/23/1997	0.0	**7,300,000**	NA	**18,000,000**	**13,000,000**	250,000	4,500,000	140,000	**9,600,000**	**8,700,000**	**100,000,000**	19,000,000	**7,100,000**
B-325	--	B325-S-10	11/17/2011	10.0	NA	8.02 U	8.02 U	8.02 U	8.02 U	8.02 U	10	29	8.02 U	8.02 U	22	20
--	B-85	B-85-S-10.0	06/23/1998	10.0	100,000	NA	**550,000**	180,000	5,100	92,000	2,700	130,000	130,000	**5,800,000**	320,000	100,000

NOTES:

Bold numbers indicate values that exceed MTCA Method B or applicable screening levels. If values were non-detects ("U"), 1/2 the reported concentration was compared with the screening level.

Highlighted numbers indicate values that exceed MTCA Method C CULs. If values were non-detects ("U"), 1/2 the reported concentration was compared with the screening level.

-- = Does not apply.

cPAH = carcinogenic PAH.

CUL = cleanup level.

ft. bgs = feet below ground surface.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

µg/kg = micrograms per kilogram.

NA = not available.

NV = no value.

PAH = polycyclic aromatic hydrocarbon.

SER = steam-enhanced remediation.

TEQ = toxicity equivalent.

U = Not detected at or above the shown method reporting limit. 1/2 the value was applied in calculating cPAH TEQ.

Table 3-4
Dioxins in 2011 SER Interim Action Soil Samples (ng/kg)
Former PWT Site RI/FS

2011 Location	Historical Sample Location	Sample Name	Date	Depth (ft. bgs)	1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,7,8,9-HxCDD	1,2,3,7,8,9-HxCDF	1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDF	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDD	2,3,7,8-TCDF	OCDD	OCDF	Dioxin TEQ
MTCA Method B Unrestricted Use Soil CUL					NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	11	NV	NV	NV	11
MTCA Method C Industrial Use Soil CUL					NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	1,500	NV	NV	NV	1,500
Discrete Samples																						
B-322	--	B322-S-2.5	11/17/2011	2.5	380,000 J	24,000	1,500	220	5,900	11,000	1,300	1,200	2,000	100	2,200 U	1,100	3,000 U	5	220	3,700,000 J	31,000	**8,100**
	B-306	B306-S-2.5	03/11/2009	2.5	280,000	18,000	1,300	440	6,600 J	10,000 J	800	1,800	150	170	620	710	850	0.18 U	120 U	4,200,000	53,000	**6,800**

NOTES:

Bold numbers indicate values that exceed MTCA Method B or applicable screening levels. If values were non-detects ("U"), 1/2 the reported concentration was compared with the screening level.

Highlighted numbers indicate values that exceed MTCA Method C CULs.

-- = Does not apply.
CUL = cleanup level.
ft. bgs = feet below ground surface.
HpCDD = heptachloro dibenzo-p-dioxin.
HpCDF = heptachloro dibenzofuran.
HxCDD = hexachloro dibenzo-p-dioxin.
HxCDF = hexachloro dibenzofuran.
J = Concentration is estimated. Value is used in calculations.
MTCA = Washington State Department of Ecology's Model Toxics Control Act.
ng/kg = nanograms per kilogram.
NV = no value.
OCDD = octachloro dibenzo-p-dioxin.
OCDF = octachloro dibenzofuran.
PeCDD = pentachloro dibenzo-p-dioxin.
PeCDF = pentachloro dibenzofuran.
SER = steam-enhanced remediation.
TCDD = tetrachloro dibenzo-p-dioxin.
TCDF = tetrachloro dibenzofuran.
TEQ = toxicity equivalent.
U = not detected. 1/2 the value was applied in calculating dioxin TEQ.

Table 3-5
Off-Property Soil Screening Results
Former PWT Site RI/FS

Location ID	MTCA Method B Soil CULs	SS-6	SS-37	SS-38	SS-39	SS-41	SS-41	SS-42	SS-50	SS-31	SS-32
Sample ID		SS-6	SS-37	SS-38	SS-39	SS-41	SS-41-Dup	SS-42	SS-50	SS-31-S-0.5	SS-32-S-0.5
Sample Date		07/17/2008	06/17/2010	06/17/2010	06/17/2010	08/09/2010	08/09/2010	08/10/2010	05/24/2011	02/26/2009	02/26/2009
Sample Depth (feet bgs)		0.3	0	0	0	0	0	0	0	0.5	0.5
Area		Port Marina	Port Railroad	Port Railroad	Port Railroad	Port Railroad	Port Railroad	Port Railroad	Port Overpass	RNWR	RNWR
Phenols (µg/kg)											
Pentachlorophenol	8,300	53.2	19.9 U	19.8 U	18.4 U	NV	NV	NV	NV	447 U	431 U
Metals (mg/kg)											
Arsenic	20[a]	2.78	7.20	8.32	9.81	NV	NV	NV	NV	5.08	4.49
Chromium	120,000	18.2	14.5	19.7	14.7	NV	NV	NV	NV	17.7	13.9
Copper	3,000	19.5	14.1	38.9	10.6	NV	NV	NV	NV	8.46	6.18
Zinc	24,000	67.6	161	153	93.9	NV	NV	NV	NV	74.9	76.5
Polycyclic Aromatic Hydrocarbons (PAHs) (µg/kg)											
Total PAH	NV	266	ND	127	181	NV	NV	NV	NV	114	ND
Naphthalene	1,600,000	6.95 U	8.86 U	8.81 U	8.19 U	NV	NV	NV	NV	8.95 U	8.63 U
Acenaphthylene	NV	6.95 U	8.86 U	8.81 U	8.19 U	NV	NV	NV	NV	8.95 U	8.63 U
Acenaphthene	4,800,000	6.95 U	8.86 U	8.81 U	8.19 U	NV	NV	NV	NV	8.95 U	8.63 U
Fluorene	3,200,000	6.95 U	8.86 U	8.81 U	8.19 U	NV	NV	NV	NV	8.95 U	8.63 U
Phenanthrene	NV	13.9	8.86 U	8.81 U	18.0	NV	NV	NV	NV	8.95 U	8.63 U
Anthracene	24,000,000	12.5	8.86 U	8.81 U	8.19 U	NV	NV	NV	NV	8.95 U	8.63 U
2-Methylnapthalene	320,000	6.95 U	NV	NV	NV	NV	NV	NV	NV	NV	NV
Fluoranthene	3,200,000	32.7	8.86 U	10.6	39.3	NV	NV	NV	NV	11.6	8.63 U
Pyrene	2,400,000	26.4	8.86 U	11.4	27.0	NV	NV	NV	NV	11.6	8.63 U
Benzo(a) anthracene	NV	13.2	8.86 U	8.81 U	8.19	NV	NV	NV	NV	8.95 U	8.63 U
Chrysene	NV	26.4	8.86 U	8.81 U	12.3	NV	NV	NV	NV	11.6	8.63 U
Benzo(a) pyrene	140	18.1	8.86 U	13.2	9.83	NV	NV	NV	NV	8.95 U	8.63 U
Indeno (1,2,3-c,d)-pyrene	NV	14.6	8.86 U	13.2	9.01	NV	NV	NV	NV	9.84	8.63 U
Dibenzo(a,h) anthracene	NV	6.95	8.86 U	8.81 U	8.19 U	NV	NV	NV	NV	8.95 U	8.63 U
Benzo(ghi) perylene	NV	20.9	8.86 U	20.3	12.3	NV	NV	NV	NV	14.3	8.63 U
Benzo(b) fluoranthene	NV	47.3	8.86 U	14.1	16.4	NV	NV	NV	NV	10.7	8.63 U
Benzo(k) fluoranthene	NV	11.8	8.86 U	8.81 U	8.19 U	NV	NV	NV	NV	8.95 U	8.63 U
1-Methyl naphthalene	24,000	6.95 U	NV	NV	NV	NV	NV	NV	NV	NV	NV
cPAH TEQ	140	26.6	ND	17.3	14.1	NV	NV	NV	NV	7.99	ND
Dioxins (ng/kg)											
Total Dioxin TEQ (Mammal)	11	**37**	**41**	**50**	5.3	**19**	**21**	**110**	**34**	9.5	6.5
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	410	200	230	40	84	90	330	190	36	32
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	7,800	6200 J	8900 J	700	3300	3600	15000	7900 J	1,600	1,000
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	160	140	150	22	76	87	370	130	23	18
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	970	1000	1400	110	460	550	2400	1100	230	160
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	15	10	14	1.4 J	5.8	5.8	26	9.1	1.5 J	1.2 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	43	23	28	2.7 J	16 U	17 U	86 U	23	2.6 J	2.1 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	7.1	10	15	1.3 J	6.3	6.5	37	11	3.2 J	2.8 J
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	17 U	14	15	1.9 J	7.3	7.6	44	17 U	1.5 U	2.1 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	45	56	62	5.5	25	29	150	57	14	9.3
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	13	6.1	6.6	0.95 J	3.8 J	4.8 J	19	8.4	1.1 U	1.1 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	25	30	36	3.2 J	15	13	74	20	6.5	6.1
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	3.9	3.9 J	5	0.75 J	2.5 J	2.7 J	12	5.4	1.1 U	1.1 U

Table 3-5
Off-Property Soil Screening Results
Former PWT Site RI/FS

Location ID	MTCA Method B Soil CULs	SS-6	SS-37	SS-38	SS-39	SS-41	SS-41	SS-42	SS-50	SS-31	SS-32
Sample ID		SS-6	SS-37	SS-38	SS-39	SS-41	SS-41-Dup	SS-42	SS-50	SS-31-S-0.5	SS-32-S-0.5
Sample Date		07/17/2008	06/17/2010	06/17/2010	06/17/2010	08/09/2010	08/09/2010	08/10/2010	05/24/2011	02/26/2009	02/26/2009
Sample Depth (feet bgs)		0.3	0	0	0	0	0	0	0	0.5	0.5
Area		Port Marina	Port Railroad	Port Railroad	Port Railroad	Port Railroad	Port Railroad	Port Railroad	Port Overpass	RNWR	RNWR
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	3.9	7.1	8.3	0.95 J	2.9 J	3.2 J	20	0.35 U	2.4 J	1.5 J
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	15	13	20	2.7 J	7.4	9.4	44	15	2.3 J	1.8 J
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	9.6	14	13	3 J	5.8	6.5	35	14	1.7 J	1.3 J
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	1.4 U	2.3	2.3	0.35 U	0.7 U	0.95 J	4.1	2.2	1.3	0.83 J
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	11	0.65 U	0.67 J	0.55 J	0.13 U	0.23 U	0.28 U	1.1	0.21 U	0.46 J	0.39 U
Total Heptachlorodibenzofuran (HpCDF)	NV	170	150	160	60	190	210	860	440	60	45
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	1800	1700	2500	180	860	1000	4400	1800	440	300
Total Hexachlorodibenzofuran (HxCDF)	NV	270	220	210	33	180	200	970	390	28	32
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	210	280	370	30	140	150	950	240	80	62
Total Pentachlorodibenzofuran (PeCDF)	NV	63	110	120	29	70	84	430	120	17	11
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	14	34	42	4 J	12	14	120	22	9.2	4.1 J
Total Tetrachlorodibenzofuran (TCDF)	NV	5.6	30	35	9.1	4.2	10	57	21	9.9	7.9
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	2.1	8.9	12	0.13 U	1.1	1.7	13	3.5	2.4	0.28 U
Total Dioxins	NV	10,745	8,933	12,579	1,085	4841	5360	23130	11127	2,283	1,494

Location ID	MTCA Method B Soil CULs	SS-33	SS-51	SS-52	SS-53	SS-34	SS-35	SS-36	SS-43	SS-44	SS-45
Sample ID		SS-33-S-0.5	SS-51	SS-52	SS-53	SS-34	SS-35	SS-36	SS-43	SS-44	SS-45
Sample Date		02/26/2009	05/24/2011	05/24/2011	05/24/2011	06/17/2010	06/17/2010	06/17/2010	09/21/2010	09/21/2010	09/21/2010
Sample Depth (feet bgs)		0.5	0	0	0	0	0	0	0	0	0
Area		RNWR	McCuddy's	McCuddy's	McCuddy's	Residential	Residential	Residential	Residential	Residential	Residential
Phenols (µg/kg)											
Pentachlorophenol	8,300	438 U	NV	NV	NV	19.9 U	18.3 U	18.7 U	23.2	17.8 U	18 U
Metals (mg/kg)											
Arsenic	20^a	4.19	NV	NV	NV	9.52	8.90	6.89	7.99	6.58	7.17
Chromium	120,000	14.4	NV	NV	NV	15.6	18.2	12.5	15.9	17.3	18.1
Copper	3,000	5.80	NV	NV	NV	9.56	15.3	11.7	12.0	16.5	8.10
Zinc	24,000	60.4	NV	NV	NV	99.7	97.4	82.5	119	160	76.2
Polycyclic Aromatic Hydrocarbons (PAHs) (µg/kg)											
Total PAH	NV	ND	NV	NV	NV	ND	110	ND	251	143	ND
Naphthalene	1,600,000	8.76 U	NV	NV	NV	8.83 U	8.12 U	8.32 U	7.49 U	7.89 U	8 U
Acenaphthylene	NV	8.76 U	NV	NV	NV	8.83 U	8.12 U	8.32 U	7.49 U	7.89 U	8 U
Acenaphthene	4,800,000	8.76 U	NV	NV	NV	8.83 U	8.12 U	8.32 U	7.49 U	7.89 U	8 U
Fluorene	3,200,000	8.76 U	NV	NV	NV	8.83 U	8.12 U	8.32 U	7.49 U	7.89 U	8 U
Phenanthrene	NV	8.76 U	NV	NV	NV	8.83 U	8.12	8.32 U	14.2	11.8	8 U
Anthracene	24,000,000	8.76 U	NV	NV	NV	8.83 U	8.12 U	8.32 U	7.49 U	7.89 U	8 U
2-Methylnapthalene	320,000	NV	NV	NV	NV	NV	NV	NV	7.49 U	7.89 U	8 U
Fluoranthene	3,200,000	8.76	NV	NV	NV	8.83 U	9.74	8.32 U	37.4	18.9	8 U
Pyrene	2,400,000	8.76 U	NV	NV	NV	8.83 U	9.74	8.32 U	24.7	14.2	8 U
Benzo(a) anthracene	NV	8.76 U	NV	NV	NV	8.83 U	8.12 U	8.32 U	12.7	7.89 U	8 U
Chrysene	NV	8.76 U	NV	NV	NV	8.83 U	8.12 U	8.32 U	27.7	13.4	8 U
Benzo(a) pyrene	140	8.76 U	NV	NV	NV	8.83 U	11.4	8.32 U	15.7	8.68	8 U
Indeno (1,2,3-c,d)-pyrene	NV	8.76 U	NV	NV	NV	8.83 U	9.74	8.32 U	18.7	11.0	8 U
Dibenzo(a,h) anthracene	NV	8.76 U	NV	NV	NV	8.83 U	8.12 U	8.32 U	11.2	7.89 U	8 U
Benzo(ghi) perylene	NV	8.76 U	NV	NV	NV	8.83 U	12.2	8.32 U	21.0	11.8	8 U
Benzo(b) fluoranthene	NV	8.76 U	NV	NV	NV	8.83 U	12.2	8.32 U	30.7	13.4	8 U
Benzo(k) fluoranthene	NV	8.76 U	NV	NV	NV	8.83 U	8.12 U	8.32 U	10.5	7.89 U	8 U
1-Methyl naphthalene	24,000	NV	NV	NV	NV	NV	NV	NV	7.49 U	7.89 U	8 U
cPAH TEQ	140	ND	NV	NV	NV	ND	14.9	ND	24.4	12.4	ND
Dioxins (ng/kg)											
Total Dioxin TEQ (Mammal)	11	7.0	**13**	3.2	2.3	0.49	2.3	2.8	**48**	**23**	6.6
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	28	110	32	27	4.3 J	17	10	210	150	79
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	940	3700	1100	820	69	370	500	6500 J	3500	1400
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	17	59	20	15	1.5 J	7.8	8.2	170	110	25
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	150	410	150	110	9.7	59	68	1100	550	160
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	1.2 J	0.31 U	0.24 U	0.18 U	0.33 U	0.63 J	0.61 J	11	6.1	2.1 J
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	1.9 J	11	0.18 U	0.1 U	0.35 J	1.4 J	2.1 J	25	12	2.3 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	2.8 J	0.24 U	0.17 U	0.13 U	0.17 J	0.61 J	0.33 U	14	7.5	2.5 J
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	1.5 U	8.5 U	0.11 U	0.19 U	0.15 U	0.74 J	0.99 J	16	4.9	1.3 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	10	21	9.5	6.4	0.54 J	3.1 J	3.3 J	72	32	9
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	1.1 U	0.26 U	0.093 U	0.11 U	0.18 U	0.39 J	0.66 J	6.6	3.4 J	0.7 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	6	8.2	0.14 U	0.15 U	0.25 J	1.3 J	1.4 J	34	16	4.9
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	1.1 U	0.13 U	0.088 U	0.094 U	0.088 U	0.18 U	0.41 J	4.6	3.1 J	0.53 J

Table 3-5
Off-Property Soil Screening Results
Former PWT Site RI/FS

Location ID	MTCA Method B Soil CULs	SS-33	SS-51	SS-52	SS-53	SS-34	SS-35	SS-36	SS-43	SS-44	SS-45
Sample ID		SS-33-S-0.5	SS-51	SS-52	SS-53	SS-34	SS-35	SS-36	SS-43	SS-44	SS-45
Sample Date		02/26/2009	05/24/2011	05/24/2011	05/24/2011	06/17/2010	06/17/2010	06/17/2010	09/21/2010	09/21/2010	09/21/2010
Sample Depth (feet bgs)		0.5	0	0	0	0	0	0	0	0	0
Area		RNWR	McCuddy's	McCuddy's	McCuddy's	Residential	Residential	Residential	Residential	Residential	Residential
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	2 J	0.13 U	0.13 U	0.14 U	0.15 J	0.37 J	0.35 J	8.2	3.9 J	1.3 J
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	1.6 J	6	0.078 U	0.1 U	0.21 J	0.81 J	1.2 J	17	8.6	2 J
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	1.3 U	6	0.16 U	0.06 U	0.13 J	0.8 J	1.4 J	11	6	1.2 J
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	0.73 U	1.4	0.12 U	0.18 U	0.24 J	0.25 J	0.3 J	1.9 U	1.7 U	1 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	11	0.45 J	0.18 U	0.11 U	0.11 U	0.13 U	0.12 U	0.2 U	3.1	0.76 J	0.28 J
Total Heptachlorodibenzofuran (HpCDF)	NV	42	190	64	46	4.3 J	8.4	24	460	270	76
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	280	710	270	200	19	100	140	2000	960	270
Total Hexachlorodibenzofuran (HxCDF)	NV	35	160	54	36	1.8 J	12	17	350	190	40
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	68	93	40	30	3.4 J	14	15	330	170	51
Total Pentachlorodibenzofuran (PeCDF)	NV	12	52	26	16	1.3 J	6.8	9.7	79	56	14
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	12	8	3 J	1.8 J	0.24 J	1.4 J	0.88 J	31	24	7.8
Total Tetrachlorodibenzofuran (TCDF)	NV	12	9.1	7.3	4.3	1.2	1.6	1.3	15	16	5.8
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	2.4	4.3	0.52 J	0.29 J	0.37 J	0.12 U	0.23 J	8.7	7.4	4.3
Total Dioxins	NV	1,431	5036	1597	1181	105	531	718	9984	5343	1948

Table 3-5
Off-Property Soil Screening Results
Former PWT Site RI/FS

Location ID	MTCA Method B Soil CULs	SS-46	SS-47	SS-48	SS-49	SS-54	SS-55	SS-56	SS-57	SS-58	SS-59
Sample ID		SS-46	SS-47	SS-48	SS-49	SS-54	SS-55	SS-56	SS-57	SS-58	SS-59
Sample Date		05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011
Sample Depth (feet bgs)		0	0	0	0	0	0	0	0	0	0
Area		Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
Phenols (µg/kg)											
Pentachlorophenol	8,300	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Metals (mg/kg)											
Arsenic	20[a]	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Chromium	120,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Copper	3,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Zinc	24,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Polycyclic Aromatic Hydrocarbons (PAHs) (µg/kg)											
Total PAH	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Naphthalene	1,600,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Acenaphthylene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Acenaphthene	4,800,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Fluorene	3,200,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Phenanthrene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Anthracene	24,000,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
2-Methylnapthalene	320,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Fluoranthene	3,200,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Pyrene	2,400,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Benzo(a) anthracene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Chrysene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Benzo(a) pyrene	140	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Indeno (1,2,3-c,d)-pyrene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Dibenzo(a,h) anthracene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Benzo(ghi) perylene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Benzo(b) fluoranthene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Benzo(k) fluoranthene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
1-Methyl naphthalene	24,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
cPAH TEQ	140	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Dioxins (ng/kg)											
Total Dioxin TEQ (Mammal)	11	0.57	**57**	**27**	**20**	0.64	5.2	1.7	**23**	1.6	1.0
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	18	230	510	160	0.13 U	36	0.15 U	110	13	16
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	150	11000 J	5200	3500	130	770	460	3500	360	330
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	5.3	190	160	93	12	26	12	100	11	9.6
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	21	1400	670	590	21	140	82	670	63	54
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	0.22 U	13	10	5.5	0.12 U	0.24 U	0.69	6.5	0.3 U	0.52
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	0.072 U	50	16	13	0.09 U	0.24 U	0.12 U	21 U	2.9 U	0.24 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	0.091 U	14	8.8	9.5	0.38	0.18 U	0.22 U	9.7	0.15 U	0.15 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	1.1 U	31 U	28 U	16 U	0.14 U	0.09 U	0.097 U	11	0.17 U	0.24 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	0.11 U	71	30	33	0.11 U	7.5	0.14 U	40	0.15 U	0.15 U
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	0.081 U	13	0.17 U	0.15 U	0.13 U	0.17 U	0.15 U	0.18 U	0.15 U	0.12 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	0.077 U	32	15	19	0.14 U	0.13 U	0.13 U	18	0.15 U	0.13 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	0.14 U	7.6	3.3 U	0.2 U	0.14 U	0.12 U	0.14 U	0.11 U	0.28 U	0.22 U

Location ID	MTCA Method B Soil CULs	SS-46	SS-47	SS-48	SS-49	SS-54	SS-55	SS-56	SS-57	SS-58	SS-59
Sample ID		SS-46	SS-47	SS-48	SS-49	SS-54	SS-55	SS-56	SS-57	SS-58	SS-59
Sample Date		05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011	05/24/2011
Sample Depth (feet bgs)		0	0	0	0	0	0	0	0	0	0
Area		Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	0.077 U	5.6	0.27 U	0.17 U	0.18 U	0.12 U	0.42	0.16 U	0.48	0.2 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	0.068 U	27	11	11	0.11 U	0.12 U	0.1 U	13	0.074 U	0.11 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	0.19 U	23	7.3	9.5	0.13 U	8	0.11 U	13	0.12 U	0.16 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	0.51	3.1	3	1.3	0.16 U	0.28 U	0.23 U	1.4	0.12 U	0.24 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	11	0.11 U	2.3	4.5	0.12 U	0.16 U	0.12 U	0.26 U	0.19 U	0.12 U	0.12 U
Total Heptachlorodibenzofuran (HpCDF)	NV	18	410	520	250	34	73	28	260	31	25
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	38	2200	1100	980	34	230	140	1200	110	97
Total Hexachlorodibenzofuran (HxCDF)	NV	6.8	540	230	200	22	99	28	270	24	24
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	5.8	310	170	190	6.2	35	18	190	20	16
Total Pentachlorodibenzofuran (PeCDF)	NV	1.1 J	180	76	95	5 J	120	11	150	14	13
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	0.77 J	30	30	25	0.11 U	5.7 J	1.4 J	23	1.3 J	1.5 J
Total Tetrachlorodibenzofuran (TCDF)	NV	0.088 U	29	47	22	0.45 J	20	0.48 J	26	3.6	1.7
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	0.86 J	9.1	19	4.6	0.16 U	0.36 J	0.098 U	4.7	0.12 U	0.56 J
Total Dioxins	NV	239	14938	7902	5427	242	1389	696	5734	577	525

NOTES:

Bold indicates values that exceed MTCA Method B Soil CUL; if values were non-detects ("U"), 1/2 the reported concentration was compared with the MTCA Method B Soil CUL. Estimated values were compared with MTCA Method B Soil CUL.

Total PAH includes the following PAHs: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, 2-methylnaphthalene 1-methylnaphthalene (if available), fluoranthene, pyrene, benzo(a)anthracene, chrysene, total benzofluoranthenes, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene.

Total SMS HPAH (High PAH) is the total of fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzofluoranthenes, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenzo(a,h)anthracene and benzo(g,h,i)perylene (2-methylnaphthalene is not included).

Total Dioxins is the sum of the homologues—OCDF, OCDD, HpCDF, HpCDD, HxCDF, HxCDD, PeCDF, PeCDD, TCDF, and TCDD.

bgs = below ground surface.

cPAH = carcinogenic PAH.

CUL = cleanup level.

Dup = duplicate sample.

J = Estimated value. Value used in calculations.

mg/kg = milligrams per kilogram.

MTCA = Model Toxics Control Act.

µg/kg = micrograms per kilogram.

ng/kg = nanograms per kilogram.

NV = no value.

Port = Port of Ridgefield.

RNWR = Ridgefield National Wildlife Refuge.

TEQ = toxicity equivalent.

U = Not detected. 1/2 the reported concentration used in dioxin TEQ and Total PAH calculations.

[a] MTCA Method A level adjusted for background

Table 3-6
Historical Groundwater Monitoring Schedule
Former PWT Site RI/FS

Monitoring Well	Depth to Water	Sampling Schedule	Sampling and Analysis				
			SVOCs by USEPA 8270D	As by USEPA 6020	Cr, Cu, and Zn by USEPA 6010B	VOCs by USEPA 8260B	NWTPH-Dx
Lower Water-Bearing Zone (LWBZ): Cells 1 and 2							
MW-22	x						
MW-33	x	M	x	x	x	x	
MW-34	x						
MW-35	x	S	x	x	x	x	x
MW-36	x	S	x	x	x	x	
MW-37	x	M	x	x	x	x	
MW-40	x	S	x	x	x	x	x
MW-41	x						
MW-54	x	S	x	x	x	x	x
MW-55	x	S	x	x	x	x	x
MW-56	x	S	x	x	x	x	x
MW-59	x	S	x	x	x	x	x
MW-60	x	S	x	x	x	x	x
MW-61	x	S	x	x	x	x	x
MW-62	x	S	x	x	x	x	x
Upper Water-Bearing Zone (UWBZ): Cells 1 and 2 Shallow UWBZ: Cells 1 and 2							
EPA-4S	x	S	x	x	x	x	x
EPA-5S	x	S	x	x	x	x	x
EPA-6S	x	S	x	x	x	x	x
MW-4	x	S	x	x	x	x	
MW-5	x	S	x	x	x	x	
PZ-06	x	S	x	x	x	x	
MW-7	x	S	x	x	x	x	x
MW-9S	x						
MW-10	x						
MW-13	x	S	x	x	x	x	
MW-14	x						
MW-16	x	S	x	x	x	x	x
MW-17	x						
MW-18	x						
MW-20R	x						
MW-26	x	S	x	x	x	x	x
MW-28S	x						
MW-39	x	S	x	x	x	x	x
MW-43	x						
MW-44	x	S	x	x	x	x	x
MW-45S	x						
MW-46S	x			x			

Table 3-6
Historical Groundwater Monitoring Schedule
Former PWT Site RI/FS

Monitoring Well	Depth to Water	Sampling Schedule	Sampling and Analysis				
			SVOCs by USEPA 8270D	As by USEPA 6020	Cr, Cu, and Zn by USEPA 6010B	VOCs by USEPA 8260B	NWTPH-Dx
MW-47S	x						
MW-48S	x	S	x	x	x	x	x
MW-50S	x	S	x	x	x	x	x
MW-53S	x	S	x	x	x	x	x
MW-55S	x		x	x	x	x	x
MW-57S	x	S	x	x	x	x	x
Deep UWBZ: Cells 1 and 2							
EPA-4D	x	S	x	x	x	x	x
EPA-5D	x	S	x	x	x	x	x
EPA-6D	x	S	x	x	x	x	x
MW-15	x	S	x	x	x	x	x
MW-20D	x						
MW-21	x	S	x	x	x	x	x
MW-23	x	M	x	x	x	x	x
MW-25	x	M	x	x	x	x	
MW-27	x	M	x	x	x	x	x
MW-29D	x	S				PCE only	
MW-38	x	S	x	x	x	x	x
MW-42	x						
MW-45D	x	S	PCP only			PCE only	
MW-46D	x	S				PCE only	
MW-47D	x	S				PCE only	
MW-49D	x	S	x	x	x	x	x
MW-51D	x	S	x	x	x	x	x
MW-52D	x	S	x	x	x	x	x
MW-53D	x	S	x	x	x	x	x
MW-55D	x		x	x	x	x	x
MW-57D	x	S	x	x	x	x	x
MW-58D	x	S	x	x	x	x	x
Carty Lake Monitoring Wells and Surface Water							
MW-32	x						
USDFW-1	x	S	x	x	x	x	x
USDFW-2	x						
USDFW-3	x						
RMW-1s	x						
RMW-1i	x						
RMW-1d	x						
RMW-2s	x	S	x	x	x	x	x

Table 3-6
Historical Groundwater Monitoring Schedule
Former PWT Site RI/FS

Monitoring Well	Depth to Water	Sampling Schedule	Sampling and Analysis				
			SVOCs by USEPA 8270D	As by USEPA 6020	Cr, Cu, and Zn by USEPA 6010B	VOCs by USEPA 8260B	NWTPH-Dx
RMW-2i	x						
RMW-2d	x	S	x	x	x	x	x
RMW-3s	x						
RMW-3i	x						
RMW-3d	x						
CL-3	x						
CL-1	x						
River Gauge	x						

NOTES:

During sampling event, samples from MW-38, MW-39, MW-45D, and MW-57D will be duplicated.

As = arsenic.

Cr = chromium.

Cu = copper.

M = Monitoring well sampled approximately every 18 months (alternating between January and August) to monitor seasonal variations .

NWTPH-Dx = Semivolatile Petroleum Products Method for Soil and Water

PCE = tetrachloroethene.

PCP = pentachlorophenol.

S = Monitoring well sampled semiannually in January and August.

SVOC = semivolatile organic compound.

USEPA = U.S. Environmental Protection Agency.

VOC = volatile organic compound.

Zn = zinc.

Table 3-7
POC Monitoring Wells and Analytical Testing Summary
Former PWT Site RI/FS

Monitoring Well	Depth to Water	Sampling and Analysis		
		SVOCs by USEPA 8270D	Arsenic by USEPA 6020	VOCs by USEPA 8260B
Lower Water-Bearing Zone (LWBZ)				
MW-55	x	PCP only		x
MW-56	x	PCP only		x
MW-61	x	PCP only		x
MW-62	x	PCP only		x
MW-63 (new)[a]	x	x	x	x
Upper Water-Bearing Zone (UWBZ) Shallow UWBZ				
MW-46S	x		x	
MW-55S	x	x	x	x
MW-57S	x	x	x	x
RMW-2s	x	PCP only		
Deep UWBZ				
MW-29D	x			PCE only
MW-45D	x	PCP only		PCE only
MW-46D	x			PCE only
MW-47D	x			PCE only
MW-55D	x	PCP only	x	x
MW-57D	x	x	x	x
MW-58D	x	PCP only	x	x
USDFW-1	x	PCP only	x	x
RMW-2d	x	PCP only		
Surface Water				
CL-3	x			
River Gauge	x			

NOTES:

During sampling event, samples from MW-45D and MW-57D will be duplicated.

only = Only wells with consistent indicator hazardous substance (IHS) detections will be analyzed for those specific IHSs, such as PCE or PCP. Note that some of the groundwater samples may have detected other IHSs in past sampling (i.e., before steam-enhanced remediation system operation) or only infrequently.

PCP = pentachlorophenol.

PCE = tetrachloroethene.

POC = point of compliance.

SVOC = semivolatile organic compound.

USEPA = U.S. Environmental Protection Agency.

VOC = volatile organic compound.

x = Indicates that the action or analysis is to be conducted during each monitoring event.

[a] Groundwater samples for at least the first two sampling events from MW-63 will also be analyzed for petroleum hydrocarbons, using NWTPH-Dx.

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
UWBZ: Cells 1 and 2																
Cell 1 (UWBZ)																
MW-7	08/12/2002	GW-125	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/26/2004	MW7-012604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	15	2.0 U	2.0 U	0.50 U
	05/06/2004	MW7-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	08/09/2004	MW7-080904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/27/2004	MW7-102704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/26/2005	MW7-012605	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
	07/25/2005	MW7072705	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/27/2006	MW7012706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	8.25	1 U	1 U	1 U
	08/10/2006	MW7081006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	47.8	1 U	1 U	1 U
	01/25/2007	MW7012507	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/05/2008	MW7090508	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.93	1 U	1 U	1 U
	02/04/2009	MW7020409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW7081909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2010	MW7012610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2010	MW7082410	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2011	MW7012511	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/01/2011	MW7090111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-8S	08/13/2002	GW-126	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
MW-42	08/12/2002	GW-137	50 U	50 U	50 U	50 U	50 U	50 U	50 U	200 U	50 U	200 U	**520**	200 U	200 U	50 U
	01/23/2004	MW42-012304	13 U	13 U	13 U	13 U	13 U	13 U	13 U	50 U	13 U	50 U	360	50 U	50 U	13 U
	04/30/2004	MW42-043004	25 U	25 U	25 U	25 U	25 U	25 U	25 U	100 U	25 U	100 U	**420**	100 U	100 U	25 U
	08/10/2004	MW42-081004	25 U	25 U	25 U	25 U	25 U	25 U	25 U	100 U	25 U	100 U	390	100 U	100 U	25 U
	10/27/2004	MW42-102704	25 U	25 U	25 U	25 U	25 U	25 U	25 U	100 U	25 U	100 U	**640**	100 U	100 U	25 U
	01/26/2005	MW42-012605	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW42012706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	22.9	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-43	08/12/2002	GW-138	50 U	50 U	50 U	50 U	50 U	50 U	50 U	200 U	50 U	200 U	**610**	200 U	200 U	50 U
	01/23/2004	MW43-012304	13 U	13 U	13 U	13 U	13 U	13 U	13 U	50 U	13 U	50 U	**510**	50 U	50 U	13 U
	08/11/2004	MW43-081104	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	20 U	5.0 U	20 U	160	20 U	20 U	5.0 U
	10/27/2004	MW43-102704	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	10 U	64	10 U	10 U	2.5 U
	01/27/2005	MW43012705	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW43012706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	63.4	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-44	08/13/2002	GW-139	25 U	25 U	25 U	25 U	25 U	25 U	25 U	100 U	25 U	100 U	**940**	100 U	100 U	25 U
	01/23/2004	MW44-012304	13 U	13 U	13 U	13 U	13 U	13 U	13 U	50 U	13 U	50 U	**1100**	50 U	50 U	13 U
	04/29/2004	MW44-042904	25 U	25 U	25 U	25 U	25 U	25 U	25 U	100 U	25 U	100 U	**1000**	100 U	100 U	25 U
	08/11/2004	MW44-081104	25 U	25 U	25 U	25 U	25 U	25 U	25 U	100 U	25 U	100 U	**630**	100 U	100 U	25 U
	10/29/2004	MW44-102904[b]	50 U	50 U	50 U	50 U	50 U	50 U	50 U	200 U	50 U	200 U	**600**	200 U	200 U	50 U
	01/27/2005	MW44012705	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW44012706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	97.1	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW44020209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.61	1 U	1 U	1 U
	08/19/2009	MW44081909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/2010	MW44082510	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW44012411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/02/2011	MW44090211	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-4	07/12/2007	E4-21071207	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.67	1 U	1 U	1 U
	09/13/2007	E4-23091307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.06	1 U	1 U	1 U
	02/12/2008	E4021208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.16	1 U	1 U	1 U
	08/22/2008	E4082208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2009	E4011309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-4S	09/03/2008	EPA4S090308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA4S100208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/10/2009	EPA4S021009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/16/2009	EPA4S041609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2009	EPA4S081309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2010	EPA4S012910	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2010	EPA4S082410	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2011	EPA4S012511	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/01/2011	EPA4S090111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-4D	09/03/2008	EPA4D090308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA4D100208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/10/2009	EPA4D021009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/16/2009	EPA4D041609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2009	EPA4D081309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
	01/29/2010	EPA4D012910	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2010	EPA4D082410	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2011	EPA4D012511	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/01/2011	EPA4D090111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cell 2 (UWBZ)																
MW-4	05/07/2004	MW4-050704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/29/2004	MW4-072904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/22/2004	MW4-102204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/24/2005	MW4012405	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW4072205	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/23/2006	MW4012306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	MW4080806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW4012407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/14/2007	MW4081407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/17/2008	MW4011708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2008	MW4081308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2009	MW4012909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/18/2009	MW4081809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2010	MW4011910	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	MW4081310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW4012011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2011	MW4082611	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-5	01/26/2004	MW5-012604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	05/07/2004	MW5-050704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/29/2004	MW5-072904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/22/2004	MW5-102204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/24/2005	MW5012405	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW5072205	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/24/2006	MW5012406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	MW5080806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW5012407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/14/2007	MW5081407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/17/2008	MW5011708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2008	MW5081308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/18/2009	MW5081809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2009	MW5012909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2010	MW5012210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	MW5081310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW5012011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2011	MW5082611	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Location	Date Collected	Sample Name	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
PZ-06	01/23/2007	PZ06012307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/13/2007	PZ06081307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/16/2008	PZ06011608	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2008	PZ06081208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2009	PZ06012609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	PZ06080509	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2010	PZ06011310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/2011	PZ06011311	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2011	PZ06082411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-10	08/06/2002	GW-121	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/23/2007	MW10012307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/14/2007	MW10081407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/17/2008	MW10011708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-13	08/08/2002	GW-127	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/26/2004	MW13-012604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	05/05/2004	MW13-050504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/28/2004	MW13-072804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/20/2004	MW13-102004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/21/2005	MW13012105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW13072105	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/23/2006	MW13012306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW13080706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2007	MW13012307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2007	MW13080907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/15/2008	MW13011508	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2008	MW13081108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2009	MW13012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**401**	1 U	1 U	1 U
	08/14/2009	MW13081409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	37.1	1 U	1 U	1 U
	01/11/2010	MW13011110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	95.2	1 U	1 U	1 U
	08/11/2010	MW13081110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	23.4	1 U	1 U	1 U
	01/12/2011	MW13011211	1 U	1 U	**1.04**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	12.1	1 U	1 U	1 U
	08/23/2011	MW13082311	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.48	1 U	1 U	1 U
MW-14	08/08/2002	GW-128	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/22/2004	MW14-012204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	05/04/2004	MW14-050404	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/28/2004	MW14-072804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/20/2004	MW14-102004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/21/2005	MW14012105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW14072105	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/23/2006	MW14012306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW14080706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
	01/23/2007	MW14012307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2007	MW14081307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/16/2008	MW14011608	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-15	08/08/2002	GW-140	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.72	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/21/2004	MW15-012104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.58	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	05/05/2004	MW15-050504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.56	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/28/2004	MW15-072804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/20/2004	MW15-102004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/21/2005	MW15012105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW15072205	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
	01/23/2006	MW15012306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW15080706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2007	MW15011807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2007	MW15081007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/16/2008	MW15011608	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2008	MW15081308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/03/2008	MW15090308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2009	MW15012609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2009	MW15081709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2010	MW15011210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2010	MW15081110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2011	MW15011311	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/23/2011	MW15082311	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-16	08/07/2002	GW-129	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	22	2 U	2 U	0.5 U
	01/23/2004	MW16-012304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	17	2.0 U	2.0 U	0.50 U
	05/06/2004	MW16-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	23	2.0 U	2.0 U	0.50 U
	07/30/2004	MW16-073004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	29	2.0 U	2.0 U	0.50 U
	10/26/2004	MW16-102604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	7.3	2.0 U	2.0 U	0.50 U
	01/25/2005	MW16012505	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10.5	1 U	1 U	1 U
	07/25/2005	MW16072505	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/25/2006	MW16012506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.77	1 U	1 U	1 U
	08/10/2006	MW16081006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW16012507	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	2.12	1 U	1 U	1 U
	08/16/2007	MW16081607	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.63	1 U	1 U	1 U
	01/22/2008	MW16012208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.88	1 U	1 U	1 U
	08/19/2008	MW16081908	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.31	1 U	1 U	1 U
	01/30/2009	MW16013009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW16081209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.14	1 U	1 U	1 U
	01/21/2010	MW16012110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW16081710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW16012111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW16083011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
MW-17	08/07/2002	GW-130	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/26/2004	MW17-012604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	05/06/2004	MW17-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/30/2004	MW17-073004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/26/2004	MW17-102604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/24/2005	MW17012405	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW17072505	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/24/2006	MW17012406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.43	1 U	1 U	1 U
	08/08/2006	MW17080806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.61	1 U	1 U	1 U
	01/24/2007	MW17012407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/15/2007	MW17081507	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2008	MW17011808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-18	07/29/2004	MW18-072904	50 U	50 U	50 U	50 U	50 U	50 U	50 U	200 U	50 U	200 U	**450**	200 U	200 U	50 U
	07/25/2005	MW18072505	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ
	01/24/2006	MW18012406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	323	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/24/2007	MW18012407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	337	1 U	1 U	1 U
	08/15/2007	MW18081507	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**452**	1 U	1 U	1 U
	01/18/2008	MW18011808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**452**	1 U	1 U	1 U
MW-21	08/08/2002	GW-131	25 U	25 U	25 U	25 U	25 U	25 U	25 U	100 U	25 U	100 U	**450**	100 U	100 U	25 U
	05/06/2004	MW21-050604	10 U	10 U	10 U	10 U	10 U	10 U	10 U	40 U	10 U	40 U	210	40 U	40 U	10 U
	07/30/2004	MW21-073004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	130	2.0 U	2.0 U	0.50 U
	10/26/2004	MW21-102604	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	10 U	140	10 U	10 U	2.5 U
	01/25/2005	MW21012505	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	110	100 U	100 U	100 U
	07/25/2005	MW21072505	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ
	01/25/2006	MW21012506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	57.7	1 U	1 U	1 U
	08/10/2006	MW21081006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW21012507	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/16/2007	MW21081607	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2008	MW21012208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2008	MW21081908	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW21013009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW21081209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW21012110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW21081710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	244	1 U	1 U	1 U
	01/21/2011	MW21012111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW21083011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-23	08/06/2002	GW-124	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/22/2004	MW23-012204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	05/03/2004	MW23-050304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/27/2004	MW23-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/19/2004	MW23-101904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/21/2005	MW23012105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
	07/20/2005	MW23072105	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/20/2006	MW23012006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW23080706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2007	MW23012307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2007	MW23080907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/15/2008	MW23011508	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2008	MW23081108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2010	MW23011110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	08/12/2002	GW-141	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/27/2004	MW25-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	04/29/2004	MW25-042904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	08/06/2004	MW25-080604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/22/2004	MW25-102204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/26/2005	MW25012605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW25072605	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/26/2006	MW25012606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2006	MW25080906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2007	MW25012607	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/17/2007	MW25081707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW25012308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/20/2008	MW25082008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2010	MW25012710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW25083111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-26	01/26/2004	MW26-012604	50 U	50 U	50 U	50 U	50 U	50 U	50 U	200 U	50 U	200 U	**590**	200 U	200 U	50 U
	05/05/2004	MW26-050504	25 U	25 U	25 U	25 U	25 U	25 U	25 U	100 U	25 U	100 U	**600**	100 U	100 U	25 U
	07/29/2004	MW26-072904	25 U	25 U	25 U	25 U	25 U	25 U	25 U	100 U	25 U	100 U	**610**	100 U	100 U	25 U
	10/25/2004	MW26-102504	25 U	25 U	25 U	25 U	25 U	25 U	25 U	100 U	25 U	100 U	**640**	100 U	100 U	25 U
	01/24/2005	MW26012405	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U
	07/25/2005	MW26072505	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ
	01/24/2006	MW26012406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	376	1 U	1 U	1 U
	08/08/2006	MW26080806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**436**	1 U	1 U	1 U
	01/24/2007	MW26012407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	370	1 U	1 U	1 U
	08/15/2007	MW26081507	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**552**	1 U	1 U	1 U
	01/18/2008	MW26011808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**521**	1 U	1 U	1 U
	08/15/2008	MW26081508	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**612**	1 U	1 U	1 U
	01/28/2009	MW26012809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**577**	1 U	1 U	1 U
	08/18/2009	MW26081809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	159	1 U	1 U	1 U
	01/25/2010	MW26012510	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	248	1 U	1 U	1 U
	08/16/2010	MW26081610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**532**	1 U	1 U	1 U
	01/20/2011	MW26012011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	186	1 U	1 U	1 U
	08/30/2011	MW26083011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**641**	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (μg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
MW-27	01/26/2004	MW27-012604	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	20 U	5.0 U	20 U	20 U	20 U	20 U	5.0 U
	05/07/2004	MW27-050704	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	10 U	11	10 U	10 U	2.5 U
	07/29/2004	MW27-072904	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	10 U	16	10 U	10 U	2.5 U
	10/20/2004	MW27-102004	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	10 U	10	10 U	10 U	2.5 U
	01/21/2005	MW27012105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW27072205	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
	01/23/2006	MW27012306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.92	1 U	1 U	1 U
	08/07/2006	MW27080706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.14	1 U	1 U	1 U
	01/24/2007	MW27012407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	4.11	1 U	1 U	1 U
	08/14/2007	MW27081407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.98	1 U	1 U	1 U
	01/17/2008	MW27011708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.53	1 U	1 U	1 U
	08/15/2008	MW27081508	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.91	1 U	1 U	1 U
	01/22/2010	MW27012210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.06	1 U	1 U	1 U
	08/29/2011	MW27082911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.03	1 U	1 U	1 U
MW-38	08/07/2002	GW-135	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2.2	2 U	2 U	0.5 U
dup	08/07/2002	GW-149	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2.5	2 U	2 U	0.5 U
	01/27/2004	MW38-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
dup	01/27/2004	MW38DUP-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	05/06/2004	MW38-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
dup	05/06/2004	MW38-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	08/06/2004	MW38-080604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
dup	08/06/2004	MW38-080604-Dup	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/29/2004	MW38-102904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
dup	10/29/2004	MW38-102904-Dup	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/25/2005	MW38012505	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/25/2005	MW38DUP012505	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW38072605	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
dup	07/25/2005	MW38072605-Dup	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/26/2006	MW38012606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/26/2006	MW38012606-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2006	MW38081006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/10/2006	MW38081006-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW38012507	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
dup	01/25/2007	MW38012507-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/16/2007	MW38081607	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/16/2007	MW38081607-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW38012308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/23/2008	MW38012308-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/21/2008	MW38082108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/21/2008	MW38082108-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/02/2009	MW38020209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	02/02/2009	MW38020209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW38081209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
dup	08/12/2009	MW38081209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW38012110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/21/2010	MW38012110-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW38081710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/17/2010	MW38081710-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW38012111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW38083111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/31/2011	MW38DUP083111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-39	08/07/2002	GW-136	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/27/2004	MW39-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
dup	01/27/2004	MW39DUP-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	05/06/2004	MW39-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
dup	05/06/2004	MW39-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	08/06/2004	MW39-080604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
dup	08/06/2004	MW39-080604-Dup	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/29/2004	MW39-102904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
dup	10/29/2004	MW39-102904-Dup	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/25/2005	MW39012505	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/25/2005	MW39DUP012505	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW39072605	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
dup	07/25/2005	MW39072605-Dup	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
	01/26/2006	MW39012606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2006	MW39012606-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2006	MW39081006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/10/2006	MW39081006-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW39012507	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
dup	01/25/2007	MW39012507-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/16/2007	MW39081607	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/16/2007	MW39081607-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW39012308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.31	1 U	1 U	1 U
dup	01/23/2008	MW39012308-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.67	1 U	1 U	1 U
	08/21/2008	MW39082108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/21/2008	MW39082108-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/02/2009	MW39020209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	02/02/2009	MW39020209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW39081209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/12/2009	MW39081209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW39012110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/21/2010	MW39012110-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW39081710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
	01/21/2011	MW39012111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW39083111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/31/2011	MW39DUP083111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-48S	08/20/2008	MW48S082008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-48S100808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/02/2009	MW48S020209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/09/2009	MW48S040909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW48S081909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2010	MW48S012710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW48S081710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW48S012411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.12	1 U	1 U	1 U
	08/31/2011	MW48S083111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-49D	08/19/2008	MW49D081908	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.41	1 U	1 U	1 U
	10/03/2008	MW49D100308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.42	1 U	1 U	1 U
	01/26/2009	MW49D012609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/06/2009	MW49D040609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/14/2009	MW49D081409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2010	MW49D011210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2010	MW49D081110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.65	1 U	1 U	1 U
	01/13/2011	MW49D011311	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U
	08/23/2011	MW49D082311	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-50S	08/19/2008	MW50S081908	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-50S100808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW50S013009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/09/2009	MW50S040909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW50S081909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2010	MW50S012610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW50S081610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW50S012111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW50S083011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-51D	08/12/2008	MW51D081208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-51D100608	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2009	MW51D012609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/06/2009	MW51D040609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	MW51D080509	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2010	MW51D011310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW51D081210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2011	MW51D011311	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2011	MW51D082411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
MW-52D	08/14/2008	MW52D081508	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	49.2	1 U	1 U	1 U
	10/07/2008	MW-52D100708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.62	1 U	1 U	1 U
	01/30/2009	MW52D013009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.02	1 U	1 U	1 U
	04/09/2009	MW52D040909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.18	1 U	1 U	1 U
	08/18/2009	MW52D081809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2010	MW52D012510	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW52D081610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW52012011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW52D083011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-53S	08/14/2008	MW53S081408	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	8.26	1 U	1 U	1 U
	10/07/2008	MW-53S100708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	29.3	1 U	1 U	1 U
	01/28/2009	MW53S012809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	17.4	1 U	1 U	1 U
	04/10/2009	MW53S041009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	12.3	1 U	1 U	1 U
	08/18/2009	MW53S081809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.20	1 U	1 U	1 U
	01/20/2010	MW53S012010	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	32.1	1 U	1 U	1 U
	08/16/2010	MW53S081610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	29.0	1 U	1 U	1 U
	01/18/2011	MW53S011811	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.72	1 U	1 U	1 U
	08/11/2011	MW53S081111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	35	1 U	1 U	1 U
MW-53D	08/14/2008	MW53D081408	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/07/2008	MW-53D100708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2009	MW53D012809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2009	MW53D041009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2009	MW53D081709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2010	MW53D012010	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW53D081610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2011	MW53D011811	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2011	MW53D081111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-55S	08/20/2010	MW55S082010	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.74	1 U	1 U	1 U
	01/14/2011	MW55S011411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.37	1 U	1 U	1 U
	08/08/2011	MW55S080811	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.09	1 U	1 U	1 U
MW-55D	09/07/2010	MW55D090710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW55D011411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2011	MW55D080811	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-57S	08/15/2008	MW57S081508	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**529**	1 U	1 U	1 U
	10/06/2008	MW-57S100608	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**561**	1 U	1 U	1 U
	01/27/2009	MW57S012709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**463**	1 U	1 U	1 U
	04/07/2009	MW57S040709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	223	1 U	1 U	1 U
	08/06/2009	MW57S080609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**497**	1 U	1 U	1 U
	01/13/2010	MW57S011310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**813**	1 U	1 U	1 U
	08/12/2010	MW57S081210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**567**	1 U	1 U	1 U
	01/14/2011	MW57S011411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**816**	1 U	1 U	1 U
	08/25/2011	MW57S082511	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**541**	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
MW-57D	08/14/2008	MW57D081508	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-57D100608	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	10/06/2008	MW-57D100608-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2009	MW57D012709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/27/2009	MW57D012709-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/07/2009	MW57D040709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	04/07/2009	MW57D040709-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/06/2009	MW57D080609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.20	1 U	1 U	1 U
	01/13/2010	MW57D011310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/13/2010	MW57D011310-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW57D081210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/12/2010	MW57D081210-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW57D011411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/14/2011	MW57DDUP011411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/25/2011	MW57D082511	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/25/2011	MW57DDUP082511	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-58D	08/13/2008	MW58D081308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-58D100808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2009	MW58D012709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/07/2009	MW58D040709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/06/2009	MW58D080609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2010	MW58D011410	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW58D081210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2011	MW58D011911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2011	MW58D082611	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-5S	08/11/2008	EPA5S081108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA5S100208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2009	EPA5S012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/03/2009	EPA5S040309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	EPA5S080509	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	EPA5S010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2010	EPA5S081110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2011	EPA5S011211	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2011	EPA5S080911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-5D	08/11/2008	EPA5D081108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA5D100208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2009	EPA5D012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/03/2009	EPA5D040309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	EPA5D080509	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	EPA5D010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
	08/11/2010	EPA5D081110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2011	EPA5D011211	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2011	EPA5D080911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-6S	08/18/2008	EPA6S081808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/07/2008	EPA-6S100708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2009	EPA6S012909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2009	EPA6S041009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	EPA6S081209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2010	EPA6S012510	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	EPA6S081310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2011	EPA6S011911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/19/2011	EPA6SDUP011911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2011	EPA6S081011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-6D	08/18/2008	EPA6D081808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	7.37	1 U	1 U	1 U
	10/07/2008	EPA-6D100708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.82	1 U	1 U	1 U
	01/29/2009	EPA6D012909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.73	1 U	1 U	1 U
	04/10/2009	EPA6D041009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.58	1 U	1 U	1 U
	08/12/2009	EPA6D081209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.26	1 U	1 U	1 U
	01/25/2010	EPA6D012510	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	EPA6D081310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2011	EPA6D011911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2011	EPA6D081011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carty Lake Monitoring Wells (UWBZ)																
MW-30	08/13/2002	GW-133	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
USDFW-1	10/24/2003	USDFW-1-102403	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	6.3	2.0 U	2.0 U	0.50 U
	05/04/2004	USDFW1-050404	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	3	2.0 U	2.0 U	0.50 U
	08/13/2004	USDFW1-081304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/25/2004	USDFW1-102504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/28/2005	USDFW1012805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/28/2005	USDFW1072805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/01/2006	USDFW1020106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2006	USDFW1081106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2007	USDFW1012207	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/27/2007	USDFW1082707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2008	USDFW1012808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/21/2008	USDW1082108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/03/2009	USDFW1020309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	USDFW1080709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2010	USDFW1012810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2010	USDFW1082610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2011	USDFW1012611	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/06/2011	USDFW1090611	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
USDFW-2	10/24/2003	USDFW-2-102403	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	05/04/2004	USDFW2-050404	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	08/13/2004	USDFW2-081304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/25/2004	USDFW2-102504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/28/2005	USDFW2012805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/28/2005	USDFW2072805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/01/2006	USDFW2020106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/22/2007	USDFW2012207	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/27/2007	USDFW2082707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2008	USDFW2012808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
USDFW-3	10/24/2003	USDFW-3-102403	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	05/04/2004	USDFW3-050404	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	08/13/2004	USDFW3-081304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/25/2004	USDFW3-102504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/28/2005	USDFW3012805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/28/2005	USDFW3072805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/01/2006	USDFW3020106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2006	USDFW3081106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2007	USDFW3012207	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/27/2007	USDFW3082707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2008	USDFW3012808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
RMW-2S	08/21/2008	RMW2S082108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/09/2008	RMW2S100908	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/03/2009	RMW2S020309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/08/2009	RMW2S040809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	RMW2S080709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2010	RMW2S012810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2010	RMW2S082610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2011	RMW2S012611	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/06/2011	RMW2S090611	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
RMW-2D	08/21/2008	RMW2D082108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/09/2008	RMW2D100908	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/03/2009	RMW2D020309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/08/2009	RMW2D040809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	RMW2D080709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2010	RMW2D012810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2010	RMW2D082610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2011	RMW2D012611	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/06/2011	RMW2D090611	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
LWBZ: Cells 1 and 2 and Carty Lake																
Cell 1 (LWBZ)																
MW-40	08/08/2002	GW-151	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	5 U	1.3 U	5 U	24	5 U	5 U	1.3 U
	01/23/2004	MW40-012304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	3.6	2.0 U	2.0 U	0.50 U
	04/30/2004	MW40-043004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	08/11/2004	MW40-081104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/29/2004	MW40-102904[b]	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/27/2005	MW40012705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW40012706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW40020209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW40081909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2010	MW40012910	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/25/2010	MW40082510	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW40012411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/02/2011	MW40090211	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-41	08/12/2002	GW-148	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/29/2004	MW41-012904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	04/29/2004	MW41-042904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	08/12/2004	MW41-081204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	11/08/2004	MW41-110804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/27/2005	MW41012705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/2006	MW41013006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cell 2 (LWBZ)																
MW-22	08/08/2002	GW-143	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/23/2004	MW22-012304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	04/28/2004	MW22-042804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	08/06/2004	MW22-080604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/26/2004	MW22-102604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/25/2005	MW22012505	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW22072505	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/25/2006	MW22012506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
	08/10/2006	MW22081006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW22012507	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/16/2007	MW22081607	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2008	MW22012208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-33	08/07/2002	GW-122	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/21/2004	MW33-012104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	04/27/2004	MW33-042704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/28/2004	MW33-072804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/19/2004	MW33-101904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/20/2005	MW33012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW33072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/20/2006	MW33012006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2006	MW33080406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2007	MW33011907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2007	MW33080907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/15/2008	MW33011508	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2010	MW33011110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2008	MW33081108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2010	MW33011110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2011	MW33080911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-34	08/08/2002	GW-144	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/21/2004	MW34-012104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	04/27/2004	MW34-042704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/29/2004	MW34-072904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/20/2004	MW34-102004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/21/2005	MW34012105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW34072105	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/23/2006	MW34012306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW34080706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2007	MW34011807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2007	MW34081007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/16/2008	MW34011608	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-35	08/13/2002	GW-145	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
dup	08/13/2002	GW-150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/21/2004	MW35-012104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	04/28/2004	MW35-042804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/30/2004	MW35-073004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/25/2004	MW35-102504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/24/2005	MW35012405	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW35072205	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
	01/24/2006	MW35012406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	MW35080806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW35012407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
	08/14/2007	MW35081407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2008	MW35011808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/14/2008	MW35081408	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.02	1 U	1 U	1 U
	01/30/2009	MW35013009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/18/2009	MW35081809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2010	MW35012210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW35081610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.13	1 U	1 U	1 U
	01/20/2011	MW35012011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/29/2011	MW35082911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-36	08/07/2002	GW-146	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/26/2004	MW36-012604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	04/28/2004	MW36-042804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	07/30/2004	MW36-073004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/26/2004	MW36-102604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/25/2005	MW36012505	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW36072705	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/25/2006	MW36012506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	MW36080806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW36012407	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/15/2007	MW36081507	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2008	MW36012208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2008	MW36081908	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW36013009	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW36081909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2010	MW36012610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW36081610	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW36012111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW36083011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-37	08/12/2002	GW-147	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	0.5 U
	01/27/2004	MW37-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	04/29/2004	MW37-042904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	08/06/2004	MW37-080604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	10/22/2004	MW37-102204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U
	01/26/2005	MW37012605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW37072605	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/26/2006	MW37012606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2006	MW37080906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2007	MW370120607	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
	08/17/2007	MW37081707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW37012308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
	08/20/2008	MW37082008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2010	MW37012710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW37083111	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-54	08/12/2008	MW54081208	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-54100608	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2009	MW54012609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/06/2009	MW54040609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	MW54080509	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2010	MW54011310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW54081210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2011	MW54011311	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2011	MW54082411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-55	08/14/2008	MW55081408	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/03/2008	MW55100308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2009	MW55012709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/07/2009	MW55040709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/06/2009	MW55080609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2010	MW55011410	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW55081210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW55011411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2011	MW55080811	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-56	08/21/2008	MW56082108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-56100808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2009	MW56012709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/07/2009	MW56040709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/06/2009	MW56080609	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2010	MW56011410	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW56081210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2011	MW56011911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2011	MW56	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-59	08/19/2008	MW59081908	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-59100608	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2009	MW59012909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/09/2009	MW59040909	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2009	MW59081709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW59012110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	MW59081310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW59012011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/29/2011	MW59082911	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-62	09/08/2010	MW62090810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW62011411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/25/2011	MW62082511	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene
MTCA Method B Groundwater VI Level			7.4	11,000	6.2	7.9	2300	130	NV	NV	NV	3900	24	NV	0.74	1800
MTCA Method B Groundwater Cleanup Level			1.7	16,000	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022	720
Carty Lake (LWBZ)																
MW-60	09/03/2008	MW60090308	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/09/2008	MW601000908	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/03/2009	MW60020309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/08/2009	MW60040809	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	MW60080709	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2010	MW60012810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/25/2010	MW60082510	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW60012411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/06/2011	MW60090611	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-61	09/03/2010	MW61090310	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW61012411	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/02/2011	MW61090211	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
UWBZ: Cells 1 and 2																		
Cell 1 (UWBZ)																		
MW-7	08/12/2002	GW-125	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/26/2004	MW7-012604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	05/06/2004	MW7-050604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	08/09/2004	MW7-080904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/27/2004	MW7-102704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/26/2005	MW7-012605	100 U	100 U	100 U	100 U	100 U	100 U	--	100 U	--	100 U	100 U	--	--	100 U	100 U	100 U
	07/25/2005	MW7072705	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	--	10 UJ	--	10 UJ	10 UJ	--	--	10 UJ	10 UJ	10 UJ
	01/27/2006	MW7012706	1 U	1 U	1.02	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/10/2006	MW7081006	1 U	1 U	13.5	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/25/2007	MW7012507	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	**24.0**	1 U	1 U
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/05/2008	MW7090508	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.370	1 U	1 U
	02/04/2009	MW7020409	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/19/2009	MW7081909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2010	MW7012610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/24/2010	MW7082410	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/25/2011	MW7012511	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/01/2011	MW7090111	1 U	1 U	1 U	1 U	1 U	1 U	50.2	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-8S	08/13/2002	GW-126	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
MW-42	08/12/2002	GW-137	50 U	50 U	200 U	50 U	50 U	50 U	2000 U	200 U	2000 U	200 U	200 U	2000 U	2000 U	**51**	200 U	50 U
	01/23/2004	MW42-012304	13 U	13 U	78	13 U	13 U	13 U	500 U	50 U	500 U	50 U	50 U	500 U	500 U	**31**	50 U	13 U
	04/30/2004	MW42-043004	25 U	25 U	100 U	25 U	25 U	25 U	1000 U	100 U	1000 U	100 U	100 U	1000 U	1000 U	**42**	100 U	25 U
	08/10/2004	MW42-081004	25 U	25 U	130	25 U	25 U	25 U	1000 U	100 U	1000 U	100 U	100 U	1000 U	1000 U	**36**	100 U	25 U
	10/27/2004	MW42-102704	25 U	25 U	180	25 U	25 U	25 U	1000 U	100 U	1000 U	100 U	100 U	1000 U	1000 U	**55**	100 U	25 U
	01/26/2005	MW42-012605	500 U	500 U	500 U	500 U	500 U	500 U	--	500 U	--	500 U	500 U	--	--	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW42012706	1 U	1 U	7.31	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-43	08/12/2002	GW-138	50 U	50 U	200 U	50 U	50 U	50 U	2000 U	200 U	2000 U	200 U	200 U	2000 U	2000 U	**57**	200 U	50 U
	01/23/2004	MW43-012304	13 U	13 U	110	13 U	13 U	13 U	500 U	50 U	500 U	50 U	50 U	500 U	500 U	**19**	50 U	13 U
	08/11/2004	MW43-081104	5.0 U	5.0 U	45	5.0 U	5.0 U	5.0 U	200 U	20 U	200 U	20 U	20 U	200 U	200 U	5.0 U	20 U	5.0 U
	10/27/2004	MW43-102704	2.5 U	2.5 U	12	2.5 U	2.5 U	2.5 U	100 U	10 U	100 U	10 U	10 U	100 U	100 U	**4.4**	10 U	2.5 U
	01/27/2005	MW43012705	500 U	500 U	500 U	500 U	500 U	500 U	--	500 U	--	500 U	500 U	--	--	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW43012706	1 U	1 U	17.0	1 U	1 U	1 U	10 U	1 U	10 U	1 U	2.53	20 U	50 U	0.500	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-44	08/13/2002	GW-139	25 U	25 U	250	25 U	25 U	25 U	1000 U	100 U	1000 U	100 U	100 U	1000 U	1000 U	**47**	100 U	25 U
	01/23/2004	MW44-012304	13 U	13 U	290	13 U	13 U	13 U	500 U	50 U	500 U	50 U	50 U	500 U	500 U	**59**	50 U	13 U
	04/29/2004	MW44-042904	25 U	25 U	290	25 U	25 U	25 U	1000 U	100 U	1000 U	100 U	100 U	1000 U	1000 U	**29**	100 U	25 U
	08/11/2004	MW44-081104	25 U	25 U	200	25 U	25 U	25 U	1000 U	100 U	1000 U	100 U	100 U	1000 U	1000 U	**29**	100 U	25 U
	10/29/2004	MW44-102904[b]	50 U	50 U	200 U	50 U	50 U	50 U	2000 U	200 U	2000 U	200 U	200 U	2000 U	2000 U	50 U	200 U	50 U
	01/27/2005	MW44012705	500 U	500 U	500 U	500 U	500 U	500 U	--	500 U	--	500 U	500 U	--	--	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW44012706	1 U	1 U	25.2	1 U	1 U	1 U	10 U	1 U	10 U	1 U	3.58	20 U	50 U	**5.57**	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW44020209	1 U	1 U	1 U	1 U	1 U	1 U	24.5	1 U	10 U	1 U	1 U	20 U	148	0.3 U	1 U	1 U
	08/19/2009	MW44081909	1 U	1 U	3.52	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/2010	MW44082510	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	55.6	0.3 U	1 U	1 U
	01/24/2011	MW44012411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/02/2011	MW44090211	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
E-4	07/12/2007	E4-21071207	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/13/2007	E4-23091307	1 U	1 U	1.24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	02/12/2008	E4021208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/22/2008	E4082208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/13/2009	E4011309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
EPA-4S	09/03/2008	EPA4S090308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/02/2008	EPA4S100208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	02/10/2009	EPA4S021009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/16/2009	EPA4S041609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/13/2009	EPA4S081309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/29/2010	EPA4S012910	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/24/2010	EPA4S082410	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/25/2011	EPA4S012511	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/01/2011	EPA4S090111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
EPA-4D	09/03/2008	EPA4D090308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/02/2008	EPA4D100208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	02/10/2009	EPA4D021009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/16/2009	EPA4D041609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/13/2009	EPA4D081309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
	01/29/2010	EPA4D012910	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/24/2010	EPA4D082410	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/25/2011	EPA4D012511	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/01/2011	EPA4D090111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
Cell 2 (UWBZ)																		
MW-4	05/07/2004	MW4-050704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	07/29/2004	MW4-072904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/22/2004	MW4-102204	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/24/2005	MW4012405	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/20/2005	MW4072205	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	--	10 UJ	--	10 UJ	10 UJ	--	--	10 UJ	10 UJ	10 UJ
	01/23/2006	MW4012306	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/08/2006	MW4080806	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/24/2007	MW4012407	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/14/2007	MW4081407	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/17/2008	MW4011708	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/13/2008	MW4081308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/29/2009	MW4012909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/18/2009	MW4081809	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/19/2010	MW4011910	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/13/2010	MW4081310	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/20/2011	MW4012011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/26/2011	MW4082611	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-5	01/26/2004	MW5-012604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	05/07/2004	MW5-050704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	07/29/2004	MW5-072904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/22/2004	MW5-102204	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/24/2005	MW5012405	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/20/2005	MW5072205	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	1 UJ	1 UJ	1 UJ
	01/24/2006	MW5012406	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/08/2006	MW5080806	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/24/2007	MW5012407	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/14/2007	MW5081407	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.350	1 U	1 U
	01/17/2008	MW5011708	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	1.28	1 U	1 U
	08/13/2008	MW5081308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/18/2009	MW5081809	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/29/2009	MW5012909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/22/2010	MW5012210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/13/2010	MW5081310	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/20/2011	MW5012011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/26/2011	MW5082611	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
PZ-06	01/23/2007	PZ06012307	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/13/2007	PZ06081307	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/16/2008	PZ06011608	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/12/2008	PZ06081208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2009	PZ06012609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/05/2009	PZ06080509	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/13/2010	PZ06011310	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/2011	PZ06011311	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/24/2011	PZ06082411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-10	08/06/2002	GW-121	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/23/2007	MW10012307	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/14/2007	MW10081407	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/17/2008	MW10011708	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-13	08/08/2002	GW-127	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/26/2004	MW13-012604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	05/05/2004	MW13-050504	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	07/28/2004	MW13-072804	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/20/2004	MW13-102004	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/21/2005	MW13012105	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/20/2005	MW13072105	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	1 UJ	1 UJ	1 UJ
	01/23/2006	MW13012306	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/07/2006	MW13080706	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/23/2007	MW13012307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/09/2007	MW13080907	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/15/2008	MW13011508	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/11/2008	MW13081108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/23/2009	MW13012309	1 U	1 U	79.8	1 U	1 U	1 U	396	1 U	10 U	1 U	15.3	28.8	**1800**	**11.3**	1 U	1 U
	08/14/2009	MW13081409	1 U	1 U	122	1 U	1 U	1 U	10 U	1 U	10 U	1 U	7.76	20 U	50 U	**2.10**	1 U	1 U
	01/11/2010	MW13011110	1 U	1 U	32.9	1 U	1 U	1 U	10 U	1 U	10 U	1 U	8.57	20 U	50 U	0.3 U	1 U	1 U
	08/11/2010	MW13081110	1 U	1 U	3.58	1 U	1 U	1 U	10 U	1 U	10 U	1 U	3.93	20 U	50 U	0.3 U	1 U	1 U
	01/12/2011	MW13011211	1 U	1 U	3.35	1 U	1 U	1 U	10 U	1 U	10 U	1 U	2.72	20 U	50 U	0.3 U	1 U	1 U
	08/23/2011	MW13082311	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-14	08/08/2002	GW-128	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/22/2004	MW14-012204	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	05/04/2004	MW14-050404	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	07/28/2004	MW14-072804	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/20/2004	MW14-102004	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/21/2005	MW14012105	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/20/2005	MW14072105	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	1 UJ	1 UJ	1 UJ
	01/23/2006	MW14012306	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/07/2006	MW14080706	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
	01/23/2007	MW14012307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/13/2007	MW14081307	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/16/2008	MW14011608	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-15	08/08/2002	GW-140	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	**15**	2 U	0.5 U
	01/21/2004	MW15-012104	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**18**	2.0 U	0.50 U
	05/05/2004	MW15-050504	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**18**	2.0 U	0.50 U
	07/28/2004	MW15-072804	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**15**	2.0 U	0.50 U
	10/20/2004	MW15-102004	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**17**	2.0 U	0.50 U
	01/21/2005	MW15012105	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1.67	--	--	**3.1**	1 U	1 U
	07/20/2005	MW15072205	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	--	5 UJ	--	5 UJ	5 UJ	--	--	**16.4**	5 UJ	5 UJ
	01/23/2006	MW15012306	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**29.0**	1 U	1 U
	08/07/2006	MW15080706	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**8.87**	1 U	1 U
	01/18/2007	MW15011807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	20 U	50 U	**14.4**	1 U	1 U
	08/10/2007	MW15081007	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**10.1**	1 U	1 U
	01/16/2008	MW15011608	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**6.46**	1 U	1 U
	08/13/2008	MW15081308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**3.14**	1 U	1 U
	09/03/2008	MW15090308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**2.77**	1 U	1 U
	01/26/2009	MW15012609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.88**	1 U	1 U
	08/17/2009	MW15081709	1 U	1 U	2.01	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.12**	1 U	1 U
	01/12/2010	MW15011210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/11/2010	MW15081110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.490	1 U	1 U
	01/13/2011	MW15011311	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/23/2011	MW15082311	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-16	08/07/2002	GW-129	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	**2.8**	2 U	0.5 U
	01/23/2004	MW16-012304	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**2.8**	2.0 U	0.50 U
	05/06/2004	MW16-050604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**3.3**	2.0 U	0.50 U
	07/30/2004	MW16-073004	0.50 U	0.50 U	2.4	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**2.6**	2.0 U	0.50 U
	10/26/2004	MW16-102604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**1.8**	2.0 U	0.50 U
	01/25/2005	MW16012505	1 U	1 U	1.29	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	**2.09**	1 U	1 U
	07/25/2005	MW16072505	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	--	10 UJ	--	10 UJ	10 UJ	--	--	10 UJ	10 UJ	10 UJ
	01/25/2006	MW16012506	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**9.11**	1 U	1 U
	08/10/2006	MW16081006	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.07**	1 U	1 U
	01/25/2007	MW16012507	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	**6.14**	1 U	1 U
	08/16/2007	MW16081607	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.74**	1 U	1 U
	01/22/2008	MW16012208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**2.73**	1 U	1 U
	08/19/2008	MW16081908	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**3.48**	1 U	1 U
	01/30/2009	MW16013009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.410	1 U	1 U
	08/12/2009	MW16081209	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.48**	1 U	1 U
	01/21/2010	MW16012110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/17/2010	MW16081710	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.460	1 U	1 U
	01/21/2011	MW16012111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.69	1 U	1 U
	08/30/2011	MW16083011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
MW-17	08/07/2002	GW-130	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.91	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/26/2004	MW17-012604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.67	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	05/06/2004	MW17-050604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.57	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	07/30/2004	MW17-073004	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	1.1	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/26/2004	MW17-102604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.98	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/24/2005	MW17012405	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/25/2005	MW17072505	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	1 UJ	1 UJ	1 UJ
	01/24/2006	MW17012406	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/08/2006	MW17080806	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/24/2007	MW17012407	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/15/2007	MW17081507	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/18/2008	MW17011808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-18	07/29/2004	MW18-072904	50 U	50 U	200 U	50 U	50 U	50 U	2000 U	200 U	2000 U	200 U	200 U	2000 U	2000 U	50 U	200 U	50 U
	07/25/2005	MW18072505	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	--	1000 UJ	--	1000 UJ	1000 UJ	--	--	1000 UJ	1000 UJ	1000 UJ
	01/24/2006	MW18012406	1 U	1 U	92.4	1 U	1 U	1 U	10 U	1 U	10 U	1 U	7.15	20 U	50 U	**33.0**	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/24/2007	MW18012407	1 U	1 U	103	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	10.7	20 U	50 U	**30.2**	1 U	1 U
	08/15/2007	MW18081507	1 U	1 U	156	1 U	1 U	1 U	10 U	1 U	10 U	1 U	12.6	20 U	50 U	**27.0**	1 U	1 U
	01/18/2008	MW18011808	1 U	1 U	91.6	1 U	1 U	1 U	10 U	1 U	10 U	1 U	9.85	20 U	50 U	**25.9**	1 U	1 U
MW-21	08/08/2002	GW-131	25 U	25 U	100 U	25 U	25 U	25 U	1000 U	100 U	1000 U	100 U	100 U	1000 U	1000 U	**41**	100 U	25 U
	05/06/2004	MW21-050604	10 U	10 U	40 U	10 U	10 U	10 U	400 U	40 U	400 U	40 U	40 U	400 U	400 U	**12**	40 U	10 U
	07/30/2004	MW21-073004	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**7.2**	2.0 U	0.50 U
	10/26/2004	MW21-102604	2.5 U	2.5 U	10 U	2.5 U	2.5 U	2.5 U	100 U	10 U	100 U	10 U	10 U	100 U	100 U	**5.1**	10 U	2.5 U
	01/25/2005	MW21012505	100 U	100 U	100 U	100 U	100 U	100 U	--	100 U	--	100 U	100 U	--	--	100 U	100 U	100 U
	07/25/2005	MW21072505	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	--	500 UJ	--	500 UJ	500 UJ	--	--	500 UJ	500 UJ	500 UJ
	01/25/2006	MW21012506	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1.11	20 U	50 U	**1.23**	1 U	1 U
	08/10/2006	MW21081006	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/25/2007	MW21012507	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/16/2007	MW21081607	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**2.21**	1 U	1 U
	01/22/2008	MW21012208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.11**	1 U	1 U
	08/19/2008	MW21081908	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/30/2009	MW21013009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/12/2009	MW21081209	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/21/2010	MW21012110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/17/2010	MW21081710	1 U	1 U	67.6	1 U	1 U	1 U	10 U	1 U	10 U	1 U	12.9	20 U	50 U	**4.10**	1 U	1 U
	01/21/2011	MW21012111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.53	1 U	1 U
	08/30/2011	MW21083011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**0.88**	1 U	1 U
MW-23	08/06/2002	GW-124	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/22/2004	MW23-012204	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	05/03/2004	MW23-050304	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	07/27/2004	MW23-072704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/19/2004	MW23-101904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/21/2005	MW23012105	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (μg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
	07/20/2005	MW23072105	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	1 UJ	1 UJ	1 UJ
	01/20/2006	MW23012006	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/07/2006	MW23080706	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/23/2007	MW23012307	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/09/2007	MW23080907	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/15/2008	MW23011508	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/11/2008	MW23081108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/11/2010	MW23011110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/30/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	08/12/2002	GW-141	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/27/2004	MW25-012704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**2.3**	2.0 U	0.50 U
	04/29/2004	MW25-042904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.61	2.0 U	0.50 U
	08/06/2004	MW25-080604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/22/2004	MW25-102204	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/26/2005	MW25012605	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/25/2005	MW25072605	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	1 UJ	1 UJ	1 UJ
	01/26/2006	MW25012606	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/09/2006	MW25080906	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2007	MW25012607	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/17/2007	MW25081707	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/23/2008	MW25012308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/20/2008	MW25082008	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/27/2010	MW25012710	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/31/2011	MW25083111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-26	01/26/2004	MW26-012604	50 U	50 U	200	50 U	50 U	50 U	2000 U	200 U	2000 U	200 U	200 U	2000 U	2000 U	**70**	200 U	50 U
	05/05/2004	MW26-050504	25 U	25 U	200	25 U	25 U	25 U	1000 U	100 U	1000 U	100 U	100 U	1000 U	1000 U	**57**	100 U	25 U
	07/29/2004	MW26-072904	25 U	25 U	210	25 U	25 U	25 U	1000 U	100 U	1000 U	100 U	100 U	1000 U	1000 U	**52**	100 U	25 U
	10/25/2004	MW26-102504	25 U	25 U	210	25 U	25 U	25 U	1000 U	100 U	1000 U	100 U	100 U	1000 U	1000 U	**52**	100 U	25 U
	01/24/2005	MW26012405	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	--	1000 U	--	1000 U	1000 U	--	--	1000 U	1000 U	1000 U
	07/25/2005	MW26072505	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	--	1000 UJ	--	1000 UJ	1000 UJ	--	--	1000 UJ	1000 UJ	1000 UJ
	01/24/2006	MW26012406	1 U	1 U	118	1 U	1 U	1 U	10 U	1 U	10 U	1 U	9.96	20 U	50 U	**54.0**	1 U	1 U
	08/08/2006	MW26080806	1 U	1 U	131	1 U	1 U	1 U	10 U	1 U	10 U	1 U	16.3	20 U	50 U	**68.2**	1 U	1 U
	01/24/2007	MW26012407	1 U	1 U	109	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	11.3	20 U	50 U	**64.0**	1 U	1 U
	08/15/2007	MW26081507	1 U	1 U	198	1 U	1 U	1 U	10 U	1 U	10 U	1 U	14.6	20 U	50 U	**57.9**	1 U	1 U
	01/18/2008	MW26011808	1 U	1 U	110	1 U	1 U	1 U	10 U	1 U	10 U	1 U	10.7	20 U	50 U	**82.6**	1 U	1 U
	08/15/2008	MW26081508	1 U	1 U	204	1 U	1 U	1 U	10 U	1 U	10 U	1 U	16.4	20 U	50 U	**41.0**	1 U	1 U
	01/28/2009	MW26012809	1 U	1 U	146	1 U	1 U	1 U	10 U	1 U	10 U	1 U	10.4	20 U	50 U	**38.8**	1 U	1 U
	08/18/2009	MW26081809	1 U	1 U	**616**	1 U	1 U	1 U	10 U	1 U	10 U	1 U	13.9	20 U	50 U	**46.0**	1 U	1 U
	01/25/2010	MW26012510	1 U	1 U	**754**	1 U	1 U	1 U	10 U	1 U	10 U	1 U	13.5	20 U	50 U	**36.1**	1 U	1 U
	08/16/2010	MW26081610	1 U	1 U	161	1 U	1 U	1 U	10 U	1 U	10 U	1 U	14.7	20 U	50 U	**56.3**	1 U	1 U
	01/20/2011	MW26012011	1 U	1 U	**509**	1 U	1 U	1 U	10 U	1 U	10 U	1 U	18.8	20 U	50 U	**42.2**	1 U	1 U
	08/30/2011	MW26083011	1 U	1 U	205	1 U	1 U	1 U	10 U	1 U	10 U	1 U	11.6	20 U	50 U	**30**	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
MW-27	01/26/2004	MW27-012604	5.0 U	5.0 U	20 U	5.0 U	5.0 U	5.0 U	200 U	20 U	200 U	20 U	20 U	200 U	200 U	**24**	20 U	5.0 U
	05/07/2004	MW27-050704	2.5 U	2.5 U	10 U	2.5 U	2.5 U	2.5 U	100 U	10 U	100 U	10 U	10 U	100 U	100 U	**19**	10 U	2.5 U
	07/29/2004	MW27-072904	2.5 U	2.5 U	10 U	2.5 U	2.5 U	2.5 U	100 U	10 U	100 U	10 U	10 U	100 U	100 U	**26**	10 U	2.5 U
	10/20/2004	MW27-102004	2.5 U	2.5 U	10 U	2.5 U	2.5 U	2.5 U	100 U	10 U	100 U	10 U	10 U	100 U	100 U	**20**	10 U	2.5 U
	01/21/2005	MW27012105	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/20/2005	MW27072205	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	--	100 UJ	--	100 UJ	100 UJ	--	--	100 UJ	100 UJ	100 UJ
	01/23/2006	MW27012306	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**17.8**	1 U	1 U
	08/07/2006	MW27080706	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**18.3**	1 U	1 U
	01/24/2007	MW27012407	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	**20.1**	1 U	1 U
	08/14/2007	MW27081407	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**13.4**	1 U	1 U
	01/17/2008	MW27011708	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**15.6**	1 U	1 U
	08/15/2008	MW27081508	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**15.1**	1 U	1 U
	01/22/2010	MW27012210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**13.7**	1 U	1 U
	08/29/2011	MW27082911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**8.02**	1 U	1 U
MW-38	08/07/2002	GW-135	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	**1.6**	2 U	0.5 U
dup	08/07/2002	GW-149	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	**1.5**	2 U	0.5 U
	01/27/2004	MW38-012704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**0.86**	2.0 U	0.50 U
dup	01/27/2004	MW38DUP-012704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**0.95**	2.0 U	0.50 U
	05/06/2004	MW38-050604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
dup	05/06/2004	MW38-050604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	08/06/2004	MW38-080604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
dup	08/06/2004	MW38-080604-Dup	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/29/2004	MW38-102904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
dup	10/29/2004	MW38-102904-Dup	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/25/2005	MW38012505	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
dup	01/25/2005	MW38DUP012505	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/25/2005	MW38072605	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	--	10 UJ	--	10 UJ	10 UJ	--	--	10 UJ	10 UJ	10 UJ
dup	07/25/2005	MW38072605-Dup	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	--	10 UJ	--	10 UJ	10 UJ	--	--	10 UJ	10 UJ	10 UJ
	01/26/2006	MW38012606	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	01/26/2006	MW38012606-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/10/2006	MW38081006	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	08/10/2006	MW38081006-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/25/2007	MW38012507	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	01/25/2007	MW38012507-Dup	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/16/2007	MW38081607	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	08/16/2007	MW38081607-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/23/2008	MW38012308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	01/23/2008	MW38012308-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/21/2008	MW38082108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	08/21/2008	MW38082108-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	02/02/2009	MW38020209	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	02/02/2009	MW38020209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/12/2009	MW38081209	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
dup	08/12/2009	MW38081209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/21/2010	MW38012110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	01/21/2010	MW38012110-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/17/2010	MW38081710	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	08/17/2010	MW38081710-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/21/2011	MW38012111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/31/2011	MW38083111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	08/31/2011	MW38DUP083111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-39	08/07/2002	GW-136	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/27/2004	MW39-012704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
dup	01/27/2004	MW39DUP-012704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	05/06/2004	MW39-050604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
dup	05/06/2004	MW39-050604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	08/06/2004	MW39-080604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
dup	08/06/2004	MW39-080604-Dup	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/29/2004	MW39-102904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
dup	10/29/2004	MW39-102904-Dup	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/25/2005	MW39012505	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
dup	01/25/2005	MW39DUP012505	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/25/2005	MW39072605	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	--	100 UJ	--	100 UJ	100 UJ	--	--	100 UJ	100 UJ	100 UJ
dup	07/25/2005	MW39072605-Dup	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	--	100 UJ	--	100 UJ	100 UJ	--	--	100 UJ	100 UJ	100 UJ
	01/26/2006	MW39012606	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2006	MW39012606-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/10/2006	MW39081006	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	08/10/2006	MW39081006-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/25/2007	MW39012507	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	01/25/2007	MW39012507-Dup	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/16/2007	MW39081607	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	08/16/2007	MW39081607-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/23/2008	MW39012308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	01/23/2008	MW39012308-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/21/2008	MW39082108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	08/21/2008	MW39082108-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	02/02/2009	MW39020209	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	02/02/2009	MW39020209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/12/2009	MW39081209	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	08/12/2009	MW39081209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/21/2010	MW39012110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	01/21/2010	MW39012110-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/17/2010	MW39081710	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
	01/21/2011	MW39012111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/31/2011	MW39083111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
dup	08/31/2011	MW39DUP083111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-48S	08/20/2008	MW48S082008	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/08/2008	MW-48S100808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	02/02/2009	MW48S020209	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/09/2009	MW48S040909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/19/2009	MW48S081909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/27/2010	MW48S012710	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/17/2010	MW48S081710	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/24/2011	MW48S012411	1 U	1 U	9.07	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.39	1 U	1 U
	08/31/2011	MW48S083111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-49D	08/19/2008	MW49D081908	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**4.07**	1 U	1 U
	10/03/2008	MW49D100308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	243	**4.24**	1 U	1 U
	01/26/2009	MW49D012609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	81.5	**2.59**	1 U	1 U
	04/06/2009	MW49D040609	1 U	1 U	1 U	1 U	1 U	1 U	16.7	1 U	10 U	1 U	1 U	20 U	224	0.3 U	1 U	1 U
	08/14/2009	MW49D081409	1 U	1 U	1 U	1 U	1 U	1 U	10.5	1 U	10 U	1 U	1 U	20 U	158	0.510	1 U	1 U
	01/12/2010	MW49D011210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/11/2010	MW49D081110	1 U	1 U	1 U	1 U	1 U	1 U	17.4	1 U	10 U	1 U	1 U	20 U	68.7	0.740	1 U	1 U
	01/13/2011	MW49D011311	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.44	1 U	1 U
	08/23/2011	MW49D082311	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.38	1 U	1 U
MW-50S	08/19/2008	MW50S081908	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/08/2008	MW-50S100808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/30/2009	MW50S013009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/09/2009	MW50S040909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/19/2009	MW50S081909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2010	MW50S012610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/16/2010	MW50S081610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/21/2011	MW50S012111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/30/2011	MW50S083011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-51D	08/12/2008	MW51D081208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/06/2008	MW-51D100608	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2009	MW51D012609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/06/2009	MW51D040609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/05/2009	MW51D080509	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/13/2010	MW51D011310	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/12/2010	MW51D081210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/13/2011	MW51D011311	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/24/2011	MW51D082411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
MW-52D	08/14/2008	MW52D081508	1 U	1 U	16.4	1 U	1 U	1 U	10 U	1 U	10 U	1 U	2.68	20 U	50 U	**4.47**	1 U	1 U
	10/07/2008	MW-52D100708	1 U	1 U	1.23	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.40**	1 U	1 U
	01/30/2009	MW52D013009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**2.24**	1 U	1 U
	04/09/2009	MW52D040909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.35**	1 U	1 U
	08/18/2009	MW52D081809	1 U	1 U	2.21	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**2.34**	1 U	1 U
	01/25/2010	MW52D012510	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.670	1 U	1 U
	08/16/2010	MW52D081610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.710	1 U	1 U
	01/20/2011	MW52012011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.35	1 U	1 U
	08/30/2011	MW52D083011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.44	1 U	1 U
MW-53S	08/14/2008	MW53S081408	1 U	1 U	4.02	1 U	1 U	1 U	10 U	1 U	10 U	1 U	2.12	20 U	50 U	**31.4**	1 U	1 U
	10/07/2008	MW-53S100708	1 U	1 U	1.41	1 U	1 U	1 U	10 U	1 U	10 U	1 U	5.75	20 U	50 U	**4.48**	1 U	1 U
	01/28/2009	MW53S012809	1 U	1 U	1.75	1 U	1 U	1 U	10 U	1 U	10 U	1 U	4.16	20 U	50 U	**22.6**	1 U	1 U
	04/10/2009	MW53S041009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	2.12	20 U	50 U	**22.4**	1 U	1 U
	08/18/2009	MW53S081809	1 U	1 U	10.1	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1.88	20 U	50 U	**13.2**	1 U	1 U
	01/20/2010	MW53S012010	1 U	1 U	2.07	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**8.51**	1 U	1 U
	08/16/2010	MW53S081610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	6.51	20 U	50 U	**10.2**	1 U	1 U
	01/18/2011	MW53S011811	1 U	1 U	33.2	1 U	1 U	1 U	10 U	1 U	10 U	1 U	6.74	20 U	50 U	**6.6**	1 U	1 U
	08/11/2011	MW53S081111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	7.08	20 U	50 U	**2.85**	1 U	1 U
MW-53D	08/14/2008	MW53D081408	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**2.64**	1 U	1 U
	10/07/2008	MW-53D100708	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.26**	1 U	1 U
	01/28/2009	MW53D012809	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**3.79**	1 U	1 U
	04/10/2009	MW53D041009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**2.62**	1 U	1 U
	08/17/2009	MW53D081709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**2.11**	1 U	1 U
	01/20/2010	MW53D012010	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.29**	1 U	1 U
	08/16/2010	MW53D081610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.670	1 U	1 U
	01/18/2011	MW53D011811	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/11/2011	MW53D081111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-55S	08/20/2010	MW55S082010	1 U	1 U	2.29	1 U	1 U	1 U	10 U	1 U	10 U	1 U	4.38	20 U	50 U	**3.47**	1 U	1 U
	01/14/2011	MW55S011411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.34	1 U	1 U
	08/08/2011	MW55S080811	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1	20 U	50 U	0.3 U	1 U	1 U
MW-55D	09/07/2010	MW55D090710	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/14/2011	MW55D011411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**3.81**	1 U	1 U
	08/08/2011	MW55D080811	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.4	1 U	1 U
MW-57S	08/15/2008	MW57S081508	1 U	1 U	106	1 U	1 U	1 U	10 U	1 U	10 U	1 U	14.9	20 U	50 U	**2.00**	1 U	1 U
	10/06/2008	MW-57S100608	1 U	1 U	98.4	1 U	1 U	1 U	10 U	1 U	10 U	1 U	12.2	20 U	50 U	**1.65**	1 U	1 U
	01/27/2009	MW57S012709	1 U	1 U	86.5	1 U	1 U	1 U	10 U	1 U	10 U	1 U	11.4	20 U	50 U	**1.40**	1 U	1 U
	04/07/2009	MW57S040709	1 U	1 U	82.9	1 U	1 U	1 U	10 U	1 U	10 U	1 U	10.4	20 U	50 U	**1.40**	1 U	1 U
	08/06/2009	MW57S080609	1 U	1 U	79.5	1 U	1 U	1 U	10 U	1 U	10 U	1 U	13.7	20 U	50 U	**2.32**	1 U	1 U
	01/13/2010	MW57S011310	1 U	1 U	85.7	1 U	1 U	1 U	10 U	1 U	10 U	1 U	11.3	20 U	50 U	0.640	1 U	1 U
	08/12/2010	MW57S081210	1 U	1 U	93.5	1 U	1 U	1 U	10 U	1 U	10 U	1 U	15.5	20 U	50 U	**2.08**	1 U	1 U
	01/14/2011	MW57S011411	1 U	1 U	104	1 U	1 U	1 U	10 U	1 U	10 U	1 U	15.5	20 U	50 U	**2.13**	1 U	1 U
	08/25/2011	MW57S082511	1 U	1 U	90.3	1 U	1 U	1 U	10 U	1 U	10 U	1 U	16.2	20 U	50 U	**1.76**	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
MW-57D	08/14/2008	MW57D081508	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**33.7**	1 U	1 U
	10/06/2008	MW-57D100608	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**29.1**	1 U	1 U
dup	10/06/2008	MW-57D100608-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**32.6**	1 U	1 U
	01/27/2009	MW57D012709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**28.3**	1 U	1 U
dup	01/27/2009	MW57D012709-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**27.7**	1 U	1 U
	04/07/2009	MW57D040709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**32.4**	1 U	1 U
dup	04/07/2009	MW57D040709-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**33.3**	1 U	1 U
	08/06/2009	MW57D080609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**28.1**	1 U	1 U
	01/13/2010	MW57D011310	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**33.6**	1 U	1 U
dup	01/13/2010	MW57D011310-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**31.6**	1 U	1 U
	08/12/2010	MW57D081210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**31.3**	1 U	1 U
dup	08/12/2010	MW57D081210-Dup	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**25.4**	1 U	1 U
	01/14/2011	MW57D011411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**30.6**	1 U	1 U
dup	01/14/2011	MW57DDUP011411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**32.5**	1 U	1 U
	08/25/2011	MW57D082511	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**27.1**	1 U	1 U
dup	08/25/2011	MW57DDUP082511	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**28.7**	1 U	1 U
MW-58D	08/13/2008	MW58D081308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**6.69**	1 U	1 U
	10/08/2008	MW-58D100808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**9.62**	1 U	1 U
	01/27/2009	MW58D012709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**8.15**	1 U	1 U
	04/07/2009	MW58D040709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**6.62**	1 U	1 U
	08/06/2009	MW58D080609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**10.3**	1 U	1 U
	01/14/2010	MW58D011410	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**16.1**	1 U	1 U
	08/12/2010	MW58D081210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**13.6**	1 U	1 U
	01/19/2011	MW58D011911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**19.5**	1 U	1 U
	08/26/2011	MW58D082611	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**18.3**	1 U	1 U
EPA-5S	08/11/2008	EPA5S081108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/02/2008	EPA5S100208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/23/2009	EPA5S012309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/03/2009	EPA5S040309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/05/2009	EPA5S080509	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/08/2010	EPA5S010810	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/11/2010	EPA5S081110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/12/2011	EPA5S011211	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/09/2011	EPA5S080911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
EPA-5D	08/11/2008	EPA5D081108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/02/2008	EPA5D100208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/23/2009	EPA5D012309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/03/2009	EPA5D040309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/05/2009	EPA5D080509	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/08/2010	EPA5D010810	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
	08/11/2010	EPA5D081110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/12/2011	EPA5D011211	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/09/2011	EPA5D080911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
EPA-6S	08/18/2008	EPA6S081808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.360	1 U	1 U
	10/07/2008	EPA-6S100708	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.350	1 U	1 U
	01/29/2009	EPA6S012909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/10/2009	EPA6S041009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.630	1 U	1 U
	08/12/2009	EPA6S081209	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.54**	1 U	1 U
	01/25/2010	EPA6S012510	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.440	1 U	1 U
	08/13/2010	EPA6S081310	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.65	1 U	1 U
	01/19/2011	EPA6S011911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.33	1 U	1 U
dup	01/19/2011	EPA6SDUP011911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.32	1 U	1 U
	08/10/2011	EPA6S081011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
EPA-6D	08/18/2008	EPA6D081808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**25.6**	1 U	1 U
	10/07/2008	EPA-6D100708	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**10.2**	1 U	1 U
	01/29/2009	EPA6D012909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**16.7**	1 U	1 U
	04/10/2009	EPA6D041009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**14.8**	1 U	1 U
	08/12/2009	EPA6D081209	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**9.36**	1 U	1 U
	01/25/2010	EPA6D012510	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/13/2010	EPA6D081310	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**3.37**	1 U	1 U
	01/19/2011	EPA6D011911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**5.25**	1 U	1 U
	08/10/2011	EPA6D081011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.93**	1 U	1 U
Carty Lake Monitoring Wells (UWBZ)																		
MW-30	08/13/2002	GW-133	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
USDFW-1	10/24/2003	USDFW-1-102403	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**4.3**	2.0 U	0.50 U
	05/04/2004	USDFW1-050404	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**3**	2.0 U	0.50 U
	08/13/2004	USDFW1-081304	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**3.2**	2.0 U	0.50 U
	10/25/2004	USDFW1-102504	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**1.6**	2.0 U	0.50 U
	01/28/2005	USDFW1012805	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	**1.43**	1 U	1 U
	07/28/2005	USDFW1072805	1 U	1 U	1 U	1 U	1 U	1 U		1 U	--	1 U	1 U	--	--	**1.1**	1 U	1 U
	02/01/2006	USDFW1020106	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.430	1 U	1 U
	08/11/2006	USDFW1081106	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/22/2007	USDFW1012207	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.550	1 U	1 U
	08/27/2007	USDFW1082707	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.410	1 U	1 U
	01/28/2008	USDFW1012808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.400	1 U	1 U
	08/21/2008	USDW1082108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	02/03/2009	USDFW1020309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/07/2009	USDFW1080709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/28/2010	USDFW1012810	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/26/2010	USDFW1082610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2011	USDFW1012611	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/06/2011	USDFW1090611	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
USDFW-2	10/24/2003	USDFW-2-102403	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	05/04/2004	USDFW2-050404	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	08/13/2004	USDFW2-081304	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/25/2004	USDFW2-102504	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/28/2005	USDFW2012805	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/28/2005	USDFW2072805	1 U	1 U	1 U	1 U	1 U	1 U		1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	02/01/2006	USDFW2020106	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/11/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/22/2007	USDFW2012207	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/27/2007	USDFW2082707	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/28/2008	USDFW2012808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
USDFW-3	10/24/2003	USDFW-3-102403	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	05/04/2004	USDFW3-050404	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	08/13/2004	USDFW3-081304	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/25/2004	USDFW3-102504	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/28/2005	USDFW3012805	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/28/2005	USDFW3072805	1 U	1 U	1 U	1 U	1 U	1 U		1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	02/01/2006	USDFW3020106	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/11/2006	USDFW3081106	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/22/2007	USDFW3012207	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/27/2007	USDFW3082707	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/28/2008	USDFW3012808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
RMW-2S	08/21/2008	RMW2S082108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/09/2008	RMW2S100908	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	02/03/2009	RMW2S020309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/08/2009	RMW2S040809	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/07/2009	RMW2S080709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/28/2010	RMW2S012810	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/26/2010	RMW2S082610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2011	RMW2S012611	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/06/2011	RMW2S090611	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
RMW-2D	08/21/2008	RMW2D082108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/09/2008	RMW2D100908	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	02/03/2009	RMW2D020309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/08/2009	RMW2D040809	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/07/2009	RMW2D080709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/28/2010	RMW2D012810	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/26/2010	RMW2D082610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2011	RMW2D012611	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/06/2011	RMW2D090611	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
LWBZ: Cells 1 and 2 and Carty Lake																		
Cell 1 (LWBZ)																		
MW-40	08/08/2002	GW-151	1.3 U	1.3 U	7.8	1.3 U	1.3 U	1.3 U	50 U	5 U	50 U	5 U	5 U	50 U	50 U	**4.6**	5 U	1.3 U
	01/23/2004	MW40-012304	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**1.3**	2.0 U	0.50 U
	04/30/2004	MW40-043004	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.78	2.0 U	0.50 U
	08/11/2004	MW40-081104	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.63	2.0 U	0.50 U
	10/29/2004	MW40-102904[b]	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50	2.0 U	0.50 U
	01/27/2005	MW40012705	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1.14	--	--	1 U	1 U	1 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW40012706	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.340	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW40020209	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/19/2009	MW40081909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/29/2010	MW40012910	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/25/2010	MW40082510	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/24/2011	MW40012411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/02/2011	MW40090211	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-41	08/12/2002	GW-148	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/29/2004	MW41-012904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	04/29/2004	MW41-042904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	52	0.50 U	2.0 U	0.50 U
	08/12/2004	MW41-081204	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	11/08/2004	MW41-110804	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/27/2005	MW41012705	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/2006	MW41013006	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**5.67**	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cell 2 (LWBZ)																		
MW-22	08/08/2002	GW-143	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	**8.6**	2 U	0.5 U
	01/23/2004	MW22-012304	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**8.9**	2.0 U	0.50 U
	04/28/2004	MW22-042804	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**8.7**	2.0 U	0.50 U
	08/06/2004	MW22-080604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**6.2**	2.0 U	0.50 U
	10/26/2004	MW22-102604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**4.8**	2.0 U	0.50 U
	01/25/2005	MW22012505	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	**3.94**	1 U	1 U
	07/25/2005	MW22072505	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	**2.45**	1 UJ	1 UJ
	01/25/2006	MW22012506	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**4.91**	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
	08/10/2006	MW22081006	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**0.970**	1 U	1 U
	01/25/2007	MW22012507	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/16/2007	MW22081607	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.18**	1 U	1 U
	01/22/2008	MW22012208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.630	1 U	1 U
MW-33	08/07/2002	GW-122	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	**1.1**	2 U	0.5 U
	01/21/2004	MW33-012104	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**3.4**	2.0 U	0.50 U
	04/27/2004	MW33-042704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**3.5**	2.0 U	0.50 U
	07/28/2004	MW33-072804	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**2.6**	2.0 U	0.50 U
	10/19/2004	MW33-101904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**2.2**	2.0 U	0.50 U
	01/20/2005	MW33012005	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	**1.97**	1 U	1 U
	07/20/2005	MW33072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	**1.77**	1 UJ	1 UJ
	01/20/2006	MW33012006	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.53**	1 U	1 U
	08/04/2006	MW33080406	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/19/2007	MW33011907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.12**	1 U	1 U
	08/09/2007	MW33080907	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/15/2008	MW33011508	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.03**	1 U	1 U
	01/11/2010	MW33011110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/11/2008	MW33081108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.380	1 U	1 U
	01/11/2010	MW33011110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/09/2011	MW33080911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-34	08/08/2002	GW-144	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/21/2004	MW34-012104	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	04/27/2004	MW34-042704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	07/29/2004	MW34-072904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/20/2004	MW34-102004	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/21/2005	MW34012105	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/20/2005	MW34072105	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	1 UJ	1 UJ	1 UJ
	01/23/2006	MW34012306	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/07/2006	MW34080706	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/18/2007	MW34011807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/10/2007	MW34081007	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/16/2008	MW34011608	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-35	08/13/2002	GW-145	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	**15**	2 U	0.5 U
dup	08/13/2002	GW-150	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	**14**	2 U	0.5 U
	01/21/2004	MW35-012104	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**16**	2.0 U	0.50 U
	04/28/2004	MW35-042804	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**15**	2.0 U	0.50 U
	07/30/2004	MW35-073004	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**16**	2.0 U	0.50 U
	10/25/2004	MW35-102504	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**13**	2.0 U	0.50 U
	01/24/2005	MW35012405	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	7.21	--	--	**14.4**	1 U	1 U
	07/20/2005	MW35072205	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	--	5 UJ	--	5 UJ	5 UJ	--	--	**11.3**	5 UJ	5 UJ
	01/24/2006	MW35012406	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**12.1**	1 U	1 U
	08/08/2006	MW35080806	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**12.8**	1 U	1 U
	01/24/2007	MW35012407	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	**9.39**	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
	08/14/2007	MW35081407	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/18/2008	MW35011808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**13.7**	1 U	1 U
	08/14/2008	MW35081408	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**12.6**	1 U	1 U
	01/30/2009	MW35013009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**7.95**	1 U	1 U
	08/18/2009	MW35081809	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**10.7**	1 U	1 U
	01/22/2010	MW35012210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**7.93**	1 U	1 U
	08/16/2010	MW35081610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**7.80**	1 U	1 U
	01/20/2011	MW35012011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**7.75**	1 U	1 U
	08/29/2011	MW35082911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**6.14**	1 U	1 U
MW-36	08/07/2002	GW-146	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	**2.7**	2 U	0.5 U
	01/26/2004	MW36-012604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.65	2.0 U	0.50 U
	04/28/2004	MW36-042804	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**3.2**	2.0 U	0.50 U
	07/30/2004	MW36-073004	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**3**	2.0 U	0.50 U
	10/26/2004	MW36-102604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	**2.1**	2.0 U	0.50 U
	01/25/2005	MW36012505	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	**1.49**	1 U	1 U
	07/25/2005	MW36072705	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	**1.27**	1 UJ	1 UJ
	01/25/2006	MW36012506	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.560	1 U	1 U
	08/08/2006	MW36080806	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/24/2007	MW36012407	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/15/2007	MW36081507	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/22/2008	MW36012208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/19/2008	MW36081908	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/30/2009	MW36013009	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/19/2009	MW36081909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2010	MW36012610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/16/2010	MW36081610	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/21/2011	MW36012111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/30/2011	MW36083011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-37	08/12/2002	GW-147	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	20 U	2 U	20 U	2 U	2 U	20 U	20 U	0.5 U	2 U	0.5 U
	01/27/2004	MW37-012704	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	04/29/2004	MW37-042904	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	08/06/2004	MW37-080604	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	10/22/2004	MW37-102204	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U	20 U	20 U	0.50 U	2.0 U	0.50 U
	01/26/2005	MW37012605	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--	--	1 U	1 U	1 U
	07/25/2005	MW37072605	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ	--	--	1 UJ	1 UJ	1 UJ
	01/26/2006	MW37012606	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/09/2006	MW37080906	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2007	MW370120607	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/17/2007	MW37081707	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/23/2008	MW37012308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
	08/20/2008	MW37082008	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/27/2010	MW37012710	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/31/2011	MW37083111	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-54	08/12/2008	MW54081208	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/06/2008	MW-54100608	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/26/2009	MW54012609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/06/2009	MW54040609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/05/2009	MW54080509	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/13/2010	MW54011310	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/12/2010	MW54081210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/13/2011	MW54011311	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/24/2011	MW54082411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-55	08/14/2008	MW55081408	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/03/2008	MW55100308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/27/2009	MW55012709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/07/2009	MW55040709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/06/2009	MW55080609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/14/2010	MW55011410	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/12/2010	MW55081210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/14/2011	MW55011411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/08/2011	MW55080811	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-56	08/21/2008	MW56082108	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/08/2008	MW-56100808	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/27/2009	MW56012709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/07/2009	MW56040709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/06/2009	MW56080609	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/14/2010	MW56011410	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/12/2010	MW56081210	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/19/2011	MW56011911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/26/2011	MW56	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-59	08/19/2008	MW59081908	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/06/2008	MW-59100608	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/29/2009	MW59012909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/09/2009	MW59040909	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/17/2009	MW59081709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/21/2010	MW59012110	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/13/2010	MW59081310	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/20/2011	MW59012011	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/29/2011	MW59082911	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-62	09/08/2010	MW62090810	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/14/2011	MW62011411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/25/2011	MW62082511	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2-Butanone	2-Chloro-toluene	2-Hex-anone	4-Chloro-toluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane
MTCA Method B Groundwater VI Level			4.2	28	25	NV	NV	7900	350000	NV	NV	NV	NV	NV	NV	2.4	NV	NV
MTCA Method B Groundwater Cleanup Level			0.48	0.64	400	NV	NV	1.8	4800	160	NV	NV	NV	640	800	0.8	NV	NV
Carty Lake (LWBZ)																		
MW-60	09/03/2008	MW60090308	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	10/09/2008	MW601000908	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	02/03/2009	MW60020309	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	04/08/2009	MW60040809	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/07/2009	MW60080709	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	**1.30**	1 U	1 U
	01/28/2010	MW60012810	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	08/25/2010	MW60082510	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/24/2011	MW60012411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/06/2011	MW60090611	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
MW-61	09/03/2010	MW61090310	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	01/24/2011	MW61012411	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U
	09/02/2011	MW61090211	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U	0.3 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
UWBZ: Cells 1 and 2																		
Cell 1 (UWBZ)																		
MW-7	08/12/2002	GW-125	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/26/2004	MW7-012604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.8	2.0 U	2.4
	05/06/2004	MW7-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	08/09/2004	MW7-080904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/27/2004	MW7-102704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/26/2005	MW7-012605	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
	07/25/2005	MW7072705	10 UJ	10 UJ	10 UJ	--	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/27/2006	MW7012706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2006	MW7081006	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.99	1 U	1 U
	01/25/2007	MW7012507	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.50
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/05/2008	MW7090508	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/04/2009	MW7020409	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW7081909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2010	MW7012610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2010	MW7082410	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2011	MW7012511	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/01/2011	MW7090111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-8S	08/13/2002	GW-126	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
MW-42	08/12/2002	GW-137	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	310	200 U	200 U
	01/23/2004	MW42-012304	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	17	13 U	13 U	13 U	140	50 U	50 U
	04/30/2004	MW42-043004	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	30	25 U	25 U	25 U	200	100 U	100 U
	08/10/2004	MW42-081004	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	30	25 U	25 U	25 U	280	100 U	100 U
	10/27/2004	MW42-102704	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	350	100 U	100 U
	01/26/2005	MW42-012605	500 U	500 U	500 U	--	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW42012706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6.12	1 U	2.46
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-43	08/12/2002	GW-138	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	270	200 U	200 U
	01/23/2004	MW43-012304	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	140	50 U	62
	08/11/2004	MW43-081104	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.4	5.0 U	5.0 U	5.0 U	35	20 U	25
	10/27/2004	MW43-102704	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	34	10 U	13
	01/27/2005	MW43012705	500 U	500 U	500 U	--	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW43012706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	16.9	1 U	9.65
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-44	08/13/2002	GW-139	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	42	25 U	25 U	25 U	310	100 U	100
	01/23/2004	MW44-012304	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	17	13 U	13 U	13 U	360	50 U	110
	04/29/2004	MW44-042904	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	270	100 U	100
	08/11/2004	MW44-081104	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	270	100 U	100 U
	10/29/2004	MW44-102904[b]	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	110	200 U	200 U
	01/27/2005	MW44012705	500 U	500 U	500 U	--	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW44012706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	22.1	1 U	1 U	1 U	30.4	1 U	12.0
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW44020209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW44081909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.29	1 U	1 U
	01/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/2010	MW44082510	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW44012411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/02/2011	MW44090211	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-4	07/12/2007	E4-21071207	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.19	1 U	1 U	1 U	1 U	1 U	1 U
	09/13/2007	E4-23091307	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/12/2008	E4021208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/22/2008	E4082208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2009	E4011309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-4S	09/03/2008	EPA4S090308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA4S100208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/10/2009	EPA4S021009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/16/2009	EPA4S041609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2009	EPA4S081309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2010	EPA4S012910	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2010	EPA4S082410	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2011	EPA4S012511	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/01/2011	EPA4S090111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-4D	09/03/2008	EPA4D090308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA4D100208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/10/2009	EPA4D021009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/16/2009	EPA4D041609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2009	EPA4D081309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
	01/29/2010	EPA4D012910	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2010	EPA4D082410	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2011	EPA4D012511	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/01/2011	EPA4D090111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cell 2 (UWBZ)																		
MW-4	05/07/2004	MW4-050704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	6.3
	07/29/2004	MW4-072904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	7.8
	10/22/2004	MW4-102204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	7.2
	01/24/2005	MW4012405	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.37
	07/20/2005	MW4072205	10 UJ	10 UJ	10 UJ	--	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/23/2006	MW4012306	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.92
	08/08/2006	MW4080806	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.32
	01/24/2007	MW4012407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.47
	08/14/2007	MW4081407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	7.56
	01/17/2008	MW4011708	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6.82
	08/13/2008	MW4081308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.18
	01/29/2009	MW4012909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.21
	08/18/2009	MW4081809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.22
	01/19/2010	MW4011910	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.08
	08/13/2010	MW4081310	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6.87
	01/20/2011	MW4012011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.92
	08/26/2011	MW4082611	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.83
MW-5	01/26/2004	MW5-012604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	05/07/2004	MW5-050704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.1
	07/29/2004	MW5-072904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.2
	10/22/2004	MW5-102204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.2
	01/24/2005	MW5012405	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW5072205	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/24/2006	MW5012406	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.51
	08/08/2006	MW5080806	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW5012407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.31	1 U	2.02
	08/14/2007	MW5081407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.09	1 U	2.74
	01/17/2008	MW5011708	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	15.7	1 U	5.75
	08/13/2008	MW5081308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/18/2009	MW5081809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2009	MW5012909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2010	MW5012210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.98
	08/13/2010	MW5081310	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.30
	01/20/2011	MW5012011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.55
	08/26/2011	MW5082611	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.64

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
PZ-06	01/23/2007	PZ06012307	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2007	PZ06081307	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/16/2008	PZ06011608	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2008	PZ06081208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2009	PZ06012609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	PZ06080509	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2010	PZ06011310	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/2011	PZ06011311	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2011	PZ06082411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-10	08/06/2002	GW-121	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/23/2007	MW10012307	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/14/2007	MW10081407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/17/2008	MW10011708	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.43	1 U	1 U
MW-13	08/08/2002	GW-127	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/26/2004	MW13-012604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	05/05/2004	MW13-050504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	07/28/2004	MW13-072804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/20/2004	MW13-102004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/21/2005	MW13012105	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW13072105	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/23/2006	MW13012306	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW13080706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2007	MW13012307	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2007	MW13080907	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/15/2008	MW13011508	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2008	MW13081108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2009	MW13012309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	11.9	1 U	1 U	1 U	14.2	1 U	30.0
	08/14/2009	MW13081409	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.63	1 U	1 U	1 U	7.37	1 U	18.1
	01/11/2010	MW13011110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.58	1 U	10.1
	08/11/2010	MW13081110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.22
	01/12/2011	MW13011211	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.76
	08/23/2011	MW13082311	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.46
MW-14	08/08/2002	GW-128	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/22/2004	MW14-012204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	05/04/2004	MW14-050404	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	07/28/2004	MW14-072804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/20/2004	MW14-102004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/21/2005	MW14012105	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW14072105	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/23/2006	MW14012306	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW14080706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
	01/23/2007	MW14012307	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2007	MW14081307	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/16/2008	MW14011608	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-15	08/08/2002	GW-140	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	54	0.5 U	0.5 U	0.5 U	0.5 U	2 U	12
	01/21/2004	MW15-012104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	61	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	6.4
	05/05/2004	MW15-050504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	59	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	5.3
	07/28/2004	MW15-072804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	45	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	3.8
	10/20/2004	MW15-102004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	51	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	4.8
	01/21/2005	MW15012105	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	8.87	1 U	1 U	1 U	1 U	1 U	1.01
	07/20/2005	MW15072205	5 UJ	5 UJ	5 UJ	--	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	42	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	6.25
	01/23/2006	MW15012306	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	36.2	1 U	1 U	1 U	1 U	1 U	28.5
	08/07/2006	MW15080706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	38.3	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2007	MW15011807	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	35.5	1 U	1 U	1 U	1 U	1 U	1.77
	08/10/2007	MW15081007	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	29.6	1 U	1 U	1 U	1 U	1 U	1.43
	01/16/2008	MW15011608	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	18.2	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2008	MW15081308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	24.4	1 U	1 U	1 U	1 U	1 U	1 U
	09/03/2008	MW15090308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	21.6	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2009	MW15012609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	40.4	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2009	MW15081709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	16.1	1 U	1 U	1 U	1 U	1 U	1.25
	01/12/2010	MW15011210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	4.53	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2010	MW15081110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.76	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2011	MW15011311	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.25	1 U	1 U	1 U	1 U	1 U	1 U
	08/23/2011	MW15082311	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-16	08/07/2002	GW-129	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	26	2 U	6.6
	01/23/2004	MW16-012304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	23	2.0 U	5.8
	05/06/2004	MW16-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	23	2.0 U	5.6
	07/30/2004	MW16-073004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	23	2.0 U	5.4
	10/26/2004	MW16-102604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	19	2.0 U	5.5
	01/25/2005	MW16012505	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	18.1	1 U	5.1
	07/25/2005	MW16072505	10 UJ	10 UJ	10 UJ	--	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	19.9	10 UJ	10 UJ
	01/25/2006	MW16012506	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	27.3	1 U	5.16
	08/10/2006	MW16081006	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	18.4	1 U	2.06
	01/25/2007	MW16012507	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	18.8	1 U	4.23
	08/16/2007	MW16081607	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	9.04	1 U	4.47
	01/22/2008	MW16012208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6.27	1 U	3.34
	08/19/2008	MW16081908	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.02	1 U	3.22
	01/30/2009	MW16013009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.98	1 U	1 U
	08/12/2009	MW16081209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.88	1 U	3.04
	01/21/2010	MW16012110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.27	1 U	1 U
	08/17/2010	MW16081710	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.07	1 U	1 U
	01/21/2011	MW16012111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.33	1 U	1 U
	08/30/2011	MW16083011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
MW-17	08/07/2002	GW-130	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/26/2004	MW17-012604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	05/06/2004	MW17-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	07/30/2004	MW17-073004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/26/2004	MW17-102604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/24/2005	MW17012405	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW17072505	1 UJ	1 UJ	1 UJ		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/24/2006	MW17012406	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.68	1 U	1 U
	08/08/2006	MW17080806	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.21	1 U	1 U
	01/24/2007	MW17012407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/15/2007	MW17081507	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2008	MW17011808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-18	07/29/2004	MW18-072904	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**1100**	200 U	200 U
	07/25/2005	MW18072505	1000 UJ	1000 UJ	1000 UJ	--	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ
	01/24/2006	MW18012406	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.55	1 U	1 U	1 U	**995**	1 U	34.4
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/24/2007	MW18012407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.95	1 U	1 U	1 U	**800**	1 U	29.7
	08/15/2007	MW18081507	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.33	1 U	1 U	1 U	**909**	1 U	35.6
	01/18/2008	MW18011808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.67	1 U	1 U	1 U	**941**	1 U	35.8
MW-21	08/08/2002	GW-131	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	170	100 U	100 U
	05/06/2004	MW21-050604	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	84	40 U	44
	07/30/2004	MW21-073004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.4	0.50 U	0.50 U	0.50 U	43	2.0 U	44
	10/26/2004	MW21-102604	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	3.9	2.5 U	2.5 U	2.5 U	69	10 U	41
	01/25/2005	MW21012505	100 U	100 U	100 U	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	110	100 U	100 U
	07/25/2005	MW21072505	500 UJ	500 UJ	500 UJ	--	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ
	01/25/2006	MW21012506	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.09	1 U	1 U	1 U	11.0	1 U	17.5
	08/10/2006	MW21081006	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.63
	01/25/2007	MW21012507	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2007	MW21081607	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.41	1 U	1 U	1 U	1.08	1 U	3.37
	01/22/2008	MW21012208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.04	1 U	1 U	1 U	1 U	1 U	2.79
	08/19/2008	MW21081908	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW21013009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW21081209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.78
	01/21/2010	MW21012110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW21081710	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	49.0	1 U	25.5
	01/21/2011	MW21012111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.81	1 U	1 U
	08/30/2011	MW21083011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-23	08/06/2002	GW-124	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/22/2004	MW23-012204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	05/03/2004	MW23-050304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	07/27/2004	MW23-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/19/2004	MW23-101904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/21/2005	MW23012105	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
	07/20/2005	MW23072105	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/20/2006	MW23012006	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW23080706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2007	MW23012307	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2007	MW23080907	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/15/2008	MW23011508	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2008	MW23081108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2010	MW23011110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	08/12/2002	GW-141	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/27/2004	MW25-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	7	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	04/29/2004	MW25-042904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	08/06/2004	MW25-080604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.6	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/22/2004	MW25-102204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/26/2005	MW25012605	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1.75	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW25072605	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1.36	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/26/2006	MW25012606	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2006	MW25080906	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2007	MW25012607	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2007	MW25081707	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW25012308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/20/2008	MW25082008	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2010	MW25012710	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW25083111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-26	01/26/2004	MW26-012604	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**1200**	200 U	200 U
	05/05/2004	MW26-050504	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**1200**	100 U	100 U
	07/29/2004	MW26-072904	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**1200**	100 U	100 U
	10/25/2004	MW26-102504	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**1300**	100 U	100 U
	01/24/2005	MW26012405	1000 U	1000 U	1000 U	--	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	**1250**	1000 U	1000 U
	07/25/2005	MW26072505	1000 UJ	1000 UJ	1000 UJ	--	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ
	01/24/2006	MW26012406	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.25	1 U	1 U	1 U	**926**	1 U	60.9
	08/08/2006	MW26080806	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1090**	1 U	64.5
	01/24/2007	MW26012407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.68	1 U	1 U	1 U	**837**	1 U	48.4
	08/15/2007	MW26081507	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.61	1 U	1 U	1 U	**1100**	1 U	55.5
	01/18/2008	MW26011808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.56	1 U	1 U	1 U	**1100**	1 U	57.9
	08/15/2008	MW26081508	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.77	1 U	1 U	1 U	**842**	1 U	51.4
	01/28/2009	MW26012809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.88	1 U	1 U	1 U	**1480**	1 U	59.1
	08/18/2009	MW26081809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.81	1 U	1 U	1 U	**1320**	1 U	50.8
	01/25/2010	MW26012510	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.43	1 U	1 U	1 U	**1440**	1 U	52.6
	08/16/2010	MW26081610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.85	1 U	1 U	1 U	**1120**	1 U	58.3
	01/20/2011	MW26012011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.94	1 U	1 U	1 U	**1090**	1 U	45.7
	08/30/2011	MW26083011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.86	1 U	1 U	1 U	**1380**	1 U	50.3

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
MW-27	01/26/2004	MW27-012604	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	200	20 U	20 U
	05/07/2004	MW27-050704	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	160	10 U	17
	07/29/2004	MW27-072904	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	280	10 U	20
	10/20/2004	MW27-102004	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	220	10 U	23
	01/21/2005	MW27012105	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.36	1 U	1 U
	07/20/2005	MW27072205	100 UJ	100 UJ	100 UJ	--	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	163	100 UJ	100 UJ
	01/23/2006	MW27012306	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	141	1 U	23.8
	08/07/2006	MW27080706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	162	1 U	21.5
	01/24/2007	MW27012407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	129	1 U	17.1
	08/14/2007	MW27081407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	86.7	1 U	18.3
	01/17/2008	MW27011708	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	135	1 U	23.1
	08/15/2008	MW27081508	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	74.0	1 U	24.6
	01/22/2010	MW27012210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	98	1 U	22.4
	08/29/2011	MW27082911	1 U	1 U	1.7	2 U	1 U	1 U	1 U	1 U	1.18	1 U	1 U	1 U	1 U	57.2	1 U	20.5
MW-38	08/07/2002	GW-135	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.3	0.5 U	0.5 U	0.5 U	0.5 U	2 U	4.5
dup	08/07/2002	GW-149	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.9	0.5 U	0.5 U	0.5 U	0.5 U	2 U	4.4
	01/27/2004	MW38-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	9.7	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
dup	01/27/2004	MW38DUP-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	9.8	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	05/06/2004	MW38-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
dup	05/06/2004	MW38-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	08/06/2004	MW38-080604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
dup	08/06/2004	MW38-080604-Dup	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/29/2004	MW38-102904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	4.7	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
dup	10/29/2004	MW38-102904-Dup	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	4.4	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/25/2005	MW38012505	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	2.13	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/25/2005	MW38DUP012505	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	2.39	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW38072605	10 UJ	10 UJ	10 UJ	--	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
dup	07/25/2005	MW38072605-Dup	10 UJ	10 UJ	10 UJ	--	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/26/2006	MW38012606	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.27	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/26/2006	MW38012606-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.22	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2006	MW38081006	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/10/2006	MW38081006-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW38012507	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/25/2007	MW38012507-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2007	MW38081607	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/16/2007	MW38081607-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW38012308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.03	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/23/2008	MW38012308-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.05	1 U	1 U	1 U	1 U	1 U	1 U
	08/21/2008	MW38082108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/21/2008	MW38082108-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/02/2009	MW38020209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	02/02/2009	MW38020209-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW38081209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
dup	08/12/2009	MW38081209-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW38012110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/21/2010	MW38012110-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW38081710	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/17/2010	MW38081710-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW38012111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW38083111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/31/2011	MW38DUP083111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-39	08/07/2002	GW-136	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/27/2004	MW39-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
dup	01/27/2004	MW39DUP-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	05/06/2004	MW39-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
dup	05/06/2004	MW39-050604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	08/06/2004	MW39-080604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
dup	08/06/2004	MW39-080604-Dup	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/29/2004	MW39-102904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
dup	10/29/2004	MW39-102904-Dup	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/25/2005	MW39012505	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/25/2005	MW39DUP012505	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW39072605	100 UJ	100 UJ	100 UJ	--	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
dup	07/25/2005	MW39072605-Dup	100 UJ	100 UJ	100 UJ	--	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
	01/26/2006	MW39012606	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2006	MW39012606-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2006	MW39081006	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/10/2006	MW39081006-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW39012507	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/25/2007	MW39012507-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2007	MW39081607	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/16/2007	MW39081607-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW39012308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/23/2008	MW39012308-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/21/2008	MW39082108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/21/2008	MW39082108-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/02/2009	MW39020209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	02/02/2009	MW39020209-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW39081209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/12/2009	MW39081209-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW39012110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/21/2010	MW39012110-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW39081710	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
	01/21/2011	MW39012111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW39083111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/31/2011	MW39DUP083111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-48S	08/20/2008	MW48S082008	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-48S100808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/02/2009	MW48S020209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/09/2009	MW48S040909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW48S081909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2010	MW48S012710	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW48S081710	1 U	1 U		2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW48S012411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.75	1 U	1 U
	08/31/2011	MW48S083111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-49D	08/19/2008	MW49D081908	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	13.4	1 U	1 U	1 U	1 U	1 U	4.94
	10/03/2008	MW49D100308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	9.32	1 U	1 U	1 U	1 U	1 U	4.21
	01/26/2009	MW49D012609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	8.24	1 U	1 U	1 U	1 U	1 U	1 U
	04/06/2009	MW49D040609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/14/2009	MW49D081409	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2010	MW49D011210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.19	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2010	MW49D081110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.16	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2011	MW49D011311	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/23/2011	MW49D082311	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-50S	08/19/2008	MW50S081908	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-50S100808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW50S013009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/09/2009	MW50S040909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW50S081909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2010	MW50S012610	1 U	1 U	1 U	2 U	1 U	1 U	1.03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW50S081610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW50S012111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW50S083011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-51D	08/12/2008	MW51D081208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-51D100608	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2009	MW51D012609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/06/2009	MW51D040609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	MW51D080509	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2010	MW51D011310	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW51D081210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2011	MW51D011311	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.45	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2011	MW51D082411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
MW-52D	08/14/2008	MW52D081508	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	12.8	1 U	1 U	1 U	43.4	1 U	7.71
	10/07/2008	MW-52D100708	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.57	1 U	1 U	1 U	3.15	1 U	1 U
	01/30/2009	MW52D013009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5.53	1 U	1 U	1 U	1.31	1 U	1 U
	04/09/2009	MW52D040909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.24	1 U	1 U	1 U	1 U	1 U	1 U
	08/18/2009	MW52D081809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5.05	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2010	MW52D012510	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.11	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW52D081610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW52012011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW52D083011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-53S	08/14/2008	MW53S081408	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	29.3	1 U	4.92
	10/07/2008	MW-53S100708	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	271	1 U	24.6
	01/28/2009	MW53S012809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	139	1 U	26.0
	04/10/2009	MW53S041009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	95.4	1 U	14.2
	08/18/2009	MW53S081809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	61.0	1 U	7.49
	01/20/2010	MW53S012010	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	4.22	1 U	1 U	1 U	178	1 U	26.5
	08/16/2010	MW53S081610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	159	1 U	24.4
	01/18/2011	MW53S011811	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	174	1 U	28.6
	08/11/2011	MW53S081111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	132	1 U	22
MW-53D	08/14/2008	MW53D081408	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	30.6	1 U	1 U	1 U	1.18	1 U	1.43
	10/07/2008	MW-53D100708	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	8.07	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2009	MW53D012809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	20.8	1 U	1 U	1 U	1 U	1 U	1.23
	04/10/2009	MW53D041009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	13.6	1 U	1 U	1 U	1 U	1 U	1.22
	08/17/2009	MW53D081709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	8.60	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2010	MW53D012010	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	7.47	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW53D081610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.86	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2011	MW53D011811	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.02	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2011	MW53D081111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-55S	08/20/2010	MW55S082010	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	19.7	1 U	13.9
	01/14/2011	MW55S011411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	24.5	1 U	18.4
	08/08/2011	MW55S080811	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	24.3	1 U	16
MW-55D	09/07/2010	MW55D090710	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW55D011411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.22	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2011	MW55D080811	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.1	1 U	1 U	1 U	1 U	1 U	1 U
MW-57S	08/15/2008	MW57S081508	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	222	1 U	32.0
	10/06/2008	MW-57S100608	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	284	1 U	26.0
	01/27/2009	MW57S012709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	250	1 U	26.6
	04/07/2009	MW57S040709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	171	1 U	32.4
	08/06/2009	MW57S080609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	238	1 U	23.8
	01/13/2010	MW57S011310	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	135	1 U	24.2
	08/12/2010	MW57S081210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	228	1 U	31.1
	01/14/2011	MW57S011411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	340	1 U	35
	08/25/2011	MW57S082511	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	164	1 U	30.2

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
MW-57D	08/14/2008	MW57D081508	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	18.3	1 U	1 U	1 U	1 U	1 U	7.33
	10/06/2008	MW-57D100608	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	10.1	1 U	1 U	1 U	1 U	1 U	3.93
dup	10/06/2008	MW-57D100608-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	10.7	1 U	1 U	1 U	1 U	1 U	4.00
	01/27/2009	MW57D012709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	11.2	1 U	1 U	1 U	1 U	1 U	3.54
dup	01/27/2009	MW57D012709-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	10.8	1 U	1 U	1 U	1 U	1 U	3.85
	04/07/2009	MW57D040709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	11.6	1 U	1 U	1 U	1 U	1 U	3.52
dup	04/07/2009	MW57D040709-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	13.5	1 U	1 U	1 U	1 U	1 U	4.04
	08/06/2009	MW57D080609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	11.6	1 U	1 U	1 U	1.02	1 U	4.94
	01/13/2010	MW57D011310	1 U	1 U	1 U	2.25	1 U	1 U	1 U	1 U	1 U	15.0	1 U	1 U	1 U	1 U	1 U	3.98
dup	01/13/2010	MW57D011310-Dup	1 U	1 U	1 U	2.30	1 U	1 U	1 U	1 U	1 U	15.0	1 U	1 U	1 U	1 U	1 U	3.75
	08/12/2010	MW57D081210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	20.4	1 U	1 U	1 U	1 U	1 U	6.09
dup	08/12/2010	MW57D081210-Dup	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	17.0	1 U	1 U	1 U	1 U	1 U	4.43
	01/14/2011	MW57D011411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	22.7	1 U	1 U	1 U	1 U	1 U	4.95
dup	01/14/2011	MW57DDUP011411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	24	1 U	1 U	1 U	1 U	1 U	4.75
	08/25/2011	MW57D082511	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	20.2	1 U	1 U	1 U	1 U	1 U	5.05
dup	08/25/2011	MW57DDUP082511	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	21.6	1 U	1 U	1 U	1 U	1 U	5.53
MW-58D	08/13/2008	MW58D081308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-58D100808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2009	MW58D012709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/07/2009	MW58D040709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/06/2009	MW58D080609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.02	1 U	1 U
	01/14/2010	MW58D011410	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW58D081210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2011	MW58D011911	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2011	MW58D082611	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-5S	08/11/2008	EPA5S081108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA5S100208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2009	EPA5S012309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/03/2009	EPA5S040309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	EPA5S080509	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	EPA5S010810	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2010	EPA5S081110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2011	EPA5S011211	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2011	EPA5S080911	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-5D	08/11/2008	EPA5D081108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA5D100208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2009	EPA5D012309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/03/2009	EPA5D040309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	EPA5D080509	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	EPA5D010810	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
	08/11/2010	EPA5D081110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2011	EPA5D011211	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2011	EPA5D080911	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-6S	08/18/2008	EPA6S081808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.97
	10/07/2008	EPA-6S100708	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.63
	01/29/2009	EPA6S012909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.55
	04/10/2009	EPA6S041009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.12
	08/12/2009	EPA6S081209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.20	1 U	4.28
	01/25/2010	EPA6S012510	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.70
	08/13/2010	EPA6S081310	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	7.37
	01/19/2011	EPA6S011911	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.42
dup	01/19/2011	EPA6SDUP011911	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.3
	08/10/2011	EPA6S081011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.82
EPA-6D	08/18/2008	EPA6D081808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	11.9	1 U	16.6
	10/07/2008	EPA-6D100708	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.68	1 U	15.7
	01/29/2009	EPA6D012909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.62	1 U	19.6
	04/10/2009	EPA6D041009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.04	1 U	15.0
	08/12/2009	EPA6D081209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.35	1 U	9.56
	01/25/2010	EPA6D012510	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	EPA6D081310	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.89	1 U	21
	01/19/2011	EPA6D011911	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.7	1 U	21.9
	08/10/2011	EPA6D081011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4	1 U	16.8
Carty Lake Monitoring Wells (UWBZ)																		
MW-30	08/13/2002	GW-133	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
USDFW-1	10/24/2003	USDFW-1-102403	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	8.9	0.50 U	0.50 U	0.50 U	8.5	2.0 U	15
	05/04/2004	USDFW1-050404	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	9	0.50 U	0.50 U	0.50 U	5.2	2.0 U	12
	08/13/2004	USDFW1-081304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	7.3	0.50 U	0.50 U	0.50 U	3.1	2.0 U	5.8
	10/25/2004	USDFW1-102504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	9.7	0.50 U	0.50 U	0.50 U	3.4	2.0 U	6.6
	01/28/2005	USDFW1012805	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	8.61	1 U	1 U	1 U	3.02	1 U	4.51
	07/28/2005	USDFW1072805	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	7.2	1 U	1 U	1 U	1.01	1 U	1.2
	02/01/2006	USDFW1020106	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	7.81	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2006	USDFW1081106	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.08	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2007	USDFW1012207	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.63	1 U	1 U	1 U	1 U	1 U	1 U
	08/27/2007	USDFW1082707	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	4.43	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2008	USDFW1012808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	4.69	1 U	1 U	1 U	1 U	1 U	1 U
	08/21/2008	USDW1082108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.84	1 U	1 U	1 U	1 U	1 U	1 U
	02/03/2009	USDFW1020309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.39	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	USDFW1080709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.62	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2010	USDFW1012810	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.94	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2010	USDFW1082610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2011	USDFW1012611	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.11	1 U	1 U	1 U	1 U	1 U	1 U
	09/06/2011	USDFW1090611	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.45	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
USDFW-2	10/24/2003	USDFW-2-102403	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	13	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	05/04/2004	USDFW2-050404	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	11	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	08/13/2004	USDFW2-081304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	11	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/25/2004	USDFW2-102504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	9.0	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/28/2005	USDFW2012805	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	6.11	1 U	1 U	1 U	1 U	1 U	1 U
	07/28/2005	USDFW2072805	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	9.14	1 U	1 U	1 U	1 U	1 U	1 U
	02/01/2006	USDFW2020106	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	8.36	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/22/2007	USDFW2012207	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	8.41	1 U	1 U	1 U	1 U	1 U	1 U
	08/27/2007	USDFW2082707	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	9.09	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2008	USDFW2012808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	8.49	1 U	1 U	1 U	1 U	1 U	1 U
USDFW-3	10/24/2003	USDFW-3-102403	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	05/04/2004	USDFW3-050404	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.88	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	08/13/2004	USDFW3-081304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/25/2004	USDFW3-102504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/28/2005	USDFW3012805	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/28/2005	USDFW3072805	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/01/2006	USDFW3020106	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2006	USDFW3081106	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2007	USDFW3012207	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/27/2007	USDFW3082707	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2008	USDFW3012808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
RMW-2S	08/21/2008	RMW2S082108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/09/2008	RMW2S100908	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.19	1 U	1 U	1 U	1 U	1 U	1 U	2 U
	02/03/2009	RMW2S020309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/08/2009	RMW2S040809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	RMW2S080709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2010	RMW2S012810	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2010	RMW2S082610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2011	RMW2S012611	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.46	1 U	1 U	1 U	1 U	1 U	1 U
	09/06/2011	RMW2S090611	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
RMW-2D	08/21/2008	RMW2D082108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/09/2008	RMW2D100908	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
	02/03/2009	RMW2D020309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/08/2009	RMW2D040809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	RMW2D080709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2010	RMW2D012810	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2010	RMW2D082610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2011	RMW2D012611	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/06/2011	RMW2D090611	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
LWBZ: Cells 1 and 2 and Carty Lake																		
Cell 1 (LWBZ)																		
MW-40	08/08/2002	GW-151	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.6	1.3 U	1.3 U	1.3 U	7.8	5 U	5 U
	01/23/2004	MW40-012304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.2	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	04/30/2004	MW40-043004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.9	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	08/11/2004	MW40-081104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.7	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/29/2004	MW40-102904[b]	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.8	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/27/2005	MW40012705	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1.7	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW40012706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.03	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW40020209	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW40081909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2010	MW40012910	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/25/2010	MW40082510	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW40012411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/02/2011	MW40090211	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-41	08/12/2002	GW-148	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.67	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/29/2004	MW41-012904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.68	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	04/29/2004	MW41-042904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.63	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	08/12/2004	MW41-081204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.65	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	11/08/2004	MW41-110804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/27/2005	MW41012705	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/2006	MW41013006	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5.82	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cell 2 (LWBZ)																		
MW-22	08/08/2002	GW-143	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.1	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2.7
	01/23/2004	MW22-012304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.9	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	16
	04/28/2004	MW22-042804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.4	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.6
	08/06/2004	MW22-080604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	4.4	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/26/2004	MW22-102604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	4.2	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/25/2005	MW22012505	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	3.88	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW22072505	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2.81	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/25/2006	MW22012506	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	4.47	1 U	1 U	1 U	1 U	1 U	1 U

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
	08/10/2006	MW22081006	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW22012507	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2007	MW22081607	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.86	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2008	MW22012208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.75	1 U	1 U	1 U	1 U	1 U	1 U
MW-33	08/07/2002	GW-122	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.7	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/21/2004	MW33-012104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	11	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	04/27/2004	MW33-042704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	11	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	07/28/2004	MW33-072804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	9.3	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/19/2004	MW33-101904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	8.7	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/20/2005	MW33012005	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	8.49	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW33072005	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	7.86	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/20/2006	MW33012006	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	6.70	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2006	MW33080406	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	7.42	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2007	MW33011907	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	6.28	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2007	MW33080907	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/15/2008	MW33011508	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	7.97	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2010	MW33011110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	6.85	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2008	MW33081108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	4.50	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2010	MW33011110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	6.85	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2011	MW33080911	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.5	1 U	1 U	1 U	**1 U**	1 U	1 U
MW-34	08/08/2002	GW-144	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/21/2004	MW34-012104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	04/27/2004	MW34-042704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	07/29/2004	MW34-072904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/20/2004	MW34-102004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/21/2005	MW34012105	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW34072105	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/23/2006	MW34012306	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW34080706	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2007	MW34011807	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2007	MW34081007	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.02	1 U	1 U	1 U	1 U	1 U	1 U
	01/16/2008	MW34011608	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.29	1 U	1 U	1 U	1 U	1 U	1 U
MW-35	08/13/2002	GW-145	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.4	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
dup	08/13/2002	GW-150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.4	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/21/2004	MW35-012104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	3.9	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	04/28/2004	MW35-042804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	3.7	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	07/30/2004	MW35-073004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	4.1	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/25/2004	MW35-102504	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	4.2	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/24/2005	MW35012405	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	4.56	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW35072205	5 UJ	5 UJ	5 UJ	--	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
	01/24/2006	MW35012406	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.68	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	MW35080806	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.25	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW35012407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	4.45	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
	08/14/2007	MW35081407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2008	MW35011808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5.70	1 U	1 U	1 U	1 U	1 U	1 U
	08/14/2008	MW35081408	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5.10	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW35013009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.17	1 U	1 U	1 U	1 U	1 U	1 U
	08/18/2009	MW35081809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	4.39	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2010	MW35012210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.35	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW35081610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5.43	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW35012011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5.26	1 U	1 U	1 U	1 U	1 U	1 U
	08/29/2011	MW35082911	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	4.97	1 U	1 U	1 U	1 U	1 U	1 U
MW-36	08/07/2002	GW-146	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.92	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2.9
	01/26/2004	MW36-012604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.8	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	04/28/2004	MW36-042804	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.9	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.6
	07/30/2004	MW36-073004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/26/2004	MW36-102604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.9	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/25/2005	MW36012505	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1.49	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW36072705	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1.49	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/25/2006	MW36012506	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.15	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	MW36080806	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW36012407	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/15/2007	MW36081507	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2008	MW36012208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2008	MW36081908	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW36013009	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW36081909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2010	MW36012610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW36081610	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW36012111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW36083011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-37	08/12/2002	GW-147	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
	01/27/2004	MW37-012704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	04/29/2004	MW37-042904	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	08/06/2004	MW37-080604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	10/22/2004	MW37-102204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U
	01/26/2005	MW37012605	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW37072605	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/26/2006	MW37012606	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2006	MW37080906	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2007	MW370120607	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2007	MW37081707	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW37012308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
	08/20/2008	MW37082008	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2010	MW37012710	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW37083111	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-54	08/12/2008	MW54081208	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-54100608	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2009	MW54012609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/06/2009	MW54040609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	MW54080509	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2010	MW54011310	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW54081210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2011	MW54011311	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2011	MW54082411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-55	08/14/2008	MW55081408	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.59	1 U	1 U	1 U	1 U	1 U	1 U
	10/03/2008	MW55100308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.55	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2009	MW55012709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.54	1 U	1 U	1 U	1 U	1 U	1 U
	04/07/2009	MW55040709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.60	1 U	1 U	1 U	1 U	1 U	1 U
	08/06/2009	MW55080609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.73	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2010	MW55011410	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1.45	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW55081210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.53	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW55011411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	3.26	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2011	MW55080811	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	2.41	1 U	1 U	1 U	1 U	1 U	1 U
MW-56	08/21/2008	MW56082108	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-56100808	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2009	MW56012709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/07/2009	MW56040709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/06/2009	MW56080609	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2010	MW56011410	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW56081210	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2011	MW56011911	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2011	MW56	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-59	08/19/2008	MW59081908	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-59100608	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2009	MW59012909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/09/2009	MW59040909	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2009	MW59081709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW59012110	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	MW59081310	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW59012011	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/29/2011	MW59082911	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-62	09/08/2010	MW62090810	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW62011411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/25/2011	MW62082511	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Bromodichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene
MTCA Method B Groundwater VI Level			0.09	200	13	400	0.22	100	12	1.2	5.2	160	0.22	NV	9.9	2800	0.81	720
MTCA Method B Groundwater Cleanup Level			0.71	5.5	11	800	0.34	160	15	7.2	3.4	80	0.52	80	1600	800	0.56	800
Carty Lake (LWBZ)																		
MW-60	09/03/2008	MW60090308	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	11.9	1 U	1 U	1 U	1 U	1 U	1 U
	10/09/2008	MW601000908	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	**13.7**	1 U	1 U	1 U	1 U	1 U	1 U	2 U
	02/03/2009	MW60020309	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	11.5	1 U	1 U	1 U	1 U	1 U	1 U
	04/08/2009	MW60040809	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	13.0	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	MW60080709	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	10.7	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2010	MW60012810	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	10.0	1 U	1 U	1 U	1 U	1 U	1 U
	08/25/2010	MW60082510	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	8.46	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW60012411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	9.48	1 U	1 U	1 U	1 U	1 U	1 U
	09/06/2011	MW60090611	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	11.5	1 U	1 U	1 U	1 U	1 U	1 U
MW-61	09/03/2010	MW61090310	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW61012411	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/02/2011	MW61090211	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
UWBZ: Cells 1 and 2																			
Cell 1 (UWBZ)																			
MW-7	08/12/2002	GW-125	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/26/2004	MW7-012604	1.5	2.0 U	150	2.0 U	2.0 U	5	2.0 U	--	0.50 U	2.0 U	**0.51**	0.64	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/06/2004	MW7-050604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	08/09/2004	MW7-080904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/27/2004	MW7-102704	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**0.92**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/26/2005	MW7-012605	200 U	100 U	**1520**	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
	07/25/2005	MW7072705	20 UJ	10 UJ	73.1	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/27/2006	MW7012706	2 U	20 U	130	1 U	1 U	2.62	1.19	1 U	1 U	1 U	**1.64**	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2006	MW7081006	2 U	20 U	**324**	1 U	1 U	9.12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW7012507	2 U	20 U	7.21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.48	1 U	1 U	1 U	1 U	1 U
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/05/2008	MW7090508	2 U	20 U	49.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.42**	1 U	1 U	1 U	1 U	1 U	1 U
	02/04/2009	MW7020409	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW7081909	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2010	MW7012610	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2010	MW7082410	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2011	MW7012511	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/01/2011	MW7090111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-8S	08/13/2002	GW-126	0.5 U	2 U	2.5	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-42	08/12/2002	GW-137	580	200 U	**16000**	200 U	200 U	330	200 U	--	**110**	200 U	50 U	260	50 U	50 U	50 U	50 U	50 U
	01/23/2004	MW42-012304	140	50 U	**6200**	50 U	50 U	170	50 U	--	**23**	50 U	13 U	43	13 U	13 U	13 U	13 U	13 U
	04/30/2004	MW42-043004	290	100 U	**9700**	180 U	100 U	240	100 U	25 U	**62**	100 U	**30**	96	25 U	25 U	25 U	25 U	25 U
	08/10/2004	MW42-081004	480	100 U	**16000**	100 U	100 U	320	100 U	25 U	**99**	100 U	25 U	150	25 U	25 U	25 U	25 U	25 U
	10/27/2004	MW42-102704	540	100 U	**18000**	100 U	100 U	410	100 U	25 U	**80**	100 U	25 U	130	25 U	25 U	25 U	25 U	25 U
	01/26/2005	MW42-012605	1000 U	500 U	**8330**	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW42012706	9.31	20 U	**526**	1 U	2.58	6.57	1.51	1 U	1 U	1 U	1 U	1.58	1 U	1 U	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-43	08/12/2002	GW-138	500	200 U	**17000**	200 U	200 U	310	200 U	--	**58**	200 U	50 U	140	50 U	50 U	50 U	50 U	50 U
	01/23/2004	MW43-012304	150	50 U	**6300**	50 U	50 U	150	50 U	--	**15**	50 U	**25**	26	13 U	13 U	13 U	13 U	13 U
	08/11/2004	MW43-081104	44	20 U	**2500**	20 U	20 U	43	20 U	5.0 U	5.0 U	20 U	**6.4**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
	10/27/2004	MW43-102704	33	10 U	**1500**	10 U	10 U	36	10 U	2.5 U	**3.1**	10 U	2.5 U	9.4	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
	01/27/2005	MW43012705	1000 U	500 U	**11000**	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW43012706	13.0	20 U	**1000**	2.81	8.04	16.0	5.24	1 U	1 U	1 U	1 U	2.34	1 U	1 U	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (μg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-44	08/13/2002	GW-139	410	100 U	**12000**	100 U	100 U	330	100 U	--	**89**	100 U	25 U	82	25 U	25 U	25 U	25 U	25 U
	01/23/2004	MW44-012304	610	50 U	**12000**	50 U	74	460	50 U	--	**130**	50 U	**13**	130	13 U	13 U	13 U	13 U	13 U
	04/29/2004	MW44-042904	440	100 U	**26000**	270 U	100 U	320	100 U	25 U	**80**	100 U	25 U	73	25 U	25 U	25 U	25 U	25 U
	08/11/2004	MW44-081104	400	100 U	**13000**	100 U	100 U	310	100 U	25 U	**110**	100 U	25 U	87	25 U	25 U	25 U	25 U	25 U
	10/29/2004	MW44-102904[b]	180	200 U	**21000**	200 U	200 U	150	200 U	50 U	50 U	200 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
	01/27/2005	MW44012705	1000 U	500 U	**4420**	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW44012706	37.1	20 U	**1450**	1.67	9.38	39.4	3.35	1 U	**5.61**	1 U	**13.1**	7.55	1 U	1 U	**7.60**	1 U	**3.26**
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW44020209	2 U	20 U	159	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW44081909	2 U	20 U	**442**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/2010	MW44082510	2 U	1 U	4.17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW44012411	2 U	20 U	61.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/02/2011	MW44090211	2 U	20 U	4.48	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-4	07/12/2007	E4-21071207	2 U	20 U	34.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/13/2007	E4-23091307	2 U	20 U	**216**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/12/2008	E4021208	2 U	20 U	13.9	1.02	1 U	1 U	1.51	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/22/2008	E4082208	2 U	20 U	2.95	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2009	E4011309	2 U	20 U	1.95	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-4S	09/03/2008	EPA4S090308	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA4S100208	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/10/2009	EPA4S021009	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/16/2009	EPA4S041609	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2009	EPA4S081309	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2010	EPA4S012910	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2010	EPA4S082410	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2011	EPA4S012511	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/01/2011	EPA4S090111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-4D	09/03/2008	EPA4D090308	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA4D100208	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/10/2009	EPA4D021009	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/16/2009	EPA4D041609	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2009	EPA4D081309	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
	01/29/2010	EPA4D012910	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2010	EPA4D082410	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2011	EPA4D012511	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/01/2011	EPA4D090111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cell 2 (UWBZ)																			
MW-4	05/07/2004	MW4-050704	0.50 U	2.0 U	2.0 U	120 U	2.0 U	0.62	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/29/2004	MW4-072904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.69	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/22/2004	MW4-102204	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.69	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/24/2005	MW4012405	2 U	1 U	1 U	1 U	1 U	1 U	1.12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW4072205	20 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/23/2006	MW4012306	2 U	20 U	3.92	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	MW4080806	2 U	20 U	2.28	1.51	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW4012407	2 U	20 U	1 U	1 U	1.39	1 U	1.28	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/14/2007	MW4081407	2 U	20 U	1 U	1.31	2.30	1 U	1.75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/17/2008	MW4011708	2 U	20 U	2.50	1.23	1.79	1 U	1.51	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2008	MW4081308	2 U	20 U	1.34	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2009	MW4012909	2 U	20 U	1.33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/18/2009	MW4081809	2 U	20 U	1.07	1 U	1.09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2010	MW4011910	2 U	1 U	2.47	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	MW4081310	2 U	1 U	1 U	1 U	2.33	1 U	1.49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW4012011	2 U	20 U	1.06	1.75	1.07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2011	MW4082611	2 U	20 U	1.62	1 U	1.36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-5	01/26/2004	MW5-012604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/07/2004	MW5-050704	0.50 U	2.0 U	2.0 U	130 U	2.0 U	1	2.2	0.50 U	0.50 U	2.0 U	0.50 U	0.93	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/29/2004	MW5-072904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	1	2.6	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/22/2004	MW5-102204	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	1.1	2.3	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/24/2005	MW5012405	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW5072205	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/24/2006	MW5012406	2 U	20 U	3.35	1 U	1 U	1 U	1.15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	MW5080806	2 U	20 U	2.12	1 U	1 U	1.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW5012407	2 U	20 U	1 U	1 U	1 U	1.37	1.63	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/14/2007	MW5081407	2 U	20 U	1 U	1 U	1 U	2.56	1.62	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/17/2008	MW5011708	4.49	20 U	1.70	1 U	1.15	8.67	2.45	1 U	1 U	1 U	1 U	1.32	1 U	1 U	1 U	1 U	1 U
	08/13/2008	MW5081308	2 U	20 U	1.78	1 U	1 U	1.47	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/18/2009	MW5081809	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2009	MW5012909	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2010	MW5012210	2 U	1 U	1 U	1 U	1 U	2.72	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	MW5081310	2 U	1 U	1 U	1 U	1.15	2.39	2.15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW5012011	2 U	20 U	1 U	1 U	1 U	1.73	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2011	MW5082611	2 U	20 U	1.22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
PZ-06	01/23/2007	PZ06012307	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2007	PZ06081307	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/16/2008	PZ06011608	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2008	PZ06081208	2 U	20 U	1.06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2009	PZ06012609	2 U	20 U	7.31	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	PZ06080509	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2010	PZ06011310	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/2011	PZ06011311	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2011	PZ06082411	2 U	20 U	1.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-10	08/06/2002	GW-121	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/23/2007	MW10012307	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/14/2007	MW10081407	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/17/2008	MW10011708	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-13	08/08/2002	GW-127	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/26/2004	MW13-012604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/05/2004	MW13-050504	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/28/2004	MW13-072804	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/20/2004	MW13-102004	0.50 U	2.0 U	51	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/21/2005	MW13012105	2 U	1 U	2.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW13072105	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/23/2006	MW13012306	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW13080706	2 U	20 U	2.67	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2007	MW13012307	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2007	MW13080907	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/15/2008	MW13011508	2 U	20 U	1 U	1 U	1 U	1 U	1.12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2008	MW13081108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2009	MW13012309	28.9	20 U	**4870**	36.2	48.1	38.1	40.0	1 U	**1.83**	3.33	1 U	4.19	1 U	1 U	1 U	1 U	1 U
	08/14/2009	MW13081409	5.77	20 U	**1330**	16.9	28.0	9.57	23.1	1 U	1 U	2.74	1 U	1.37	1 U	1 U	1 U	1 U	1 U
	01/11/2010	MW13011110	2.51	1 U	**3200**	16.0	15.9	4.52	16.4	--	1 U	1.37	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2010	MW13081110	2 U	1 U	**186**	14.0	8.42	1 U	15.4	1 U	1 U	1.50	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2011	MW13011211	2 U	20 U	150	11.4	8.26	1 U	15.6	1 U	1 U	1.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/23/2011	MW13082311	2 U	20 U	6.4	8.06	3.77	1 U	9.78	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-14	08/08/2002	GW-128	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/22/2004	MW14-012204	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/04/2004	MW14-050404	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/28/2004	MW14-072804	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/20/2004	MW14-102004	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/21/2005	MW14012105	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW14072105	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/23/2006	MW14012306	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW14080706	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310^{a}	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000^{a}	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
	01/23/2007	MW14012307	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2007	MW14081307	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/16/2008	MW14011608	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-15	08/08/2002	GW-140	0.5 U	2 U	2 U	2 U	2 U	0.5 U	12	--	0.5 U	2 U	**140**	0.68	2.1	0.5 U	**35**	0.5 U	**9.6**
	01/21/2004	MW15-012104	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	15	--	0.50 U	2.0 U	**160**	1.3	2.1	0.50 U	**37**	0.50 U	**9.7**
	05/05/2004	MW15-050504	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	15	0.50 U	0.50 U	2	**150**	0.86	2.1	0.50 U	**35**	0.50 U	**9.7**
	07/28/2004	MW15-072804	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	10	0.50 U	0.50 U	2.0 U	**93**	0.50 U	1.5	0.50 U	**24**	0.50 U	**5.7**
	10/20/2004	MW15-102004	0.50 U	2.0 U	2.9	2.0 U	2.0 U	0.50 U	15	0.50 U	0.50 U	2.0	**130**	0.50 U	1.6	0.50 U	**27**	0.50 U	**7.9**
	01/21/2005	MW15012105	2 U	1 U	1 U	1 U	1 U	1 U	2.69	1 U	1 U	1 U	**24.2**	1 U	1 U	1 U	**4.64**	1 U	**1.46**
	07/20/2005	MW15072205	10 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	11	5 UJ	5 UJ	5 UJ	**104**	5 UJ	5 UJ	5 UJ	**19.6**	5 UJ	**8.47**
	01/23/2006	MW15012306	2 U	20 U	6.11	1 U	2.22	25.1	12.3	1 U	1 U	1.58	**101**	1 U	1 U	1 U	**16.0**	1 U	**5.19**
	08/07/2006	MW15080706	2 U	20 U	1.61	1 U	1 U	1 U	4.45	1 U	1 U	1 U	**45.5**	1 U	1 U	1 U	**16.4**	1 U	**4.48**
	01/18/2007	MW15011807	2 U	20 U	1.32	1 U	1 U	1 U	4.22	1 U	1 U	1 U	**24.9**	1 U	1 U	1 U	**10.3**	1 U	**5.38**
	08/10/2007	MW15081007	2 U	20 U	1 U	1 U	1 U	1 U	6.78	1 U	1 U	1 U	**41.6**	1 U	1 U	1 U	**11.3**	1 U	**3.53**
	01/16/2008	MW15011608	2 U	20 U	1 U	1 U	1 U	1 U	4.22	1 U	1 U	1 U	**22.4**	1 U	1 U	1 U	**6.53**	1 U	**2.04**
	08/13/2008	MW15081308	2 U	20 U	1 U	1 U	1 U	1 U	2.59	1 U	1 U	1 U	**23.7**	1 U	1 U	1 U	**6.87**	1 U	**3.87**
	09/03/2008	MW15090308	2 U	20 U	1 U	1 U	1 U	1 U	3.24	1 U	1 U	1 U	**24.0**	1 U	1 U	1 U	**6.71**	1 U	**2.43**
	01/26/2009	MW15012609	2 U	20 U	1 U	1 U	1 U	1 U	4.54	1 U	1 U	1 U	**26.6**	1 U	1 U	1 U	**11.5**	1 U	**4.53**
	08/17/2009	MW15081709	2 U	20 U	35.7	1 U	1.35	1 U	3.10	1 U	1 U	1 U	**13.6**	1 U	1 U	1 U	**5.83**	1 U	**2.17**
	01/12/2010	MW15011210	2 U	1 U	2.76	1 U	1 U	1 U	1 U	--	1 U	1 U	**10.9**	1 U	1 U	1 U	**5.09**	1 U	**1.10**
	08/11/2010	MW15081110	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.40**	1 U	1 U	1 U	**1.31**	1 U	1 U
	01/13/2011	MW15011311	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.58**
	08/23/2011	MW15082311	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-16	08/07/2002	GW-129	9.5	2 U	46	2.2	8.3	34	2 U	--	0.5 U	2 U	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/23/2004	MW16-012304	8.6	2.0 U	31	3	8.9	31	2.2	--	0.50 U	2.0 U	0.50 U	0.89	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/06/2004	MW16-050604	8.7	2.0 U	30	2.5	9.1	30	2.2	0.50 U	0.50 U	2.0 U	0.50 U	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/30/2004	MW16-073004	8.1	2.0 U	28	2.6	8.9	30	2.1	0.50 U	0.50 U	2.0 U	0.50 U	0.7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/26/2004	MW16-102604	5.5	2.0 U	13	2.7	7.5	24	2.0	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/25/2005	MW16012505	5.56	1 U	15.8	1 U	6.5	23	1.93	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW16072505	20 UJ	10 UJ	18.6	10 UJ	10 UJ	21.4	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/25/2006	MW16012506	5.35	20 U	10.2	1.77	6.62	41.0	1.59	1 U	1 U	1 U	1 U	1.36	1 U	1 U	1 U	1 U	1 U
	08/10/2006	MW16081006	2 U	20 U	5.14	1.40	3.26	26.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW16012507	2.59	20 U	3.33	1.69	5.87	21.7	1.50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2007	MW16081607	2.40	20 U	1.67	1.82	7.20	19.7	1.64	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2008	MW16012208	2 U	20 U	1.99	1.32	6.16	16.9	1.48	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2008	MW16081908	2 U	20 U	2.17	1.47	4.20	17.3	1.34	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW16013009	2 U	20 U	1 U	1 U	1 U	2.93	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW16081209	2 U	20 U	1 U	2.28	2.08	4.54	2.48	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW16012110	2 U	1 U	1 U	1 U	1 U	2.96	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW16081710	2 U	1 U	1 U	1 U	1 U	3.27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW16012111	2 U	20 U	1 U	1 U	1 U	1.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW16083011	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (μg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphtha-lene	n-Butyl-benzene	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	sec-Dichloro-propane	Styrene	tert-Butyl-benzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloro-ethene	1,3-Dichloro-propene	Trichloro-ethene (TCE)	Trichloro-fluoro-methane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
MW-17	08/07/2002	GW-130	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/26/2004	MW17-012604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/06/2004	MW17-050604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/30/2004	MW17-073004	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/26/2004	MW17-102604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/24/2005	MW17012405	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW17072505	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/24/2006	MW17012406	5.09	20 U	5.75	1 U	1 U	1.44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	MW17080806	2 U	20 U	**398**	1 U	1 U	2.17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW17012407	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/15/2007	MW17081507	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2008	MW17011808	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-18	07/29/2004	MW18-072904	720	200 U	**18000**	200 U	200 U	390	200 U	50 U	**130**	200 U	50 U	**990**	50 U	50 U	50 U	50 U	50 U
	07/25/2005	MW18072505	2000 UJ	1000 UJ	**4160**	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ
	01/24/2006	MW18012406	714	20 U	**17300**	1.93	11.9	469	2.72	1 U	**186**	1 U	1 U	**676**	1 U	1 U	**2.85**	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/24/2007	MW18012407	546	20 U	**4060**	4.16	17.1	299	3.98	1 U	**125**	1 U	**3.02**	543	1 U	1 U	1 U	1 U	1 U
	08/15/2007	MW18081507	605	20 U	**8780**	3.62	24.5	345	4.66	1 U	**93.3**	1 U	**1.78**	623	1 U	1 U	**2.90**	1 U	1 U
	01/18/2008	MW18011808	676	20 U	**17000**	3.03	12.8	402	3.00	1 U	**100**	1 U	**2.15**	624	1 U	1 U	**2.77**	1 U	1 U
MW-21	08/08/2002	GW-131	130	100 U	**7400**	100 U	100 U	250	100 U	--	25 U	100 U	**34**	25 U	25 U	25 U	25 U	25 U	25 U
	05/06/2004	MW21-050604	44	40 U	**3000**	40 U	40 U	110	40 U	10 U	10 U	40 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	07/30/2004	MW21-073004	33	2.0 U	**1500**	4.6	17	56	11	0.50 U	0.50 U	2	**3**	1.4	0.82	0.50 U	**3.2**	0.50 U	**1**
	10/26/2004	MW21-102604	39	10 U	**1000**	10 U	14	92	10 U	2.5 U	2.5 U	10 U	2.5 U	3.5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
	01/25/2005	MW21012505	200 U	100 U	**1290**	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
	07/25/2005	MW21072505	1000 UJ	500 UJ	**1160**	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ	500 UJ
	01/25/2006	MW21012506	5.88	20 U	**620**	2.11	5.43	15.1	4.98	1 U	1 U	1.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2006	MW21081006	2 U	20 U	1.36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW21012507	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2007	MW21081607	2 U	20 U	1 U	1 U	1 U	1 U	4.57	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.34**	1 U	1 U
	01/22/2008	MW21012208	2 U	20 U	1 U	1 U	1 U	1 U	2.78	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2008	MW21081908	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW21013009	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW21081209	2 U	20 U	1 U	1 U	1 U	1 U	2.34	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW21012110	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW21081710	79.7	1 U	107	1 U	11.2	62.2	9.69	1 U	1.36	1 U	1 U	10.8	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW21012111	2 U	20 U	24.6	1 U	1 U	1.83	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW21083011	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-23	08/06/2002	GW-124	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/22/2004	MW23-012204	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/03/2004	MW23-050304	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/27/2004	MW23-072704	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.1	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/19/2004	MW23-101904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/21/2005	MW23012105	2 U	1 U	1 U	1 U	1 U	1 U	1.76	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
	07/20/2005	MW23072105	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1.26	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/20/2006	MW23012006	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW23080706	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2007	MW23012307	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2007	MW23080907	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**4.10**	1 U	1 U	1 U	1 U	1 U	1 U
	01/15/2008	MW23011508	2 U	20 U	1 U	1 U	1 U	1 U	2.05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2008	MW23081108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2010	MW23011110	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	08/12/2002	GW-141	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	0.5 U	0.5 U	0.74	0.5 U	**1.1**	0.5 U	**1.2**
	01/27/2004	MW25-012704	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	4	--	0.50 U	2.0 U	**0.74**	0.50 U	0.58	0.50 U	**1.3**	0.50 U	**1.4**
	04/29/2004	MW25-042904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.4	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.74**	0.50 U	**0.56**
	08/06/2004	MW25-080604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.1	0.50 U	0.50 U	2.0 U	**0.54**	0.50 U	0.50 U	0.50 U	**0.78**	0.50 U	0.50 U
	10/22/2004	MW25-102204	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.4	0.50 U	0.50 U	2.0 U	**0.53**	0.50 U	0.50 U	0.50 U	**0.79**	0.50 U	**0.51**
	01/26/2005	MW25012605	2 U	1 U	1 U	1 U	1 U	1 U	2.14	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW25072605	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/26/2006	MW25012606	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2006	MW25080906	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2007	MW25012607	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2007	MW25081707	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW25012308	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/20/2008	MW25082008	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2010	MW25012710	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW25083111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-26	01/26/2004	MW26-012604	680	200 U	**20000**	200 U	200 U	390	200 U	--	50 U	200 U	50 U	190	50 U	50 U	50 U	50 U	50 U
	05/05/2004	MW26-050504	690	100 U	**17000**	100 U	100 U	400	100 U	25 U	**34**	100 U	25 U	250	25 U	25 U	25 U	25 U	25 U
	07/29/2004	MW26-072904	730	100 U	**14000**	100 U	100 U	430	100 U	25 U	**75**	100 U	25 U	320	25 U	25 U	25 U	25 U	25 U
	10/25/2004	MW26-102504	790	100 U	**16000**	100 U	100 U	460	100 U	25 U	**61**	100 U	25 U	290	25 U	25 U	25 U	25 U	25 U
	01/24/2005	MW26012405	2000 U	1000 U	**16300**	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U
	07/25/2005	MW26072505	2000 UJ	1000 UJ	**3740**	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ	1000 UJ
	01/24/2006	MW26012406	508	20 U	**15800**	1 U	13.8	352	3.00	1 U	**9.27**	1 U	1 U	125	1 U	1 U	**1.62**	1 U	**1.20**
	08/08/2006	MW26080806	584	20 U	**16800**	1 U	25.4	333	3.79	1 U	**14.8**	1 U	1 U	178	1 U	1 U	1 U	1 U	**1.76**
	01/24/2007	MW26012407	475	20 U	**2770**	4.03	14.7	270	3.61	1 U	**13.7**	1 U	**2.38**	151	1 U	1 U	**1.90**	1 U	**2.05**
	08/15/2007	MW26081507	743	20 U	**10200**	3.78	22.6	435	4.35	1 U	**81.2**	1 U	**1.91**	358	1 U	1 U	**3.85**	1 U	**1.00**
	01/18/2008	MW26011808	703	20 U	**10300**	3.40	12.8	429	3.03	1 U	**25.2**	1 U	**1.47**	226	1 U	1 U	**2.60**	1 U	**1.92**
	08/15/2008	MW26081508	814	20 U	**15300**	6.47	21.8	537	5.89	1 U	**127**	1 U	**3.46**	412	1 U	1 U	**4.19**	1 U	1 U
	01/28/2009	MW26012809	1040	20 U	**17800**	1 U	18.0	572	3.92	1 U	**49.4**	1 U	**1.65**	352	1 U	1 U	**2.32**	1 U	**1.00**
	08/18/2009	MW26081809	874	20 U	**16900**	1 U	20.9	496	5.82	1 U	**14.9**	1 U	**1.32**	285	1 U	1 U	**2.35**	1 U	**1.36**
	01/25/2010	MW26012510	909	1 U	**12300**	1 U	20.4	543	1 U	--	**31.5**	1 U	**1.34**	334	1 U	1 U	**1.76**	1 U	**1.31**
	08/16/2010	MW26081610	706	1 U	**17200**	3.53	19.3	433	4.07	1 U	**9.51**	1 U	**1.17**	291	1 U	1 U	**2.34**	1 U	**1.55**
	01/20/2011	MW26012011	895	20 U	**28100**	6.17	26.6	549	4.4	1 U	**91.6**	1 U	**2.01**	420	1 U	1 U	**3.51**	1 U	1 U
	08/30/2011	MW26083011	1060	20 U	**16000**	1 U	15.6	615	3.83	1 U	**89.4**	1 U	**1.69**	487	1 U	1 U	**3.48**	1 U	**1.24**

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
MW-27	01/26/2004	MW27-012604	11	20 U	**1800**	20 U	20 U	24	20 U	--	5.0 U	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
	05/07/2004	MW27-050704	9.6	10 U	**1400**	270 U	10 U	18	10 U	2.5 U	2.5 U	10 U	2.5 U	2.8	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
	07/29/2004	MW27-072904	22	10 U	**1400**	10 U	10 U	29	10 U	2.5 U	2.5 U	10 U	2.5 U	3.7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
	10/20/2004	MW27-102004	11	10 U	**1800**	10 U	10 U	25	10 U	2.5 U	2.5 U	10 U	2.5 U	2.5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
	01/21/2005	MW27012105	2 U	1 U	14.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW27072205	200 UJ	100 UJ	**1640**	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
	01/23/2006	MW27012306	3.94	20 U	**1810**	1 U	4.72	16.2	1 U	1 U	1 U	1 U	1 U	2.01	1 U	1 U	1 U	1 U	1 U
	08/07/2006	MW27080706	2 U	20 U	**905**	1 U	3.57	16.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW27012407	4.62	20 U	**478**	1 U	4.14	13.3	1 U	1 U	1 U	1 U	1 U	2.73	1 U	1 U	1 U	1 U	1 U
	08/14/2007	MW27081407	2.95	20 U	**705**	1 U	5.84	9.67	1.13	1 U	1 U	1 U	1 U	1.66	1 U	1 U	1 U	1 U	1 U
	01/17/2008	MW27011708	5.41	20 U	**694**	1 U	6.63	13.9	1.15	1 U	1 U	1 U	1 U	2.04	1 U	1 U	1 U	1 U	1 U
	08/15/2008	MW27081508	6.13	20 U	**1320**	1 U	7.01	10.8	1.72	1 U	1 U	1 U	1 U	1.81	1 U	1 U	1 U	1 U	1 U
	01/22/2010	MW27012210	3.14	20 U	**1730**	1 U	7.57	7.31	1 U	1 U	1 U	1 U	1 U	1.68	1 U	1 U	1 U	1 U	1 U
	08/29/2011	MW27082911	2 U	20 U	**1040**	1 U	5.71	4.88	1.09	1 U	1 U	1 U	1 U	1.39	1 U	1 U	1 U	1 U	1 U
MW-38	08/07/2002	GW-135	0.56	2 U	21	2 U	2 U	1.3	8.5	--	0.5 U	2 U	**4.9**	0.5 U	0.81	0.5 U	**4.4**	0.5 U	**2.5**
dup	08/07/2002	GW-149	0.62	2 U	33	2 U	2 U	1.5	9.2	--	0.5 U	2 U	**4.6**	0.5 U	0.69	0.5 U	**3.9**	0.5 U	**2.2**
	01/27/2004	MW38-012704	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	12	--	0.50 U	2.2	**7.3**	0.50 U	1	0.50 U	**6.5**	0.50 U	**2.9**
dup	01/27/2004	MW38DUP-012704	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	12	--	0.50 U	2.2	**7.3**	0.50 U	0.98	0.50 U	**6.6**	0.50 U	**2.9**
	05/06/2004	MW38-050604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
dup	05/06/2004	MW38-050604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	08/06/2004	MW38-080604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
dup	08/06/2004	MW38-080604-Dup	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/29/2004	MW38-102904	0.50 U	2.0 U	78	2.0 U	2.0 U	0.50 U	9.9	0.50 U	0.50 U	2.0 U	**0.75**	0.50 U	0.52	0.50 U	**1.3**	0.50 U	**1.4**
dup	10/29/2004	MW38-102904-Dup	0.50 U	2.0 U	77	2.0 U	2.0 U	0.50 U	8.0	0.50 U	0.50 U	2.0 U	**0.63**	0.50 U	0.50 U	0.50 U	**1.1**	0.50 U	**1.2**
	01/25/2005	MW38012505	2 U	1 U	1 U	1 U	1 U	1 U	2.65	1 U	1 U	1 U	**1.88**	1 U	1 U	1 U	**1.65**	1 U	1 U
dup	01/25/2005	MW38DUP012505	2 U	1 U	1 U	1 U	1 U	1 U	3.03	1 U	1 U	1 U	**2.01**	1 U	1 U	1 U	**1.67**	1 U	1 U
	07/25/2005	MW38072605	20 UJ	10 UJ	147	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
dup	07/25/2005	MW38072605-Dup	20 UJ	10 UJ	**168**	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	01/26/2006	MW38012606	2 U	20 U	1 U	1 U	1 U	1 U	1.73	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.64**	1 U	**1.79**
dup	01/26/2006	MW38012606-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1.69	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.64**	1 U	**1.70**
	08/10/2006	MW38081006	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/10/2006	MW38081006-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW38012507	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/25/2007	MW38012507-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2007	MW38081607	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/16/2007	MW38081607-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW38012308	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.14**	1 U	1 U
dup	01/23/2008	MW38012308-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.23**	1 U	1 U
	08/21/2008	MW38082108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/21/2008	MW38082108-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/02/2009	MW38020209	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	02/02/2009	MW38020209-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW38081209	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
dup	08/12/2009	MW38081209-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW38012110	2 U	1 U	1.16	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/21/2010	MW38012110-Dup	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW38081710	2 U	1 U	3.70	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/17/2010	MW38081710-Dup	2 U	1 U	3.30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW38012111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW38083111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/31/2011	MW38DUP083111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-39	08/07/2002	GW-136	0.5 U	2 U	12	2 U	2 U	0.65	2 U	--	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/27/2004	MW39-012704	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
dup	01/27/2004	MW39DUP-012704	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/06/2004	MW39-050604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
dup	05/06/2004	MW39-050604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	08/06/2004	MW39-080604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
dup	08/06/2004	MW39-080604-Dup	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/29/2004	MW39-102904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
dup	10/29/2004	MW39-102904-Dup	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/25/2005	MW39012505	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/25/2005	MW39DUP012505	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW39072605	200 UJ	100 UJ	**1100**	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
dup	07/25/2005	MW39072605-Dup	200 UJ	100 UJ	**979**	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
	01/26/2006	MW39012606	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2006	MW39012606-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2006	MW39081006	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/10/2006	MW39081006-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW39012507	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/25/2007	MW39012507-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2007	MW39081607	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/16/2007	MW39081607-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW39012308	2 U	20 U	114	1 U	1 U	1.38	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/23/2008	MW39012308-Dup	2 U	20 U	98.8	1 U	1 U	1.17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/21/2008	MW39082108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/21/2008	MW39082108-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/02/2009	MW39020209	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	02/02/2009	MW39020209-Dup	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	MW39081209	2 U	20 U	1 U	1 U	1 U	1 U	2.40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/12/2009	MW39081209-Dup	2 U	20 U	1 U	1 U	1 U	1 U	2.42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW39012110	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/21/2010	MW39012110-Dup	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW39081710	2 U	1 U	8.17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphtha-lene	n-Butyl-benzene	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	sec-Dichloro-propane	Styrene	tert-Butyl-benzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloro-ethene	1,3-Dichloro-propene	Trichloro-ethene (TCE)	Trichloro-fluoro-methane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
	01/21/2011	MW39012111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW39083111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/31/2011	MW39DUP083111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-48S	08/20/2008	MW48S082008	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-48S100808	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/02/2009	MW48S020209	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/09/2009	MW48S040909	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW48S081909	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2010	MW48S012710	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2010	MW48S081710	2 U	1 U	5.65	1 U	1 U	3.26	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW48S012411	4.91	20 U	**1010**	1.21	1 U	3.09	1 U	1 U	**2.33**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW48S083111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-49D	08/19/2008	MW49D081908	2 U	20 U	**220**	1 U	1 U	2.29	3.21	1 U	1 U	1 U	**13.4**	1 U	1 U	1 U	**4.60**	1 U	**1.35**
	10/03/2008	MW49D100308	2 U	20 U	**1070**	1 U	1 U	1.93	1.65	1 U	1 U	1 U	**11.4**	1 U	1 U	1 U	**3.86**	1 U	**1.00**
	01/26/2009	MW49D012609	2 U	20 U	72.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**6.41**	1 U	1 U	1 U	**2.10**	1 U	1 U
	04/06/2009	MW49D040609	2 U	20 U	81.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/14/2009	MW49D081409	2 U	20 U	99.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2010	MW49D011210	2 U	1 U	6.78	1 U	1 U	1 U	1 U	--	1 U	1 U	**1.54**	1 U	1 U	1 U	**1.57**	1 U	1 U
	08/11/2010	MW49D081110	2 U	1 U	115	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2011	MW49D011311	2 U	20 U	68.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/23/2011	MW49D082311	2 U	20 U	70.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-50S	08/19/2008	MW50S081908	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-50S100808	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW50S013009	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/09/2009	MW50S040909	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW50S081909	2 U	20 U	1.47	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2010	MW50S012610	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW50S081610	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2011	MW50S012111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW50S083011	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-51D	08/12/2008	MW51D081208	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-51D100608	2 U	20 U	1.29	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.12**	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2009	MW51D012609	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/06/2009	MW51D040609	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	MW51D080509	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2010	MW51D011310	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.43**
	08/12/2010	MW51D081210	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/13/2011	MW51D011311	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.34**
	08/24/2011	MW51D082411	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
MW-52D	08/14/2008	MW52D081508	30.2	20 U	**1390**	1.81	2.63	21.1	3.51	1 U	1 U	1 U	**3.85**	7.04	1 U	1 U	**2.43**	1 U	1 U
	10/07/2008	MW-52D100708	2 U	20 U	**270**	1 U	1 U	1.15	1 U	1 U	1 U	1 U	**2.49**	1 U	1 U	1 U	1 U	1 U	1 U
	01/30/2009	MW52D013009	2 U	20 U	60.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**3.47**	1 U	1 U	1 U	**1.54**	1 U	1 U
	04/09/2009	MW52D040909	2 U	20 U	52.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.29**	1 U	1 U	1 U	1 U	1 U	1 U
	08/18/2009	MW52D081809	2 U	20 U	41.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**3.42**	1 U	1 U	1 U	**1.90**	1 U	1 U
	01/25/2010	MW52D012510	2 U	1 U	6.51	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	**1.27**	1 U	1 U
	08/16/2010	MW52D081610	2 U	1 U	2.73	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW52012011	2 U	20 U	1.91	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW52D083011	2 U	20 U	2.23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-53S	08/14/2008	MW53S081408	4.20	20 U	**979**	1 U	2.29	4.72	1 U	1 U	1 U	1 U	1 U	1.34	1 U	1 U	1 U	1 U	1 U
	10/07/2008	MW-53S100708	41.2	20 U	**21000**	3.47	19.1	23.5	4.24	1 U	1 U	1 U	1 U	8.50	1 U	1 U	1 U	1 U	1 U
	01/28/2009	MW53S012809	36.6	20 U	**10400**	3.16	14.4	20.9	3.59	1 U	1 U	1 U	1 U	6.95	1 U	1 U	1 U	1 U	1 U
	04/10/2009	MW53S041009	17.4	20 U	**10600**	1 U	8.20	11.0	2.01	1 U	**2.08**	1 U	1 U	4.99	1 U	1 U	1 U	1 U	1 U
	08/18/2009	MW53S081809	17.4	20 U	**2960**	1 U	4.06	13.2	1.14	1 U	1 U	1 U	1 U	5.35	1 U	1 U	1 U	1 U	1 U
	01/20/2010	MW53S012010	50.4	1 U	**9630**	1 U	19.6	31.5	4.27	--	1.31	1 U	1 U	9.06	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW53S081610	39.2	1 U	**15500**	1 U	16.9	23.1	4.61	1 U	1 U	1.24	1 U	8.90	1 U	1 U	1 U	1 U	1 U
	01/18/2011	MW53S011811	53.3	20 U	**26300**	4.83	20.7	25.8	3.88	1 U	**2.85**	1 U	1 U	8.71	1 U	1 U	1 U	1 U	1 U
	08/11/2011	MW53S081111	29.1	20 U	**24200**	1 U	14.4	16.5	4.29	1 U	1 U	1.19	1 U	4.09	1 U	1 U	1 U	1 U	1 U
MW-53D	08/14/2008	MW53D081408	2 U	20 U	76.8	1 U	1 U	1.39	4.89	1 U	1 U	1 U	**15.8**	1 U	1 U	1 U	**7.38**	1 U	**2.68**
	10/07/2008	MW-53D100708	2 U	20 U	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**4.48**	1 U	1 U	1 U	**2.50**	1 U	1 U
	01/28/2009	MW53D012809	2 U	20 U	60.2	1 U	1 U	1 U	1.25	1 U	1 U	1 U	**10.1**	1 U	1 U	1 U	**4.10**	1 U	**1.08**
	04/10/2009	MW53D041009	2 U	20 U	**182**	1 U	1 U	1 U	1.62	1 U	1 U	1 U	**4.38**	1 U	1.65	1 U	**1.83**	1 U	1 U
	08/17/2009	MW53D081709	2 U	20 U	13.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**5.42**	1 U	1 U	1 U	**2.67**	1 U	**1.04**
	01/20/2010	MW53D012010	2 U	1 U	10.0	1 U	1 U	1 U	1 U	--	1 U	1 U	**2.37**	1 U	1 U	1 U	**2.89**	1 U	1 U
	08/16/2010	MW53D081610	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.94**	1 U	1 U
	01/18/2011	MW53D011811	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.25**	1 U	1 U
	08/11/2011	MW53D081111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-55S	08/20/2010	MW55S082010	2 U	20 U	**2490**	7.23	10.8	5.54	9.03	1 U	1 U	5.47	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW55S011411	4.73	20 U	**1900**	1 U	13.2	5.49	8.1	1 U	1 U	3.68	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2011	MW55S080811	2.93	20 U	**938**	1 U	10.1	4.51	7.97	1 U	1 U	3.05	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-55D	09/07/2010	MW55D090710	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW55D011411	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**5.98**	1 U	1 U	1 U	**3.06**	1 U	1 U
	08/08/2011	MW55D080811	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**7.2**	1 U	1 U	1 U	**3.52**	1 U	1 U
MW-57S	08/15/2008	MW57S081508	223	20 U	**17700**	7.83	33.0	153	9.75	1 U	1 U	2.44	1 U	16.1	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-57S100608	275	20 U	**27200**	7.60	34.7	156	8.40	1 U	1 U	1.73	1 U	17.6	1 U	1 U	1 U	1 U	1 U
	01/27/2009	MW57S012709	218	20 U	**17000**	6.11	28.6	145	7.31	1 U	1 U	1.80	1 U	13.9	1 U	1 U	1 U	1 U	1 U
	04/07/2009	MW57S040709	279	20 U	**11100**	5.33	30.0	69.4	6.71	1 U	1 U	1.63	1 U	15.2	1 U	1 U	1 U	1 U	1 U
	08/06/2009	MW57S080609	163	20 U	**13100**	7.03	27.5	115	8.87	1 U	1 U	4.59	1 U	13.3	1 U	1 U	1 U	1 U	1 U
	01/13/2010	MW57S011310	147	1 U	**16300**	6.32	30.8	119	7.12	--	1 U	1.25	1 U	13.3	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW57S081210	202	1 U	**16600**	1 U	32.9	144	8.63	1 U	1 U	1 U	1 U	15.0	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW57S011411	241	20 U	**22800**	1 U	37.4	161	8.1	1 U	1 U	2.46	1 U	15.1	1 U	1 U	1 U	1 U	1 U
	08/25/2011	MW57S082511	190	20 U	**18700**	1 U	35	136	8.46	1 U	1 U	2.74	1 U	13.4	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310^{a}	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000^{a}	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
MW-57D	08/14/2008	MW57D081508	2 U	20 U	141 B	1 U	1 U	12.5	9.25	1 U	1 U	1.21	**102**	1 U	1.15	1 U	**13.5**	1 U	**3.89**
	10/06/2008	MW-57D100608	2 U	20 U	77.3	1 U	1 U	9.48	5.80	1 U	1 U	1 U	**117 B**	1 U	1 U	1 U	**13.6**	1 U	**3.41**
dup	10/06/2008	MW-57D100608-Dup	2 U	20 U	118	1 U	1 U	10.7	4.79	1 U	1 U	1 U	**104 B**	1 U	1 U	1 U	**12.4**	1 U	**5.07**
	01/27/2009	MW57D012709	2 U	20 U	98.8	1 U	1 U	10.7	4.94	1 U	1 U	1 U	**76.9**	1 U	1 U	1 U	**11.4**	1 U	**4.42**
dup	01/27/2009	MW57D012709-Dup	2 U	20 U	104	1 U	1 U	11.6	5.15	1 U	1 U	1 U	**75.2**	1 U	1 U	1 U	**11.7**	1 U	**4.29**
	04/07/2009	MW57D040709	2 U	20 U	51.6	1 U	1 U	9.04	3.85	1 U	1 U	1 U	**76.6**	1 U	1 U	1 U	**13.5**	1 U	**4.38**
dup	04/07/2009	MW57D040709-Dup	2 U	20 U	66.3	1 U	1 U	12.7	4.66	1 U	1 U	1 U	**77.4**	1 U	1 U	1 U	**14.1**	1 U	**4.65**
	08/06/2009	MW57D080609	2 U	20 U	94.1	2.36	1.99	9.32	5.75	1 U	1 U	3.21	**82.0**	1 U	2.31	1 U	**11.7**	1 U	**1.52**
	01/13/2010	MW57D011310	2 U	1 U	96.4	1 U	1 U	13.2	6.60	--	1 U	1 U	**97.6**	1 U	1 U	1 U	**14.4**	1 U	**5.60**
dup	01/13/2010	MW57D011310-Dup	2 U	1 U	131	1 U	1 U	12.7	6.17	--	1 U	1 U	**91.1**	1 U	1 U	1 U	**13.3**	1 U	**6.00**
	08/12/2010	MW57D081210	2 U	1 U	134	1 U	1 U	16.4	7.78	1 U	1 U	1.05	**98.3**	1 U	1.44	1 U	**16.6**	1 U	**4.20**
dup	08/12/2010	MW57D081210-Dup	2 U	1 U	107	1 U	1 U	12.5	5.74	1 U	1 U	1 U	**71.0**	1 U	1.09	1 U	**12.8**	1 U	**3.26**
	01/14/2011	MW57D011411	2 U	20 U	**161**	1 U	1 U	18.9	6.76	1 U	1 U	1.05	**103**	1 U	1.53	1 U	**14.2**	1 U	**3.52**
dup	01/14/2011	MW57DDUP011411	2 U	20 U	**177**	1 U	1 U	15.5	7.18	1 U	1 U	1.08	**113**	1 U	1.67	1 U	**14.5**	1 U	**3.73**
	08/25/2011	MW57D082511	2 U	20 U	128	1 U	1 U	14	7.61	1 U	1 U	1.05	**87.4**	1 U	1.43	1 U	**14.2**	1 U	**4.55**
dup	08/25/2011	MW57DDUP082511	2 U	20 U	132	1 U	1 U	14.6	8.31	1 U	1 U	1.14	**93.5**	1 U	1.52	1 U	**14.5**	1 U	**5.03**
MW-58D	08/13/2008	MW58D081308	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/08/2008	MW-58D100808	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2009	MW58D012709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/07/2009	MW58D040709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/06/2009	MW58D080609	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2010	MW58D011410	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW58D081210	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2011	MW58D011911	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2011	MW58D082611	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-5S	08/11/2008	EPA5S081108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA5S100208	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.51**	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2009	EPA5S012309	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/03/2009	EPA5S040309	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	EPA5S080509	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	EPA5S010810	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2010	EPA5S081110	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2011	EPA5S011211	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2011	EPA5S080911	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-5D	08/11/2008	EPA5D081108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/02/2008	EPA5D100208	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.60**	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2009	EPA5D012309	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.48**	1 U	1 U	1 U	1 U	1 U	1 U
	04/03/2009	EPA5D040309	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	EPA5D080509	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.57**	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	EPA5D010810	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	**1.72**	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphtha-lene	n-Butyl-benzene	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	sec-Dichloro-propane	Styrene	tert-Butyl-benzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloro-ethene	1,3-Dichloro-propene	Trichloro-ethene (TCE)	Trichloro-fluoro-methane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
	08/11/2010	EPA5D081110	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/12/2011	EPA5D011211	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2011	EPA5D080911	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-6S	08/18/2008	EPA6S081808	2 U	20 U	2.56	1.48	2.15	1 U	1.27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/07/2008	EPA-6S100708	2 U	20 U	4.23	1.73	2.57	1 U	1.39	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2009	EPA6S012909	2 U	20 U	1.05	1.26	1.94	1 U	1.16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2009	EPA6S041009	2 U	20 U	1.12	1.44	2.53	1 U	1.80	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	EPA6S081209	2 U	20 U	1 U	2.95	3.18	3.07	2.95	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2010	EPA6S012510	2 U	1 U	1.63	1 U	3.36	1 U	1.81	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	EPA6S081310	2 U	20 U	10.1	1 U	3.69	1.53	2.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2011	EPA6S011911	2 U	20 U	1.72	2.25	2.49	1.12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/19/2011	EPA6SDUP011911	2 U	20 U	1.74	2.22	2.36	1.13	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2011	EPA6S081011	2 U	20 U	1.51	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
EPA-6D	08/18/2008	EPA6D081808	2.15	20 U	121	1 U	3.78	3.60	1 U	1 U	1 U	1 U	1 U	1.03	1 U	1 U	1 U	1 U	1 U
	10/07/2008	EPA-6D100708	2 U	20 U	**168**	1 U	4.43	1.58	1 U	1 U	1 U	1 U	1 U	1.17	1 U	1 U	1 U	1 U	1 U
	01/29/2009	EPA6D012909	2 U	20 U	114	1 U	4.57	1.62	1 U	1 U	1 U	1 U	1 U	1.20	1 U	1 U	1 U	1 U	1 U
	04/10/2009	EPA6D041009	2 U	20 U	123	1 U	4.25	1.27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2009	EPA6D081209	2 U	20 U	42.9	1 U	3.64	3.22	2.36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2010	EPA6D012510	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	EPA6D081310	2.12	20 U	**196**	1 U	8.15	3.62	1.89	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U
	01/19/2011	EPA6D011911	2 U	20 U	69.4	1 U	7.38	2.76	1 U	1 U	1 U	1 U	1 U	1.41	1 U	1 U	1 U	1 U	1 U
	08/10/2011	EPA6D081011	2 U	20 U	53.2	1 U	6.51	1.16	1 U	1 U	1 U	1 U	1 U	1.29	1 U	1 U	1 U	1 U	1 U
Carty Lake Monitoring Wells (UWBZ)																			
MW-30	08/13/2002	GW-133	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
USDFW-1	10/24/2003	USDFW-1-102403	2.4	2.0 U	**170**	2.0 U	2.0 U	15	4.8	--	0.50 U	2.0 U	**1.1**	0.93	0.63	0.50 U	**7.5**	0.50 U	**1.5**
	05/04/2004	USDFW1-050404	1	2.0 U	95	2.0 U	2.0 U	9.3	4.7	0.50 U	0.50 U	2.0 U	0.50 U	0.53	0.52	0.50 U	**3.9**	0.50 U	**1.4**
	08/13/2004	USDFW1-081304	0.50 U	2.0 U	37	2.0 U	2.0 U	2.9	4.1	0.50 U	0.50 U	2.0 U	**1.1**	0.50 U	0.50 U	0.50 U	**1.8**	0.50 U	**1**
	10/25/2004	USDFW1-102504	0.62	2.0 U	50	2.0 U	2.0 U	4.2	2.8	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.5**	0.50 U	**1.2**
	01/28/2005	USDFW1012805	2 U	1 U	31.8	1 U	1 U	3.03	1.93	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.42**	1 U	**1.15**
	07/28/2005	USDFW1072805	2 U	1 U	4.68	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
	02/01/2006	USDFW1020106	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.41**
	08/11/2006	USDFW1081106	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2007	USDFW1012207	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.15**
	08/27/2007	USDFW1082707	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2008	USDFW1012808	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/21/2008	USDW1082108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/03/2009	USDFW1020309	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	USDFW1080709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2010	USDFW1012810	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2010	USDFW1082610	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2011	USDFW1012611	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.07**	1 U	1 U
	09/06/2011	USDFW1090611	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
USDFW-2	10/24/2003	USDFW-2-102403	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	0.50 U	0.50 U	0.74	0.50 U	0.50 U	0.50 U	**0.83**
	05/04/2004	USDFW2-050404	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.61	0.50 U	0.50 U	0.50 U	**0.62**
	08/13/2004	USDFW2-081304	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.64	0.50 U	0.50 U	0.50 U	**0.58**
	10/25/2004	USDFW2-102504	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.52	0.50 U	0.50 U	0.50 U	**0.64**
	01/28/2005	USDFW2012805	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/28/2005	USDFW2072805	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
	02/01/2006	USDFW2020106	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**4.25**
	08/11/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/22/2007	USDFW2012207	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/27/2007	USDFW2082707	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2008	USDFW2012808	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
USDFW-3	10/24/2003	USDFW-3-102403	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/04/2004	USDFW3-050404	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	08/13/2004	USDFW3-081304	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/25/2004	USDFW3-102504	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/28/2005	USDFW3012805	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/28/2005	USDFW3072805	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
	02/01/2006	USDFW3020106	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2006	USDFW3081106	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2007	USDFW3012207	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/27/2007	USDFW3082707	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2008	USDFW3012808	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
RMW-2S	08/21/2008	RMW2S082108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/09/2008	RMW2S100908	1 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/03/2009	RMW2S020309	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/08/2009	RMW2S040809	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	RMW2S080709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.12**	1 U	1 U
	01/28/2010	RMW2S012810	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2010	RMW2S082610	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2011	RMW2S012611	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/06/2011	RMW2S090611	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
RMW-2D	08/21/2008	RMW2D082108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/09/2008	RMW2D100908	1 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	02/03/2009	RMW2D020309	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/08/2009	RMW2D040809	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2009	RMW2D080709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/28/2010	RMW2D012810	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2010	RMW2D082610	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2011	RMW2D012611	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/06/2011	RMW2D090611	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
LWBZ: Cells 1 and 2 and Carty Lake																			
Cell 1 (LWBZ)																			
MW-40	08/08/2002	GW-151	15	5 U	**690**	5 U	5 U	8.5	5 U	--	**2.6**	5 U	**2.5**	5.1	1.3 U	1.3 U	**1.3**	1.3 U	1.3 U
	01/23/2004	MW40-012304	0.77	2.0 U	91	2.0 U	2.0 U	2	2.1	--	0.50 U	2.0 U	**1.6**	0.76	0.79	0.50 U	**1.4**	0.50 U	**1.5**
	04/30/2004	MW40-043004	0.50 U	2.0 U	24	2.0 U	2.0 U	0.96	2.0 U	0.50 U	0.50 U	2.0 U	**1.1**	0.50 U	0.75	0.50 U	**1.2**	0.50 U	**1.6**
	08/11/2004	MW40-081104	0.50 U	2.0 U	31	2.0 U	2.0 U	0.85	2.0 U	0.50 U	0.50 U	2.0 U	**0.91**	0.50 U	0.6	0.50 U	**0.94**	0.50 U	**1.4**
	10/29/2004	MW40-102904[b]	0.50 U	2.0 U	18	2.0 U	2.0 U	0.76	2.0 U	0.50 U	0.50 U	2.0 U	**1.0**	0.50 U	0.62	0.50 U	**1.2**	0.50 U	**1.5**
	01/27/2005	MW40012705	2 U	1 U	15	1 U	1 U	1.63	1.01	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.75**
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW40012706	2 U	20 U	3.09	1 U	1 U	1 U	1.06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW40020209	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW40081909	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2010	MW40012910	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/25/2010	MW40082510	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW40012411	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/02/2011	MW40090211	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-41	08/12/2002	GW-148	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	**1.2**	0.5 U	0.5 U	0.5 U	**1.7**	0.5 U	**0.83**
	01/29/2004	MW41-012904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	**1.8**	0.50 U	0.50 U	0.50 U	**2.1**	0.50 U	**0.64**
	04/29/2004	MW41-042904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**1.4**	0.50 U	0.50 U	0.50 U	**1.6**	0.50 U	**0.69**
	08/12/2004	MW41-081204	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**1.4**	0.50 U	0.50 U	0.50 U	**1.3**	0.50 U	**0.51**
	11/08/2004	MW41-110804	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**2.5**	0.50 U	0.50 U	0.50 U	**1.9**	0.50 U	**0.81**
	01/27/2005	MW41012705	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.18**	1 U	1 U	1 U	**1.7**	1 U	1 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/2006	MW41013006	2 U	20 U	1 U	1 U	1 U	1 U	2.35	1 U	1 U	1 U	**5.56**	1 U	1 U	1 U	**4.37**	1 U	**1.22**
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cell 2 (LWBZ)																			
MW-22	08/08/2002	GW-143	1.2	2 U	**310**	2 U	2 U	20	3.4	--	0.72	2 U	**12**	0.57	0.5 U	0.5 U	**3.7**	0.5 U	**0.95**
	01/23/2004	MW22-012304	0.50 U	2.0 U	4.3	2.0 U	2.0 U	2.8	6.1	--	0.50 U	2.0 U	**11**	0.53	0.52	0.50 U	**7.7**	0.50 U	**1.3**
	04/28/2004	MW22-042804	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	6.4	6.9	0.50 U	0.50 U	2.0 U	**11**	0.50 U	0.54	0.50 U	**6.2**	0.50 U	**1.5**
	08/06/2004	MW22-080604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.69	5.8	0.50 U	0.50 U	2.0 U	**9.6**	0.50 U	0.52	0.50 U	**4.9**	0.50 U	**1.2**
	10/26/2004	MW22-102604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	4.4	0.50 U	0.50 U	2.0 U	**8.4**	0.50 U	0.50 U	0.50 U	**4.2**	0.50 U	**1.1**
	01/25/2005	MW22012505	2 U	1 U	1 U	1 U	1 U	1 U	5.05	1 U	1 U	1.05	**6.89**	1 U	1 U	1 U	**3.52**	1 U	**1.05**
	07/25/2005	MW22072505	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2.2	1 UJ	1 UJ	1 UJ	**3.46**	1 UJ	1 UJ	1 UJ	**2.03**	1 UJ	1 UJ
	01/25/2006	MW22012506	2 U	20 U	1 U	1 U	1 U	1 U	4.15	1 U	1 U	1 U	**3.42**	1 U	1 U	1 U	**2.84**	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310^{a}	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000^{a}	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
	08/10/2006	MW22081006	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW22012507	2 U	20 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	**1.83**	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2007	MW22081607	2 U	20 U	1 U	1 U	1 U	1 U	3.12	1 U	1 U	1 U	**1.54**	1 U	1 U	1 U	**2.14**	1 U	1 U
	01/22/2008	MW22012208	2 U	20 U	1 U	1 U	1 U	1 U	2.13	1 U	1 U	1 U	**1.97**	1 U	1 U	1 U	**2.23**	1 U	1 U
MW-33	08/07/2002	GW-122	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	**4.5**	0.5 U	0.5 U	0.5 U	**0.81**	0.5 U	0.5 U
	01/21/2004	MW33-012104	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.9	--	0.50 U	2.0 U	**4.8**	0.50 U	0.50 U	0.50 U	**1.2**	0.50 U	0.50 U
	04/27/2004	MW33-042704	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.9	0.50 U	0.50 U	2.0 U	**3.9**	0.50 U	0.50 U	0.50 U	**1.3**	0.50 U	0.50 U
	07/28/2004	MW33-072804	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**3.9**	0.50 U	0.50 U	0.50 U	**1.2**	0.50 U	0.50 U
	10/19/2004	MW33-101904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.2	0.50 U	0.50 U	2.0 U	**4.6**	0.50 U	0.50 U	0.50 U	**1.2**	0.50 U	0.50 U
	01/20/2005	MW33012005	2 U	1 U	1 U	1 U	1 U	1 U	2.19	1 U	1 U	1 U	**3.48**	1 U	1 U	1 U	1 U	1 U	1 U
	07/20/2005	MW33072005	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1.45	1 UJ	1 UJ	1 UJ	**3.08**	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/20/2006	MW33012006	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2006	MW33080406	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2007	MW33011907	2 U	20 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2007	MW33080907	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/15/2008	MW33011508	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.99**	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2010	MW33011110	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	**1.83**	1 U	1 U	1 U	1 U	1 U	1 U
	08/11/2008	MW33081108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.81**	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2010	MW33011110	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.83**	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2011	MW33080911	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.03**	1 U	1 U	1 U	1 U	1 U	1 U
MW-34	08/08/2002	GW-144	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	**12**	0.5 U	0.5 U	0.5 U	**1.2**	0.5 U	0.5 U
	01/21/2004	MW34-012104	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	**16**	0.73	0.50 U	0.50 U	**1.5**	0.50 U	0.50 U
	04/27/2004	MW34-042704	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**12**	0.50 U	0.50 U	0.50 U	**1.6**	0.50 U	0.50 U
	07/29/2004	MW34-072904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**15**	0.50 U	0.50 U	0.50 U	**1.6**	0.50 U	0.50 U
	10/20/2004	MW34-102004	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**16**	0.50 U	0.50 U	0.50 U	**1.8**	0.50 U	0.50 U
	01/21/2005	MW34012105	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**15.3**	1 U	1 U	1 U	**1.33**	1 U	1 U
	07/20/2005	MW34072105	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	**12.7**	1 UJ	1 UJ	1 UJ	**1.39**	1 UJ	1 UJ
	01/23/2006	MW34012306	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**12.2**	1 U	1 U	1 U	**1.40**	1 U	1 U
	08/07/2006	MW34080706	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**8.72**	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2007	MW34011807	2 U	20 U	7.88	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/10/2007	MW34081007	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**9.47**	1 U	1 U	1 U	**1.51**	1 U	1 U
	01/16/2008	MW34011608	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**10.5**	1 U	1 U	1 U	**1.42**	1 U	1 U
MW-35	08/13/2002	GW-145	0.5 U	2 U	2 U	2 U	2 U	0.5 U	3.3	--	0.5 U	2 U	**32**	0.5 U	0.64	0.5 U	**6**	0.5 U	**0.95**
dup	08/13/2002	GW-150	0.5 U	2 U	2 U	2 U	2 U	0.5 U	3.1	--	0.5 U	2 U	**31**	0.5 U	0.59	0.5 U	**5.8**	0.5 U	**0.9**
	01/21/2004	MW35-012104	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	3.1	--	0.50 U	2.0 U	**42**	0.87	0.68	0.50 U	**7.3**	0.50 U	**1.3**
	04/28/2004	MW35-042804	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.8	0.50 U	0.50 U	2.0 U	**33**	0.50 U	0.64	0.50 U	**6.2**	0.50 U	**1.2**
	07/30/2004	MW35-073004	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	3.1	0.50 U	0.50 U	2.0 U	**39**	0.50 U	0.74	0.50 U	**7**	0.50 U	**1.3**
	10/25/2004	MW35-102504	0.50 U	2.0 U	2.9	2.0 U	2.0 U	0.50 U	3.0	0.50 U	0.50 U	2.0 U	**43**	0.50 U	0.70	0.50 U	**6.6**	0.50 U	**1.4**
	01/24/2005	MW35012405	2 U	1 U	1.52	1 U	1 U	1 U	3.88	1 U	1 U	1 U	**44.3**	1 U	1 U	1 U	**6.55**	1 U	**1.54**
	07/20/2005	MW35072205	10 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	**33.2**	5 UJ	5 UJ	5 UJ	**5.73**	5 UJ	5 UJ
	01/24/2006	MW35012406	2 U	20 U	4.12	1 U	1 U	1 U	2.08	1 U	1 U	1 U	**32.1**	1 U	1 U	1 U	**6.14**	1 U	**1.47**
	08/08/2006	MW35080806	2 U	20 U	3.42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**31.6**	1 U	1 U	1 U	**4.70**	1 U	**2.14**
	01/24/2007	MW35012407	2 U	20 U	1 U	1 U	1 U	1 U	1.47	1 U	1 U	1 U	**19.3**	1 U	1 U	1 U	**4.46**	1 U	**1.14**

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (μg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
	08/14/2007	MW35081407	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**9.68**	1 U	1 U	1 U	**2.47**	1 U	1 U
	01/18/2008	MW35011808	2 U	20 U	4.86	1 U	1 U	1.01	2.98	1 U	1 U	1 U	**29.8**	1 U	1 U	1 U	**6.64**	1 U	**2.35**
	08/14/2008	MW35081408	2 U	20 U	11.3	1 U	1 U	1.13	2.94	1 U	1 U	1 U	**32.9**	1 U	1 U	1 U	**6.02**	1 U	**2.17**
	01/30/2009	MW35013009	2 U	20 U	4.49	1 U	1 U	1 U	1.44	1 U	1 U	1 U	**16.4**	1 U	1 U	1 U	**3.57**	1 U	**2.33**
	08/18/2009	MW35081809	2 U	20 U	13.6	1 U	1 U	1 U	2.42	1 U	1 U	1 U	**24.4**	1 U	1 U	1 U	**5.51**	1 U	**1.99**
	01/22/2010	MW35012210	2 U	1 U	6.49	1 U	1 U	1 U	1.91	--	1 U	1 U	**23.9**	1 U	1 U	1 U	**4.50**	1 U	1 U
	08/16/2010	MW35081610	2 U	1 U	9.76	1 U	1 U	1.23	2.76	1 U	1 U	1 U	**19.4**	1 U	1 U	1 U	**5.73**	1 U	**1.98**
	01/20/2011	MW35012011	2 U	20 U	4.38	1.16	1 U	1 U	1 U	1 U	1 U	1 U	**20**	1 U	1 U	1 U	**5.43**	1 U	**2.34**
	08/29/2011	MW35082911	2 U	20 U	12.3	1 U	1 U	1 U	1.89	1 U	1 U	1 U	**16.1**	1 U	1 U	1 U	**4.76**	1 U	**2.62**
MW-36	08/07/2002	GW-146	0.5 U	2 U	110	2 U	2 U	5.5	2 U	--	0.5 U	2 U	**3.8**	0.5 U	0.5 U	0.5 U	**2.3**	0.5 U	0.5 U
	01/26/2004	MW36-012604	0.50 U	2.0 U	7.9	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	**0.93**	1	0.50 U	0.50 U	**1**	0.50 U	0.50 U
	04/28/2004	MW36-042804	0.50 U	2.0 U	4	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**4.5**	0.50 U	0.50 U	0.50 U	**2.6**	0.50 U	0.50 U
	07/30/2004	MW36-073004	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**4.9**	0.50 U	0.50 U	0.50 U	**2.7**	0.50 U	0.50 U
	10/26/2004	MW36-102604	0.50 U	2.0 U	2.3	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	**5.5**	0.50 U	0.50 U	0.50 U	**2.6**	0.50 U	0.50 U
	01/25/2005	MW36012505	2 U	1 U	1.47	1 U	1 U	1 U	1.41	1 U	1 U	1 U	**3.97**	1 U	1 U	1 U	**2.14**	1 U	1 U
	07/25/2005	MW36072705	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1.09	1 UJ	1 UJ	1 UJ	**3.13**	1 UJ	1 UJ	1 UJ	**1.9**	1 UJ	1 UJ
	01/25/2006	MW36012506	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.01**	1 U	1 U	1 U	**1.57**	1 U	1 U
	08/08/2006	MW36080806	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW36012407	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.83**	1 U	1 U	1 U	1 U	1 U	1 U
	08/15/2007	MW36081507	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/22/2008	MW36012208	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.22**	1 U	1 U
	08/19/2008	MW36081908	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.30**	1 U	1 U
	01/30/2009	MW36013009	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/19/2009	MW36081909	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2010	MW36012610	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/16/2010	MW36081610	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.01**	1 U	1 U	1 U	**1.07**	1 U	1 U
	01/21/2011	MW36012111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/30/2011	MW36083011	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-37	08/12/2002	GW-147	0.5 U	2 U	2 U	2 U	2 U	0.5 U	2 U	--	0.5 U	2 U	**0.51**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/27/2004	MW37-012704	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	--	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	04/29/2004	MW37-042904	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.57**	0.50 U	0.50 U
	08/06/2004	MW37-080604	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/22/2004	MW37-102204	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/26/2005	MW37012605	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/25/2005	MW37072605	2 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	01/26/2006	MW37012606	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/09/2006	MW37080906	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/26/2007	MW370120607	2 U	20 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2007	MW37081707	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/23/2008	MW37012308	2 U	20 U	1.90	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310^a	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000^a	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
	08/20/2008	MW37082008	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2010	MW37012710	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/2011	MW37083111	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-54	08/12/2008	MW54081208	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-54100608	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.46**	1 U	1 U
	01/26/2009	MW54012609	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.18**	1 U	1 U
	04/06/2009	MW54040609	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/05/2009	MW54080509	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.05**	1 U	1 U
	01/13/2010	MW54011310	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	**1.21**	1 U	1 U
	08/12/2010	MW54081210	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.60**	1 U	1 U
	01/13/2011	MW54011311	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.59**	1 U	1 U
	08/24/2011	MW54082411	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.55**	1 U	1 U
MW-55	08/14/2008	MW55081408	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**5.91**	1 U	1 U	1 U	**4.66**	1 U	1 U
	10/03/2008	MW55100308	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**6.04**	1 U	1 U	1 U	**5.19**	1 U	1 U
	01/27/2009	MW55012709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**4.81**	1 U	1 U	1 U	**3.96**	1 U	1 U
	04/07/2009	MW55040709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**3.55**	1 U	1 U	1 U	**4.12**	1 U	1 U
	08/06/2009	MW55080609	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**3.40**	1 U	1.52	1 U	**3.68**	1 U	1 U
	01/14/2010	MW55011410	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	**3.75**	1 U	1 U	1 U	**4.05**	1 U	1 U
	08/12/2010	MW55081210	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**5.16**	1 U	1 U	1 U	**5.03**	1 U	1 U
	01/14/2011	MW55011411	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**4.79**	1 U	1 U	1 U	**3.77**	1 U	1 U
	08/08/2011	MW55080811	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.91**	1 U	1 U	1 U	**3.12**	1 U	1 U
MW-56	08/21/2008	MW56082108	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.04**	1 U	1 U
	10/08/2008	MW-56100808	2 U	20 U	1.98	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/27/2009	MW56012709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/07/2009	MW56040709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/06/2009	MW56080609	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2010	MW56011410	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/12/2010	MW56081210	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.01**	1 U	1 U
	01/19/2011	MW56011911	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/26/2011	MW56	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.08**	1 U	1 U
MW-59	08/19/2008	MW59081908	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/06/2008	MW-59100608	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/29/2009	MW59012909	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/09/2009	MW59040909	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/17/2009	MW59081709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/21/2010	MW59012110	2 U	1 U	3.53	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/13/2010	MW59081310	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2011	MW59012011	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/29/2011	MW59082911	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-62	09/08/2010	MW62090810	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/14/2011	MW62011411	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/25/2011	MW62082511	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-8
Volatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	sec-Dichloropropane	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Level			310[a]	94	170	NV	NV	440	NV	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level			16000[a]	5.8	160	NV	NV	16000	NV	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
Carty Lake (LWBZ)																			
MW-60	09/03/2008	MW60090308	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.83	1 U	**11.3**	1 U	1 U
	10/09/2008	MW601000908	1 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.82	1 U	**11.6**	1 U	**1.26**
	02/03/2009	MW60020309	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.71	1 U	**6.89**	1 U	**1.12**
	04/08/2009	MW60040809	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.93	1 U	**10.6**	1 U	**2.17**
	08/07/2009	MW60080709	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.97	1 U	**7.72**	1 U	1 U
	01/28/2010	MW60012810	2 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1.41	1 U	**7.17**	1 U	**2.19**
	08/25/2010	MW60082510	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.60	1 U	**6.87**	1 U	1 U
	01/24/2011	MW60012411	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4	1 U	**8.19**	1 U	**2.96**
	09/06/2011	MW60090611	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.91	1 U	**6.47**	1 U	**4.92**
MW-61	09/03/2010	MW61090310	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/24/2011	MW61012411	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/02/2011	MW61090211	2 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

NOTES:

-- = not analyzed or not Cell 3 point of compliance monitoring results.

B = analyte found in the associated method blank.

Bold = detected concentration that exceeds MTCA Method B Groundwater Cleanup Level. Non-detect values ("U" or "UJ") were not compared with MTCA Method B Groundwater Cleanup Level.

dup = duplicate sample.

LWBZ = lower water-bearing zone.

MTCA = Model Toxics Control Act.

μg/L = micrograms per liter.

NS = not sampled.

NV = no value.

RNWR = Ridgefield National Wildlife Refuge.

U = not detected at or above method reporting limit.

UJ = not detected above estimated detection limit.

UWBZ = upper water-bearing zone.

[a] m-xylene.

[b] Volatile organic compound and dissolved metal data for October 29, 2004 were switched because of mislabeling during sampling.

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
UWBZ: Cell 1 *Cell 1 (UWBZ)*												
MW-7	08/12/2002	GW-125	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**1.6**
	01/26/2004	MW7-012604	0.50 U	--	0.50 U	0.58	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**2.7**
	05/06/2004	MW7-050604	3.5	--	0.48 U	1.1	0.48 U	0.48 U	0.48 U	0.69	0.48 U	**21**
	08/09/2004	MW7-080904	0.5	--	0.48 U	0.55	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**4.8**
	10/27/2004	MW7-102704	1	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**32**
	01/26/2005	MW7012605	--	2.98	1.9 U	5.02	1.9 U	1.9 U	1.9 U	1.9 U	23.3	**27.3**
	07/25/2005	MW7072705	--	3.33	1.24	13.6	0.19 U	0.19 U	0.19 U	1.31	7.61	**253**
	01/27/2006	MW7012706	--	111	13.9	131	0.948 U	7.15	16.5	**73.8**	20.1	**413**
	08/10/2006	MW7081006	--	11.3	33.9	158	0.958 U	0.958 U	11.7	0.958 U	243	**393**
	01/25/2007	MW7012507	--	6.42	14.1	89.8	0.967 U	0.967 U	2.54	0.967 U	56.7	**222**
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/05/2008	MW7090508	--	18.3	18.2	21.0	0.954 U	0.954 U	10.3	0.954 U	55.3	**54.2**
	02/04/2009	MW7020409	--	0.952 U	9.82	9.10	0.952 U	0.952 U	3.49	0.952 U	26.3	**19.8**
	08/19/2009	MW7081909	--	0.953 U	0.953 U	1.26	0.953 U	0.953 U	0.953 U	0.953 U	8.2	**11.7**
	01/26/2010	MW7012610	--	3.93	5.94	1.47	0.951 U	0.951 U	3.17	0.951 U	49.3	**38.4**
	08/24/2010	MW7082410	--	0.951 U	0.951 U	3.48	0.951 U	0.951 U	0.951 U	0.951 U	5.07	**19.2**
	01/25/2011	MW7012511	--	0.958 U	1.18	2.68	0.958 U	0.958 U	1.44	0.958 U	13.3	**15.1**
	09/01/2011	MW7090111	--	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	**6.17**
MW-8S	08/13/2002	GW-126	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**2.2**
MW-42	08/12/2002	GW-137	500	--	4.9 U	140	11	4.9 U	36	4.9 U	44	**2100**
	01/23/2004	MW42-012304	190	--	4.8 U	23	5.1	4.8 U	30	4.8 U	150	**740**
	04/30/2004	MW42-043004	390	--	48 U	48 U	48 U	48 U	48 U	48 U	83	480 U
	08/10/2004	MW42-081004	430	--	4.8 U	110	11	4.8 U	45	**11**	71	**3600**
	10/27/2004	MW42-102704	250	--	2.4 U	63	10	2.4 U	16	**4.9**	34	**2200**
	01/26/2005	MW42012605	--	17	1.91 U	71	4.27	1.91 U	6.79	1.91 U	16.4	**694**
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW42012706	--	2.57	0.953 U	5.75	0.953 U	0.953 U	0.953 U	0.953 U	1.82	**31.5**
	08/10/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-43	08/12/2002	GW-138	900	--	4.8 U	83	26	4.8 U	89	**14**	110	**2400**
	01/23/2004	MW43-012304	440	--	4.8 U	18	14	4.8 U	56	4.8 U	150	**760**
	04/30/2004	MW43-043004	48 U	--	48 U	550	48 U	48 U	110	48 U	190	**110**
	08/11/2004	MW43-081104	87	--	4.8 U	8.8	4.8 U	4.8 U	10	4.8 U	39	**360**
	10/27/2004	MW43-102704	42	--	2.4 U	66	11	2.4 U	6.3	**6.6**	6.2	**170**
	01/27/2005	MW43012705	--	31.6	1.89 U	44.4	18.5	1.89 U	1.89 U	1.89 U	64.6	**111**
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW43012706	--	4.45	4.30	20.9	0.955 U	1.53	1.96	2.45	0.955 U	**22.6**
	08/10/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-44	08/13/2002	GW-139	630	--	4.8 U	56	13	4.8 U	44	4.8 U	140	**1900**
	01/23/2004	MW44-012304	490	--	240 U	240 U	240 U	240 U	240 U	240 U	240 U	**3100**
	04/29/2004	MW44-042904	220	--	4.8 U	15	15	4.8 U	30	4.8 U	47	**1500**
	08/11/2004	MW44-081104	340	--	48 U	110	50	48 U	77	48 U	77	**1600**
	10/29/2004	MW44-102904	570	--	240 U	740	240 U	240 U	240 U	240 U	240 U	**4900**
	01/27/2005	MW44012705	--	61.3	19.2 U	222	34.3	19.2 U	22.9	19.2 U	152	**809**
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW44012706	--	127	27.9	215	0.951 U	2.71	31.2	**12.5**	70.2	**1280**
	08/10/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/01/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW44020209	--	76.1	59.8	94.3	0.953 U	0.953 U	13.5	0.953 U	322	**170**
	08/19/2009	MW44081909	--	24.7	12.5	164	0.972 U	0.972 U	2.94	0.972 U	39	**418**
	01/29/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/2010	MW44082510	--	0.963 U	1.34	6.12	0.963 U	0.963 U	0.963 U	0.963 U	4.06	**9.04**
	01/24/2011	MW44012411	--	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	1.25	0.961 U	1.1	1.44 U
	09/02/2011	MW44090211	--	0.961 U	5.51	0.961 U	0.961 U	0.961 U	9.5	0.961 U	147	**4.36**
Cell 2 (UWBZ)												
E-4	07/12/2007	E4-21071207	--	8.41	14.4	9.73	2.88	0.968 U	0.968 U	0.968 U	74.2	**34.1**
	09/13/2007	E4-23091307	--	41.3	9.23	41.9	0.976 U	0.976 U	2.82	0.976 U	64.4	**429**
	02/12/2008	E4021208	--	6.16	6.62	0.963 U	0.963 U	0.963 U	2.02	0.963 U	21.3	**65.8**
	08/22/2008	E4082208	--	1.78	3.12	1.28	0.961 U	0.961 U	5.05	0.961 U	74.5	**4.61**
	01/13/2009	E4011309	--	1.80	1.71	4.22	0.947 U	0.947 U	0.947 U	0.947 U	10.9	**8.17**
EPA-4S	09/03/2008	EPA4S090308	--	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	1.44 U
	10/02/2008	EPA4S100208	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	02/10/2009	EPA4S021009	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.52 U
	04/16/2009	EPA4S041609	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/13/2009	EPA4S081309	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	01/29/2010	EPA4S012910	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/24/2010	EPA4S082410	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.967	1.42 U
	01/25/2011	EPA4S012511	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	09/01/2011	EPA4S090111	--	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	1.33	**17**
EPA-4D	09/03/2008	EPA4D090308	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	1.43 U
	10/02/2008	EPA4D100208	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	02/10/2009	EPA4D021009	--	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	1.5 U
	04/16/2009	EPA4D041609	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	1.43 U
	08/13/2009	EPA4D081309	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	01/29/2010	EPA4D012910	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/24/2010	EPA4D082410	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	01/25/2011	EPA4D012511	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	1.43 U
	09/01/2011	EPA4D090111	--	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	1.44 U
MW-4	05/07/2004	MW4-050704	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	07/29/2004	MW4-072904	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	10/22/2004	MW4-102204	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	01/24/2005	MW4012405	--	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U
	07/20/2005	MW4072205	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U
	01/23/2006	MW4012306	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/08/2006	MW4080806	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.52 U
	01/24/2007	MW4012407	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	08/14/2007	MW4081407	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/17/2008	MW4011708	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/13/2008	MW4081308	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/29/2009	MW4012909	--	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	1.42 U
	08/18/2009	MW4081809	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/19/2010	MW4011910	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
	08/13/2010	MW4081310	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**3.68**
	01/20/2011	MW4012011	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/26/2011	MW4082611	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U
MW-5	01/26/2004	MW5-012604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U
	05/07/2004	MW5-050704	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	07/29/2004	MW5-072904	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	10/22/2004	MW5-102204	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	01/24/2005	MW5012405	--	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U
	07/20/2005	MW5072205	--	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U
	01/24/2006	MW5012406	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	08/08/2006	MW5080806	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.51 U
	01/24/2007	MW5012407	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	08/14/2007	MW5081407	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	01/17/2008	MW5011708	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	08/13/2008	MW5081308	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/29/2009	MW5012909	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	08/18/2009	MW5081809	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	01/22/2010	MW5012210	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/13/2010	MW5081310	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	01/20/2011	MW5012011	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	08/26/2011	MW5082611	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
PZ-06	01/23/2007	PZ06012307	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/13/2007	PZ06081307	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	01/16/2008	PZ06011608	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/12/2008	PZ06081208	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/26/2009	PZ06012609	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
	08/05/2009	PZ06080509	--	1.96	2.06	2.25	2.64	0.949 U	0.949 U	2.31	1.94	**3.55**
	01/13/2010	PZ06011310	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	08/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/2011	PZ06011311	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	08/24/2011	PZ06082411	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U
MW-10	08/06/2002	GW-121	0.5 U	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/23/2007	MW10012307	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/14/2007	MW10081407	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/17/2008	MW10011708	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
MW-13	08/08/2002	GW-127	0.49 U	--	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.53
	01/26/2004	MW13-012604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**1**
	05/05/2004	MW13-050504	0.50 U	--	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.81**
	07/28/2004	MW13-072804	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	10/20/2004	MW13-102004	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**0.90 J**
	01/21/2005	MW13012105	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	07/20/2005	MW13072105	--	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U
	01/23/2006	MW13012306	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	08/07/2006	MW13080706	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/23/2007	MW13012307	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/09/2007	MW13080907	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/15/2008	MW13011508	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	1.43 U
	08/11/2008	MW13081108	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/23/2009	MW13012309	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/14/2009	MW13081409	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/11/2010	MW13011110	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/11/2010	MW13081110	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	01/12/2011	MW13011211	--	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	1.43 U
	08/23/2011	MW13082311	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
MW-14	08/08/2002	GW-128	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**1.8**
	01/22/2004	MW14-012204	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**1.6**
	05/04/2004	MW14-050404	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	07/28/2004	MW14-072804	0.48 U	--	0.48 U	0.54	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**1.6**
	10/20/2004	MW14-102004	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 UJ
	01/21/2005	MW14012105	--	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.312
	07/20/2005	MW14072105	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.503
	01/23/2006	MW14012306	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/07/2006	MW14080706	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/23/2007	MW14012307	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/13/2007	MW14081307	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/16/2008	MW14011608	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
MW-15	08/08/2002	GW-140	350	--	0.48 U	170	3.6	0.93	9	2	0.95	**2400**
	01/21/2004	MW15-012104	270	--	0.48 U	110	3.2	0.62	7.5	1.3	0.7	**5600**
	05/05/2004	MW15-050504	350	--	0.48 U	110	4.9	0.91	12	2	1.1	**870**
	07/28/2004	MW15-072804	240	--	0.48 U	100	5.1	0.94	13	2.2	1.1	**5500**
	10/20/2004	MW15-102004	330	--	0.49 U	130	5.1	0.98	13	2.2	1.1	**4000 J**
	01/21/2005	MW15012105	--	123 J	15.5 J	325 J	1.04 J	0.192 UJ	0.755 J	0.192 UJ	0.192 UJ	**2470 J**
	07/20/2005	MW15072205	--	164 J	1.92 UR	230 J	4.09 J	1.92 UR	16.4 J	2.59 J	1.92 UR	**4270 J**

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachloro-phenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	01/23/2006	MW15012306	--	272	2.41	132	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**3590**
	08/07/2006	MW15080706	--	158	2.27	0.962 U	0.962 U	0.962 U	6.10	1.27	0.962 U	**1630**
	01/18/2007	MW15011807	--	198	2.33	108	0.955 U	0.955 U	4.94	2.31	1.34	**1600**
	08/10/2007	MW15081007	--	67.2	1.75	21.3	0.95 U	0.95 U	2.64	0.95 U	0.95 U	**537**
	01/16/2008	MW15011608	--	115	3.41	84.8	0.951 U	0.951 U	5.16	0.961	0.951 U	**1800**
	08/13/2008	MW15081308	--	155	3.89	118	0.957 U	0.957 U	5.39	0.957 U	0.957 U	**1380**
	09/03/2008	MW15090308	--	94.3	3.69	145	0.948 U	0.948 U	5.44	0.948 U	0.948 U	**700**
	01/26/2009	MW15012609	--	62.6	9.03	188	9.28	0.945 U	0.945 U	0.945 U	0.945 U	**843**
	08/17/2009	MW15081709	--	28.7	4.34	73.2	0.946 U	0.946 U	5.15	0.946 U	1.63	**57.1**
	01/12/2010	MW15011210	--	94.2	4.39	34.1	0.947 U	1.85	5.19	0.947 U	0.947 U	**464**
	08/11/2010	MW15081110	--	19.8	13.7	135	0.956 U	2.19	3.45	0.956 U	2.46	**341**
	01/13/2011	MW15011311	--	5.94	5.17	43.4	0.95 U	0.95 U	1.53	0.95 U	1.94	**89.4**
	08/23/2011	MW15082311	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	1.43 U
MW-16	08/07/2002	GW-129	0.53 U	--	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	**2**
	01/23/2004	MW16-012304	0.48 U	--	0.48 U	0.63	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**2.6**
	05/06/2004	MW16-050604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.58
	07/30/2004	MW16-073004	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	10/26/2004	MW16-102604	0.48 U	--	0.48 U	0.58	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**1.1**
	01/25/2005	MW16012505	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	07/25/2005	MW16072505	--	0.282	0.19 U	0.247	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	01/25/2006	MW16012506	--	0.947 U	0.947 U	1.54	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**12.0**
	08/10/2006	MW16081006	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/25/2007	MW16012507	--	0.951 U	0.951 U	1.33	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**5.18**
	08/16/2007	MW16081607	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/22/2008	MW16012208	--	0.954 U	0.954 U	2.15	0.954 U	0.954 U	0.954 U	0.954 U	2.69	**3.83**
	08/19/2008	MW16081908	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/30/2009	MW16013009	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/12/2009	MW16081209	--	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	2.3 U
	01/21/2010	MW16012110	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	08/17/2010	MW16081710	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/21/2011	MW16012111	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	08/30/2011	MW16083011	--	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	1.43 U
MW-17	08/07/2002	GW-130	0.52 U	--	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.68
	01/26/2004	MW17-012604	0.49 U	--	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.97 U
	05/06/2004	MW17-050604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**1.5**
	07/30/2004	MW17-073004	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	10/26/2004	MW17-102604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	01/24/2005	MW17012405	--	0.189 U	0.189 U	0.189 U	0.189 U	0.224	0.189 U	0.189 U	0.189 U	0.189 U
	07/25/2005	MW17072505	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	01/24/2006	MW17012406	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/08/2006	MW17080806	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.51 U
	01/24/2007	MW17012407	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/15/2007	MW17081507	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/18/2008	MW17011808	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachloro-phenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
MW-18	07/29/2004	MW18-072904	48 U	--	48 U	48 U	48 U	48 U	48 U	48 U	48 U	48 U
	07/25/2005	MW18072505	--	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
	01/24/2006	MW18012406	--	0.951 U	3.50	0.951 U	0.951 U	0.951 U	3.28	0.951 U	10.4	**1.83**
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/24/2007	MW18012407	--	0.954 U	1.44	1.15	0.954 U	0.954 U	1.15	0.954 U	0.954 U	**4.47**
	08/15/2007	MW18081507	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/18/2008	MW18011808	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
MW-21	08/08/2002	GW-131	390	--	0.53	51	15	0.49 U	26	1.4	45	**1400**
	05/06/2004	MW21-050604	150	--	0.48 U	15	5.3	0.48 U	11	0.67	48 U	**770**
	07/30/2004	MW21-073004	44	--	0.48 U	5.1	3.4	0.48 U	6.8	0.48 U	30	**90**
	10/26/2004	MW21-102604	2.4 U	--	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	5.5	4.8 U
	01/25/2005	MW21012505	--	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U
	07/25/2005	MW21072505	--	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
	01/25/2006	MW21012506	--	0.951 U	0.951 U	2.34	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**2.93**
	08/10/2006	MW21081006	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/25/2007	MW21012507	--	2.90	10.4	33.7	0.95 U	1.98	2.92	2.05	10.0	**19.5**
	08/16/2007	MW21081607	--	0.952 U	0.952 U	2.51	0.952 U	0.952 U	0.952 U	0.952 U	6.01	**3.98**
	01/22/2008	MW21012208	--	0.958 U	0.958 U	1.62	0.958 U	0.958 U	0.958 U	0.958 U	1.43	**1.93**
	08/19/2008	MW21081908	--	0.949 U	0.949 U	1.82	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**2.76**
	01/30/2009	MW21013009	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	08/12/2009	MW21081209	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/21/2010	MW21012110	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	08/17/2010	MW21081710	--	0.962 U	0.962 U	1.03	0.962 U	0.962 U	0.962 U	0.962 U	17.8	**2.47**
	01/21/2011	MW21012111	--	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	1.44 U
	08/30/2011	MW21083011	--	0.959 U	1.44	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	12.9	**7.79**
MW-23	08/06/2002	GW-124	7.5	--	0.49 U	6.4	0.78	0.49 U	0.49 U	0.49 U	0.49 U	**60**
	01/22/2004	MW23-012204	5.2	--	0.48 U	2.9	0.51	0.48 U	0.48 U	0.48 U	0.48 U	**46**
	05/03/2004	MW23-050304	5.4	--	0.48 U	3	0.53	0.48 U	0.48 U	0.48 U	0.48 U	**36**
	07/27/2004	MW23-072704	5.5	--	0.48 U	3.8	0.64	0.55	0.48 U	0.48 U	0.48 U	**42**
	10/19/2004	MW23-101904	4.9	--	0.48 U	1.5	0.52	0.48 U	0.48 U	0.48 U	0.48 U	**35 J**
	01/21/2005	MW23012105	--	2.41 J	0.19 UJ	4.2 J	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	**22.6 J**
	07/20/2005	MW23072105	--	1.61 J	0.192 UR	2.25 J	0.192 UR	0.192 UR	0.192 UR	0.192 UR	0.192 UR	**58.9 J**
	01/20/2006	MW23012006	--	0.95 U	0.95 U	3.58	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**15.7**
	08/07/2006	MW23080706	--	3.25	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	**75.5**
	01/23/2007	MW23012307	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**12.5**
	08/09/2007	MW23080907	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**5.35**
	01/15/2008	MW23011508	--	0.951 U	0.951 U	1.51	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**14.8**
	01/11/2010	MW23011110	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**10.7**
	08/30/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	08/12/2002	GW-141	13	--	0.48 U	0.49	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**61**
	01/27/2004	MW25-012704	29	--	0.48 U	1.4	0.71	0.48 U	0.48	0.48 U	1.3	**32**
	04/29/2004	MW25-042904	27	--	0.48 U	0.92	0.49	0.48 U	0.48 U	0.48 U	0.48 U	**89**
	08/06/2004	MW25-080604	28	--	0.48 U	1.2	0.58	0.48 U	0.52	0.48 U	0.67	**75**
	10/22/2004	MW25-102204	31	--	0.48 U	1.2	0.7	0.48 U	0.6	0.48 U	1	**63**
	01/26/2005	MW25012605	--	0.556	0.189 U	13.6	0.348	0.189 U	0.221	0.189 U	0.604	**34.4**

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	07/25/2005	MW25072605	--	0.191 U	0.191 U	23.9	0.31	0.191 U	0.504	0.191 U	0.191 U	**77.9**
	01/26/2006	MW25012606	--	0.949 U	0.949 U	22.3	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**54.2**
	08/09/2006	MW25080906	--	0.953 U	0.953 U	15.7	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	**26.2**
	01/26/2007	MW25012607	--	0.95 U	0.95 U	20.6	0.95 U	0.95 U	0.95 U	0.95 U	2.60	**43.2**
	08/17/2007	MW25081707	--	0.95 U	0.95 U	23.7	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**43.8**
	01/23/2008	MW25012308	--	0.952 U	0.952 U	15.3	0.952 U	0.952 U	0.952 U	0.952 U	2.41	**32.3**
	01/27/2010	MW25012710	--	0.949 U	0.949 U	5.44	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**13.3**
	08/31/2011	MW25083111	--	0.959 U	0.959 U	6.04	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	**15.2**
MW-26	01/26/2004	MW26-012604	4.8 U	--	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	9.5 U
	05/05/2004	MW26-050504	9.6 U	--	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	**19**
	07/29/2004	MW26-072904	48 U	--	48 U	48 U	48 U	48 U	48 U	48 U	48 U	48 U
	10/25/2004	MW26-102504	0.96 U	--	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	**2.9**
	01/24/2005	MW26012405	--	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
	07/25/2005	MW26072505	--	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
	01/24/2006	MW26012406	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/08/2006	MW26080806	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.51 U
	01/24/2007	MW26012407	--	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	1.44 U
	08/15/2007	MW26081507	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/18/2008	MW26011808	--	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	**3.45**
	08/15/2008	MW26081508	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U
	01/28/2009	MW26012809	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/18/2009	MW26081809	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/25/2010	MW26012510	--	0.951 U	0.951 U	0.951 U	4.75 U	0.951 U	4.75 U	4.75 U	0.951 U	**19.7**
	08/16/2010	MW26081610	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**1.88**
	01/20/2011	MW26012011	--	0.957 U	0.957 U	1.53	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	1.44 U
	08/30/2011	MW26083011	--	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	**2.59**
MW-27	01/26/2004	MW27-012604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U
	05/07/2004	MW27-050704	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	07/29/2004	MW27-072904	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	10/20/2004	MW27-102004	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 UJ
	01/21/2005	MW27012105	--	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U	1.89 U
	07/20/2005	MW27072205[a]	--	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.491
	01/23/2006	MW27012306	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/07/2006	MW27080706	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/24/2007	MW27012407	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/14/2007	MW27081407	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/17/2008	MW27011708	--	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	1.44 U
	01/22/2010	MW27012210	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
	08/29/2011	MW27082911	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
MW-38	08/07/2002	GW-135	39	--	0.49 U	1.6	0.82	0.49 U	4.4	2	0.49 U	**77**
dup	08/07/2002	GW-149	44	--	0.49 U	1.8	0.78	0.49 U	4.3	1.9	0.49 U	**68**
	01/27/2004	MW38-012704	26	--	0.48 U	1.6	0.8	0.48 U	3.1	1.5	0.48 U	**42**
dup	01/27/2004	MW38DUP-012704	24	--	0.48 U	1.6	0.82	0.48 U	3.2	1.4	0.48 U	**40**
	05/06/2004	MW38-050604	21	--	0.49 U	0.94	0.49 U	0.49 U	1.7	0.97	0.49 U	**7.1**
dup	05/06/2004	MW38-050604	20	--	0.48 U	0.78	0.48 U	0.48 U	1.6	0.94	0.48 U	**7.7**

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachloro-phenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	08/06/2004	MW38-080604	17	--	0.48 U	0.8	0.48 U	0.48 U	0.64	0.48 U	0.48 U	**25**
dup	08/06/2004	MW38-080604-Dup	17	--	0.48 U	0.78	0.48 U	0.48 U	0.63	0.48 U	0.48 U	**24**
	10/29/2004	MW38-102904	13	--	0.48 U	0.48 U	0.48 U	0.48 U	0.49	0.48 U	0.48 U	**22**
dup	10/29/2004	MW38-102904-Dup	15	--	0.48 U	0.48 U	0.48 U	0.48 U	0.54	0.48 U	0.48 U	**23**
	01/25/2005	MW38012505	--	0.189 U	0.189 U	5.18	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	**9.88**
dup	01/25/2005	MW38DUP012505	--	0.338	0.189 U	6.18	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	**10.2**
	07/25/2005	MW38072605	--	2.42	0.19 U	13.2	0.55	0.19 U	0.19 U	0.19 U	0.19 U	**39.1**
	01/26/2006	MW38012606	--	0.948 U	0.948 U	9.56	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**18.0**
dup	01/26/2006	MW38012606-Dup	--	0.95 U	0.95 U	8.94	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**17.9**
	08/10/2006	MW38081006	--	1.02 U	1.02 U	4.94	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	**7.40**
dup	08/10/2006	MW38081006-Dup	--	1 U	1 U	5.73	1 U	1 U	1 U	1 U	1 U	**9.23**
	01/25/2007	MW38012507	--	5.78	0.95 U	1.50	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**16.1**
dup	01/25/2007	MW38012507-Dup	--	5.35	0.953 U	1.34	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	**16.1**
	08/16/2007	MW38081607	--	0.953 U	0.953 U	6.11	0.953 U	0.953 U	0.953 U	0.953 U	1.39	**4.13**
dup	08/16/2007	MW38081607-Dup	--	0.95 U	0.95 U	5.07	0.95 U	0.95 U	0.95 U	0.95 U	1.16	**2.84**
	01/23/2008	MW38012308	--	1.06	0.954 U	7.07	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	**9.42**
dup	01/23/2008	MW38012308-Dup	--	0.971	0.952 U	7.10	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**9.85**
	08/21/2008	MW38082108	--	6.19	0.952 U	4.38	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**16.7**
dup	08/21/2008	MW38082108-Dup	--	4.94	0.952 U	2.38	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**10.2**
	02/02/2009	MW38020209	--	0.948 U	0.948 U	5.27	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**8.91**
dup	02/02/2009	MW38020209-Dup	--	0.951 U	0.951 U	4.20	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**7.34**
	08/12/2009	MW38081209	--	1.54 U	1.54 U	2.86	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	**4.14**
dup	08/12/2009	MW38081209-Dup	--	0.943 U	0.943 U	3.13	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	**6.27**
	01/21/2010	MW38012110	--	0.977	0.949 U	2.69	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**6.34**
dup	01/21/2010	MW38012110-Dup	--	1.22	0.952 U	2.95	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**6.81**
	08/17/2010	MW38081710	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**2.39**
dup	08/17/2010	MW38081710-Dup	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**1.86**
	01/21/2011	MW38012111	--	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	1.43 U
	08/31/2011	MW38083111	--	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	**2.69**
dup	08/31/2011	MW38DUP083111	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	**2.69**
MW-39	08/07/2002	GW-136	0.49 U	--	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	**1.4**
	01/27/2004	MW39-012704	0.49 U	--	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.98 U
dup	01/27/2004	MW39DUP-012704	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	05/06/2004	MW39-050604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
dup	05/06/2004	MW39-050604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**3.3**
	08/06/2004	MW39-080604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
dup	08/06/2004	MW39-080604-Dup	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	10/29/2004	MW39-102904	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
dup	10/29/2004	MW39-102904-Dup	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	01/25/2005	MW39012505	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.506
dup	01/25/2005	MW39DUP012505	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.495
	07/25/2005	MW39072605	--	0.73	0.19 U	0.721	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**12.9**
dup	07/25/2005	MW39072605-Dup	--	1.32	0.211	0.783	0.92	0.189 U	0.189 U	0.189 U	0.189 U	**9.99**

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachloro-phenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	01/26/2006	MW39012606	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
dup	01/26/2006	MW39012606-Dup	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
dup	08/10/2006	MW39081006	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/10/2006	MW39081006-Dup	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/25/2007	MW39012507	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
dup	01/25/2007	MW39012507-Dup	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/16/2007	MW39081607	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
dup	08/16/2007	MW39081607-Dup	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/23/2008	MW39012308	--	2.75	0.952 U	11.1	0.952 U	0.952 U	0.952 U	0.952 U	2.91	**30.2**
dup	01/23/2008	MW39012308-Dup	--	2.99	0.951 U	14.0	0.951 U	0.951 U	0.951 U	0.951 U	3.74	**38.0**
	08/21/2008	MW39082108	--	0.947 U	0.947 U	1.92	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**2.06**
dup	08/21/2008	MW39082108-Dup	--	0.949 U	0.949 U	1.78	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**2.60**
	02/02/2009	MW39020209	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
dup	02/02/2009	MW39020209-Dup	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/12/2009	MW39081209	--	1.55 U	1.55 U	1.71	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	**3.49**
dup	08/12/2009	MW39081209-Dup	--	0.948 U	0.948 U	1.8	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**3.77**
	01/21/2010	MW39012110	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
dup	01/21/2010	MW39012110-Dup	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/17/2010	MW39081710	--	0.949 U	1.89	2.93	0.949 U	0.949 U	0.949 U	0.949 U	1.44	**8.91**
dup	08/17/2010	MW39081710-Dup	--	0.948 U	1.39	2.41	0.948 U	0.948 U	0.948 U	0.948 U	1.27	**7.09**
	01/21/2011	MW39012111	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/31/2011	MW39083111	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
dup	08/31/2011	MW39DUP083111	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
MW-48S	08/20/2008	MW48S082008	--	0.954 U	4.13	1.70	0.954 U	0.954 U	3.23	0.954 U	30.0	**2.44**
	10/08/2008	MW-48S100808	--	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	4.37	1.45 U
	02/02/2009	MW48S020209	--	0.949 U	0.949 U	1.30	0.949 U	0.949 U	0.949 U	0.949 U	3.05	**1.91**
	04/09/2009	MW48S040909	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/19/2009	MW48S081909	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**1.84**
	01/27/2010	MW48S012710	--	0.948 U	0.948 U	1.08	0.948 U	0.948 U	0.948 U	0.948 U	4.89	1.42 U
	08/17/2010	MW48S081710	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	2.19	1.43 U
	01/24/2011	MW48S012411	--	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	1.4	1.43 U
	08/31/2011	MW48S083111	--	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	2.9	**2.31**
MW-49D	08/19/2008	MW49D081908	--	67.0	24.7	196	0.955 U	0.955 U	11.5	0.955 U	46.5	**1130**
	10/03/2008	MW49D100308	--	87.7	22.4	228	0.958 U	1.51	11.5	0.958 U	86.4	**502**
	01/26/2009	MW49D012609	--	36.8	12.1	152	0.967 U	0.967 U	5.46	0.967 U	23.4	**1310**
	04/06/2009	MW49D040609	--	28.6	0.978 U	201	4.46	2.33	0.978 U	**16.3**	22.4	**531**
	08/14/2009	MW49D081409	--	23.8	23.6	217	0.965 U	3.2	0.965 U	**4.66**	26	**239**
	01/12/2010	MW49D011210	--	213	44.2	28.8	0.967 U	2.92	5.69	0.967 U	35.0	**461**
	08/11/2010	MW49D081110	--	0.973 U	2.95	9.28	0.973 U	0.973 U	0.973 U	0.973 U	6.37	**10.9**
	01/13/2011	MW49D011311	--	0.966 U	4.36	1.25	0.966 U	0.966 U	0.966 U	0.966 U	3.68	1.45 U
	08/23/2011	MW49D082311	--	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	1.47 U

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachloro-phenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
MW-50S	08/19/2008	MW50S081908	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	**4.99**
	10/08/2008	MW-50S100808	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/30/2009	MW50S013009	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
	04/09/2009	MW50S040909	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/19/2009	MW50S081909	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/26/2010	MW50S012610	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	**6.37**
	08/16/2010	MW50S081610	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/21/2011	MW50S012111	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	08/30/2011	MW50S083011	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
MW-51D	08/12/2008	MW51D081208	--	3.20	0.948 U	11.4	0.948 U	0.948 U	0.948 U	0.948 U	19.8	**121**
	10/06/2008	MW-51D100608	--	1.17	0.951 U	5.25	0.951 U	0.951 U	1.43	0.951 U	46.0	**41.4**
	01/26/2009	MW51D012609	--	4.50	0.95 U	13.8	0.95 U	0.95 U	3.02	0.95 U	20.0	**105**
	04/06/2009	MW51D040609	--	1.50	0.945 U	7.69	0.945 U	0.945 U	0.945 U	0.945 U	20.0	**92.2**
	08/05/2009	MW51D080509	--	3.07	0.951 U	3.41	0.951 U	0.951 U	0.951 U	0.951 U	3.11	**80.1**
	01/13/2010	MW51D011310	--	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	**95.8**
	08/12/2010	MW51D081210	--	1.90	0.955 U	4.79	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	**116**
	01/13/2011	MW51D011311	--	1.97	0.956 U	4.33	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	**109**
	08/24/2011	MW51D082411	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U
MW-52D	08/14/2008	MW52D081508	--	47.0	9.09	91.8	1 U	1 U	4.24	1 U	12.6	**949**
	10/07/2008	MW-52D100708	--	21.4	7.00	57.5	0.95 U	0.95 U	1.87	0.95 U	7.53	**352**
	01/30/2009	MW52D013009	--	12.7	3.01	58.1	0.953 U	0.953 U	1.31	0.953 U	9.08	**90.9**
	04/09/2009	MW52D040909	--	11.7	0.951 U	80.2	0.951 U	0.951 U	0.951 U	**4.46**	15.9	**220**
	08/18/2009	MW52D081809	--	13.7	6.93	34.3	0.954 U	0.954 U	1.97	0.954 U	6.94	**331**
	01/25/2010	MW52D012510	--	78.8	49.7	16.8	0.955 U	0.955 U	9.41	0.955 U	43.9	**211**
	08/16/2010	MW52D081610	--	0.961 U	4.39	10.5	0.961 U	0.961 U	0.961 U	0.961 U	11.4	**22.6**
	01/20/2011	MW52012011	--	1.05	2.73	9.85	0.956 U	0.956 U	1.05	0.956 U	13.6	**14**
	08/30/2011	MW52D083011	--	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	13.6	1.44 U
MW-53S	08/14/2008	MW53S081408	--	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	1.45 U
	10/07/2008	MW-53S100708	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/28/2009	MW53S012809		0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	04/10/2009	MW53S041009	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
	08/18/2009	MW53S081809	--	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	1.42 U
	01/20/2010	MW53S012010	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/16/2010	MW53S081610	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**3.90**
	01/18/2011	MW53S011811	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	08/11/2011	MW53S081111	--	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	1.44 U
MW-53D	08/14/2008	MW53D081408	--	61.4	10.8	138	0.951 U	0.951 U	7.92	0.951 U	7.78	**1450**
	10/07/2008	MW-53D100708	--	20.7	3.85	72.6	0.948 U	0.948 U	2.91	0.948 U	8.96	**329**
	01/28/2009	MW53D012809	--	36.1	6.90	129	0.949 U	1.41	5.28	3.40	9.87	**596**
	04/10/2009	MW53D041009	--	38.5	4.00	100	7.95	1.73	0.949 U	**6.89**	25.2	**406**
	08/17/2009	MW53D081709	--	28.5	15	107	0.948 U	4.71	5.79	**9.7**	19.2	**150**
	01/20/2010	MW53D012010	--	93.6	21.9	13.4	0.951 U	0.951 U	3.36	0.951 U	16.1	**254**

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachloro-phenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	08/16/2010	MW53D081610	--	1.76	4.12	19.4	0.951 U	1.28	1.34	0.951 U	18.3	**44.0**
	01/18/2011	MW53D011811	--	2.77	4.09	17.9	0.956 U	2.2	1.26	0.956 U	13.1	**30.3**
	08/11/2011	MW53D081111	--	0.954 U	0.954 U	1.17	0.954 U	0.954 U	0.954 U	0.954 U	27.8	**2.35**
MW-55S	08/20/2010	MW55S082010	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	01/14/2011	MW55S011411	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	**2.61**
	08/08/2011	MW55S080811	--	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	1.44 U
MW-55D	09/07/2010	MW55D090710	--	8.74	1.26	42.1	0.982 U	0.982 U	0.982 U	1.45	7.38	**632**
	01/14/2011	MW55D011411	--	12.4	0.998	30	0.951 U	0.951 U	2.16	0.951 U	3.44	**185**
	08/08/2011	MW55D080811	--	4.25	0.953 U	3.8	0.953 U	0.953 U	1.54	0.953 U	2.21	7.15 U
MW-57S	08/15/2008	MW57S081508	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	1.43 U
	10/06/2008	MW-57S100608	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	**2.84**
	01/27/2009	MW57S012709	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	**3.52**
	04/07/2009	MW57S040709	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/06/2009	MW57S080609	--	3.11	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	**12**
	01/13/2010	MW57S011310	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**1.87**
	08/12/2010	MW57S081210	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/14/2011	MW57S011411	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	**1.46**
	08/25/2011	MW57S082511	--	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	1.45 U
MW-57D	08/14/2008	MW57D081508	--	184	1.81	96.3	1 U	1 U	1.59	1 U	3.12	**8220**
	10/06/2008	MW-57D100608	--	120	2.64	88.5	0.961 U	0.961 U	3.68	0.961 U	55.0	**4800**
dup	10/06/2008	MW-57D100608-Dup	--	142	3.72	112	0.961 U	0.961 U	5.38	0.961 U	80.5	**4080**
	01/27/2009	MW57D012709	--	137	2.33	98.6	0.943 U	0.943 U	4.54	0.943 U	76.5	**3900**
dup	01/27/2009	MW57D012709-Dup	--	143	2.87	113	0.95 U	0.95 U	5.40	0.95 U	90.4	**4480**
	04/07/2009	MW57D040709	--	111	0.95 U	72.8	0.95 U	0.95 U	0.95 U	1.82	33.9	**3700**
dup	04/07/2009	MW57D040709-Dup	--	129	0.95 U	94.3	0.95 U	0.95 U	0.95 U	2.61	49.7	**3640**
	08/06/2009	MW57D080609	--	103	3.49	67.7	0.649 U	0.649 U	0.649 U	3.47	17.3	**2690**
	01/13/2010	MW57D011310	--	89.9	4.23	132	0.947 U	0.947 U	2.65	0.947 U	16.8	**3640**
dup	01/13/2010	MW57D011310-Dup	--	92.1	4.55	123	0.947 U	0.947 U	2.89	0.947 U	18.7	**3580**
	08/12/2010	MW57D081210	--	139	9.81	99.9	0.948 U	0.948 U	3.03	0.948 U	9.79	**4160**
dup	08/12/2010	MW57D081210-Dup	--	119	11.1	95.8	0.947 U	0.947 U	2.91	0.947 U	13.4	**3700**
	01/14/2011	MW57D011411	--	201	20.5	155	0.953 U	0.953 U	5.31	0.953 U	10.5	**4800**
dup	01/14/2011	MW57DDUP011411	--	189	15.4	146	0.951 U	0.951 U	4.11	0.951 U	7.54	**4480**
	08/25/2011	MW57D082511	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**1820**
dup	08/25/2011	MW57D082511-Dup	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	**2430**
MW-58D	08/13/2008	MW58D081308	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	10/08/2008	MW-58D100808	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/27/2009	MW58D012709	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	04/07/2009	MW58D040709	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	1.43 U
	08/06/2009	MW58D080609	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/14/2010	MW58D011410	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**5.33**
	08/12/2010	MW58D081210	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**2.73**
	01/19/2011	MW58D011911	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/26/2011	MW58D082611	--	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	1.44 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
EPA-5S	08/11/2008	EPA5S081108	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	10/02/2008	EPA5S100208	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	01/23/2009	EPA5S012309	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	04/03/2009	EPA5S040309	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/05/2009	EPA5S080509	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/08/2010	EPA5S010810	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
	08/11/2010	EPA5S081110	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/12/2011	EPA5S011211	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	08/09/2011	EPA5S080911	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
EPA-5D	08/11/2008	EPA5D081108	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**12.8**
	10/02/2008	EPA5D100208	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**6.42**
	01/23/2009	EPA5D012309	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**4.29**
	04/03/2009	EPA5D040309	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	**4.74**
	08/05/2009	EPA5D080509	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**9.44**
	01/08/2010	EPA5D010810	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U
	08/11/2010	EPA5D081110	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/12/2011	EPA5D011211	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/09/2011	EPA5D080911	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	1.43 U
EPA-6S	08/18/2008	EPA6S081808	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	10/07/2008	EPA-6S100708	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/29/2009	EPA6S012909	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	04/10/2009	EPA6S041009	--	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	1.42 U
	08/12/2009	EPA6S081209	--	1.56 U	1.56 U	1.56 U	1.56 U	1.56 U	1.56 U	1.56 U	1.56 U	2.34 U
	01/25/2010	EPA6S012510	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	**23.0**
	08/13/2010	EPA6S081310	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/19/2011	EPA6S011911	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U
	01/19/2011	EPA6SDUP011911	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	08/10/2011	EPA6S081011	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U
EPA-6D	08/18/2008	EPA6D081808	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	10/07/2008	EPA-6D100708	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/29/2009	EPA6D012909	--	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	1.42 U
	04/10/2009	EPA6D041009	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/12/2009	EPA6D081209	--	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	2.33 U
	01/25/2010	EPA6D012510	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/13/2010	EPA6D081310	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/19/2011	EPA6D011911	--	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	1.44 U
	08/10/2011	EPA6D081011	--	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	1.44 U
Carty Lake Monitoring Wells (UWBZ)												
MW-30	08/13/2002	GW-133	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
USDFW-1	10/24/2003	USDFW-1-102403	1.4	--	0.49 U	0.49 U	0.49 U	0.49 U	0.69	0.49 U	1.3	**4**
	05/04/2004	USDFW1-050404	1.3	--	0.48 U	0.75	0.48 U	0.48 U	0.48 U	0.48 U	0.7	**3.1**
	08/13/2004	USDFW1-081304	8.5	--	0.53 U	1.5	0.53 U	0.53 U	1.4	0.53 U	0.53 U	**26**
	10/25/2004	USDFW1-102504	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	01/28/2005	USDFW1012805	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachloro-phenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	07/28/2005	USDFW1072805	--	0.253	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	02/01/2006	USDFW1020106	--	0.965 U	0.965 U	1.72	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U	**5.67**
	08/11/2006	USDFW1081106	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/22/2007	USDFW1012207	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/27/2007	USDFW1082707	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	01/28/2008	USDFW1012808	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/21/2008	USDW1082108	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	02/03/2009	USDFW1020309	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	08/07/2009	USDFW1080709	--	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	1.41 U
	01/28/2010	USDFW1012810	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.52 U
	08/26/2010	USDFW1082610	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	01/26/2011	USDFW1012611	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	09/06/2011	USDFW1090611	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U
USDFW-2	10/24/2003	USDFW-2-102403	0.49 U	--	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
	05/04/2004	USDFW2-050404	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	08/13/2004	USDFW2-081304	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	10/25/2004	USDFW2-102504	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	01/28/2005	USDFW2012805	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U
	07/28/2005	USDFW2072805	--	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U	0.192 U
	02/01/2006	USDFW2020106	--	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	1.47 U
	08/11/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/22/2007	USDFW2012207	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/27/2007	USDFW2082707	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/28/2008	USDFW2012808	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
USDFW-3	10/24/2003	USDFW-3-102403	0.49 U	--	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
	05/04/2004	USDFW3-050404	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	08/13/2004	USDFW3-081304	0.49 U	--	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.97 U
	10/25/2004	USDFW3-102504	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	01/28/2005	USDFW3012805	--	0.195 U	0.195 U	0.195 U	0.195 U	0.195 U	0.195 U	0.195 U	0.195 U	0.195 U
	07/28/2005	USDFW3072805	--	0.195 U	0.195 U	0.195 U	0.195 U	0.195 U	0.195 U	0.195 U	0.195 U	0.195 U
	02/01/2006	USDFW3020106	--	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	1.46 U
	08/11/2006	USDFW3081106	--	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ	1.42 UJ
	01/22/2007	USDFW3012207	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/27/2007	USDFW3082707	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U
	01/28/2008	USDFW3012808	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	08/26/2010	USDFW1082610	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
RMW-2S	08/21/2008	RMW2S082108	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	10/09/2008	RMW2S100908	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	02/03/2009	RMW2S020309	--	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	1.42 U
	04/08/2009	RMW2S040809	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/07/2009	RMW2S080709	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	**7.06**
	01/28/2010	RMW2S012810	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/26/2010	RMW2S082610	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/26/2011	RMW2S012611	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	09/06/2011	RMW2S090611	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U

Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachloro-phenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
RMW-2D	08/21/2008	RMW2D082108	--	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	1.44 U
	10/09/2008	RMW2D100908	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**5.89**
	02/03/2009	RMW2D020309	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	04/08/2009	RMW2D040809	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	**3.93**
	08/07/2009	RMW2D080709	--	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	**7.26**
	01/28/2010	RMW2D012810	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/26/2010	RMW2D082610	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	**3.53**
	01/26/2011	RMW2D012611	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**1.74**
	09/06/2011	RMW2D090611	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**3.04**
LWBZ: Cells 1 and 2 and Carty Lake												
Cell 1 (LWBZ)												
MW-40	08/08/2002	GW-151	29	--	0.48 U	18	1.3	0.48 U	0.91	0.48 U	0.98	**700**
	01/23/2004	MW40-012304	16	--	0.48 U	4.7	1.3	0.48 U	1.7	0.48 U	2.5	**860**
	04/30/2004	MW40-043004	15	--	0.48 U	3.2	1.4	0.48 U	1.6	0.48 U	3.9	**240**
	08/11/2004	MW40-081104	15	--	0.48 U	3.3	1.5	0.48 U	1.6	0.48 U	9.7	**850**
	10/29/2004	MW40-102904	6.5	--	0.48 U	3.1	1.2	0.48 U	1.2	0.48 U	20	**1100**
	01/27/2005	MW40012705	--	1.68	0.189 U	2.73	0.67	0.189 U	0.468	0.189 U	5.68	**573**
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW40012706	--	5.18	1.39	7.30	0.951 U	0.951 U	1.70	1.25	0.951 U	**385**
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/28/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW40020209	--	5.76	0.990	22.8	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**79.7**
	08/19/2009	MW40081909	--	2.4	0.954 U	28.9	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	**138**
	01/29/2010	MW40012910	--	0.952 U	0.952 U	22.6	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**184**
	08/25/2010	MW40082510	--	3.40	1.47	55.8	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	**159**
	01/24/2011	MW40012411	--	3.01	1.24	40.4	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	**102**
	09/02/2011	MW40090211	--	0.979	0.96 U	41.8	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	**95.3**
MW-41	08/12/2002	GW-148	1.9	--	0.48 U	0.58	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**99**
	01/29/2004	MW41-012904	1.6	--	0.48 U	1.7	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**370**
	04/29/2004	MW41-042904	1.2	--	0.48 U	2.1	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**570**
	08/12/2004	MW41-081204	1.3	--	0.48 U	1.5	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**340**
	11/08/2004	MW41-110804	1.3	--	0.24 U	2.1	0.24 U	0.24 U	0.24 U	0.24 U	0.28 U	**550**
	01/27/2005	MW41012705	--	0.894	0.189 U	0.497	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	**175**
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/2006	MW41013006	--	4.50	0.947 U	6.92	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**698**
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/28/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachloro-phenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
Cell 2 (LWBZ)												
MW-22	08/08/2002	GW-143	74	--	0.49 U	17	2.5	0.49 U	4.4	0.49 U	1.6	**430**
	01/23/2004	MW22-012304	13	--	0.49 U	13	11	0.84	19	1.5	54	**52**
	04/28/2004	MW22-042804	61	--	0.48 U	29	9	0.48 U	14	1.7	19	**360**
	08/06/2004	MW22-080604	67	--	0.48 U	41	8.4	0.48 U	8.6	1.6	1.8	**540**
	10/26/2004	MW22-102604	62	--	0.48 U	23	4.7	0.48 U	8.1	1.1	0.67	**410**
	01/25/2005	MW22012505	--	4.5	0.189 U	26.3	1.13	0.189 U	3.69	0.189 U	0.189 U	**178**
	08/03/2005	MW22080305	--	0.19 U	0.19 U	53.9	0.798	0.19 U	3.7	0.507	0.19 U	**629**
	01/25/2006	MW22012506	--	6.12	1.40	47.2	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**144**
	08/10/2006	MW22081006	--	7.06	2.56	34.0	0.954 U	0.954 U	3.40	0.954 U	1.81	**114**
	01/25/2007	MW22012507	--	9.15	0.990	29.7	0.951 U	0.951 U	3.38	0.951 U	3.44	**307**
	08/16/2007	MW22081607	--	4.02	0.953 U	19.0	0.953 U	0.953 U	2.41	0.953 U	0.953 U	**110**
	01/22/2008	MW22012208	--	4.48	0.955 U	22.0	0.955 U	0.955 U	1.60	0.955 U	0.955 U	**339**
MW-33	08/07/2002	GW-122	4.9	--	0.48 U	2.1	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**120**
	01/21/2004	MW33-012104	11	--	0.48 U	2.9	0.48 U	0.48 U	0.48	0.48 U	0.48 U	**200**
	04/27/2004	MW33-042704	12	--	0.48 U	3.2	0.48 U	0.48 U	0.67	0.48 U	0.48 U	**320**
	07/28/2004	MW33-072804	12	--	0.48 U	2.5	0.48 U	0.48 U	0.84	0.48 U	0.48 U	**250**
	10/19/2004	MW33-101904	12	--	0.48 U	1.4	0.48 U	0.48 U	0.78	0.48 U	0.48 U	**200 J**
	01/20/2005	MW33012005	--	2.44	0.189 U	10.2	0.189 U	0.189 U	0.665	0.189 U	0.189 U	**121**
	07/20/2005	MW33072005	--	0.189 UR	0.189 UR	0.516 J	0.189 UR	0.189 UR	0.189 UR	0.189 UR	0.189 UR	**1.83 J**
	01/20/2006	MW33012006	--	4.46	0.951 U	4.19	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**192**
	08/04/2006	MW33080406	--	5.00	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**136**
	01/19/2007	MW33011907	--	2.43	0.951 U	2.27	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**63.9**
	08/09/2007	MW33080907	--	1.94	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**80.9**
	01/15/2008	MW33011508	--	3.28	0.952 U	2.83	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**163**
	08/11/2008	MW33081108	--	4.44	0.949 U	1.70	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**248**
	01/11/2010	MW33011110	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	**94.7**
	08/09/2011	MW33080911	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**37.3**
MW-34	08/08/2002	GW-144	1.8	--	0.49 U	4.6	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	**410**
	01/21/2004	MW34-012104	2.2	--	0.48 U	3.7	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**610**
	04/27/2004	MW34-042704	1.9	--	0.48 U	3.5	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**640**
	07/29/2004	MW34-072904	2.7	--	0.48 U	3.2	0.48 U	0.48 U	0.48 U	0.48 U	0.77	**740**
	10/20/2004	MW34-102004	3.1	--	0.48 U	3.5	0.48 U	0.48 U	0.48 U	0.48 U	0.64	**610 J**
	01/21/2005	MW34012105	--	2.19	0.189 U	2.21	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	**207**
	07/20/2005	MW34072105	--	2.72	0.19 U	1.59	0.19 U	0.19 U	0.19 U	0.19 U	0.873	**707**
	01/23/2006	MW34012306	--	1.99	0.948 U	3.06	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**702**
	08/07/2006	MW34080706	--	1.83	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**626**
	01/18/2007	MW34011807	--	1.17	0.952 U	2.30	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**354**
	08/10/2007	MW34081007	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**147**
	01/16/2008	MW34011608	--	2.62	0.952 U	3.13	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**466**
MW-35	08/13/2002	GW-145	67	--	0.48 U	23	1.9	0.48 U	2.3	0.48 U	6.1	**1100**
dup	08/13/2002	GW-150	71	--	0.49 U	23	1.9	0.49 U	2.4	0.49 U	4.8	**1300**
	01/21/2004	MW35-012104	120	--	0.48 U	45	2.1	0.55	3.2	0.48 U	21	**5800**
	04/28/2004	MW35-042804	120	--	0.48 U	50	2.1	0.48 U	3.2	0.48 U	18	**4000**
	07/30/2004	MW35-073004	99	--	0.48 U	36	2.1	0.48 U	3.3	0.48 U	20	**2800**

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	10/25/2004	MW35-102504	100	--	0.96 U	46	2.2	0.96 U	3.3	0.96 U	26	**2700**
	01/24/2005	MW35012405	--	Broken	Broken	Broken	Broken	Broken	Broken	Broken	Broken	Broken
	07/20/2005	MW35072205[a]	--	50.5 J	0.19 UR	124 J	0.19 UR	0.19 UR	3.93 J	0.929 J	21.6 J	**6540 J**
	01/24/2006	MW35012406	--	58.8	3.29	61.1	0.948 U	0.948 U	0.948 U	0.948 U	14.4	**1750**
	08/08/2006	MW35080806	--	73.9	2.79	1.02 U	3.19	1.02 U	3.80	1.02 U	30.9	**1620**
	01/24/2007	MW35012407	--	67.8	2.71	68.7	0.948 U	0.948 U	2.12	0.948 U	17.2	**1660**
	08/14/2007	MW35081407	--	44.9	2.33	48.7	0.947 U	0.947 U	2.03	0.947 U	24.6	**600**
	01/18/2008	MW35011808	--	93.8	3.09	0.956 U	0.956 U	0.956 U	1.81	0.956 U	20.3	**1860**
	08/14/2008	MW35081408	--	93.4	3.08	40.1	0.951 U	0.951 U	2.46	0.951 U	9.26	**2950**
	01/30/2009	MW35013009		58.2	2.44	44.1	0.949 U	0.949 U	1.80	0.949 U	7.17	**1230**
	08/18/2009	MW35081809	--	58.8	1.44	19.8	0.949 U	0.949 U	1.89	0.949 U	2.18	**2710**
	01/22/2010	MW35012210	--	77.5	0.951 U	88.9	0.951 U	0.951 U	4.81	0.951 U	40.4	**1990**
	08/16/2010	MW35081610	--	33.4	1.21	36.6	0.949 U	0.949 U	1.67	0.949 U	10.5	**1270**
	01/20/2011	MW35012011	--	50.4	2.88	70.3	0.953 U	0.953 U	10.2	0.953 U	45.7	**1200**
	08/29/2011	MW35082911	--	39.7	1.63	32.5	0.956 U	0.956 U	2.05	0.956 U	9.27	**1110**
MW-36	08/07/2002	GW-146	12	--	0.49 U	3.8	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	**120**
	01/26/2004	MW36-012604	37	--	0.48 U	5.3	0.94	0.48 U	2.1	0.48 U	3.2	**69**
	04/28/2004	MW36-042804	16	--	0.48 U	5	0.67	0.48 U	2.4	0.48 U	0.48 U	**350**
	07/30/2004	MW36-073004	13	--	0.48 U	2.8	0.6	0.48 U	2.3	0.48 U	0.48 U	**230**
	10/26/2004	MW36-102604	11	--	0.48 U	3.7	0.48 U	0.48 U	1.6	0.48 U	0.48 U	**120**
	01/25/2005	MW36012505	--	1.69	0.189 U	6.6	0.37	0.189 U	1	0.189 U	0.189 U	**155**
	07/25/2005	MW36072705	--	0.19 U	1.4	15.7	0.388	0.19 U	0.19 U	0.19 U	0.19 U	**245**
	01/25/2006	MW36012506	--	1.92	0.95 U	7.72	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**85.2**
	08/08/2006	MW36080806	--	1.61	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**76.9**
	01/24/2007	MW36012407	--	1.58	0.948 U	6.99	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**105**
	08/15/2007	MW36081507	--	0.951 U	0.951 U	2.95	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**59.3**
	01/22/2008	MW36012208	--	1.43	0.953 U	4.39	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	**99.5**
	08/19/2008	MW36081908	--	1.20	0.951 U	6.63	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**114**
	01/30/2009	MW36013009	--	0.947 U	0.947 U	2.92	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**52.3**
	08/19/2009	MW36081909	--	2.71	0.946 U	6.4	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	**107**
	01/26/2010	MW36012610	--	0.947 U	0.947 U	4.77	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**61.4**
	08/16/2010	MW36081610	--	1.72	0.957 U	6.28	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	**109**
	01/21/2011	MW36012111	--	2.37	0.955 U	8.23	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	**94.7**
	08/30/2011	MW36083011	--	2.4	0.954 U	7.06	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	**102**
MW-37	08/12/2002	GW-147	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**4**
	01/27/2004	MW37-012704	0.7	--	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	**32**
	04/29/2004	MW37-042904	0.68	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**23**
	08/06/2004	MW37-080604	0.65	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**23**
	10/22/2004	MW37-102204	0.58	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**21**
	01/26/2005	MW37012605	--	0.189 U	0.189 U	0.222	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	**6.15**
	07/25/2005	MW37072605	--	0.19 U	0.19 U	0.567	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**20.8**
	01/26/2006	MW37012606	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**9.21**
	08/09/2006	MW37080906	--	0.952 U	0.952 U	1.21	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**25.7**
	01/26/2007	MW370120607	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**12.8**

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	08/17/2007	MW37081707	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**5.61**
	01/23/2008	MW37012308	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	**5.98**
	08/20/2008	MW37082008	--	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	**18.4**
	01/27/2010	MW37012710	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**1.63**
	08/31/2011	MW37083111	--	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	**8.15**
MW-54	08/12/2008	MW54081208	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	12.2	**50.5**
	10/06/2008	MW-54100608	--	0.956 U	0.956 U	1.90	0.956 U	0.956 U	0.956 U	0.956 U	10.2	**35.5**
	01/26/2009	MW54012609	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	4.28	**37.0**
	04/06/2009	MW54040609	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.25	**49.3**
	08/05/2009	MW54080509	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	**58.5**
	01/13/2010	MW54011310	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	**40.2**
	08/12/2010	MW54081210	--	0.947 U	0.947 U	1.27	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**74.2**
	01/13/2011	MW54011311	--	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	**63.7**
	08/24/2011	MW54082411	--	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	1.43 U
MW-55	08/14/2008	MW55081408	--	9.32	0.955 U	12.5	0.955 U	0.955 U	1.31	0.955 U	0.955 U	**828**
	10/03/2008	MW55100308	--	6.61	0.954 U	13.8	0.954 U	0.954 U	1.34	0.954 U	2.49	**448**
	01/27/2009	MW55012709		6.11	0.946 U	24.5	0.946 U	0.946 U	2.40	0.946 U	26.0	**485**
	04/07/2009	MW55040709	--	5.10	0.951 U	19.7	0.951 U	0.951 U	0.951 U	0.951 U	16.9	**410**
	08/06/2009	MW55080609	--	3.89	0.948 U	6.99	0.948 U	0.948 U	0.948 U	0.948 U	9.31	**418**
	01/14/2010	MW55011410	--	7.04	0.951 U	4.93	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**293**
	08/12/2010	MW55081210	--	7.66	0.949 U	16.1	0.949 U	0.949 U	1.13	0.949 U	0.949 U	**632**
	01/14/2011	MW55011411	--	8.91	0.957 U	19.4	0.957 U	0.957 U	1.23	0.957 U	0.957 U	**544**
	08/08/2011	MW55080811	--	4.9	0.951 U	3.79	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	7.13 U
MW-56	08/21/2008	MW56082108	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**23.1**
	10/08/2008	MW-56100808	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	**18.7**
	01/27/2009	MW56012709	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	**26.9**
	04/07/2009	MW56040709	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**27.6**
	08/06/2009	MW56080609	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**33.2**
	01/14/2010	MW56011410	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**10.1**
	08/12/2010	MW56081210	--	0.951 U	0.951 U	1.06	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**31.9**
	01/19/2011	MW56011911	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**23.3**
	08/26/2011	MW56082611	--	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	**26.1**
MW-59	08/19/2008	MW59081908	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	3.41	**13.4**
	10/06/2008	MW-59100608	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	4.49	**4.86**
	01/29/2009	MW59012909	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**3.95**
	04/09/2009	MW59040909	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**10.9**
	08/17/2009	MW59081709	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	01/21/2010	MW59012110	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/13/2010	MW59081310	--	0.946 U	0.946 U	1.60	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	**18.0**
	01/20/2011	MW59012011	--	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	**2.19**
	08/29/2011	MW59082911	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	**5.09**
MW-62	09/08/2010	MW62090810	--	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	**22.4**
	01/14/2011	MW62011411	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**10.7**
	08/25/2011	MW62082511	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol (PCP)
MTCA Method B Groundwater Cleanup Level			NV	480	NV	NV	NV	NV	800	4	NV	0.73
Carty Lake Monitoring Well (LWBZ)												
MW-60	09/03/2008	MW60090308	--	1.09	0.948 U	3.06	0.948 U	0.948 U	0.948 U	0.948 U	2.70	**94.5**
	10/09/2008	MW601000908	--	0.951 U	0.951 U	3.87	0.951 U	0.951 U	0.951 U	0.951 U	11.6	**68.9**
	02/03/2009	MW60020309	--	0.951 U	0.951 U	3.03	0.951 U	0.951 U	0.951 U	0.951 U	3.33	**51.0**
	04/08/2009	MW60040809	--	0.992	0.945 U	3.14	0.945 U	0.945 U	0.945 U	0.945 U	3.77	**91.2**
	08/07/2009	MW60080709	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**57.5**
	01/28/2010	MW60012810	--	0.948 U	0.948 U	3.35	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**70.2**
	08/25/2010	MW60082510	--	0.95 U	0.95 U	2.57	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**72.2**
	01/24/2011	MW60012411	--	0.951 U	1.09	3.95	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**80.4**
	09/06/2011	MW60090611	--	2.5	0.951 U	1.72	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**94.4**
MW-61	09/03/2010	MW61090310	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.51 U
	01/24/2011	MW61012411	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	09/02/2011	MW61090211	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
UWBZ: Cell 1													
Cell 1 (UWBZ)													
MW-7	08/12/2002	GW-125	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/26/2004	MW7-012604	0.10 U	0.10 U	0.10 U	0.10 U	--	0.10 U	0.10 U	0.10 U	ND	1.6	--
	05/06/2004	MW7-050604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	08/09/2004	MW7-080904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/27/2004	MW7-102704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/26/2005	MW7012605	0.427	0.19 U	--	--	0.95 U	0.443	0.19 U	0.19 U	**0.21**	**66.2**	74.7
	07/25/2005	MW7072705	0.239	**0.0433**	--	--	0.119	0.216	0.019 U	0.019 U	**0.083**	2.22	0.285 U
	01/27/2006	MW7012706	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	9.09	9.69
	08/10/2006	MW7081006	0.958 U	0.958 U	0.958 U	0.958 U	--	0.958 U	0.958 U	0.958 U	ND	18.8	17.7
	01/25/2007	MW7012507	0.967 U	0.967 U	0.967 U	0.967 U	--	0.967 U	0.967 U	0.967 U	ND	6.91	5.00
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/05/2008	MW7090508	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	**32.4**	15.2
	02/04/2009	MW7020409	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	1.84	0.952 U
	08/19/2009	MW7081909	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
	01/26/2010	MW7012610	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/24/2010	MW7082410	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/25/2011	MW7012511	0.958 U	0.958 U	0.958 U	0.958 U	--	0.958 U	0.958 U	0.958 U	ND	0.958 U	0.958 U
	09/01/2011	MW7090111	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	0.957 U	0.957 U
MW-8S	08/13/2002	GW-126	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	4	--
MW-42	08/12/2002	GW-137	0.97 U	0.97 U	0.97 U	0.97 U	--	0.97 U	0.97 U	0.97 U	ND	**87**	--
	01/23/2004	MW42-012304	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	**87**	--
	04/30/2004	MW42-043004	0.47	0.096 U	0.1	0.096 U	--	0.35	0.096 U	0.096 U	**0.12**	**140**	--
	08/10/2004	MW42-081004	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	**150**	--
	10/27/2004	MW42-102704	0.48 U	0.48 U	0.48 U	0.48 U	--	0.48 U	0.48 U	0.48 U	ND	**110**	--
	01/26/2005	MW42012605	0.191 U	0.191 U	--	--	0.957 U	0.191 U	0.191 U	0.191 U	ND	26.6	59.7
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW42012706	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	23.2	40.2
	08/10/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-43	08/12/2002	GW-138	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	**120**	--
	01/23/2004	MW43-012304	1.2	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	**0.79**	**190**	--
	04/30/2004	MW43-043004	1	**0.26**	0.41	0.14	--	0.69	0.096 U	0.096 U	**0.43**	**200**	--
	08/11/2004	MW43-081104	3.4	**1.2**	1.8	0.96 U	--	2.6	0.96 U	0.96 U	**1.9**	**140**	--
	10/27/2004	MW43-102704	1.2	0.48 U	0.48 U	0.48 U	--	0.78	0.48 U	0.48 U	**0.46**	**49**	--
	01/27/2005	MW43012705	0.189 U	0.189 U	--	--	0.947 U	0.189 U	0.189 U	0.189 U	ND	12.8	23.6
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW43012706	1.66	0.955 U	0.955 U	0.955 U	--	1.06	0.955 U	0.955 U	**0.845**	**75.1**	114
	08/10/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-44	08/13/2002	GW-139	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	**69**	--
	01/23/2004	MW44-012304	170	**54**	56	60	--	160	4.1	18	**86.4**	**870**	--
	04/29/2004	MW44-042904	16	**5.7**	8.9	3.2	--	16	0.96 U	2.1	**8.9**	**140**	--
	08/11/2004	MW44-081104	260	**78**	110	49	--	260	9.6 U	26	**126**	**1100**	--
	10/29/2004	MW44-102904	890	**290**	400	190	--	760	51	100	**461**	**5300**	--
	01/27/2005	MW44012705	1.92 U	1.92 U	--	--	9.61 U	1.92 U	1.92 U	1.92 U	ND	**239**	287
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW44012706	1.98	0.951 U	0.951 U	0.951 U	--	1.97	0.951 U	0.951 U	**0.883**	**73.5**	97.5
	08/10/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/01/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW44020209	244	**67.3**	153	29.7	--	209	12.1	22.6	**127**	**271**	71.1
	08/19/2009	MW44081909	14.7	0.972 U	5.89	2.02	--	16.7	0.972 U	0.972 U	**3.01**	**50.6**	26.8
	01/29/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/2010	MW44082510	12.2	**1.27**	5.84	1.55	--	15.8	0.963 U	0.963 U	**3.39**	3.59	1.49
	01/24/2011	MW44012411	1.06	0.961 U	0.961 U	0.961 U	--	1.26	0.961 U	0.961 U	**0.7913**	0.961 U	0.961 U
	09/02/2011	MW44090211	21.2	**3.04**	13.9	5.13	--	25.3	0.961 U	1.41	**7.50505**	1.6	0.961 U
Cell 2 (UWBZ)													
E-4	07/12/2007	E4-21071207	5.03	0.968 U	2.34	0.968 U	--	4.83	0.968 U	0.968 U	**1.41**	22.8	9.19
	09/13/2007	E4-23091307	14.0	**2.01**	4.02	3.90	--	15.5	0.976 U	0.976 U	**4.45**	**41.4**	27.8
	02/12/2008	E4021208	3.49	0.963 U	1.18	0.963 U	--	3.54	0.963 U	0.963 U	**1.13**	23.0	21.3
	08/22/2008	E4082208	0.961 U	0.961 U	0.961 U	0.961 U	--	0.961 U	0.961 U	0.961 U	ND	1.18	0.961 U
	01/13/2009	E4011309	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	2.17	1.04
EPA-4S	09/03/2008	EPA4S090308	0.958 U	0.958 U	0.958 U	0.958 U	--	0.958 U	0.958 U	0.958 U	ND	0.958 U	0.958 U
	10/02/2008	EPA4S100208	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	02/10/2009	EPA4S021009	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	1.01 U
	04/16/2009	EPA4S041609	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/13/2009	EPA4S081309	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	01/29/2010	EPA4S012910	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	08/24/2010	EPA4S082410	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	01/25/2011	EPA4S012511	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	09/01/2011	EPA4S090111	0.962 U	0.962 U	0.962 U	0.962 U	--	0.962 U	0.962 U	0.962 U	ND	0.962 U	0.962 U
EPA-4D	09/03/2008	EPA4D090308	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
	10/02/2008	EPA4D100208	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
	02/10/2009	EPA4D021009	0.999 U	0.999 U	0.999 U	0.999 U	--	0.999 U	0.999 U	0.999 U	ND	0.999 U	0.999 U
	04/16/2009	EPA4D041609	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
	08/13/2009	EPA4D081309	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	01/29/2010	EPA4D012910	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/24/2010	EPA4D082410	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
	01/25/2011	EPA4D012511	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
	09/01/2011	EPA4D090111	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U
MW-4	05/07/2004	MW4-050704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1.1	--
	07/29/2004	MW4-072904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.57	--
	10/22/2004	MW4-102204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1.7	--
	01/24/2005	MW4012405	0.0192 U	0.0192 U	--	--	0.096 U	0.0192 U	0.0192 U	0.0192 U	ND	1.1	0.288 U
	07/20/2005	MW4072205	0.0189 U	0.0189 U	--	--	0.0947 U	0.0189 U	0.0189 U	0.0189 U	ND	0.194	23.4
	01/23/2006	MW4012306	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	20.7
	08/08/2006	MW4080806	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	12.7
	01/24/2007	MW4012407	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	36.4
	08/14/2007	MW4081407	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	30.2
	01/17/2008	MW4011708	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	27.9
	08/13/2008	MW4081308	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	14.5
	01/29/2009	MW4012909	0.944 U	0.944 U	0.944 U	0.944 U	--	0.944 U	0.944 U	0.944 U	ND	0.944 U	16.4
	08/18/2009	MW4081809	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	16.5
	01/19/2010	MW4011910	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	21.9
	08/13/2010	MW4081310	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	22.4
	01/20/2011	MW4012011	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	40
	08/26/2011	MW4082611	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	16.4
MW-5	01/26/2004	MW5-012604	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	ND	0.095 U	--
	05/07/2004	MW5-050704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	07/29/2004	MW5-072904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/22/2004	MW5-102204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/24/2005	MW5012405	0.189 U	0.189 U	--	--	0.945 U	0.189 U	0.189 U	0.189 U	ND	1.89 U	--
	07/20/2005	MW5072205	0.0191 U	0.0191 U	--	--	0.0956 U	0.0191 U	0.0191 U	0.0191 U	ND	0.191 U	11.3
	01/24/2006	MW5012406	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	7.31
	08/08/2006	MW5080806	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	5.09
	01/24/2007	MW5012407	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	4.42
	08/14/2007	MW5081407	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	4.54
	01/17/2008	MW5011708	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	5.75
	08/13/2008	MW5081308	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	6.90
	01/29/2009	MW5012909	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	6.07
	08/18/2009	MW5081809	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	5.09
	01/22/2010	MW5012210	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	2.04
	08/13/2010	MW5081310	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	01/20/2011	MW5012011	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	08/26/2011	MW5082611	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
PZ-06	01/23/2007	PZ06012307	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/13/2007	PZ06081307	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	01/16/2008	PZ06011608	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	08/12/2008	PZ06081208	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/26/2009	PZ06012609	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	08/05/2009	PZ06080509	1.13	**1.04**	0.949 U	1.2	--	1.14	1.05	1.02	**1.54**	0.949 U	0.958
	01/13/2010	PZ06011310	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
	08/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/2011	PZ06011311	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	08/24/2011	PZ06082411	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
MW-10	08/06/2002	GW-121	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 U	0.1 U	ND	0.1 U	--
	01/23/2007	MW10012307	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	08/14/2007	MW10081407	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	01/17/2008	MW10011708	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
MW-13	08/08/2002	GW-127	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.097 U	--
	01/26/2004	MW13-012604	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	ND	0.095 U	--
	05/05/2004	MW13-050504	0.10 U	0.10 U	0.10 U	0.10 U	--	0.10 U	0.10 U	0.10 U	ND	0.10 U	--
	07/28/2004	MW13-072804	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/20/2004	MW13-102004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	4.2	--
	01/21/2005	MW13012105	0.019 U	0.019 U	--	--	0.095 U	0.019 U	0.019 U	0.019 U	ND	0.535	0.538
	07/20/2005	MW13072105	0.0191 U	0.0191 U	--	--	0.0953 U	0.0191 U	0.0191 U	0.0191 U	ND	0.191 U	0.286 U
	01/23/2006	MW13012306	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	08/07/2006	MW13080706	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/23/2007	MW13012307	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	08/09/2007	MW13080907	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	01/15/2008	MW13011508	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
	08/11/2008	MW13081108	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	01/23/2009	MW13012309	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	**61.7**	166
	08/14/2009	MW13081409	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	23	49.4
	01/11/2010	MW13011110	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	**47.9**	103
	08/11/2010	MW13081110	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	**35.2**	40.6
	01/12/2011	MW13011211	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	21.2	31.7
	08/23/2011	MW13082311	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
MW-14	08/08/2002	GW-128	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/22/2004	MW14-012204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	05/04/2004	MW14-050404	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	07/28/2004	MW14-072804	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/20/2004	MW14-102004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/21/2005	MW14012105	0.0191 U	0.0191 U	--	--	0.0954 U	0.0191 U	0.0191 U	0.0191 U	ND	0.191 U	0.286 U
	07/20/2005	MW14072105	0.019 U	0.019 U	--	--	0.0949 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U
	01/23/2006	MW14012306	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	08/07/2006	MW14080706	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/23/2007	MW14012307	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/13/2007	MW14081307	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	01/16/2008	MW14011608	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
MW-15	08/08/2002	GW-140	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	15	--
	01/21/2004	MW15-012104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	15	--
	05/05/2004	MW15-050504	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	21	--
	07/28/2004	MW15-072804	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	11	--
	10/20/2004	MW15-102004	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	26	--
	01/21/2005	MW15012105	0.0192 U	0.0192 U	--	--	0.0962 U	0.0192 U	0.0192 U	0.0192 U	ND	21.1	1.92
	07/20/2005	MW15072205	0.192 UR	0.192 UR	--	--	0.958 UR	0.192 UR	0.192 UR	0.192 UR	ND	21.5 J	3.5 J

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
	01/23/2006	MW15012306	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	18.5	10.1
	08/07/2006	MW15080706	0.962 U	0.962 U	0.962 U	0.962 U	--	0.962 U	0.962 U	0.962 U	ND	11.7	0.962 U
	01/18/2007	MW15011807	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	12.5	2.95
	08/10/2007	MW15081007	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	9.83	1.01
	01/16/2008	MW15011608	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	9.53	0.951 U
	08/13/2008	MW15081308	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	7.60	0.957 U
	09/03/2008	MW15090308	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	7.15	0.948 U
	01/26/2009	MW15012609	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	9.83	1.55
	08/17/2009	MW15081709	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	7.83	2.83
	01/12/2010	MW15011210	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	4.70	0.947 U
	08/11/2010	MW15081110	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	1.36	0.956 U
	01/13/2011	MW15011311	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	08/23/2011	MW15082311	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
MW-16	08/07/2002	GW-129	0.11 U	0.11 U	0.11 U	0.11 U	--	0.11 U	0.11 U	0.11 U	ND	1	--
	01/23/2004	MW16-012304	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	ND	1.5	--
	05/06/2004	MW16-050604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	2	--
	07/30/2004	MW16-073004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1.4	--
	10/26/2004	MW16-102604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1.7	--
	01/25/2005	MW16012505	0.019 U	0.019 U	--	--	0.0949 U	0.019 U	0.019 U	0.019 U	ND	0.959	3.83
	07/25/2005	MW16072505	0.019 U	0.019 U	--	--	0.0952 U	0.019 U	0.019 U	0.019 U	ND	1.7	8.1
	01/25/2006	MW16012506	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	1.48	5.07
	08/10/2006	MW16081006	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	1.36	3.26
	01/25/2007	MW16012507	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	1.32	1.92
	08/16/2007	MW16081607	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	1.52	3.05
	01/22/2008	MW16012208	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	1.26	1.89
	08/19/2008	MW16081908	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	1.39	0.949 U
	01/30/2009	MW16013009	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	1.11	0.947 U
	08/12/2009	MW16081209	1.54 U	1.54 U	1.54 U	1.54 U	--	1.54 U	1.54 U	1.54 U	ND	1.54 U	1.54 U
	01/21/2010	MW16012110	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	08/17/2010	MW16081710	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	01/21/2011	MW16012111	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	1.19	0.953 U
	08/30/2011	MW16083011	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	0.956 U	0.956 U
MW-17	08/07/2002	GW-130	0.11 U	0.11 U	0.11 U	0.11 U	--	0.11 U	0.11 U	0.11 U	ND	0.11 U	--
	01/26/2004	MW17-012604	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.097 U	--
	05/06/2004	MW17-050604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	07/30/2004	MW17-073004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/26/2004	MW17-102604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/24/2005	MW17012405	0.0189 U	0.0189 U	--	--	0.0944 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.283 U
	07/25/2005	MW17072505	0.019 U	0.019 U	--	--	0.0952 U	0.0221	0.019 U	0.019 U	**0.0173**	0.19 U	0.286 U
	01/24/2006	MW17012406	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/08/2006	MW17080806	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	1.01 U
	01/24/2007	MW17012407	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/15/2007	MW17081507	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	01/18/2008	MW17011808	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
MW-18	07/29/2004	MW18-072904	9.6 U	0.096 U	0.096 U	0.096 U	--	9.6 U	0.096 U	0.096 U	ND	**160**	--
	07/25/2005	MW18072505	1.9 U	1.9 U	--	--	9.52 U	1.9 U	1.9 U	1.9 U	ND	**155**	464
	01/24/2006	MW18012406	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	**106**	320
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/24/2007	MW18012407	1.75	0.954 U	0.954 U	0.954 U	--	1.33	0.954 U	0.954 U	**0.856**	**94.7**	305
	08/15/2007	MW18081507	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	**59.8**	253
	01/18/2008	MW18011808	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	**170**	487
MW-21	08/08/2002	GW-131	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	**48**	--
	05/06/2004	MW21-050604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	**53**	--
	07/30/2004	MW21-073004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	31	--
	10/26/2004	MW21-102604	0.48 U	0.48 U	0.48 U	0.48 U	--	0.48 U	0.48 U	0.48 U	ND	**34**	--
	01/25/2005	MW21012505	0.189 U	0.189 U	--	--	0.943 U	0.189 U	0.189 U	0.189 U	ND	11.3	33.8
	07/25/2005	MW21072505	1.9 U	1.9 U	--	--	9.52 U	1.9 U	1.9 U	1.9 U	ND	**37**	125
	01/25/2006	MW21012506	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	25.7	51.1
	08/10/2006	MW21081006	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	11.8	4.92
	01/25/2007	MW21012507	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	**33.7**	11.1
	08/16/2007	MW21081607	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	8.47	0.952 U
	01/22/2008	MW21012208	0.958 U	0.958 U	0.958 U	0.958 U	--	0.958 U	0.958 U	0.958 U	ND	12.0	0.958 U
	08/19/2008	MW21081908	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	7.26	0.949 U
	01/30/2009	MW21013009	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	2.29	0.946 U
	08/12/2009	MW21081209	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	1.56	0.948 U
	01/21/2010	MW21012110	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
	08/17/2010	MW21081710	0.962 U	0.962 U	0.962 U	0.962 U	--	0.962 U	0.962 U	0.962 U	ND	10.2	2.49
	01/21/2011	MW21012111	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U
	08/30/2011	MW21083011	0.959 U	0.959 U	0.959 U	0.959 U	--	0.959 U	0.959 U	0.959 U	ND	0.959 U	0.959 U
MW-23	08/06/2002	GW-124	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.097 U	--
	01/22/2004	MW23-012204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	05/03/2004	MW23-050304	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	07/27/2004	MW23-072704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/19/2004	MW23-101904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/21/2005	MW23012105	0.019 U	0.019 U	--	--	0.0951 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U
	07/20/2005	MW23072105	0.0192 UR	0.0192 UR	--	--	0.0959 UR	0.0192 UR	0.0192 UR	0.0192 UR	ND	0.192 UR	0.288 UR
	01/20/2006	MW23012006	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	08/07/2006	MW23080706	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U
	01/23/2007	MW23012307	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/09/2007	MW23080907	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	01/15/2008	MW23011508	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/11/2010	MW23011110	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	08/30/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	08/12/2002	GW-141	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.89	--
	01/27/2004	MW25-012704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.91	--
	04/29/2004	MW25-042904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.74	--
	08/06/2004	MW25-080604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1	--
	10/22/2004	MW25-102204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	2.6	--
	01/26/2005	MW25012605	0.0189 U	0.0189 U	--	--	0.0945 U	0.0189 U	0.0189 U	0.0189 U	ND	1.55	0.284 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
	07/25/2005	MW25072605	0.0191 U	0.0191 U	--	--	0.0953 U	0.0191 U	0.0191 U	0.0191 U	ND	0.811	0.286 U
	01/26/2006	MW25012606	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	1.25	0.949 U
	08/09/2006	MW25080906	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
	01/26/2007	MW25012607	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	08/17/2007	MW25081707	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	01/23/2008	MW25012308	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	01/27/2010	MW25012710	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	08/31/2011	MW25083111	0.959 U	0.959 U	0.959 U	0.959 U		0.959 U	0.959 U	0.959 U	ND	0.959 U	0.959 U
MW-26	01/26/2004	MW26-012604	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	**180**	--
	05/05/2004	MW26-050504	2.0 U	2.0 U	2.0 U	2.0 U	--	2.0 U	2.0 U	2.0 U	ND	**140**	--
	07/29/2004	MW26-072904	0.67	**0.23**	0.33	0.12	--	0.56	0.096 U	0.096 U	**0.36**	**160**	--
	10/25/2004	MW26-102504	0.34	0.20 U	0.2	0.20 U	--	0.27	0.20 U	0.20 U	**0.19**	**150**	--
	01/24/2005	MW26012405	2.73	**1.07**	--	--	1.76	2.08	0.19 U	0.334	**1.58**	**102**	2.85 U
	07/25/2005	MW26072505	1.9 U	1.9 U	--	--	9.52 U	1.9 U	1.9 U	1.9 U	ND	**136**	478
	01/24/2006	MW26012406	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	**91.4**	331
	08/08/2006	MW26080806	1.17	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	**0.829**	**96.6**	394
	01/24/2007	MW26012407	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	**85.4**	341
	08/15/2007	MW26081507	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	**48.4**	217
	01/18/2008	MW26011808	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	**143**	496
	08/15/2008	MW26081508	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	**75.4**	488
	01/28/2009	MW26012809	2.35	0.947 U	1.14	0.947 U		1.56	0.947 U	0.947 U	**0.980**	**76.4**	284
	08/18/2009	MW26081809	1.25	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	**0.795**	**94.4**	361
	01/25/2010	MW26012510	2.32	**0.989**	1.28	0.951 U	--	1.72	0.951 U	0.951 U	**1.37**	**154**	514
	08/16/2010	MW26081610	1.29	0.952 U	0.952 U	0.952 U	--	1.01	0.952 U	0.952 U	**0.14**	**54.1**	346
	01/20/2011	MW26012011	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	**92.1**	552
	08/30/2011	MW26083011	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	**46.9**	271
MW-27	01/26/2004	MW27-012604	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	ND	0.65	--
	05/07/2004	MW27-050704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.56	--
	07/29/2004	MW27-072904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.48	--
	10/20/2004	MW27-102004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.56	--
	01/21/2005	MW27012105	0.189 U	0.189 U	--	--	0.943 U	0.189 U	0.189 U	0.189 U	ND	1.89 U	11.3
	07/20/2005	MW27072205[a]	0.0192 U	0.0192 U	--	--	0.0958 U	0.0192 U	0.0192 U	0.0192 U	ND	0.709	10.2
	01/23/2006	MW27012306	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	9.35
	08/07/2006	MW27080706	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	7.10
	01/24/2007	MW27012407	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	6.93
	08/14/2007	MW27081407	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	8.32
	01/17/2008	MW27011708	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	0.96 U	10.9
	01/22/2010	MW27012210	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	6.75
	08/29/2011	MW27082911	0.953 U	0.953 U	0.953 U	0.953 U		0.953 U	0.953 U	0.953 U	ND	0.953 U	7.87
MW-38	08/07/2002	GW-135	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.4	--
dup	08/07/2002	GW-149	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.39	--
	01/27/2004	MW38-012704	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	ND	0.095 U	--
dup	01/27/2004	MW38DUP-012704	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	ND	0.095 U	--
	05/06/2004	MW38-050604	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.097 U	--
dup	05/06/2004	MW38-050604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
	08/06/2004	MW38-080604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
dup	08/06/2004	MW38-080604-Dup	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/29/2004	MW38-102904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	2.6	--
dup	10/29/2004	MW38-102904-Dup	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	3	--
	01/25/2005	MW38012505	0.0189 U	0.0189 U	--	--	0.0943 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.283 U
dup	01/25/2005	MW38DUP012505	0.0189 U	0.0189 U	--	--	0.0943 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.283 U
	07/25/2005	MW38072605	0.019 U	0.019 U	--	--	0.0952 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.286 U
	01/26/2006	MW38012606	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
dup	01/26/2006	MW38012606-Dup	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	08/10/2006	MW38081006	1.02 U	1.02 U	1.02 U	1.02 U	--	1.02 U	1.02 U	1.02 U	ND	1.02 U	1.02 U
dup	08/10/2006	MW38081006-Dup	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U
	01/25/2007	MW38012507	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
dup	01/25/2007	MW38012507-Dup	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
	08/16/2007	MW38081607	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
dup	08/16/2007	MW38081607-Dup	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	01/23/2008	MW38012308	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
dup	01/23/2008	MW38012308-Dup	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	08/21/2008	MW38082108	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
dup	08/21/2008	MW38082108-Dup	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	02/02/2009	MW38020209	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
dup	02/02/2009	MW38020209-Dup	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/12/2009	MW38081209	1.54 U	1.54 U	1.54 U	1.54 U	--	1.54 U	1.54 U	1.54 U	ND	1.54 U	1.54 U
dup	08/12/2009	MW38081209-Dup	0.943 U	0.943 U	0.943 U	0.943 U	--	0.943 U	0.943 U	0.943 U	ND	0.943 U	0.943 U
	01/21/2010	MW38012110	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
dup	01/21/2010	MW38012110-Dup	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	08/17/2010	MW38081710	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
dup	08/17/2010	MW38081710-Dup	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/21/2011	MW38012111	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	0.956 U	0.956 U
	08/31/2011	MW38083111	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	0.957 U	0.957 U
dup	08/31/2011	MW38DUP083111	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
MW-39	08/07/2002	GW-136	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.49	--
	01/27/2004	MW39-012704	0.098 U	0.098 U	0.098 U	0.098 U	--	0.098 U	0.098 U	0.098 U	ND	0.098 U	--
dup	01/27/2004	MW39DUP-012704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	05/06/2004	MW39-050604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
dup	05/06/2004	MW39-050604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	08/06/2004	MW39-080604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.11	--
dup	08/06/2004	MW39-080604-Dup	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/29/2004	MW39-102904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
dup	10/29/2004	MW39-102904-Dup	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/25/2005	MW39012505	0.019 U	0.019 U	--	--	0.0948 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.284 U
dup	01/25/2005	MW39DUP012505	0.0189 U	0.0189 U	--	--	0.0947 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U
	07/25/2005	MW39072605	0.023 U	0.019 U	--	--	0.0951 U	0.0277	0.019 U	0.019 U	**0.0176**	0.19 U	0.285 U
dup	07/25/2005	MW39072605-Dup	0.0189 U	0.0189 U	--	--	0.0946 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location		Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
				Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level				NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
		01/26/2006	MW39012606	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	dup	01/26/2006	MW39012606-Dup	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
		08/10/2006	MW39081006	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	dup	08/10/2006	MW39081006-Dup	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
		01/25/2007	MW39012507	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
	dup	01/25/2007	MW39012507-Dup	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
		08/16/2007	MW39081607	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	dup	08/16/2007	MW39081607-Dup	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
		01/23/2008	MW39012308	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	2.14	1.63
	dup	01/23/2008	MW39012308-Dup	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	2.42	1.78
		08/21/2008	MW39082108	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	2.68	0.947 U
	dup	08/21/2008	MW39082108-Dup	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	4.49	0.949 U
		02/02/2009	MW39020209	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	dup	02/02/2009	MW39020209-Dup	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
		08/12/2009	MW39081209	1.55 U	1.55 U	1.55 U	1.55 U	--	1.55 U	1.55 U	1.55 U	ND	3.29	1.55 U
	dup	08/12/2009	MW39081209-Dup	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	3.12	0.948 U
		01/21/2010	MW39012110	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	dup	01/21/2010	MW39012110-Dup	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
		08/17/2010	MW39081710	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	3.69	1.84
	dup	08/17/2010	MW39081710-Dup	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	3.14	1.55
		01/21/2011	MW39012111	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
		08/31/2011	MW39083111	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	1.19	0.953 U
	dup	08/31/2011	MW39DUP083111	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	1.07	0.953 U
MW-48S		08/20/2008	MW48S082008	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
		10/08/2008	MW-48S100808	0.967 U	0.967 U	0.967 U	0.967 U	--	0.967 U	0.967 U	0.967 U	ND	0.967 U	0.967 U
		02/02/2009	MW48S020209	0.949 U	0.949 U	0.949 U	0.949 U		0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
		04/09/2009	MW48S040909	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
		08/19/2009	MW48S081909	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
		01/27/2010	MW48S012710	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
		08/17/2010	MW48S081710	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
		01/24/2011	MW48S012411	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	13.9	20.2
		08/31/2011	MW48S083111	1.77	0.96 U	0.96 U	0.96 U	--	2	0.96 U	0.96 U	**0.869**	0.96 U	0.96 U
MW-49D		08/19/2008	MW49D081908	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	**40.1**	19.9
		10/03/2008	MW49D100308	0.958 U	0.958 U	0.958 U	0.958 U	--	0.958 U	0.958 U	0.958 U	ND	**59.6**	83.1
		01/26/2009	MW49D012609	1.16	0.967 U	0.967 U	0.967 U	--	0.967	0.967 U	0.967 U	**0.803**	11.1	5.26
		04/06/2009	MW49D040609	3.41	**1.20**	1.50	0.978 U	--	2.41	0.978 U	0.978 U	**1.86**	**143**	73.6
		08/14/2009	MW49D081409	1.3	0.965 U	0.965 U	0.965 U	--	1.04	0.965 U	0.965 U	**0.816**	**37.2**	18.6
		01/12/2010	MW49D011210	0.967 U	0.967 U	0.967 U	0.967 U	--	0.967 U	0.967 U	0.967 U	ND	2.32	1.17
		08/11/2010	MW49D081110	2.46	0.973 U	0.973 U	0.973 U	--	2.37	0.973 U	0.973 U	**0.27**	11.1	9.42
		01/13/2011	MW49D011311	2.16	0.966 U	0.966 U	0.966 U	--	1.85	0.966 U	0.966 U	**0.911**	0.966 U	2.65
		08/23/2011	MW49D082311	3.31	0.979 U	0.979 U	0.979 U	--	3.27	0.979 U	0.979 U	**1.05**	0.979 U	5.76

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
MW-50S	08/19/2008	MW50S081908	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	10/08/2008	MW-50S100808	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	01/30/2009	MW50S013009	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	04/09/2009	MW50S040909	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	08/19/2009	MW50S081909	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	01/26/2010	MW50S012610	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	08/16/2010	MW50S081610	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/21/2011	MW50S012111	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
	08/30/2011	MW50S083011	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
MW-51D	08/12/2008	MW51D081208	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	10/06/2008	MW-51D100608	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/26/2009	MW51D012609	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	04/06/2009	MW51D040609	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	08/05/2009	MW51D080509	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/13/2010	MW51D011310	0.944 U	0.944 U	0.944 U	0.944 U	--	0.944 U	0.944 U	0.944 U	ND	0.944 U	0.944 U
	08/12/2010	MW51D081210	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
	01/13/2011	MW51D011311	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	0.956 U	0.956 U
	08/24/2011	MW51D082411	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
MW-52D	08/14/2008	MW52D081508	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	30.5	57.6
	10/07/2008	MW-52D100708	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	13.4	20.6
	01/30/2009	MW52D013009	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	4.07	3.19
	04/09/2009	MW52D040909	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	2.09	2.09
	08/18/2009	MW52D081809	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
	01/25/2010	MW52D012510	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
	08/16/2010	MW52D081610	0.961 U	0.961 U	0.961 U	0.961 U	--	0.961 U	0.961 U	0.961 U	ND	0.961 U	0.961 U
	01/20/2011	MW52012011	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	0.956 U	0.956 U
	08/30/2011	MW52D083011	0.961 U	0.961 U	0.961 U	0.961 U	--	0.961 U	0.961 U	0.961 U	ND	0.961 U	0.961 U
MW-53S	08/14/2008	MW53S081408	0.967 U	0.967 U	0.967 U	0.967 U	--	0.967 U	0.967 U	0.967 U	ND	0.967 U	1.55
	10/07/2008	MW-53S100708	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	**195**	62.7
	01/28/2009	MW53S012809	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	**48.8**	189
	04/10/2009	MW53S041009	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	26.8	106
	08/18/2009	MW53S081809	0.944 U	0.944 U	0.944 U	0.944 U	--	0.944 U	0.944 U	0.944 U	ND	12.5	36.9
	01/20/2010	MW53S012010	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	**58.2**	227
	08/16/2010	MW53S081610	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	28.1	158
	01/18/2011	MW53S011811	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	**60.1**	349
	08/11/2011	MW53S081111	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	**48.2**	262
MW-53D	08/14/2008	MW53D081408	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	16.0	2.33
	10/07/2008	MW-53D100708	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	2.66	1.59
	01/28/2009	MW53D012809	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	12.8	3.88
	04/10/2009	MW53D041009	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	11.9	4.44
	08/17/2009	MW53D081709	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	2.2	0.948 U
	01/20/2010	MW53D012010	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	1.50	0.951 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
	08/16/2010	MW53D081610	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/18/2011	MW53D011811	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	0.956 U	0.956 U
	08/11/2011	MW53D081111	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
MW-55S	08/20/2010	MW55S082010	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	**51.5**	325
	01/14/2011	MW55S011411	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	**64.6**	390
	08/08/2011	MW55S080811	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	**41**	262
MW-55D	09/07/2010	MW55D090710	0.982 U	0.982 U	0.982 U	0.982 U	--	0.982 U	0.982 U	0.982 U	ND	0.982 U	0.982 U
	01/14/2011	MW55D011411	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/08/2011	MW55D080811	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
MW-57S	08/15/2008	MW57S081508	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	**76.4**	479
	10/06/2008	MW-57S100608	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	**539**	833
	01/27/2009	MW57S012709	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	**71.0**	452
	04/07/2009	MW57S040709	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	**67.9**	422
	08/06/2009	MW57S080609	0.958 U	0.958 U	0.958 U	0.958 U	--	0.958 U	0.958 U	0.958 U	ND	**71.4**	407
	01/13/2010	MW57S011310	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	**86.4**	714
	08/12/2010	MW57S081210	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	**64.6**	469
	01/14/2011	MW57S011411	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	**68.8**	706
	08/25/2011	MW57S082511	0.964 U	0.964 U	0.964 U	0.964 U	--	0.964 U	0.964 U	0.964 U	ND	0.964 U	369
MW-57D	08/14/2008	MW57D081508	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	4.21	2.97
	10/06/2008	MW-57D100608	0.961 U	0.961 U	0.961 U	0.961 U	--	0.961 U	0.961 U	0.961 U	ND	3.45	0.961 U
dup	10/06/2008	MW-57D100608-Dup	0.961 U	0.961 U	0.961 U	0.961 U	--	0.961 U	0.961 U	0.961 U	ND	4.00	1.17
	01/27/2009	MW57D012709	0.943 U	0.943 U	0.943 U	0.943 U	--	0.943 U	0.943 U	0.943 U	ND	5.12	3.00
dup	01/27/2009	MW57D012709-Dup	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	5.15	3.45
	04/07/2009	MW57D040709	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	3.54	2.40
dup	04/07/2009	MW57D040709-Dup	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	4.44	3.14
	08/06/2009	MW57D080609	0.649 U	0.649 U	0.649 U	0.649 U	--	0.649 U	0.649 U	0.649 U	ND	3.32	2.13
	01/13/2010	MW57D011310	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	3.96	2.36
dup	01/13/2010	MW57D011310-Dup	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	4.08	2.34
	08/12/2010	MW57D081210	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	5.09	2.73
dup	08/12/2010	MW57D081210-Dup	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	3.95	2.05
	01/14/2011	MW57D011411	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	7.62	3.93
dup	01/14/2011	MW57DDUP011411	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	5.8	3.21
	08/25/2011	MW57D082511	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
dup	08/25/2011	MW57D082511-Dup	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	4.14	0.955 U
MW-58D	08/13/2008	MW58D081308	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	10/08/2008	MW-58D100808	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/27/2009	MW58D012709	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	04/07/2009	MW58D040709	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
	08/06/2009	MW58D080609	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	01/14/2010	MW58D011410	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	08/12/2010	MW58D081210	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	01/19/2011	MW58D011911	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/26/2011	MW58D082611	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	0.957 U	0.957 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
EPA-5S	08/11/2008	EPA5S081108	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	10/02/2008	EPA5S100208	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	01/23/2009	EPA5S012309	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	04/03/2009	EPA5S040309	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	08/05/2009	EPA5S080509	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	01/08/2010	EPA5S010810	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	08/11/2010	EPA5S081110	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	01/12/2011	EPA5S011211	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
	08/09/2011	EPA5S080911	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
EPA-5D	08/11/2008	EPA5D081108	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	10/02/2008	EPA5D100208	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	01/23/2009	EPA5D012309	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	04/03/2009	EPA5D040309	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	08/05/2009	EPA5D080509	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	01/08/2010	EPA5D010810	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
	08/11/2010	EPA5D081110	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/12/2011	EPA5D011211	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	08/09/2011	EPA5D080911	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
EPA-6S	08/18/2008	EPA6S081808	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	7.03	83.2
	10/07/2008	EPA-6S100708	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	**62.6**	3.06
	01/29/2009	EPA6S012909	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	4.77	57.5
	04/10/2009	EPA6S041009	0.943 U	0.943 U	0.943 U	0.943 U	--	0.943 U	0.943 U	0.943 U	ND	5.48	78.7
	08/12/2009	EPA6S081209	1.56 U	1.56 U	1.56 U	1.56 U	--	1.56 U	1.56 U	1.56 U	ND	4.27	54.9
	01/25/2010	EPA6S012510	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	6.48	71.8
	08/13/2010	EPA6S081310	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	2.86	31.7
	01/19/2011	EPA6S011911	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	2.63	40.7
	01/19/2011	EPA6SDUP011911	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	2.62	39.2
	08/10/2011	EPA6S081011	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	2.43	20.1
EPA-6D	08/18/2008	EPA6D081808	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	10/07/2008	EPA-6D100708	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	01/29/2009	EPA6D012909	0.943 U	0.943 U	0.943 U	0.943 U	--	0.943 U	0.943 U	0.943 U	ND	0.943 U	0.943 U
	04/10/2009	EPA6D041009	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	08/12/2009	EPA6D081209	1.55 U	1.55 U	1.55 U	1.55 U	--	1.55 U	1.55 U	1.55 U	ND	1.55 U	1.55 U
	01/25/2010	EPA6D012510	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	08/13/2010	EPA6D081310	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	1.2
	01/19/2011	EPA6D011911	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	0.957 U	0.957 U
	08/10/2011	EPA6D081011	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	0.957 U	0.957 U
Carty Lake Monitoring Wells (UWBZ)													
MW-30	08/13/2002	GW-133	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
USDFW-1	10/24/2003	USDFW-1-102403	0.098 U	0.098 U	0.098 U	0.098 U	--	0.098 U	0.098 U	0.098 U	ND	4.9	--
	05/04/2004	USDFW1-050404	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	4.4	--
	08/13/2004	USDFW1-081304	0.11 U	0.11 U	0.11 U	0.11 U	--	0.11 U	0.11 U	0.11 U	ND	4.4	--
	10/25/2004	USDFW1-102504	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	2.7	--
	01/28/2005	USDFW1012805	0.0189 U	0.0189 U	--	--	0.0943 U	0.0189 U	0.0189 U	0.0189 U	ND	1.35	2.2

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
	07/28/2005	USDFW1072805	0.019 U	0.019 U	--	--	0.0952 U	0.019 U	0.019 U	0.019 U	ND	1.3	0.883
	02/01/2006	USDFW1020106	0.965 U	0.965 U	0.965 U	0.965 U	--	0.965 U	0.965 U	0.965 U	ND	0.965 U	0.965 U
	08/11/2006	USDFW1081106	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/22/2007	USDFW1012207	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	08/27/2007	USDFW1082707	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	01/28/2008	USDFW1012808	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	08/21/2008	USDW1082108	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	02/03/2009	USDFW1020309	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	08/07/2009	USDFW1080709	0.943 U	0.943 U	0.943 U	0.943 U	--	0.943 U	0.943 U	0.943 U	ND	0.943 U	0.943 U
	01/28/2010	USDFW1012810	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	1.01 U
	08/26/2010	USDFW1082610	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	01/26/2011	USDFW1012611	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	09/06/2011	USDFW1090611	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
USDFW-2	10/24/2003	USDFW-2-102403	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.097 U	--
	05/04/2004	USDFW2-050404	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	08/13/2004	USDFW2-081304	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/25/2004	USDFW2-102504	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/28/2005	USDFW2012805	0.0189 U	0.0189 U	--	--	0.0944 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.283 U
	07/28/2005	USDFW2072805	0.0192 U	0.0192 U	--	--	0.096 U	0.0192 U	0.0192 U	0.0192 U	ND	0.192 U	0.288 U
	02/01/2006	USDFW2020106	0.982 U	0.982 U	0.982 U	0.982 U	--	0.982 U	0.982 U	0.982 U	ND	0.982 U	0.982 U
	08/11/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/22/2007	USDFW2012207	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	08/27/2007	USDFW2082707	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/28/2008	USDFW2012808	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
USDFW-3	10/24/2003	USDFW-3-102403	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.097 U	--
	05/04/2004	USDFW3-050404	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	08/13/2004	USDFW3-081304	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.097 U	--
	10/25/2004	USDFW3-102504	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/28/2005	USDFW3012805	0.0195 U	0.0195 U	--	--	0.0973 U	0.0195 U	0.0195 U	0.0195 U	ND	0.195 U	0.292 U
	07/28/2005	USDFW3072805	0.0195 U	0.0195 U	--	--	0.0974 U	0.0195 U	0.0195 U	0.0195 U	ND	0.195 U	0.292 U
	02/01/2006	USDFW3020106	0.976 U	0.976 U	0.976 U	0.976 U	--	0.976 U	0.976 U	0.976 U	ND	0.976 U	0.976 U
	08/11/2006	USDFW3081106	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ	--	0.949 UJ	0.949 UJ	0.949 UJ	ND	0.949 UJ	0.949 UJ
	01/22/2007	USDFW3012207	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	08/27/2007	USDFW3082707	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
	01/28/2008	USDFW3012808	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	08/26/2010	USDFW1082610	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
RMW-2S	08/21/2008	RMW2S082108	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	10/09/2008	RMW2S100908	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	02/03/2009	RMW2S020309	0.944 U	0.944 U	0.944 U	0.944 U	--	0.944 U	0.944 U	0.944 U	ND	0.944 U	0.944 U
	04/08/2009	RMW2S040809	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	08/07/2009	RMW2S080709	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	01/28/2010	RMW2S012810	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	08/26/2010	RMW2S082610	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	01/26/2011	RMW2S012611	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	09/06/2011	RMW2S090611	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
RMW-2D	08/21/2008	RMW2D082108	0.961 U	0.961 U	0.961 U	0.961 U	--	0.961 U	0.961 U	0.961 U	ND	0.961 U	0.961 U
	10/09/2008	RMW2D100908	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	02/03/2009	RMW2D020309	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	04/08/2009	RMW2D040809	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	08/07/2009	RMW2D080709	0.944 U	0.944 U	0.944 U	0.944 U	--	0.944 U	0.944 U	0.944 U	ND	0.944 U	0.944 U
	01/28/2010	RMW2D012810	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	08/26/2010	RMW2D082610	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	01/26/2011	RMW2D012611	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	09/06/2011	RMW2D090611	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
LWBZ: Cells 1 and 2 and Carty Lake													
Cell 1 (LWBZ)													
MW-40	08/08/2002	GW-151	0.25	0.096 U	0.096 U	0.096 U	--	0.23	0.096 U	0.096 U	**0.0945**	**32**	--
	01/23/2004	MW40-012304	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	ND	16	--
	04/30/2004	MW40-043004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	20	--
	08/11/2004	MW40-081104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	15	--
	10/29/2004	MW40-102904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	14	--
	01/27/2005	MW40012705	0.0703	0.0189 U	--	--	0.0943 U	0.048	0.0189 U	0.0189 U	**0.0236**	0.189 U	0.283 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW40012706	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	13.1	0.951 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/28/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW40020209	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	3.54	0.952 U
	08/19/2009	MW40081909	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	2.19	0.954 U
	01/29/2010	MW40012910	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	2.35	0.952 U
	08/25/2010	MW40082510	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	0.969	0.96 U
	01/24/2011	MW40012411	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
	09/02/2011	MW40090211	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U
MW-41	08/12/2002	GW-148	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	2.4	--
	01/29/2004	MW41-012904	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	ND	1.3	--
	04/29/2004	MW41-042904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1.1	--
	08/12/2004	MW41-081204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.95	--
	11/08/2004	MW41-110804	0.048 U	0.048 U	0.048 U	0.048 U	--	0.048 U	0.048 U	0.048 U	ND	1	--
	01/27/2005	MW41012705	0.0189 U	0.0189 U	--	--	0.0943 U	0.0189 U	0.0189 U	0.0189 U	ND	0.67	0.283 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/2006	MW41013006	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	2.09	0.947 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/28/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
Cell 2 (LWBZ)													
MW-22	08/08/2002	GW-143	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	9.5	--
	01/23/2004	MW22-012304	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	15	--
	04/28/2004	MW22-042804	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	16	--
	08/06/2004	MW22-080604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	18	--
	10/26/2004	MW22-102604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	23	--
	01/25/2005	MW22012505	0.0189 U	0.0189 U	--	--	0.0943 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.283 U
	08/03/2005	MW22080305	0.019 U	0.019 U	--	--	0.0952 U	0.019 U	0.019 U	0.019 U	ND	11.6	0.286 U
	01/25/2006	MW22012506	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	10.4	0.951 U
	08/10/2006	MW22081006	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	6.65	0.954 U
	01/25/2007	MW22012507	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	8.64	0.951 U
	08/16/2007	MW22081607	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	7.05	0.953 U
	01/22/2008	MW22012208	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	7.27	0.955 U
MW-33	08/07/2002	GW-122	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1	--
	01/21/2004	MW33-012104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.67	--
	04/27/2004	MW33-042704	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	ND	0.77	--
	07/28/2004	MW33-072804	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.89	--
	10/19/2004	MW33-101904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1.2	--
	01/20/2005	MW33012005	0.0189 U	0.0189 U	--	--	0.0945 U	0.0189 U	0.0189 U	0.0189 U	ND	1.16	0.284 U
	07/20/2005	MW33072005	0.0189 UR	0.0189 UR	--	--	0.0947 UR	0.0189 UR	0.0189 UR	0.0189 UR	ND	1.49 J	0.284 UR
	01/20/2006	MW33012006	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	1.24	0.951 U
	08/04/2006	MW33080406	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	01/19/2007	MW33011907	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/09/2007	MW33080907	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/15/2008	MW33011508	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	08/11/2008	MW33081108	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	01/11/2010	MW33011110	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	08/09/2011	MW33080911	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
MW-34	08/08/2002	GW-144	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.097 U	--
	01/21/2004	MW34-012104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	04/27/2004	MW34-042704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	07/29/2004	MW34-072904	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/20/2004	MW34-102004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.11	--
	01/21/2005	MW34012105	0.0189 U	0.0189 U	--	--	0.0946 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U
	07/20/2005	MW34072105	0.019 U	0.019 U	--	--	0.095 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U
	01/23/2006	MW34012306	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	08/07/2006	MW34080706	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	01/18/2007	MW34011807	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	08/10/2007	MW34081007	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	01/16/2008	MW34011608	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
MW-35	08/13/2002	GW-145	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.83	--
dup	08/13/2002	GW-150	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.96	--
	01/21/2004	MW35-012104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1.6	--
	04/28/2004	MW35-042804	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1.8	--
	07/30/2004	MW35-073004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	1.9	--

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
	10/25/2004	MW35-102504	0.20 U	0.20 U	0.20 U	0.20 U	--	0.20 U	0.20 U	0.20 U	ND	2.3	--
	01/24/2005	MW35012405	Broken	Broken	--	--	Broken	Broken	Broken	Broken	ND	Broken	Broken
	07/20/2005	MW35072205[a]	0.019 UR	0.019 UR	--	--	0.0951 UR	0.019 UR	0.019 UR	0.019 UR	ND	2.8 J	0.285 UR
	01/24/2006	MW35012406	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	2.30	0.948 U
	08/08/2006	MW35080806	1.02 U	1.02 U	1.02 U	1.02 U	--	1.02 U	1.02 U	1.02 U	ND	2.40	1.02 U
	01/24/2007	MW35012407	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	2.09	0.948 U
	08/14/2007	MW35081407	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	2.66	0.947 U
	01/18/2008	MW35011808	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	2.73	0.956 U
	08/14/2008	MW35081408	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	2.83	0.951 U
	01/30/2009	MW35013009	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	2.10	0.949 U
	08/18/2009	MW35081809	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	2.65	0.949 U
	01/22/2010	MW35012210	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	3.60	0.951 U
	08/16/2010	MW35081610	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	1.78	0.949 U
	01/20/2011	MW35012011	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	4.11	0.953 U
	08/29/2011	MW35082911	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	3.39	0.956 U
MW-36	08/07/2002	GW-146	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	1.4	--
	01/26/2004	MW36-012604	0.1	0.095 U	0.095 U	0.095 U	--	0.16	0.095 U	0.095 U	**0.078**	1	--
	04/28/2004	MW36-042804	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	3.7	--
	07/30/2004	MW36-073004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	3.9	--
	10/26/2004	MW36-102604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	3.6	--
	01/25/2005	MW36012505	0.0189 U	0.0189 U	--	--	0.0947 U	0.0189 U	0.0189 U	0.0189 U	ND	2.11	0.284 U
	07/25/2005	MW36072705	0.019 U	0.019 U	--	--	0.0949 U	0.019 U	0.019 U	0.019 U	ND	3.84	0.285 U
	01/25/2006	MW36012506	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	2.93	0.95 U
	08/08/2006	MW36080806	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1.98	1 U
	01/24/2007	MW36012407	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	1.85	0.948 U
	08/15/2007	MW36081507	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	1.88	0.951 U
	01/22/2008	MW36012208	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	1.04	0.953 U
	08/19/2008	MW36081908	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	1.71	0.951 U
	01/30/2009	MW36013009	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	08/19/2009	MW36081909	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	01/26/2010	MW36012610	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	1.06	0.947 U
	08/16/2010	MW36081610	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	1.09	0.957 U
	01/21/2011	MW36012111	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	1.78	0.955 U
	08/30/2011	MW36083011	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	1.42	0.954 U
MW-37	08/12/2002	GW-147	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/27/2004	MW37-012704	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.097 U	--
	04/29/2004	MW37-042904	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	ND	0.095 U	--
	08/06/2004	MW37-080604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	10/22/2004	MW37-102204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--
	01/26/2005	MW37012605	0.0189 U	0.0189 U	--	--	0.0946 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U
	07/25/2005	MW37072605	0.019 U	0.019 U	--	--	0.0951 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U
	01/26/2006	MW37012606	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	08/09/2006	MW37080906	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	01/26/2007	MW370120607	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U

Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
	08/17/2007	MW37081707	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	01/23/2008	MW37012308	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
	08/20/2008	MW37082008	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	0.957 U	0.957 U
	01/27/2010	MW37012710	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	08/31/2011	MW37083111	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U
MW-54	08/12/2008	MW54081208	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
	10/06/2008	MW-54100608	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	0.956 U	0.956 U
	01/26/2009	MW54012609	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	04/06/2009	MW54040609	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	08/05/2009	MW54080509	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	01/13/2010	MW54011310	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U
	08/12/2010	MW54081210	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	01/13/2011	MW54011311	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	0.957 U	0.957 U
	08/24/2011	MW54082411	0.956 U	0.956 U	0.956 U	0.956 U	--	0.956 U	0.956 U	0.956 U	ND	0.956 U	0.956 U
MW-55	08/14/2008	MW55081408	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	1.39	0.955 U
	10/03/2008	MW55100308	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
	01/27/2009	MW55012709	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	1.38	0.946 U
	04/07/2009	MW55040709	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/06/2009	MW55080609	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	1.1	0.948 U
	01/14/2010	MW55011410	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/12/2010	MW55081210	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	1.34	0.949 U
	01/14/2011	MW55011411	0.957 U	0.957 U	0.957 U	0.957 U	--	0.957 U	0.957 U	0.957 U	ND	1.39	0.957 U
	08/08/2011	MW55080811	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	1.2	0.951 U
MW-56	08/21/2008	MW56082108	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	10/08/2008	MW-56100808	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U
	01/27/2009	MW56012709	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	04/07/2009	MW56040709	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	08/06/2009	MW56080609	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	01/14/2010	MW56011410	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	08/12/2010	MW56081210	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/19/2011	MW56011911	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U
	08/26/2011	MW56082611	0.96 U	0.96 U	0.96 U	0.96 U	--	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U
MW-59	08/19/2008	MW59081908	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	10/06/2008	MW-59100608	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	01/29/2009	MW59012909	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	04/09/2009	MW59040909	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U
	08/17/2009	MW59081709	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	01/21/2010	MW59012110	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U
	08/13/2010	MW59081310	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U
	01/20/2011	MW59012011	0.964 U	0.964 U	0.964 U	0.964 U	--	0.964 U	0.964 U	0.964 U	ND	0.964 U	0.964 U
	08/29/2011	MW59082911	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U
MW-62	09/08/2010	MW62090810	0.985 U	0.985 U	0.985 U	0.985 U	--	0.985 U	0.985 U	0.985 U	ND	0.985 U	0.985 U
	01/14/2011	MW62011411	1.24	**1.07**	0.951 U	1.41	--	1.29	1.04	0.989	**1.60**	0.951 U	0.951 U
	08/25/2011	MW62082511	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs								TEQ cPAHs	Noncarcinogenic PAHs	
			Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene
MTCA Method B Groundwater Cleanup Level			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	NV
Carty Lake Monitoring Well (LWBZ)													
MW-60	09/03/2008	MW60090308	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	10/09/2008	MW601000908	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	02/03/2009	MW60020309	0.989	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	04/08/2009	MW60040809	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U
	08/07/2009	MW60080709	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	01/28/2010	MW60012810	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U
	08/25/2010	MW60082510	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U
	01/24/2011	MW60012411	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	09/06/2011	MW60090611	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
MW-61	09/03/2010	MW61090310	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	1.01 U
	01/24/2011	MW61012411	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U
	09/02/2011	MW61090211	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
UWBZ: Cell 1														
Cell 1 (UWBZ)														
MW-7	08/12/2002	GW-125	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.62	0.096 U	0.096 U	0.096 U	0.32
	01/26/2004	MW7-012604	0.49	2.9	0.11	0.32	0.10 U	--	2.2	0.9	1.2	45	0.43	0.59
	05/06/2004	MW7-050604	0.096 U	0.096 U	0.096 U	0.17	0.096 U	--	0.33	0.24	0.096 U	0.097	0.096 U	0.16
	08/09/2004	MW7-080904	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.13	0.096 U	0.096 U	0.096 U	0.096 U
	10/27/2004	MW7-102704	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.76	0.096 U	0.096 U	0.096 U	0.54
	01/26/2005	MW7012605	**55.1**	152	5.15	14	0.19 U	14.2 U	**58.3**	18.5	67.5	**1580**	76.4	12.9
	07/25/2005	MW7072705	0.0475 U	39.5	1.27	0.455	0.0225	1.42 U	3.41	8.57	1.27	0.0475 U	0.127 U	4.9
	01/27/2006	MW7012706	1.65	13.0	0.948 U	2.06	0.948 U	0.948 U	**8.8**	9.25	12.3	115	1.81	5.84
	08/10/2006	MW7081006	22.2	12.8	1.21	3.21	0.958 U	0.958 U	**11.7**	15.5	17.2	**263**	37.9	10.3
	01/25/2007	MW7012507	5.57	7.97	0.967 U	2.50	0.967 U	0.967 U	**9.73**	9.02	17.7	40.4	24.7	5.97
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/05/2008	MW7090508	21.3	13.7	2.32	1.71	0.954 U	0.954 U	**4.77**	4.36	19.7	45.6	21.9	2.66
	02/04/2009	MW7020409	0.990	0.952 U	0.952 U	1.17	0.952 U	0.952 U	2.21	3.29	9.66	0.971	12.2	2.16
	08/19/2009	MW7081909	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	01/26/2010	MW7012610	0.951 U	0.951 U	0.951 U	2.29	0.951 U	0.951 U	3.80	3.67	0.951 U	1.33	1.15	2.28
	08/24/2010	MW7082410	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.09	0.951 U	0.951 U	0.951 U	0.951 U
	01/25/2011	MW7012511	0.958 U	0.958 U	0.958 U	1.25	0.958 U	0.958 U	1.74	1.57	0.958 U	0.958 U	1.22	0.958 U
	09/01/2011	MW7090111	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
MW-8S	08/13/2002	GW-126	0.096 U	4.9	0.16	0.2	0.096 U	--	**11**	0.12	1.5	39	0.27	0.72
MW-42	08/12/2002	GW-137	**480**	230	16	14	0.97 U	--	**6.7**	12	91	**6500**	77	7.5
	01/23/2004	MW42-012304	**91**	160	6.9	12	0.95 U	--	**130**	9.7	82	**3000**	71	6.5
	04/30/2004	MW42-043004	**660**	280	18	13	0.096 U	--	**320**	10	110	**15000**	87	9.6 U
	08/10/2004	MW42-081004	**800**	310	18	13	0.96 U	--	**370**	11	120	**12000**	98	7
	10/27/2004	MW42-102704	**520**	210	11	17	0.48 U	--	**190**	7.9	80	**8000**	83	5.2
	01/26/2005	MW42012605	**135**	66.7	3.64	7.28	0.191 U	14.4 U	**182**	3.98	24	**2350**	25.7	1.96
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW42012706	25.6	40.6	1.79	4.59	0.953 U	0.953 U	**12.3**	6.02	21.4	**416**	27.7	4.33
	08/10/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-43	08/12/2002	GW-138	**680**	290	16	27	0.96 U	--	**260**	17	120	**8400**	110	11
	01/23/2004	MW43-012304	**460**	320	11	23	0.95 U	--	**150**	19	180	**3500**	160	13
	04/30/2004	MW43-043004	**580**	370	13	25	0.096 U	--	**170**	23	180	**5800**	190	16
	08/11/2004	MW43-081104	**220**	250	8.5	22	0.96 U	--	**20**	38	140	**1300**	140	27
	10/27/2004	MW43-102704	**36**	71	1.7	14	0.48 U		**51**	30	48	**1200**	91	21
	01/27/2005	MW43012705	**49.6**	27.6	9.21	4.61	0.189 U	14.2 U	**187**	0.693	13.7	**1600**	7.38	0.189 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW43012706	**64.1**	145	4.77	27.1	0.955 U	0.955 U	**52.0**	37.0	77.8	**944**	132	24.1
	08/10/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-44	08/13/2002	GW-139	**310**	170	5.2	16	0.96 U	--	**130**	12	76	**2900**	77	7.8
	01/23/2004	MW44-012304	**1900**	**1600**	48 U	390	12	--	**180**	**1000**	**1000**	**14000**	2200	**760**
	04/29/2004	MW44-042904	**410**	260	4.7	38	1.5	--	**87**	90	140	**9000**	300	91
	08/11/2004	MW44-081104	**2700**	**2000**	40	520	18	--	**43**	**1600**	**1200**	**14000**	3000	**1200**
	10/29/2004	MW44-102904	**9400**	**5700**	160	1900	83	--	**740**	**5300**	**4100**	**42000**	11000	**4100**
	01/27/2005	MW44012705	**608**	467	11.2	14.5	1.92 U	144 U	**117**	11.8	166	**3570**	104	7.81
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW44012706	**122**	135	3.84	24.6	0.951 U	0.951 U	**55.8**	30.4	91.2	**947**	140	16.6
	08/10/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/01/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW44020209	**152**	346	9.49	231	19.8	4.66	**84.8**	**1490**	599	64.7	2240	**1110**
	08/19/2009	MW44081909	**42.5**	64.5	2.58	40.8	0.972 U	0.972 U	**117**	233	75.1	**249**	368	160
	01/29/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/25/2010	MW44082510	1.98	7.21	0.963 U	14.5	0.963 U	0.963 U	**7.40**	64.5	18.7	2.19	73.7	53.2
	01/24/2011	MW44012411	0.961 U	1.95	0.961 U	2.74	0.961 U	0.961 U	3.32	11	4.73	0.961 U	10.1	6.32
	09/02/2011	MW44090211	1.34	1.86	0.961 U	3.93	1.27	0.961 U	3.24	37.3	11.3	2.98	14.4	32.8
Cell 2 (UWBZ)														
E-4	07/12/2007	E4-21071207	5.06	38.2	1.12	16.1	0.968 U	0.968 U	**11.8**	76.1	36.6	12.3	59.6	55.3
	09/13/2007	E4-23091307	**33.2**	50.2	2.72	28.7	0.976 U	0.976 U	**50.3**	172	46.2	132	265	64.6
	02/12/2008	E4021208	24.9	50.5	1.12	27.2	0.963 U	0.963 U	**11.4**	75.3	75.0	36.8	163	51.2
	08/22/2008	E4082208	0.961 U	2.57	0.961 U	2.71	0.961 U	0.961 U	2.88	18.5	7.25	2.44	9.64	13.3
	01/13/2009	E4011309	0.947 U	5.51	0.947 U	2.80	0.947 U	0.947 U	**5.17**	16.7	7.07	8.58	6.93	11.2
EPA-4S	09/03/2008	EPA4S090308	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U
	10/02/2008	EPA4S100208	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	02/10/2009	EPA4S021009	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	04/16/2009	EPA4S041609	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/13/2009	EPA4S081309	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	01/29/2010	EPA4S012910	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/24/2010	EPA4S082410	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/25/2011	EPA4S012511	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	09/01/2011	EPA4S090111	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
EPA-4D	09/03/2008	EPA4D090308	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	10/02/2008	EPA4D100208	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	02/10/2009	EPA4D021009	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U	0.999 U
	04/16/2009	EPA4D041609	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	08/13/2009	EPA4D081309	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	01/29/2010	EPA4D012910	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/24/2010	EPA4D082410	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (μg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	01/25/2011	EPA4D012511	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	09/01/2011	EPA4D090111	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
MW-4	05/07/2004	MW4-050704	0.1	65	0.24	0.28	0.096 U	--	0.49	0.19	15	1.1	0.096 U	0.13
	07/29/2004	MW4-072904	0.096 U	40	0.18	0.2	0.096 U	--	0.59	0.1	9.5	0.49	0.096 U	0.096 U
	10/22/2004	MW4-102204	0.14	64	0.43	0.26	0.096 U	--	0.65	0.14	21	0.52	0.096 U	0.1
	01/24/2005	MW4012405	0.048 U	60	0.395	0.363	0.0192 U	1.44 U	0.192 U	0.121	10.4	0.048 U	0.0192 U	0.175
	07/20/2005	MW4072205	0.0473 U	28	0.0939	0.0804	0.0189 U	1.42 U	0.385	0.045	0.0189 U	0.595	0.0564	0.0332
	01/23/2006	MW4012306	0.949 U	39.2	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	10.7	0.949 U	0.949 U	0.949 U
	08/08/2006	MW4080806	1.01 U	14.3	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	3.35	1.01 U	1.01 U	1.01 U
	01/24/2007	MW4012407	0.952 U	43.9	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	14.6	0.952 U	0.952 U	0.952 U
	08/14/2007	MW4081407	0.951 U	34.4	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	9.91	0.951 U	0.951 U	0.951 U
	01/17/2008	MW4011708	0.949 U	38.6	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	11.3	0.949 U	0.949 U	0.949 U
	08/13/2008	MW4081308	0.948 U	17.2	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	4.24	0.948 U	0.948 U	0.948 U
	01/29/2009	MW4012909	0.944 U	27.2	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	8.51	2.25	0.944 U	0.944 U
	08/18/2009	MW4081809	0.951 U	23.3	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	7.09	0.951 U	0.951 U	0.951 U
	01/19/2010	MW4011910	0.945 U	40.9	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	12.1	0.945 U	0.945 U	0.945 U
	08/13/2010	MW4081310	0.95 U	34.6	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	11.6	0.95 U	0.95 U	0.95 U
	01/20/2011	MW4012011	0.951 U	52.6	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	18	0.951 U	0.951 U	0.951 U
	08/26/2011	MW4082611	0.954 U	22.9	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	7.27	0.954 U	0.954 U	0.954 U
MW-5	01/26/2004	MW5-012604	0.095 U	17	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	2.8	0.32	0.095 U	0.095 U
	05/07/2004	MW5-050704	0.096 U	34	0.1	0.16	0.096 U	--	0.096 U	0.096 U	5.2	0.46	0.096 U	0.096 U
	07/29/2004	MW5-072904	0.096 U	29	0.12	0.12	0.096 U	--	0.096 U	0.096 U	5	2.3	0.096 U	0.096 U
	10/22/2004	MW5-102204	0.096 U	39	0.18	0.29	0.096 U	--	0.096 U	0.096 U	4.2	0.096 U	0.096 U	0.096 U
	01/24/2005	MW5012405	0.473 U	40.1	0.189 U	0.289	0.189 U	14.2 U	1.89 U	0.189 U	5.21	0.473 U	0.189 U	0.189 U
	07/20/2005	MW5072205	0.0478 U	34.9	0.0893	0.0844	0.0191 U	1.43 U	0.191 U	0.0191 U	0.0191 U	0.189	0.112	0.0191 U
	01/24/2006	MW5012406	0.952 U	27.2	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	4.32	0.952 U	0.952 U	0.952 U
	08/08/2006	MW5080806	1.01 U	22.8	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	3.62	1.01 U	1.01 U	1.01 U
	01/24/2007	MW5012407	0.953 U	26.8	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	4.25	0.953 U	0.953 U	0.953 U
	08/14/2007	MW5081407	0.946 U	23.8	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	3.68	0.946 U	0.946 U	0.946 U
	01/17/2008	MW5011708	0.952 U	31.4	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	4.72	3.59	0.952 U	0.952 U
	08/13/2008	MW5081308	0.951 U	30.5	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	4.56	2.10	0.951 U	0.951 U
	01/29/2009	MW5012909	0.946 U	30.0	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	3.92	0.946 U	0.946 U	0.946 U
	08/18/2009	MW5081809	0.947 U	31.2	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	3.85	0.947 U	0.947 U	0.947 U
	01/22/2010	MW5012210	0.947 U	37.9	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	3.54	0.947 U	0.947 U	0.947 U
	08/13/2010	MW5081310	0.946 U	21.2	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.85	0.946 U	0.946 U	0.946 U
	01/20/2011	MW5012011	0.952 U	41.1	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	3.23	0.952 U	0.952 U	0.952 U
	08/26/2011	MW5082611	0.951 U	26.3	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.21	0.951 U	0.951 U	0.951 U
PZ-06	01/23/2007	PZ06012307	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/13/2007	PZ06081307	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	2.84	0.952 U	0.952 U
	01/16/2008	PZ06011608	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	08/12/2008	PZ06081208	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/26/2009	PZ06012609	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	08/05/2009	PZ06080509	0.949 U	3.1	1.01	2.93	1.05	2.87	1.35	2.65	0.949 U	0.949 U	2.99	1.02
	01/13/2010	PZ06011310	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	08/01/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/2011	PZ06011311	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/24/2011	PZ06082411	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
MW-10	08/06/2002	GW-121	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	01/23/2007	MW10012307	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	08/14/2007	MW10081407	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/17/2008	MW10011708	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
MW-13	08/08/2002	GW-127	0.097 U	4.5	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	0.097 U	0.17	0.097 U
	01/26/2004	MW13-012604	0.095 U	8	0.095 U	0.17	0.095 U	--	0.095 U	0.12	0.16	0.2	0.27	0.097
	05/05/2004	MW13-050504	0.10 U	6.4	0.10 U	0.14	0.10 U	--	0.10 U	0.10 U	0.10 U	0.10 U	0.22	0.10 U
	07/28/2004	MW13-072804	0.096 U	5.7	0.096 U	0.11	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.22	0.096 U
	10/20/2004	MW13-102004	4.7	18	0.32	0.43	0.096 U	--	1.5	0.38	3.9	24	7	0.28
	01/21/2005	MW13012105	0.482	9.96	0.019 U	0.392	0.019 U	1.42 U	0.19 U	0.341	0.89	1.53	1.96	0.244
	07/20/2005	MW13072105	0.0477 U	8.24	0.0378	0.0807	0.0191 U	1.43 U	0.191 U	0.115	0.0757	0.0651	0.478	0.121
	01/23/2006	MW13012306	0.952 U	5.22	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/07/2006	MW13080706	0.951 U	4.83	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/23/2007	MW13012307	0.949 U	4.86	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	08/09/2007	MW13080907	0.95 U	5.20	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/15/2008	MW13011508	0.955 U	4.69	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	08/11/2008	MW13081108	0.949 U	4.65	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/23/2009	MW13012309	**216**	156	0.95 U	5.68	0.95 U	**6.79**	**7.30**	2.89	53.7	**1220**	31.5	1.79
	08/14/2009	MW13081409	**55.6**	56.1	0.951 U	1.56	0.951 U	2.64	1.61	1.57	20.6	**290**	12.9	0.951 U
	01/11/2010	MW13011110	**128**	140	0.951 U	2.83	0.951 U	3.85	1.10	2.25	45.1	**379**	24.6	1.64
	08/11/2010	MW13081110	21.3	85.3	2.96	1.77	0.952 U	1.77	0.952 U	0.952 U	31.1	51.5 B	4.32	0.952 U
	01/12/2011	MW13011211	20.9	51	0.956 U	1.21	0.956 U	0.956 U	0.956 U	0.956 U	19	36.6	7.05	0.956 U
	08/23/2011	MW13082311	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
MW-14	08/08/2002	GW-128	0.096 U	0.17	0.096 U	0.096 U	0.096 U	--	0.1	0.096 U	0.096 U	0.096 U	0.18	0.096 U
	01/22/2004	MW14-012204	0.096 U	0.35	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	05/04/2004	MW14-050404	0.096 U	0.27	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	07/28/2004	MW14-072804	0.096 U	0.32	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/20/2004	MW14-102004	0.096 U	0.4	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/21/2005	MW14012105	0.0477 U	0.442	0.0191 U	0.0767	0.0191 U	1.43 U	0.191 U	0.0191 U	0.0191 U	0.0477 U	0.0191 U	0.0191 U
	07/20/2005	MW14072105	0.0474 U	0.356	0.019 U	0.019 U	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0474 U	0.0238	0.019 U
	01/23/2006	MW14012306	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	08/07/2006	MW14080706	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/23/2007	MW14012307	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/13/2007	MW14081307	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/16/2008	MW14011608	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
MW-15	08/08/2002	GW-140	0.096 U	0.22	0.12	0.22	0.096 U	--	**59**	0.096 U	0.85	0.38	1.6	0.096 U
	01/21/2004	MW15-012104	0.096 U	0.096 U	0.28	2.0 U	0.096 U	--	**45**	0.096 U	0.92	0.29	2.0 U	0.096 U
	05/05/2004	MW15-050504	0.096 U	0.12	0.25	0.51	0.096 U	--	**60**	0.096 U	1.5	0.45	1.7	0.096 U
	07/28/2004	MW15-072804	0.096 U	0.12	0.16	0.42	0.096 U	--	**34**	0.096 U	1.7	0.35	1.8	0.096 U
	10/20/2004	MW15-102004	0.097 U	0.17	0.19	0.47	0.097 U	--	**62**	0.097 U	1.8	0.52	1.8	0.097 U
	01/21/2005	MW15012105	0.0481 U	0.0192 U	1.19	0.0192 U	0.0192 U	1.44 U	**58**	0.0192 U	1.6	0.568	0.0192 U	0.0192 U
	07/20/2005	MW15072205	0.479 UR	0.543 J	0.222 J	0.228 J	0.192 UR	14.4 UR	**74.8 J**	0.192 UR	2.18 J	0.773 J	1.83 J	0.192 UR

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	01/23/2006	MW15012306	0.949 U	2.01	0.949 U	0.949 U	0.949 U	0.949 U	**62.9**	0.949 U	1.46	2.32	2.46	0.949 U
	08/07/2006	MW15080706	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	**37.3**	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
	01/18/2007	MW15011807	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	**37.2**	0.955 U	1.43	0.955 U	0.955 U	0.955 U
	08/10/2007	MW15081007	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**25.1**	0.95 U	1.87	0.95 U	0.95 U	0.95 U
	01/16/2008	MW15011608	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**24.8**	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/13/2008	MW15081308	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	**15.0**	0.957 U	1.52	0.957 U	0.957 U	0.957 U
	09/03/2008	MW15090308	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**16.0**	0.948 U	1.55	0.948 U	0.948 U	0.948 U
	01/26/2009	MW15012609	1.39	2.24	0.945 U	0.945 U	0.945 U	0.945 U	**18.1**	0.945 U	2.88	6.62	0.945 U	0.945 U
	08/17/2009	MW15081709	2.49	4.31	0.946 U	0.946 U	0.946 U	0.946 U	**7.01**	0.946 U	2.89	12.4	0.946 U	0.946 U
	01/12/2010	MW15011210	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.62	0.947 U	0.994	0.947 U	0.947 U	0.947 U
	08/11/2010	MW15081110	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U
	01/13/2011	MW15011311	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/23/2011	MW15082311	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
MW-16	08/07/2002	GW-129	0.78	2.3	0.15	0.38	0.11 U	--	1.6	0.47	1.5	32	1.5	0.39
	01/23/2004	MW16-012304	0.7	2.8	0.12	0.44	0.095 U	--	1.7	0.22	1.9	14	0.45	0.14
	05/06/2004	MW16-050604	1.6	3.8	0.27	0.53	0.096 U	--	1.6	0.21	2.2	24	0.57	0.14
	07/30/2004	MW16-073004	0.67	2.7	0.096 U	0.46	0.096 U	--	1.7	0.2	1.7	0.2	0.49	0.13
	10/26/2004	MW16-102604	0.49	3.2	0.23	0.75	0.096 U	--	1.4	0.28	2	7.8	0.25	0.19
	01/25/2005	MW16012505	0.706	1.71	0.019 U	0.881	0.019 U	1.42 U	1.15	0.21	1.79	0.0474 U	0.328	0.019 U
	07/25/2005	MW16072505	0.77	3.33	0.189	0.306	0.019 U	1.43 U	1.37 U	0.238	2.1	10.3	0.384 U	0.166
	01/25/2006	MW16012506	0.947 U	2.55	0.947 U	0.947 U	0.947 U	0.947 U	1.67	0.947 U	1.69	8.00	0.947 U	0.947 U
	08/10/2006	MW16081006	0.95 U	2.42	0.95 U	0.95 U	0.95 U	0.95 U	0.978	0.95 U	1.54	1.47	0.95 U	0.95 U
	01/25/2007	MW16012507	0.951 U	2.43	0.951 U	0.951 U	0.951 U	0.951 U	1.16	0.951 U	2.01	2.48	0.951 U	0.951 U
	08/16/2007	MW16081607	0.95 U	3.06	0.95 U	0.95 U	0.95 U	0.95 U	1.07	0.95 U	1.84	1.36	0.95 U	0.95 U
	01/22/2008	MW16012208	0.954 U	2.40	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.54	1.56	0.954 U	0.954 U
	08/19/2008	MW16081908	0.949 U	2.94	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.74	0.949 U	0.949 U	0.949 U
	01/30/2009	MW16013009	0.947 U	2.15	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.30	0.947 U	0.947 U	0.947 U
	08/12/2009	MW16081209	1.54 U	1.81	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U
	01/21/2010	MW16012110	0.946 U	1.66	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.05	0.946 U	0.946 U	0.946 U
	08/17/2010	MW16081710	0.95 U	1.35	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/21/2011	MW16012111	0.953 U	2.81	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.78	0.953 U	0.953 U	0.953 U
	08/30/2011	MW16083011	0.956 U	2.38	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	1.57	0.956 U	0.956 U	0.956 U
MW-17	08/07/2002	GW-130	0.11 U	1.2	0.11 U	0.11 U	0.11 U	--	0.11 U	0.4	0.67	0.15	0.11 U	0.25
	01/26/2004	MW17-012604	0.14	1.5	0.097 U	0.15	0.097 U	--	0.097 U	0.097 U	0.62	1.6	0.097 U	0.097 U
	05/06/2004	MW17-050604	0.096 U	1.4	0.096 U	0.2	0.096 U	--	0.096 U	0.12	0.55	0.28	0.096 U	0.096 U
	07/30/2004	MW17-073004	0.096 U	1.6	0.096 U	0.21	0.096 U	--	0.096 U	0.35	0.86	0.096 U	0.096 U	0.18
	10/26/2004	MW17-102604	0.096 U	1.8	0.096 U	0.098	0.096 U	--	0.096 U	0.1	0.7	0.096 U	0.096 U	0.096 U
	01/24/2005	MW17012405	0.0472 U	1.84	0.0189 U	0.36	0.0189 U	1.42 U	0.189 U	0.384	0.942	0.165	0.0189 U	0.317
	07/25/2005	MW17072505	0.194	1.98	0.019 U	0.113	0.019 U	1.43 U	0.19 U	0.789	1.03	2.45	0.124 U	0.479
	01/24/2006	MW17012406	0.951 U	1.53	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/08/2006	MW17080806	1.01 U	1.45	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	3.12	1.01 U	1.01 U
	01/24/2007	MW17012407	0.951 U	1.04	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/15/2007	MW17081507	0.948 U	1.42	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/18/2008	MW17011808	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.10	0.951 U	0.951 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
MW-18	07/29/2004	MW18-072904	**1200**	340	9.6 U	12	0.096 U	--	**210**	9.6 U	130	**20000**	86	9.6 U
	07/25/2005	MW18072505	**885**	326	7.66	12.9	1.9 U	143 U	**228**	10.5	128	**16900**	101	7.59
	01/24/2006	MW18012406	**539**	208	5.54	8.24	0.951 U	0.951 U	**192**	11.8	64.5	**7820**	59.9	6.94
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/24/2007	MW18012407	**551**	224	5.64	10.5	0.954 U	0.954 U	**174**	11.7	78.4	**8670**	61.2	11.0
	08/15/2007	MW18081507	**408**	159	0.95 U	7.68	0.95 U	0.95 U	**135**	8.12	48.5	**5740**	38.8	4.75
	01/18/2008	MW18011808	**915**	343	5.03	8.29	0.952 U	0.952 U	**267**	6.00	88.0	**12000**	64.2	4.65
MW-21	08/08/2002	GW-131	**140**	52	1	1	0.097 U	--	**110**	0.097 U	25	**3800**	16	0.097 U
	05/06/2004	MW21-050604	27	87	1.3	3.2	0.096 U	--	**88**	0.2	41	**3900**	23	0.17
	07/30/2004	MW21-073004	0.84	51	1.1	2.4	0.096 U	--	**21**	0.17	25	**350**	12	0.12
	10/26/2004	MW21-102604	0.52	53	1.3	2.7	0.48 U	--	**46**	0.48 U	26	**1000**	16	0.48 U
	01/25/2005	MW21012505	1.88	19.3	0.628	1.99	0.189 U	14.2 U	**21.3**	0.189 U	12.3	**867**	9.43	0.189 U
	07/25/2005	MW21072505	**59.7**	67.9	1.9 U	2.11	1.9 U	143 U	**31.9**	1.9 U	32.6	**2760**	18.1	1.9 U
	01/25/2006	MW21012506	5.05	42.8	0.951 U	1.60	0.951 U	0.951 U	**30.2**	0.951 U	22.5	**491**	15.9	0.951 U
	08/10/2006	MW21081006	0.949 U	22.6	0.949 U	0.949 U	0.949 U	0.949 U	**12.8**	0.949 U	1.68	0.949 U	2.64	0.949 U
	01/25/2007	MW21012507	2.10	64.9	1.02	1.15	0.95 U	0.95 U	**22.3**	0.95 U	4.55	36.3	2.35	0.95 U
	08/16/2007	MW21081607	0.952 U	1.10	0.952 U	0.952 U	0.952 U	0.952 U	**11.3**	0.952 U	1.89	1.95	0.952 U	0.952 U
	01/22/2008	MW21012208	0.958 U	1.73	0.958 U	0.958 U	0.958 U	0.958 U	**16.4**	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U
	08/19/2008	MW21081908	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.71	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/30/2009	MW21013009	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	08/12/2009	MW21081209	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/21/2010	MW21012110	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	08/17/2010	MW21081710	2.32	20.7	1.12	1.76	0.962 U	0.962 U	**16.8**	9.66	11.1	22.5 B	1.91	4.64
	01/21/2011	MW21012111	0.96 U	1.16	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	3.18	0.96 U	8.49	0.96 U	2.16
	08/30/2011	MW21083011	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	5.2	0.959 U	0.959 U	0.959 U	3.6
MW-23	08/06/2002	GW-124	0.2	0.097 U	0.29	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	0.12	0.097 U	0.097 U
	01/22/2004	MW23-012204	0.096 U	0.096 U	0.27	0.35	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	05/03/2004	MW23-050304	0.096 U	0.096 U	0.096 U	0.29	0.096 U	--	0.096 U	0.096 U	0.096 U	0.8	0.096 U	0.096 U
	07/27/2004	MW23-072704	0.096 U	0.096 U	0.096 U	0.21	0.096 U	--	0.096 U	0.096 U	0.096 U	0.11	0.096 U	0.096 U
	10/19/2004	MW23-101904	0.096 U	0.096 U	0.096 U	0.21	0.096 U	--	0.096 U	0.096 U	0.096 U	0.12 U	0.096 U	0.096 U
	01/21/2005	MW23012105	2.14	0.019 U	0.019 U	0.334	0.019 U	1.43 U	0.19 U	0.019 U	0.019 U	0.0475 U	0.019 U	0.019 U
	07/20/2005	MW23072105	0.0479 UR	0.0192 UR	0.219 J	0.0306 J	0.0192 UR	1.44 UR	0.192 UR	0.0192 UR	0.0192 UR	0.0479 UR	0.0214 J	0.0244 J
	01/20/2006	MW23012006	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/07/2006	MW23080706	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
	01/23/2007	MW23012307	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/09/2007	MW23080907	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	01/15/2008	MW23011508	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/11/2010	MW23011110	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/30/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	08/12/2002	GW-141	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.27	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/27/2004	MW25-012704	0.096 U	0.096 U	0.096 U	0.24	0.096 U	--	0.11	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	04/29/2004	MW25-042904	0.096 U	0.096 U	0.096 U	0.22	0.096 U	--	0.13	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	08/06/2004	MW25-080604	0.096 U	0.096 U	0.096 U	0.16	0.096 U	--	0.38	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/22/2004	MW25-102204	0.096 U	0.096 U	0.096 U	0.21	0.096 U	--	0.98	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/26/2005	MW25012605	0.0473 U	0.0189 U	0.0189 U	0.205	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0473 U	0.0189 U	0.0189 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	07/25/2005	MW25072605	0.0477 U	0.0191 U	0.0191 U	0.06 U	0.0191 U	1.43 U	0.191 U	0.0191 U	0.0191 U	0.0628	0.0352 U	0.0191 U
	01/26/2006	MW25012606	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	08/09/2006	MW25080906	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	01/26/2007	MW25012607	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/17/2007	MW25081707	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/23/2008	MW25012308	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	01/27/2010	MW25012710	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	08/31/2011	MW25083111	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U
MW-26	01/26/2004	MW26-012604	**1100**	370	8	10	0.95 U	--	**160**	5.3	130	**15000**	100	3.5
	05/05/2004	MW26-050504	**1100**	310	8.6	8.9	2.0 U	--	**140**	4.8	99	**16000**	86	3
	07/29/2004	MW26-072904	**1200**	350	9.6 U	11	0.096 U	--	**170**	9.6 U	120	**16000**	100	4.8
	10/25/2004	MW26-102504	**950**	320	2.8	4	0.20 U	--	**150**	2.7	100	**14000**	88	1.9
	01/24/2005	MW26012405	**920**	257	4.89	12.1	0.345	14.2 U	**153**	13.9	89.1	**11000**	109	11.8
	07/25/2005	MW26072505	**818**	1.9 U	7.17	7.22	1.9 U	143 U	**148**	3.71	103	**10300**	74.9	2.1
	01/24/2006	MW26012406	**547**	197	4.62	6.47	0.947 U	0.947 U	**109**	3.31	72.3	**6490**	59.5	1.75
	08/08/2006	MW26080806	**668**	240	4.69	8.88	1.01 U	1.01 U	**128**	8.11	79.6	**7360**	70.8	5.42
	01/24/2007	MW26012407	**578**	215	4.51	5.04	0.957 U	0.957 U	**114**	3.69	71.0	**6930**	56.6	2.49
	08/15/2007	MW26081507	**335**	84.9	0.948 U	4.21	0.948 U	0.948 U	**55.4**	2.43	40.7	**4360**	30.4	1.28
	01/18/2008	MW26011808	**886**	310	6.86	9.19	0.96 U	0.96 U	**143**	6.09	103	**10800**	92.4	4.29
	08/15/2008	MW26081508	**672**	246	5.32	6.17	1 U	1 U	**90.0**	4.02	55.8	**10400**	48.4	2.31
	01/28/2009	MW26012809	**372**	228	6.29	10.7	0.947 U	0.947 U	**75.0**	13.5	69.6	**6620**	64.4	9.40
	08/18/2009	MW26081809	**536**	249	3.51	8.33	0.951 U	0.951 U	**126**	7.52	76	**8710**	81.1	5.25
	01/25/2010	MW26012510	**921**	311	7.30	14.0	0.951 U	0.951 U	**181**	13.8	90.1	**13600**	75.4	11.2
	08/16/2010	MW26081610	**590**	187	2.34	6.71	0.952 U	0.952 U	**85.3**	7.32	43.4	**7640**	44.8	5.35
	01/20/2011	MW26012011	**946**	269	6.84	9.23	0.957 U	0.957 U	**167**	6.38	68.7	**12700**	64.3	3.94
	08/30/2011	MW26083011	**450**	155	4.41	5.61	0.956 U	0.956 U	**120**	4.64	39.4	**4640**	30.2	2.99
MW-27	01/26/2004	MW27-012604	16	7.3	0.095 U	0.11	0.095 U	--	0.83	0.095 U	0.76	**1200**	0.095 U	0.095 U
	05/07/2004	MW27-050704	19	7.9	0.096 U	0.13	0.096 U	--	0.81	0.096 U	0.67	**1500**	0.096 U	0.096 U
	07/29/2004	MW27-072904	13	5.7	0.096 U	0.096 U	0.096 U	--	0.82	0.096 U	0.56	**1000**	0.096 U	0.096 U
	10/20/2004	MW27-102004	15	6.9	0.096 U	0.096 U	0.096 U	--	0.9	0.096 U	0.67	**1100**	0.096 U	0.096 U
	01/21/2005	MW27012105	15.2	7.75	0.189 U	0.266	0.189 U	14.2 U	1.89 U	0.189 U	0.889	**913**	0.189 U	0.189 U
	07/20/2005	MW27072205[a]	14.3	6.47	0.0761	0.0741	0.0192 U	1.44 U	1.23	0.0192 U	0.833	**984**	0.0253	0.0192 U
	01/23/2006	MW27012306	12.1	5.76	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**644**	0.951 U	0.951 U
	08/07/2006	MW27080706	9.50	4.49	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**518**	0.951 U	0.951 U
	01/24/2007	MW27012407	9.63	5.00	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**538**	0.95 U	0.95 U
	08/14/2007	MW27081407	10.7	5.39	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**372**	0.951 U	0.951 U
	01/17/2008	MW27011708	13.1	6.54	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	**706**	0.96 U	0.96 U
	01/22/2010	MW27012210	8.73	5.09	0.945 U	0.945 U	0.945 U	1.06	0.945 U	0.945 U	0.945 U	**871**	0.945 U	0.945 U
	08/29/2011	MW27082911	9.25	5.63	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.991	**331**	0.953 U	0.953 U
MW-38	08/07/2002	GW-135	0.12	0.56	0.097 U	0.18	0.097 U	--	1.5	0.097 U	0.12	0.94	0.097 U	0.097 U
dup	08/07/2002	GW-149	0.11	0.59	0.097 U	0.097 U	0.097 U	--	1.3	0.097 U	0.13	0.46	0.097 U	0.097 U
	01/27/2004	MW38-012704	0.095 U	0.095 U	0.095 U	0.31	0.095 U	--	0.097	0.095 U	0.095 U	0.095	0.095 U	0.095 U
dup	01/27/2004	MW38DUP-012704	0.095 U	0.095 U	0.095 U	0.32	0.095 U	--	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U
	05/06/2004	MW38-050604	0.097 U	0.097 U	0.097 U	0.28	0.097 U	--	0.17	0.097 U	0.097 U	0.16	0.097 U	0.097 U
dup	05/06/2004	MW38-050604	0.096 U	0.096 U	0.096 U	0.27	0.096 U	--	0.17	0.096 U	0.096 U	0.15	0.096 U	0.096 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	08/06/2004	MW38-080604	0.096 U	0.096 U	0.096 U	0.21	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
dup	08/06/2004	MW38-080604-Dup	0.096 U	0.096 U	0.096 U	0.22	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/29/2004	MW38-102904	0.096 U	1.3	0.096 U	0.23	0.096 U	--	1.4	0.096 U	0.39	0.17	0.096 U	0.096 U
dup	10/29/2004	MW38-102904-Dup	0.096 U	1.5	0.096 U	0.26	0.096 U	--	1.5	0.096 U	0.47	0.17	0.096 U	0.096 U
	01/25/2005	MW38012505	0.0471 U	0.0189 U	0.0646	1.14	0.0189 U	1.41 U	0.189 U	0.0189 U	0.308	0.0471 U	0.0189 U	0.0189 U
dup	01/25/2005	MW38DUP012505	0.0471 U	0.0189 U	0.0741	1.25	0.0189 U	1.41 U	0.189 U	0.0189 U	0.338	0.0471 U	0.0189 U	0.0189 U
	07/25/2005	MW38072605	0.0476 U	0.583	0.146	0.168	0.019 U	1.43 U	0.19 U	0.019 U	0.019 U	0.283	0.0407 U	0.0232 U
	01/26/2006	MW38012606	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
dup	01/26/2006	MW38012606-Dup	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/10/2006	MW38081006	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U
dup	08/10/2006	MW38081006-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/25/2007	MW38012507	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
dup	01/25/2007	MW38012507-Dup	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	08/16/2007	MW38081607	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
dup	08/16/2007	MW38081607-Dup	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
dup	01/23/2008	MW38012308	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	01/23/2008	MW38012308-Dup	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/21/2008	MW38082108	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.37	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
dup	08/21/2008	MW38082108-Dup	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.07	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	02/02/2009	MW38020209	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
dup	02/02/2009	MW38020209-Dup	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/12/2009	MW38081209	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U
dup	08/12/2009	MW38081209-Dup	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U
	01/21/2010	MW38012110	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
dup	01/21/2010	MW38012110-Dup	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/17/2010	MW38081710	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.42 B	0.951 U	0.951 U
dup	08/17/2010	MW38081710-Dup	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.67 B	0.951 U	0.951 U
	01/21/2011	MW38012111	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	1.42
	08/31/2011	MW38083111	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	1.96	0.957 U	0.957 U	0.957 U	3.36
dup	08/31/2011	MW38DUP083111	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	2.04	0.954 U	0.954 U	0.954 U	3.55
MW-39	08/07/2002	GW-136	0.097 U	0.74	0.097 U	0.097 U	0.097 U	--	0.76	0.15	0.71	0.37	0.097 U	0.097 U
	01/27/2004	MW39-012704	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	--	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U
dup	01/27/2004	MW39DUP-012704	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	05/06/2004	MW39-050604	0.096 U	0.096 U	0.096 U	0.1	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
dup	05/06/2004	MW39-050604	0.096 U	0.096 U	0.096 U	0.11	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	08/06/2004	MW39-080604	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.11	0.096 U	0.096 U	0.096 U	0.096 U
dup	08/06/2004	MW39-080604-Dup	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.1	0.096 U	0.096 U	0.096 U	0.096 U
	10/29/2004	MW39-102904	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
dup	10/29/2004	MW39-102904-Dup	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/25/2005	MW39012505	0.0474 U	0.019 U	0.019 U	0.218	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0474 U	0.019 U	0.019 U
dup	01/25/2005	MW39DUP012505	0.0473 U	0.0189 U	0.0189 U	0.208	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0473 U	0.0189 U	0.0189 U
	07/25/2005	MW39072605	0.0475 U	0.019 U	0.0768 U	0.366	0.019 U	1.43 U	0.381 U	0.0225 U	0.0231 U	0.0475 U	0.0617 U	0.019 U
dup	07/25/2005	MW39072605-Dup	0.0473 U	0.0189 U	0.115 U	0.237	0.0189 U	1.42 U	0.193 U	0.0189 U	0.0299 U	0.0473 U	0.0459 U	0.0189 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	01/26/2006	MW39012606	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
dup	01/26/2006	MW39012606-Dup	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
dup	08/10/2006	MW39081006	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	08/10/2006	MW39081006-Dup	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/25/2007	MW39012507	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
dup	01/25/2007	MW39012507-Dup	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	08/16/2007	MW39081607	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
dup	08/16/2007	MW39081607-Dup	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/23/2008	MW39012308	0.952 U	2.87	0.952 U	0.952 U	0.952 U	0.952 U	2.29	0.952 U	1.48	0.952 U	0.952 U	0.952 U
dup	01/23/2008	MW39012308-Dup	0.951 U	3.10	0.951 U	1.03	0.951 U	0.951 U	2.80	0.951 U	1.74	0.951 U	0.951 U	0.951 U
	08/21/2008	MW39082108	0.947 U	1.26	0.947 U	0.947 U	0.947 U	0.947 U	1.29	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
dup	08/21/2008	MW39082108-Dup	0.949 U	2.02	0.949 U	0.949 U	0.949 U	0.949 U	3.06	1.34	0.949 U	0.949 U	0.949 U	0.949 U
	02/02/2009	MW39020209	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
dup	02/02/2009	MW39020209-Dup	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/12/2009	MW39081209	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.88	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U
dup	08/12/2009	MW39081209-Dup	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.75	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/21/2010	MW39012110	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
dup	01/21/2010	MW39012110-Dup	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/17/2010	MW39081710	0.949 U	1.92	0.949 U	1.14	0.949 U	0.949 U	**4.45**	0.949 U	3.14	2.52 B	3.43	0.949 U
dup	08/17/2010	MW39081710-Dup	0.948 U	1.63	0.948 U	0.948 U	0.948 U	0.948 U	3.75	0.948 U	2.73	2.03 B	3.01	0.948 U
	01/21/2011	MW39012111	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/31/2011	MW39083111	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.982	1.12	0.953 U	0.953 U	1.01	0.953 U
dup	08/31/2011	MW39DUP083111	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.982	0.953 U	0.953 U	1.52	0.953 U
MW-48S	08/20/2008	MW48S082008	0.954 U	2.71	0.954 U	1.18	0.954 U	0.954 U	**4.98**	14.0	0.954 U	0.954 U	0.954 U	8.46
	10/08/2008	MW-48S100808	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	3.00	0.967 U	0.967 U	0.967 U	1.59
	02/02/2009	MW48S020209	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.73	0.949 U	0.949 U	0.949 U	1.02
	04/09/2009	MW48S040909	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	2.05	0.947 U	0.947 U	0.947 U	0.947 U
	08/19/2009	MW48S081909	0.951 U	0.951 U	0.951 U	1.07	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/27/2010	MW48S012710	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	2.36	0.948 U	0.948 U	0.948 U	1.52
	08/17/2010	MW48S081710	0.952 U	0.952 U	0.952 U	2.23	0.952 U	0.952 U	0.962	7.86	0.952 U	0.952 U	0.952 U	6.17
	01/24/2011	MW48S012411	28.4	20.5	0.956 U	2.52	0.956 U	0.956 U	**15.6**	3.53	19.3	**219**	10.2	3.45
	08/31/2011	MW48S083111	0.96 U	1.86	0.96 U	1.21	0.96 U	0.96 U	2.61	10.4	0.96 U	0.96 U	0.96 U	8.8
MW-49D	08/19/2008	MW49D081908	20.4	59.5	2.93	2.12	0.955 U	0.955 U	**49.1**	4.48	22.8	144	54.9	2.76
	10/03/2008	MW49D100308	**120**	5.90	9.95	0.958 U	0.958 U	**68.5**	**51.4**	16.2	55.3	**483**	70.7	9.20
	01/26/2009	MW49D012609	8.06	6.32	0.967 U	1.37	0.967 U	0.967 U	**19.0**	7.36	7.25	29.7	19.4	4.90
	04/06/2009	MW49D040609	**160**	219	20.9	21.8	0.978 U	2.08	**132**	42.4	131	**298**	270	27.9
	08/14/2009	MW49D081409	30.1	61.8	5.47	8.72	0.965 U	2.71	**50.2**	24.9	37.4	42.2	75.4	15.6
	01/12/2010	MW49D011210	1.50	2.67	0.967 U	0.967 U	0.967 U	0.967 U	**11.8**	1.57	1.27	10.2	5.90	1.09
	08/11/2010	MW49D081110	15.1	70.1	4.09	10.7	0.973 U	0.973 U	**13.5**	51.3	18.0	74.1 B	66.4	39.1
	01/13/2011	MW49D011311	4.19	37.4	1.71	11.7	0.966 U	0.966 U	3.61	37.8	6.02	22.2	38.8	29.9
	08/23/2011	MW49D082311	9.85	22.5	1.8	10.2	0.979 U	0.979 U	**5.53**	39.9	11.3	28.4	33.8	31.3

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
MW-50S	08/19/2008	MW50S081908	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	10/08/2008	MW-50S100808	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/30/2009	MW50S013009	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	04/09/2009	MW50S040909	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/19/2009	MW50S081909	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.39	0.95 U	0.95 U
	01/26/2010	MW50S012610	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	08/16/2010	MW50S081610	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/21/2011	MW50S012111	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	08/30/2011	MW50S083011	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.16	0.952 U	0.952 U
MW-51D	08/12/2008	MW51D081208	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	10/06/2008	MW-51D100608	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/26/2009	MW51D012609	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	04/06/2009	MW51D040609	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	08/05/2009	MW51D080509	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/13/2010	MW51D011310	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U
	08/12/2010	MW51D081210	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	1.00	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	01/13/2011	MW51D011311	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U
	08/24/2011	MW51D082411	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
MW-52D	08/14/2008	MW52D081508	**85.7**	47.5	1 U	3.26	1 U	1 U	**19.3**	3.14	21.3	**671**	26.5	1.81
	10/07/2008	MW-52D100708	14.7	0.95 U	2.71	0.95 U	0.95 U	**8.98**	**11.8**	5.01	11.0	72.4	19.7	3.39
	01/30/2009	MW52D013009	3.97	2.80	0.953 U	0.953 U	0.953 U	0.953 U	**5.41**	1.81	2.98	22.8	5.35	1.29
	04/09/2009	MW52D040909	2.43	1.57	0.951 U	0.951 U	0.951 U	0.951 U	**5.22**	1.37	6.32	18.2	3.07	0.951 U
	08/18/2009	MW52D081809	0.954 U	2.91	0.954 U	0.954 U	0.954 U	0.954 U	3.52	1.3	0.954 U	2.94	0.954 U	0.954 U
	01/25/2010	MW52D012510	0.955 U	1.62	0.955 U	0.955 U	0.955 U	0.955 U	1.22	1.38	0.955 U	13.4	0.955 U	1.19
	08/16/2010	MW52D081610	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	2.62 B	0.961 U	0.961 U
	01/20/2011	MW52012011	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	1.21	0.956 U	2.87	0.956 U	0.956 U
	08/30/2011	MW52D083011	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	2.02	0.961 U	0.98	0.961 U	1.48
MW-53S	08/14/2008	MW53S081408	0.967 U	8.12	0.967 U	0.967 U	0.967 U	0.967 U	1.66	0.967 U	0.977	0.967 U	0.967 U	0.967 U
	10/07/2008	MW-53S100708	**87.7**	1.53	0.951 U	0.951 U	0.951 U	**64.7**	**35.0**	0.951 U	29.0	**6240**	3.79	0.951 U
	01/28/2009	MW53S012809	28.1	135	0.947 U	0.947 U	0.947 U	0.947 U	**72.7**	0.947 U	43.0	**5890**	7.75	0.947 U
	04/10/2009	MW53S041009	20.6	72.6	1.35	0.945 U	0.945 U	0.945 U	**58.3**	0.945 U	25.1	**3280**	5.30	0.945 U
	08/18/2009	MW53S081809	2.41	41.7	2.1	0.944 U	0.944 U	0.944 U	**28.4**	0.944 U	12.8	**459**	1.88	0.944 U
	01/20/2010	MW53S012010	**44.9**	144	1.93	0.949 U	0.949 U	0.949 U	**124**	0.949 U	51.9	**14200**	11.6	0.949 U
	08/16/2010	MW53S081610	**39.7**	62.6	1.06	0.949 U	0.949 U	0.949 U	**64.4**	0.949 U	24.3	**3730**	6.03	0.949 U
	01/18/2011	MW53S011811	**177**	179	2.78	1.32	0.952 U	0.952 U	**206**	0.952 U	53	**11100**	15.2	0.952 U
	08/11/2011	MW53S081111	**154**	93.4	2.29	2.03	0.957 U	0.957 U	**87.2**	0.957 U	46.8	**7280**	18.3	0.957 U
MW-53D	08/14/2008	MW53D081408	0.951 U	1.22	0.951 U	0.951 U	0.951 U	0.951 U	**24.3**	0.951 U	6.57	41.8	0.951 U	0.951 U
	10/07/2008	MW-53D100708	1.57	0.948 U	0.948 U	0.948 U	0.948 U	**12.8**	**7.49**	0.948 U	2.74	43.1	1.48	0.948 U
	01/28/2009	MW53D012809	4.35	2.79	0.949 U	0.949 U	0.949 U	0.949 U	**19.5**	0.949 U	6.60	27.8	6.85	0.949 U
	04/10/2009	MW53D041009	6.27	2.63	1.28	0.949 U	0.949 U	0.949 U	**20.5**	1.99	18.5	33.3	14.5	0.977
	08/17/2009	MW53D081709	0.948 U	1.97	0.948 U	0.948 U	0.948 U	2.62	**14.3**	0.948 U	5	6.66	0.948 U	0.948 U
	01/20/2010	MW53D012010	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**5.81**	0.951 U	2.09	6.69	0.951 U	0.951 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	08/16/2010	MW53D081610	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.37	0.951 U	0.951 U	0.951 U	0.998
	01/18/2011	MW53D011811	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	3.2	0.956 U	1.46	0.956 U	2.16
	08/11/2011	MW53D081111	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	4.06	0.954 U	0.954 U	0.954 U	2.6
MW-55S	08/20/2010	MW55S082010	**248**	202	0.953 U	5.00	0.953 U	1.22	**43.5**	1.03	42.4	**582**	30.2	0.953 U
	01/14/2011	MW55S011411	**214**	267	0.953 U	4.05	0.953 U	0.953 U	**61.2**	0.953 U	50.9	**625**	24.9	0.953 U
	08/08/2011	MW55S080811	**66.1**	95.8	0.96 U	2.61	0.96 U	0.96 U	**41.7**	0.96 U	33.8	**322**	15.2	0.96 U
MW-55D	09/07/2010	MW55D090710	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U
	01/14/2011	MW55D011411	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/08/2011	MW55D080811	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
MW-57S	08/15/2008	MW57S081508	**765**	185	5.87	6.89	0.955 U	0.955 U	**132**	2.68	61.4	**7040**	36.0	1.80
	10/06/2008	MW-57S100608	**222**	5.34	7.76	0.945 U	0.945 U	**80.8**	**61.3**	2.98	53.5	**12300**	37.9	2.03
	01/27/2009	MW57S012709	**760**	212	0.945 U	8.88	0.945 U	1.64	**90.3**	3.84	61.3	**7260**	44.3	2.18
	04/07/2009	MW57S040709	**662**	161	5.36	7.51	0.949 U	0.949 U	**129**	2.97	54.4	**10700**	37.2	1.74
	08/06/2009	MW57S080609	**757**	169	6.69	7.91	0.958 U	0.958 U	**199**	3.98	72	**10300**	38	1.65
	01/13/2010	MW57S011310	**667**	196	5.64	8.50	0.948 U	0.948 U	**154**	3.26	67.6	**11100**	46.5	2.22
	08/12/2010	MW57S081210	**784**	180	5.24	10.7	0.948 U	0.948 U	**152**	3.54	50.7	**9680**	52.2	2.12
	01/14/2011	MW57S011411	**1150**	201	6.16	9.32	0.954 U	0.954 U	**149**	3.94	56.3	**12700**	43.3	2.52
	08/25/2011	MW57S082511	**588**	142	4.37	0.964 U	0.964 U	0.964 U	**64.2**	2.64	36.4	**4380**	24.3	1.71
MW-57D	08/14/2008	MW57D081508	1 U	1 U	1 U	1 U	1 U	1 U	**8.39**	1 U	1 U	39	1 U	1 U
	10/06/2008	MW-57D100608	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	**8.95**	**4.54**	0.961 U	0.961 U	51.9	0.961 U	0.961 U
dup	10/06/2008	MW-57D100608-Dup	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	**10.7**	**5.70**	0.961 U	0.961 U	62.0	0.961 U	0.961 U
	01/27/2009	MW57D012709	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	**9.85**	0.943 U	0.943 U	41.1	0.943 U	0.943 U
dup	01/27/2009	MW57D012709-Dup	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**10.7**	0.95 U	0.95 U	52.9	0.95 U	0.95 U
	04/07/2009	MW57D040709	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**7.49**	0.95 U	0.95 U	37.3	0.95 U	0.95 U
dup	04/07/2009	MW57D040709-Dup	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**8.40**	0.95 U	0.95 U	48.5	0.95 U	0.95 U
	08/06/2009	MW57D080609	0.649 U	0.649 U	0.649 U	0.649 U	0.649 U	0.649 U	**9.07**	0.649 U	0.649 U	33.6	0.649 U	0.649 U
	01/13/2010	MW57D011310	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**9.32**	0.947 U	0.947 U	49.1	0.947 U	0.947 U
dup	01/13/2010	MW57D011310-Dup	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**9.39**	0.947 U	0.947 U	48.9	0.947 U	0.947 U
	08/12/2010	MW57D081210	1.04	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**10.3**	0.948 U	0.948 U	49.3 B	0.948 U	0.948 U
dup	08/12/2010	MW57D081210-Dup	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**8.30**	0.947 U	0.947 U	45.4 B	0.947 U	0.947 U
	01/14/2011	MW57D011411	1.27	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	**13.3**	0.953 U	0.953 U	84.7	0.953 U	0.953 U
dup	01/14/2011	MW57DDUP011411	1.07	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**10.1**	0.951 U	0.951 U	74.6	0.951 U	0.951 U
	08/25/2011	MW57D082511	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**7.86**	0.952 U	0.952 U	35.7	0.952 U	0.952 U
dup	08/25/2011	MW57D082511-Dup	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	**8.27**	0.955 U	0.955 U	38.8	0.955 U	0.955 U
MW-58D	08/13/2008	MW58D081308	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	10/08/2008	MW-58D100808	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.07	0.951 U	0.951 U
	01/27/2009	MW58D012709	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	04/07/2009	MW58D040709	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	08/06/2009	MW58D080609	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/14/2010	MW58D011410	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/12/2010	MW58D081210	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	01/19/2011	MW58D011911	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/26/2011	MW58D082611	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
EPA-5S	08/11/2008	EPA5S081108	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	10/02/2008	EPA5S100208	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	01/23/2009	EPA5S012309	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	04/03/2009	EPA5S040309	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/05/2009	EPA5S080509	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/08/2010	EPA5S010810	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	08/11/2010	EPA5S081110	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/12/2011	EPA5S011211	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	08/09/2011	EPA5S080911	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
EPA-5D	08/11/2008	EPA5D081108	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	10/02/2008	EPA5D100208	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/23/2009	EPA5D012309	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	04/03/2009	EPA5D040309	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	08/05/2009	EPA5D080509	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	01/08/2010	EPA5D010810	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	08/11/2010	EPA5D081110	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/12/2011	EPA5D011211	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/09/2011	EPA5D080911	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
EPA-6S	08/18/2008	EPA6S081808	3.63	73.4	0.948 U	3.85	0.948 U	0.948 U	0.948 U	7.03	13.1	1.11	4.55	4.82
	10/07/2008	EPA-6S100708	**60.2**	0.95 U	3.14	0.95 U	0.95 U	0.95 U	**5.32**	5.39	10.4	0.95 U	23.7	3.64
	01/29/2009	EPA6S012909	2.13	55.4	0.946 U	3.82	0.946 U	0.946 U	0.946 U	6.58	9.65	1.30	30.4	4.01
	04/10/2009	EPA6S041009	2.47	71.9	0.943 U	4.95	0.943 U	0.943 U	0.943 U	8.25	11.6	0.943 U	36.4	5.17
	08/12/2009	EPA6S081209	1.78	54.4	1.56 U	3.15	1.56 U	1.56 U	1.56 U	6.23	9.21	1.56 U	28.8	3.8
	01/25/2010	EPA6S012510	2.33	79.3	0.946 U	5.42	0.946 U	0.946 U	1.14	10.1	14.5	0.946 U	42.3	7.96
	08/13/2010	EPA6S081310	0.97	39.7	0.951 U	2.52	0.951 U	0.951 U	0.951 U	5.22	6.59	3.53	20.3	3.89
	01/19/2011	EPA6S011911	0.954 U	52.4	0.954 U	3.32	0.954 U	0.954 U	0.954 U	6.58	7.24	0.954 U	24.4	4.27
	01/19/2011	EPA6SDUP011911	0.952 U	51.1	0.952 U	3.41	0.952 U	0.952 U	0.952 U	6.71	7.2	0.952 U	25.1	4.3
	08/10/2011	EPA6S081011	0.954 U	40.1	0.954 U	3.29	0.954 U	0.954 U	0.954 U	6.53	6.67	0.954 U	21.6	4.42
EPA-6D	08/18/2008	EPA6D081808	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	98.9	0.947 U	0.947 U
	10/07/2008	EPA-6D100708	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.36	0.949 U	0.949 U
	01/29/2009	EPA6D012909	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	32.4	0.943 U	0.943 U
	04/10/2009	EPA6D041009	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	42.9	0.947 U	0.947 U
	08/12/2009	EPA6D081209	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	25.7	1.55 U	1.55 U
	01/25/2010	EPA6D012510	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/13/2010	EPA6D081310	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	62.1	0.949 U	0.949 U
	01/19/2011	EPA6D011911	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	25.7	0.957 U	0.957 U
	08/10/2011	EPA6D081011	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	16.1	0.957 U	0.957 U
Carty Lake Monitoring Wells (UWBZ)														
MW-30	08/13/2002	GW-133	0.096 U	0.11	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
USDFW-1	10/24/2003	USDFW-1-102403	1.1	3.9	0.16	0.36	0.098 U	--	**17**	0.098 U	3.4	120	0.4	0.098 U
	05/04/2004	USDFW1-050404	0.39	3.6	0.13	0.4	0.096 U	--	**18**	0.096 U	3.1	87	0.31	0.096 U
	08/13/2004	USDFW1-081304	0.19	2.3	0.11 U	0.38	0.11 U	--	**14**	0.11 U	2.4	28	0.18	0.11 U
	10/25/2004	USDFW1-102504	0.18	2.1	0.096 U	0.32	0.096 U	--	**7.3**	0.096 U	2.3	39	0.16	0.096 U
	01/28/2005	USDFW1012805	0.0679	1.48	0.0923	0.968	0.0189 U	**13**	**5.46**	0.0189 U	1.77	21.1	0.325	0.0189 U

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	07/28/2005	USDFW1072805	0.0476 U	1.35	0.0943 U	0.156	0.019 U	**15**	0.22	0.019 U	1.36	2.53	0.0869 U	0.0294 U
	02/01/2006	USDFW1020106	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U	5.69	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U
	08/11/2006	USDFW1081106	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	2.73	2.51	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/22/2007	USDFW1012207	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	2.08	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/27/2007	USDFW1082707	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.70	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	01/28/2008	USDFW1012808	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.51	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/21/2008	USDW1082108	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	02/03/2009	USDFW1020309	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	08/07/2009	USDFW1080709	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U
	01/28/2010	USDFW1012810	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	08/26/2010	USDFW1082610	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	01/26/2011	USDFW1012611	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	09/06/2011	USDFW1090611	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
USDFW-2	10/24/2003	USDFW-2-102403	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.1	0.097 U	0.097 U	0.097 U
	05/04/2004	USDFW2-050404	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	08/13/2004	USDFW2-081304	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/25/2004	USDFW2-102504	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/28/2005	USDFW2012805	0.0472 U	0.0189 U	0.0189 U	0.0529	0.0189 U	**23**	0.189 U	0.0189 U	0.0443	0.0472 U	0.0189 U	0.0189 U
	07/28/2005	USDFW2072805	0.0645	0.0192 U	0.0192 U	0.0192 U	0.0192 U	5.82	0.192 U	0.0192 U	0.0437 U	0.313	0.0192 U	0.0192 U
	02/01/2006	USDFW2020106	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U	0.982 U
	08/11/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/22/2007	USDFW2012207	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.66	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/27/2007	USDFW2082707	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.05	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/28/2008	USDFW2012808	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
USDFW-3	10/24/2003	USDFW-3-102403	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
	05/04/2004	USDFW3-050404	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.28	0.096 U	0.096 U
	08/13/2004	USDFW3-081304	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
	10/25/2004	USDFW3-102504	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/28/2005	USDFW3012805	0.0486 U	0.0195 U	0.0195 U	0.0195 U	0.0195 U	1.97	0.195 U	0.0195 U	0.0195 U	0.0486 U	0.0195 U	0.0195 U
	07/28/2005	USDFW3072805	0.0487 U	0.0195 U	0.0195 U	0.0195 U	0.0195 U	1.69	0.195 U	0.0195 U	0.0195 U	0.0487 U	0.0195 U	0.0195 U
	02/01/2006	USDFW3020106	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	1.28	0.976 U	0.976 U
	08/11/2006	USDFW3081106	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ	1.76 J	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ	0.949 UJ
	01/22/2007	USDFW3012207	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	2.11	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/27/2007	USDFW3082707	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.45	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	01/28/2008	USDFW3012808	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/26/2010	USDFW1082610	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
RMW-2S	08/21/2008	RMW2S082108	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1 U	0.949 U	0.949 U
	10/09/2008	RMW2S100908	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	02/03/2009	RMW2S020309	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U
	04/08/2009	RMW2S040809	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/07/2009	RMW2S080709	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	01/28/2010	RMW2S012810	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/26/2010	RMW2S082610	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/26/2011	RMW2S012611	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	09/06/2011	RMW2S090611	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
RMW-2D	08/21/2008	RMW2D082108	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	1 U	0.961 U	0.961 U
	10/09/2008	RMW2D100908	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	02/03/2009	RMW2D020309	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	04/08/2009	RMW2D040809	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	08/07/2009	RMW2D080709	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U
	01/28/2010	RMW2D012810	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/26/2010	RMW2D082610	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	01/26/2011	RMW2D012611	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	09/06/2011	RMW2D090611	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
LWBZ: Cells 1 and 2 and Carty Lake														
Cell 1 (LWBZ)														
MW-40	08/08/2002	GW-151	**64**	40	1	3.8	0.096 U	--	**11**	3.3	20	**360**	28	2.3
	01/23/2004	MW40-012304	3.3	3.2	0.21	0.35	0.095 U	--	**4.8**	0.72	2.4	68	2.7	0.49
	04/30/2004	MW40-043004	2.6	3.3	0.19	0.54	0.096 U	--	3.5	0.85	2.5	38	3.3	0.62
	08/11/2004	MW40-081104	1.2	1.9	0.099	0.33	0.096 U	--	2.5	0.64	1.6	16	1.9	0.45
	10/29/2004	MW40-102904	0.52	0.72	0.096 U	0.19	0.096 U	--	1.5	0.26	1.1	7.2	0.91	0.18
	01/27/2005	MW40012705	0.365	0.668	0.137	0.348	0.0189 U	1.42 U	0.189 U	0.217	0.766	5.39	0.0189 U	0.102
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/2006	MW40012706	0.951 U	2.93	0.951 U	0.951 U	0.951 U	0.951 U	**7.27**	0.951 U	1.96	3.18	1.18	0.951 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/28/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/02/2009	MW40020209	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	2.37	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/19/2009	MW40081909	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.83	1.72	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	01/29/2010	MW40012910	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.33	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/25/2010	MW40082510	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	1.64	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
	01/24/2011	MW40012411	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	09/02/2011	MW40090211	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
MW-41	08/12/2002	GW-148	0.15	0.18	0.096 U	0.096 U	0.096 U	--	0.26	0.096 U	0.11	0.68	0.14	0.096 U
	01/29/2004	MW41-012904	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	--	0.1	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U
	04/29/2004	MW41-042904	0.096 U	0.096 U	0.096 U	0.12	0.096 U	--	0.11	0.096 U	0.096 U	0.28	0.096 U	0.096 U
	08/12/2004	MW41-081204	0.096 U	0.096 U	0.096 U	0.1	0.096 U	--	0.28	0.096 U	0.096 U	0.38	0.096 U	0.096 U
	11/08/2004	MW41-110804	0.048 U	0.048 U	0.048 U	0.061	0.048 U	--	0.1	0.048 U	0.048 U	0.077	0.048 U	0.048 U
	01/27/2005	MW41012705	0.0471 U	0.0189 U	0.0189 U	0.058	0.0189 U	1.41 U	0.189 U	0.0189 U	0.0189 U	0.0471 U	0.0189 U	0.0189 U
	07/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/2006	MW41013006	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/08/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/28/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
Cell 2 (LWBZ)														
MW-22	08/08/2002	GW-143	1.4	2.5	0.34	0.098	0.097 U	--	**20**	0.097 U	2.3	**180**	0.73	0.097 U
	01/23/2004	MW22-012304	0.097 U	6.9	0.45	0.26	0.097 U	--	**30**	0.097 U	6.8	5.3	1.5	0.097 U
	04/28/2004	MW22-042804	0.096 U	6	0.57	0.25	0.096 U	--	**27**	0.096 U	6.4	1.1	0.88	0.096 U
	08/06/2004	MW22-080604	0.096 U	3.7	0.49	0.24	0.096 U	--	**28**	0.096 U	7.3	0.9	0.41	0.096 U
	10/26/2004	MW22-102604	0.096 U	0.51	0.27	0.25	0.096 U	--	**30**	0.096 U	7.4	0.4	0.096 U	0.096 U
	01/25/2005	MW22012505	0.0472 U	0.0189 U	0.376	0.0189 U	0.0189 U	1.42 U	**19.9**	0.0189 U	4.61	0.0472 U	0.0189 U	0.0189 U
	08/03/2005	MW22080305	0.0476 U	0.019 U	0.0731	0.0946	0.019 U	1.43 U	**11.2**	0.019 U	3.16	0.0476 U	0.0545	0.019 U
	01/25/2006	MW22012506	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**15.6**	0.951 U	2.16	0.951 U	0.951 U	0.951 U
	08/10/2006	MW22081006	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	**5.73**	0.954 U	1.12	0.954 U	0.954 U	0.954 U
	01/25/2007	MW22012507	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**8.89**	0.951 U	1.53	0.980	0.951 U	0.951 U
	08/16/2007	MW22081607	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	**7.14**	0.953 U	1.01	0.953 U	0.953 U	0.953 U
	01/22/2008	MW22012208	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	**6.86**	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
MW-33	08/07/2002	GW-122	0.096 U	0.096 U	0.096 U	0.12	0.096 U	--	0.68	0.096 U	0.18	0.096 U	0.096 U	0.096 U
	01/21/2004	MW33-012104	0.096 U	0.096 U	0.096 U	0.46	0.096 U	--	0.4	0.096 U	0.6	0.096 U	0.096 U	0.096 U
	04/27/2004	MW33-042704	0.095 U	0.095 U	0.095 U	0.48	0.095 U	--	0.44	0.095 U	0.83	0.095 U	0.095 U	0.095 U
	07/28/2004	MW33-072804	0.096 U	0.096 U	0.096 U	0.33	0.096 U	--	0.49	0.096 U	1	0.096 U	0.096 U	0.096 U
	10/19/2004	MW33-101904	0.096 U	0.096 U	0.096 U	0.37	0.096 U	--	0.51	0.096 U	1.1	0.33	0.096 U	0.096 U
	01/20/2005	MW33012005	0.0473 U	0.0251	0.0449	0.479	0.0189 U	1.42 U	0.345	0.0189 U	0.67	0.0473 U	0.0189 U	0.0189 U
	07/20/2005	MW33072005	0.11 J	0.0189 UR	0.0314 J	1.05 J	0.0189 UR	1.42 UR	0.48 J	0.0189 UR	0.69 J	0.0473 UR	0.0189 UR	0.0189 UR
	01/20/2006	MW33012006	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/04/2006	MW33080406	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/19/2007	MW33011907	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/09/2007	MW33080907	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/15/2008	MW33011508	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/11/2008	MW33081108	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/11/2010	MW33011110	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	08/09/2011	MW33080911	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
MW-34	08/08/2002	GW-144	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
	01/21/2004	MW34-012104	0.096 U	0.096 U	0.096 U	0.14	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	04/27/2004	MW34-042704	0.096 U	0.096 U	0.096 U	0.12	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	07/29/2004	MW34-072904	0.096 U	0.096 U	0.096 U	0.1	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/20/2004	MW34-102004	0.096 U	0.096 U	0.096 U	0.12	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/21/2005	MW34012105	0.0473 U	0.0189 U	0.0189 U	0.176	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0478	0.0189 U	0.0189 U
	07/20/2005	MW34072105	0.0475 U	0.019 U	0.019 U	0.0542	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0475 U	0.0326	0.019 U
	01/23/2006	MW34012306	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/07/2006	MW34080706	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/18/2007	MW34011807	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/10/2007	MW34081007	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/16/2008	MW34011608	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
MW-35	08/13/2002	GW-145	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	1.1	0.096 U	0.096 U	0.19	0.096 U	0.096 U
dup	08/13/2002	GW-150	0.1	0.097 U	0.097 U	0.097 U	0.097 U	--	1	0.097 U	0.097 U	0.25	0.097 U	0.097 U
	01/21/2004	MW35-012104	0.13 U	0.096 U	0.096 U	0.2	0.096 U	--	1.8	0.096 U	0.096 U	2.8	0.099	0.096 U
	04/28/2004	MW35-042804	0.096 U	0.096 U	0.096 U	0.19	0.096 U	--	2	0.096 U	0.096 U	0.74	0.1	0.096 U
	07/30/2004	MW35-073004	0.096 U	0.096 U	0.096 U	0.17	0.096 U	--	2.4	0.096 U	0.12	3.7	0.1	0.096 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	10/25/2004	MW35-102504	0.20 U	0.20 U	0.20 U	0.23	0.20 U	--	3.5	0.20 U	0.20 U	5.3	0.20 U	0.20 U
	01/24/2005	MW35012405	Broken	Broken	Broken	Broken	Broken	Broken	Broken	Broken	Broken	Broken	Broken	Broken
	07/20/2005	MW35072205[a]	0.0475 UR	0.042 J	0.373 J	0.13 J	0.019 UR	1.43 UR	1.74 J	0.019 UR	0.124 J	4.55 J	0.122 J	0.019 UR
	01/24/2006	MW35012406	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	3.43	0.948 U	0.948 U	1.55	0.948 U	0.948 U
	08/08/2006	MW35080806	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	3.00	1.02 U	1.02 U	3.04	1.02 U	1.02 U
	01/24/2007	MW35012407	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	2.80	0.948 U	0.948 U	2.87	0.948 U	0.948 U
	08/14/2007	MW35081407	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	3.37	0.947 U	0.947 U	4.26	0.947 U	0.947 U
	01/18/2008	MW35011808	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	3.87	0.956 U	0.956 U	5.59	0.956 U	0.956 U
	08/14/2008	MW35081408	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	2.89	0.951 U	0.951 U	5.73	0.951 U	0.951 U
	01/30/2009	MW35013009	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	2.46	0.949 U	0.949 U	4.69	0.949 U	0.949 U
	08/18/2009	MW35081809	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	3.1	0.949 U	0.949 U	6.59	0.949 U	0.949 U
	01/22/2010	MW35012210	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**4.88**	0.951 U	0.951 U	12.9	0.951 U	0.951 U
	08/16/2010	MW35081610	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	2.31	0.949 U	0.949 U	3.46 B	0.949 U	0.949 U
	01/20/2011	MW35012011	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	4.3	0.953 U	0.953 U	3.42	0.953 U	0.953 U
	08/29/2011	MW35082911	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	3.52	0.956 U	0.956 U	7.66	0.956 U	0.956 U
MW-36	08/07/2002	GW-146	1.1	0.14	0.097 U	0.097 U	0.097 U	--	2.6	0.097 U	0.097 U	63	0.097 U	0.097 U
	01/26/2004	MW36-012604	0.96	1.5	0.095 U	0.62	0.095 U	--	3.4	0.66	1	6.4	2.1	0.48
	04/28/2004	MW36-042804	0.096 U	0.97	0.15	0.14	0.096 U	--	**6.9**	0.096 U	0.77	0.75	0.12	0.096 U
	07/30/2004	MW36-073004	0.096 U	1.1	0.12	0.098	0.096 U	--	**6.5**	0.096 U	0.92	0.24	0.1	0.096 U
	10/26/2004	MW36-102604	0.096 U	0.27	0.096 U	0.11	0.096 U	--	**4.8**	0.096 U	0.9	0.25	0.096 U	0.096 U
	01/25/2005	MW36012505	0.0473 U	0.102	0.234	0.0991	0.0189 U	1.42 U	2.38	0.0189 U	0.938	0.34	0.0189 U	0.0189 U
	07/25/2005	MW36072705	0.0474 U	0.0194 U	0.04 U	0.0327 U	0.019 U	1.42 U	**5.33**	0.019 U	1.11	0.0896	0.0363 U	0.019 U
	01/25/2006	MW36012506	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	3.27	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/08/2006	MW36080806	1 U	1 U	1 U	1 U	1 U	1 U	2.22	1 U	1 U	1 U	1 U	1 U
	01/24/2007	MW36012407	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.71	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/15/2007	MW36081507	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.73	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/22/2008	MW36012208	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.14	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	08/19/2008	MW36081908	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/30/2009	MW36013009	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/19/2009	MW36081909	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.76	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	01/26/2010	MW36012610	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/16/2010	MW36081610	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	01/21/2011	MW36012111	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	08/30/2011	MW36083011	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
MW-37	08/12/2002	GW-147	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/27/2004	MW37-012704	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
	04/29/2004	MW37-042904	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	--	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U
	08/06/2004	MW37-080604	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/22/2004	MW37-102204	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/26/2005	MW37012605	0.0473 U	0.0189 U	0.0189 U	0.0492	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0473 U	0.0189 U	0.0189 U
	07/25/2005	MW37072605	0.0476 U	0.019 U	0.019 U	0.019 U	0.0867	1.43 U	0.19 U	0.019 U	0.019 U	0.0983	0.0274 U	0.019 U
	01/26/2006	MW37012606	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/09/2006	MW37080906	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	01/26/2007	MW370120607	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
	08/17/2007	MW37081707	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	01/23/2008	MW37012308	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	08/20/2008	MW37082008	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	01/27/2010	MW37012710	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/31/2011	MW37083111	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
MW-54	08/12/2008	MW54081208	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	10/06/2008	MW-54100608	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U
	01/26/2009	MW54012609	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	04/06/2009	MW54040609	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/05/2009	MW54080509	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	01/13/2010	MW54011310	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	08/12/2010	MW54081210	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	01/13/2011	MW54011311	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	08/24/2011	MW54082411	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U
MW-55	08/14/2008	MW55081408	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	10/03/2008	MW55100308	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.35	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	01/27/2009	MW55012709	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.47	0.946 U	0.946 U
	04/07/2009	MW55040709	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/06/2009	MW55080609	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.26	0.948 U	0.948 U
	01/14/2010	MW55011410	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/12/2010	MW55081210	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/14/2011	MW55011411	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	08/08/2011	MW55080811	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
MW-56	08/21/2008	MW56082108	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	10/08/2008	MW-56100808	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	2.05	0.955 U	0.955 U
	01/27/2009	MW56012709	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	04/07/2009	MW56040709	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/06/2009	MW56080609	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/14/2010	MW56011410	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/12/2010	MW56081210	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/19/2011	MW56011911	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/26/2011	MW56082611	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
MW-59	08/19/2008	MW59081908	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	10/06/2008	MW-59100608	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/29/2009	MW59012909	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	04/09/2009	MW59040909	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/17/2009	MW59081709	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.46	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	01/21/2010	MW59012110	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	08/13/2010	MW59081310	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	01/20/2011	MW59012011	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U
	08/29/2011	MW59082911	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
MW-62	09/08/2010	MW62090810	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U
	01/14/2011	MW62011411	0.951 U	0.951 U	0.951 U	1.19	1.02	1.14	1.1	1.25	0.951 U	0.951 U	1.17	1.12
	08/25/2011	MW62082511	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs											
			2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater Cleanup Level			32	960	NV	4800	NV	6.3	4.4	640	640	160	NV	480
Carty Lake Monitoring Well (LWBZ)														
MW-60	09/03/2008	MW60090308	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	10/09/2008	MW601000908	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	02/03/2009	MW60020309	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	04/08/2009	MW60040809	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	08/07/2009	MW60080709	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/28/2010	MW60012810	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/25/2010	MW60082510	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/24/2011	MW60012411	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	09/06/2011	MW60090611	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
MW-61	09/03/2010	MW61090310	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	01/24/2011	MW61012411	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	09/02/2011	MW61090211	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U

Table 3-9
Semivolatile Organic Compounds in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

NOTES:

-- = not analyzed or not Cell 3 point of compliance monitoring results.

Bold = detected concentration that exceeds MTCA Method B Groundwater Cleanup Level. non-detect values ("U," "UJ" or "UR") were not compared with MTCA Method B Groundwater Cleanup Level; estimated values ("J") were.

B = analyte found in the associated method blank.

cPAH = carcinogenic PAH.

dup = duplicate sample.

J = Estimated value. Value used in calculations.

LWBZ = lower water-bearing zone.

MTCA = Model Toxics Control Act.

µg/L = micrograms per liter.

ND = no cPAH detections.

NS = not sampled.

NV = no value.

PAH = polycyclic aromatic hydrocarbon.

RNWR = Ridgefield National Wildlife Refuge.

TEQ = toxicity equivalent, calculated using toxicity equivalent factors, consistent with Washington Administrative Code 173-340-900.

U = Not detected at or above method reporting limit. Half the value used in calculations.

UJ = not detected above estimated detection limit. Half the value used in calculations.

UR = Data were rejected because of poor laboratory surrogate recoveries. Cannot be used in calculations.

UWBZ = upper water-bearing zone.

[a] Semivolatile organic compounds data for July 20, 2005, were switched because of mislabeling during sampling.

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
UWBZ: Cells 1 and 2 *Cell 1 (UWBZ)*						
MW-7	08/12/2002	GW-125	4 U	5 U	10 U	10 U
	01/26/2004	MW7-012604	5 U	5 U	10 U	10 U
	05/06/2004	MW7-050604	5 U	5 U	10 U	10 U
	08/09/2004	MW7-080904	10 U	5 U	10 U	10 U
	10/27/2004	MW7-102704	5 U	5 U	10 U	113
	01/26/2005	MW7012605	4.68	6.07	2.5 U	3.63
	07/25/2005	MW7072705	2.5 U	2.5 U	2.5 U	5 U
	01/27/2006	MW7012706	2.9	5 U	10 U	10 U
	08/10/2006	MW7081006	**7.5**	5 U	10 U	10 U
	01/25/2007	MW7012507	**6.1**	5 U	10 U	10 U
	08/06/2007	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS
	09/05/2008	MW7090508	1 U	5.00	10 U	10 U
	02/04/2009	MW7020409	4.3	5 U	10 U	10 U
	08/19/2009	MW7081909	2.3	7.40	10 U	10 U
	01/26/2010	MW7012610	4.6	6.00	10 U	10 U
	08/24/2010	MW7082410	2.6	6.80	10 U	10 U
	01/25/2011	MW7012511	4.44	5 U	10 U	10 U
	09/01/2011	MW7090111	2.08	7.2	10 U	10 U
MW-8S	08/13/2002	GW-126	10 U	5 U	10 U	11.2
MW-42	08/12/2002	GW-137	10 U	5 U	10 U	10 U
	01/23/2004	MW42-012304	5 U	5 U	10 U	10 U
	04/30/2004	MW42-043004	5 U	5 U	10 U	10 U
	08/10/2004	MW42-081004	5 U	5 U	10 U	10 U
	10/27/2004	MW42-102704	5 U	5 U	10 U	10 U
	01/26/2005	MW42012605	3.27	4.54	2.5 U	2.5 U
	07/20/2005	NS	NS	NS	NS	NS
	01/27/2006	MW42012706	1.2	5 U	10 U	10 U
	08/08/2006	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS
MW-43	08/12/2002	GW-138	10 U	5 U	10 U	10 U
	01/23/2004	MW43-012304	5 U	5 U	10 U	10 U
	04/30/2004	MW43-043004	5 U	5 U	10 U	10 U
	08/11/2004	MW43-081104	5 U	5 U	10 U	10 U
	10/27/2004	MW43-102704	5 U	5 U	10 U	10 U
	01/27/2005	MW43012705	**10.9**	3.76	2.5 U	2.5 U
	07/20/2005	NS	NS	NS	NS	NS
	01/27/2006	MW43012706	1.9	5 U	10 U	10 U
	08/08/2006	NS	NS	NS	NS	NS

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
	01/18/2007	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS
MW-44	08/13/2002	GW-139	10 U	5 U	10 U	10 U
	01/23/2004	MW44-012304	**13.1**	5 U	10 U	10 U
	04/29/2004	MW44-042904	**6.1**	5 U	10 U	10 U
	08/11/2004	MW44-081104	**35.3**	5 U	10 U	10 U
	10/29/2004	MW44-102904[c]	**39.6**	5 U	10 U	10 U
	01/27/2005	MW44012705	**19.1**	4.07	2.5 U	2.5 U
	07/20/2005	NS	NS	NS	NS	NS
	01/27/2006	MW44012706	**7.0**	5 U	10 U	10 U
	08/08/2006	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS
	08/11/2008	NS	NS	NS	NS	NS
	02/02/2009	MW44020209	**12**	5 U	10 U	10 U
	08/19/2009	MW44081909	**26**	6.50	10 U	10 U
	01/01/2010	NS	NS	NS	NS	NS
	08/25/2010	MW44082510	**9.7**	8.10	10 U	10 U
	01/24/2011	MW44012411	2.71	6.9	10 U	10 U
	09/02/2011	MW44090211	**9.54**	8.5	10 U	10 U
E-4	07/12/2007	E4-21071207	**8.6**	5 U	10 U	10 U
	09/13/2007	E4-23091307	**57**	5 U	11.3	10 U
	02/12/2008	E4021208	1 U	5 U	10 U	17.6
	08/22/2008	E4082208	**9.2**	5 U	10 U	10 U
	01/13/2009	E4011309	**7.8**	1 U	4.1	23
EPA-4S	09/03/2008	EPA4S090308	1 U	6.50	10 U	10 U
	10/02/2008	EPA4S100208	2.2	5 U	10 U	10 U
	02/10/2009	EPA4S021009	1.6	5.20	10 U	10 U
	04/16/2009	EPA4S041609	1.2	5 U	10 U	10 U
	08/13/2009	EPA4S081309	1.1	6.30	10 U	10 U
	01/29/2010	EPA4S012910	1.1	5.1	10 U	10 U
	08/24/2010	EPA4S082410	2.8	6.7	10 U	10 U
	01/25/2011	EPA4S012511	4.65	6.1	10 U	10 U
	09/01/2011	EPA4S090111	**6.9**	6.9	10 U	10 U
EPA-4D	09/03/2008	EPA4D090308	1 U	8.70	10 U	10 U
	10/02/2008	EPA4D100208	1.2	6.10	10 U	10 U
	02/10/2009	EPA4D021009	1.3	5.70	10 U	10 U
	04/16/2009	EPA4D041609	1.0	6.10	10 U	10 U
	08/13/2009	EPA4D081309	1.0	9.90	10 U	10 U
	01/29/2010	EPA4D012910	1 U	8.2	10 U	10 U
	08/24/2010	EPA4D082410	1 U	9.8	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
	01/25/2011	EPA4D012511	0.766	8	10 U	10 U
	09/01/2011	EPA4D090111	0.974	7.5	10 U	10 U
Cell 2 (UWBZ)						
MW-4	05/07/2004	MW4-050704	**42.1**	5 U	10 U	10 U
	07/29/2004	MW4-072904	**48.7**	5 U	10 U	10 U
	10/22/2004	MW4-102204	**31.7**	5 U	10 U	10 U
	01/24/2005	MW4012405	**36.9**	17.9	2.5 U	5 U
	07/20/2005	MW4072205	**49.5**	9.3	2.5 U	5 U
	01/23/2006	MW4012306	**18**	5 U	10 U	10 U
	08/08/2006	MW4080806	**54**	5 U	10 U	10 U
	01/24/2007	MW4012407	**55**	5 U	10 U	10 U
	08/14/2007	MW4081407	**44**	5 U	10 U	10 U
	01/17/2008	MW4011708	**45**	5 U	10 U	10 U
	08/13/2008	MW4081308	**45**	5 U	10 U	10 U
	01/29/2009	MW4012909	**14**	5.10	10 U	10 U
	08/18/2009	MW4081809	**8.6**	8.80	10 U	10 U
	01/19/2010	MW4011910	**43**	6.80	10 U	10 U
	08/13/2010	MW4081310	**48**	11.6	10 U	10 U
	01/20/2011	MW4012011	**42.7**	10	10 U	10 U
	08/26/2011	MW4082611	**45.2**	9.3	10 U	10 U
MW-5	01/26/2004	MW5-012604	**32.8**	5 U	10 U	10 U
	05/07/2004	MW5-050704	**33.6**	5 U	10 U	10 U
	07/29/2004	MW5-072904	**41.2**	5 U	10 U	10 U
	10/22/2004	MW5-102204	**45.1**	5 U	10 U	10 U
	01/24/2005	MW5012405	**49.3**	20.5	2.5 U	7.98
	07/20/2005	MW5072205	**48.3**	8.09	2.5 U	5 U
	01/24/2006	MW5012406	**31**	5 U	10 U	10 U
	08/08/2006	MW5080806	**54**	5 U	10 U	10 U
	01/24/2007	MW5012407	**56**	5 U	10 U	10 U
	08/14/2007	MW5081407	**58**	5 U	10 U	10 U
	01/17/2008	MW5011708	**52**	5 U	10 U	10 U
	08/13/2008	MW5081308	**54**	5 U	10 U	10 U
	01/29/2009	MW5012909	**17**	5.70	10 U	10 U
	08/18/2009	MW5081809	**7.6**	8.40	10 U	10 U
	01/22/2010	MW5012210	**38**	6.30	10 U	10 U
	08/13/2010	MW5081310	**35**	10.9	10 U	10 U
	01/20/2011	MW5012011	**26.5**	10.3	10 U	10 U
	08/26/2011	MW5082611	**30**	6.9	10 U	10 U
PZ-06	01/23/2007	PZ06012307	**19**	5	10 U	10 U
	08/13/2007	PZ06081307	**26**	5 U	10 U	10 U
	01/16/2008	PZ06011608	**23**	5 U	10 U	10 U
	08/12/2008	PZ06081208	**21**	5 U	10 U	10 U
	01/26/2009	PZ06012609	**11**	6.00	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
	08/05/2009	PZ06080509	**26**	9.00	10 U	10 U
	01/13/2010	PZ06011310	**23**	9.20	10 U	10 U
	08/01/2010	NS	NS	NS	NS	NS
	01/13/2011	PZ06011311	**25.2**	7.4	10 U	10 U
	08/24/2011	PZ06082411	**27.8**	9.6	10 U	10 U
MW-10	01/23/2007	MW10012307	**32**	5 U	10 U	10 U
	01/17/2008	MW10011708	**29**	5 U	10 U	10 U
MW-13	08/08/2002	GW-127	**16.4**	5 U	10 U	10 U
	01/26/2004	MW13-012604	**17.5**	5 U	10 U	10 U
	05/05/2004	MW13-050504	**14.5**	5 U	10 U	10 U
	07/28/2004	MW13-072804	**16.4**	5 U	10 U	10 U
	10/20/2004	MW13-102004	**15.4**	5 U	10 U	10 U
	01/21/2005	MW13012105	**16.5**	9.73	2.5 U	5 U
	07/20/2005	MW13072105	**17.6**	5.68	2.5 U	5 U
	01/23/2006	MW13012306	**7.3**	5 U	10 U	10 U
	08/07/2006	MW13080706	**15**	5 U	10 U	10 U
	01/23/2007	MW13012307	**15**	5 U	10 U	10 U
	08/09/2007	MW13080907	**14**	5 U	10 U	10 U
	01/15/2008	MW13011508	**12**	5 U	10 U	10 U
	08/11/2008	MW13081108	**14**	5 U	10 U	10 U
	01/23/2009	MW13012309	**35**	6.20	10 U	10 U
	08/14/2009	MW13081409	**36**	8.40	10 U	10 U
	01/11/2010	MW13011110	**35**	6.50	10 U	10 U
	08/11/2010	MW13081110	**26**	9.10	10 U	10 U
	01/12/2011	MW13011211	0.264	7.5	10 U	10 U
	08/23/2011	MW13082311	**20.3**	8.2	10 U	10 U
MW-14	08/08/2002	GW-128	**11.8**	5 U	10 U	10 U
	01/22/2004	MW14-012204	**12**	5 U	10 U	10 U
	05/04/2004	MW14-050404	**10.9**	10 U	10 U	10 U
	07/28/2004	MW14-072804	**15.4**	5 U	10 U	10 U
	10/20/2004	MW14-102004	**15.8**	5 U	10 U	10 U
	01/21/2005	MW14012105	**17.2**	12	2.5 U	5 U
	07/20/2005	MW14072105	**19.9**	5.71	2.5 U	5 U
	01/23/2006	MW14012306	**26**	5 U	10 U	10 U
	08/07/2006	MW14080706	**26**	5 U	10 U	10 U
	01/23/2007	MW14012307	**33**	5 U	10 U	10 U
	08/13/2007	MW14081307	**26**	5 U	10 U	10 U
	01/16/2008	MW14011608	**29**	5 U	10 U	10 U
MW-15	08/08/2002	GW-140	5 U	5 U	10 U	10 U
	01/21/2004	MW15-012104	5 U	5 U	10 U	10 U
	05/05/2004	MW15-050504	5 U	5 U	10 U	10 U
	07/28/2004	MW15-072804	5 U	5 U	10 U	10 U
	10/20/2004	MW15-102004	10 U	5 U	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
	01/21/2005	MW15012105	2.5 U	16.2	2.5 U	5 U
	07/20/2005	MW15072205	2.5 U	7.83	4.67	5 U
	01/23/2006	MW15012306	1.5	5 U	10 U	10 U
	08/07/2006	MW15080706	1.2	5 U	10 U	10 U
	01/18/2007	MW15011807	2.3	5 U	10 U	10 U
	08/10/2007	MW15081007	2.3	5 U	10 U	10 U
	01/16/2008	MW15011608	1.3	5 U	10 U	10 U
	08/13/2008	MW15081308	1 U	5 U	10 U	10 U
	09/03/2008	MW15090308	1 U	5.00	10 U	10 U
	01/26/2009	MW15012609	1.1	5 U	10 U	10 U
	08/17/2009	MW15081709	1.2	5.10	10 U	10 U
	01/12/2010	MW15011210	1.9	6.10	10 U	10 U
	08/11/2010	MW15081110	1.3	7.90	10 U	10 U
	01/13/2011	MW15011311	1.39	6.2	10 U	10 U
	08/23/2011	MW15082311	1.57	8.3	10 U	10 U
MW-16	08/07/2002	GW-129	5 U	5 U	10 U	10 U
	01/23/2004	MW16-012304	5 U	5 U	10 U	10 U
	05/06/2004	MW16-050604	5 U	5 U	10 U	10 U
	07/30/2004	MW16-073004	5 U	5 U	10 U	10 U
	10/26/2004	MW16-102604	5 U	5 U	10 U	10 U
	01/25/2005	MW16012505	2.5 U	5 U	2.5 U	5 U
	07/25/2005	MW16072505	2.5 U	2.5 U	2.5 U	5 U
	01/25/2006	MW16012506	1.2	5 U	10 U	10 U
	08/10/2006	MW16081006	1.5	5 U	10 U	10 U
	01/25/2007	MW16012507	1.6	5 U	10 U	10 U
	08/16/2007	MW16081607	2.5	5 U	10 U	10 U
	01/22/2008	MW16012208	1.7	5 U	10 U	10 U
	08/19/2008	MW16081908	3.9	5 U	10 U	10 U
	01/30/2009	MW16013009	1 U	5 U	22.9	10 U
	08/12/2009	MW16081209	1.3	6.60	10 U	10 U
	01/21/2010	MW16012110	1 U	5 U	10 U	12.8
	08/17/2010	MW16081710	10 U	7.70	10 U	10 U
	01/21/2011	MW16012111	0.722	7.3	10 U	10 U
	08/30/2011	MW16083011	1.95	8.5	10 U	10 U
MW-17	08/07/2002	GW-130	5 U	5 U	10 U	11.9
	01/26/2004	MW17-012604	5 U	5 U	10 U	12.5
	05/06/2004	MW17-050604	5 U	10 U	10 U	20 U
	07/30/2004	MW17-073004	5 U	25 U	10 U	50 U
	10/26/2004	MW17-102604	5 U	5 U	10 U	10 U
	01/24/2005	MW17012405	2.5 U	22.1	2.5 U	5 U
	07/25/2005	MW17072505	3.25	10	2.5 U	5 U
	01/24/2006	MW17012406	1.6	5.70	10 U	10 U
	08/08/2006	MW17080806	4.3	5 U	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5^a	48^b	590	4,800
	01/24/2007	MW17012407	4.4	5 U	10 U	10 U
	08/15/2007	MW17081507	**5.8**	5 U	10 U	10 U
	01/18/2008	MW17011808	3.7	5 U	10 U	10 U
MW-18	07/29/2004	MW18-072904	**61.3**	5 U	10 U	10 U
	07/25/2005	MW18072505	**72.4**	9.7	2.5 U	5 U
	01/24/2006	MW18012406	**71**	5 U	10 U	10 U
	08/08/2006	NS	NS	NS	NS	NS
	01/24/2007	MW18012407	**87**	5 U	10 U	10 U
	08/15/2007	MW18081507	**87**	5 U	10 U	10 U
	01/18/2008	MW18011808	**90**	5 U	10 U	10 U
MW-21	08/08/2002	GW-131	5 U	5 U	10 U	10 U
	05/06/2004	MW21-050604	5 U	5 U	10 U	10 U
	07/30/2004	MW21-073004	5 U	5 U	10 U	10 U
	10/26/2004	MW21-102604	5 U	5 U	10 U	10 U
	01/25/2005	MW21012505	2.5 U	9.6	2.5 U	5 U
	07/25/2005	MW21072505	2.63	4.1	2.5 U	5 U
	01/25/2006	MW21012506	2.8	5 U	10 U	10 U
	08/10/2006	MW21081006	3.0	5 U	10 U	10 U
	01/25/2007	MW21012507	3.7	5 U	10 U	10 U
	08/16/2007	MW21081607	4.2	5 U	10 U	10 U
	01/22/2008	MW21012208	1 U	5 U	10 U	28.8
	08/19/2008	MW21081908	2.9	5 U	10 U	10 U
	01/30/2009	MW21013009	2.7	5 U	10 U	10 U
	08/12/2009	MW21081209	2.9	8.20	10 U	10 U
	01/21/2010	MW21012110	2.8	6.90	10 U	10 U
	08/17/2010	MW21081710	10 U	9.50	10 U	10 U
	01/21/2011	MW21012111	**7.67**	7.3	10 U	10 U
	08/30/2011	MW21083011	**17.8**	7.8	10 U	10 U
MW-23	01/22/2004	MW23-012204	5 U	5 U	10 U	10 U
	05/03/2004	MW23-050304	5 U	10 U	10 U	10 U
	07/27/2004	MW23-072704	5 U	5 U	10 U	10 U
	10/19/2004	MW23-101904	5 U	5 U	10 U	10 U
	01/21/2005	MW23012105	2.5 U	21	2.5 U	5 U
	07/20/2005	MW23072105	2.5 U	10.7	7.54	5 U
	01/20/2006	MW23012006	1.3	5 U	10 U	10 U
	08/07/2006	MW23080706	1 U	5 U	10 U	10 U
	01/23/2007	MW23012307	2.4	5 U	10 U	10 U
	08/09/2007	MW23080907	3.1	5 U	10 U	10 U
	01/15/2008	MW23011508	1.2	5 U	10 U	22.0
	08/11/2008	MW23081108	1.0	5 U	10 U	10 U
	01/11/2010	MW23011110	2.1	7.90	10 U	10 U
	08/30/2011	NS	NS	NS	NS	NS

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
MW-25	08/12/2002	GW-141	10 U	5 U	10 U	10 U
	01/27/2004	MW25-012704	5 U	5 U	10 U	10 U
	04/29/2004	MW25-042904	5 U	5 U	10 U	10 U
	08/06/2004	MW25-080604	10 U	5 U	10 U	10 U
	10/22/2004	MW25-102204	10 U	5 U	10 U	10 U
	01/26/2005	MW25012605	2.5 U	7.07	2.5 U	3.81
	07/25/2005	MW25072605	2.5 U	2.5 U	2.5 U	9.6
	01/26/2006	MW25012606	1 U	5 U	10 U	10 U
	08/09/2006	MW25080906	1 U	5 U	10 U	10 U
	01/26/2007	MW25012607	1 U	5 U	63.3	10 U
	08/17/2007	MW25081707	1.5	5 U	10 U	10 U
	01/23/2008	MW25012308	1 U	5 U	10 U	10 U
	08/20/2008	MW25082008	1.1	5 U	10 U	10 U
	01/27/2010	MW25012710	1 U	5.8	10 U	10 U
	08/31/2011	MW25083111	1	8	10 U	10 U
MW-26	01/26/2004	MW26-012604	**36.6**	5 U	10 U	10 U
	05/05/2004	MW26-050504	**38.4**	5 U	10 U	10 U
	07/29/2004	MW26-072904	**48.8**	5 U	10 U	10 U
	10/25/2004	MW26-102504	**47.8**	5 U	10 U	10 U
	01/24/2005	MW26012405	**56**	26.3	2.5 U	5 U
	07/25/2005	MW26072505	**49.3**	9.04	2.5 U	5 U
	01/24/2006	MW26012406	**27**	5 U	10 U	10 U
	08/08/2006	MW26080806	**49**	5 U	10 U	10 U
	01/24/2007	MW26012407	**52**	5 U	10 U	10 U
	08/15/2007	MW26081507	**52**	5 U	10 U	10 U
	01/18/2008	MW26011808	**49**	5 U	10 U	10 U
	08/15/2008	MW26081508	**76**	5 U	10 U	10 U
	01/28/2009	MW26012809	**21**	5.30	10 U	10 U
	08/18/2009	MW26081809	**77**	7.80	10 U	10 U
	01/25/2010	MW26012510	**76**	5.60	10 U	10 U
	08/16/2010	MW26081610	**93**	9.00	10 U	10 U
	01/20/2011	MW26012011	**114**	9.4	10 U	10 U
	08/30/2011	MW26083011	**103**	9	10 U	10 U
MW-27	01/26/2004	MW27-012604	5 U	5 U	10 U	10 U
	05/07/2004	MW27-050704	5 U	5 U	10 U	10 U
	07/29/2004	MW27-072904	5 U	5 U	10 U	10 U
	10/20/2004	MW27-102004	10 U	5 U	10 U	10 U
	01/21/2005	MW27012105	2.5 U	18.2	2.5 U	5 U
	07/20/2005	MW27072205	2.69	8	2.5 U	5 U
	01/23/2006	MW27012306	1.1	5 U	10 U	10 U
	08/07/2006	MW27080706	2.9	5 U	10 U	10 U
	01/24/2007	MW27012407	4.0	5 U	10 U	10 U
	08/14/2007	MW27081407	3.9	5 U	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
	01/17/2008	MW27011708	3.4	5 U	10 U	10 U
	08/15/2008	MW27081508	3.0	5 U	10 U	10 U
	01/22/2010	MW27012210	3	5 U	10 U	10 U
	08/29/2011	MW27082911	3.04	6.9	10 U	10 U
MW-38	08/07/2002	GW-135	5 U	5 U	10 U	10 U
dup	08/07/2002	GW-149	5 U	5 U	10 U	10 U
	08/07/2002	GW-136	5 U	5 U	10 U	10 U
	01/27/2004	MW38-012704	5 U	5 U	10 U	10 U
dup	01/27/2004	MW38DUP-012704	5 U	5 U	10 U	10 U
	05/06/2004	MW38-050604	5 U	5 U	10 U	10 U
dup	05/06/2004	MW38-050604	5 U	5 U	10 U	10 U
	08/06/2004	MW38-080604	10 U	5 U	10 U	10 U
dup	08/06/2004	MW38-080604-Dup	10 U	5 U	10 U	10 U
	10/29/2004	MW38-102904	5 U	5 U	10 U	10 U
dup	10/29/2004	MW38-102904-Dup	5 U	5 U	10 U	10 U
	01/25/2005	MW38012505	2.5 U	6.44	2.5 U	5 U
dup	01/25/2005	MW38DUP012505	2.5 U	6.56	2.5 U	5 U
	07/25/2005	MW38072605	2.5 U	2.87	6.11	5 U
dup	07/25/2005	MW38072605-Dup	2.5 U	3.32	4.15	5 U
	01/26/2006	MW38012606	1 U	5 U	10 U	10 U
dup	01/26/2006	MW38012606-Dup	1 U	5 U	10 U	10 U
	08/10/2006	MW38081006	1 U	5 U	10 U	10 U
dup	08/10/2006	MW38081006-Dup	1 U	5 U	10 U	10 U
	01/25/2007	MW38012507	1 U	5 U	10 U	10 U
dup	01/25/2007	MW38012507-Dup	1 U	5 U	10 U	10 U
	08/16/2007	MW38081607	1.2	5 U	10 U	10 U
dup	08/16/2007	MW38081607-Dup	1.3	5 U	10 U	10 U
	01/23/2008	MW38012308	1 U	5 U	10 U	10 U
dup	01/23/2008	MW38012308-Dup	1 U	5 U	10 U	10 U
	08/21/2008	MW38082108	1 U	5 U	10 U	10 U
dup	08/21/2008	MW38082108-Dup	1 U	5 U	10 U	10 U
	02/02/2009	MW38020209	1 U	5 U	10 U	10 U
dup	02/02/2009	MW38020209-Dup	1 U	5 U	10.4	10 U
	08/12/2009	MW38081209	1 U	5.40	10 U	10 U
dup	08/12/2009	MW38081209-Dup	1 U	5.60	10 U	10 U
	01/21/2010	MW38012110	1 U	5.10	10 U	10 U
dup	01/21/2010	MW38012110-Dup	1 U	5 U	10 U	10 U
	08/17/2010	MW38081710	1.2	8.00	10 U	10 U
dup	08/17/2010	MW38081710-Dup	1.2	6.40	10 U	10 U
	01/21/2011	MW38012111	1.02	7	10 U	10 U
	08/31/2011	MW38083111	1.13	7.3	10 U	10 U
dup	08/31/2011	MW38DUP083111	1.15	7.9	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
MW-39	01/27/2004	MW39-012704	5 U	5 U	10 U	10 U
dup	01/27/2004	MW39DUP-012704	5 U	5 U	10 U	10 U
	05/06/2004	MW39-050604	5 U	5 U	10 U	10 U
dup	05/06/2004	MW39-050604	5 U	5 U	10 U	10 U
	08/06/2004	MW39-080604	10 U	5 U	10 U	10 U
dup	08/06/2004	MW39-080604-Dup	10 U	5 U	10 U	10 U
	10/29/2004	MW39-102904	5 U	5 U	10 U	10 U
dup	10/29/2004	MW39-102904-Dup	5 U	5 U	10 U	10 U
	01/25/2005	MW39012505	2.5 U	5 U	2.5 U	5 U
dup	01/25/2005	MW39DUP012505	2.5 U	6 U	2.5 U	5.33
	07/25/2005	MW39072605	2.5 U	2.5 U	5.07	5 U
dup	07/25/2005	MW39072605-Dup	2.5 U	2.5 U	4.9	5 U
	01/26/2006	MW39012606	1 U	5 U	10 U	10 U
dup	01/26/2006	MW39012606-Dup	1 U	5 U	10 U	10 U
	08/10/2006	MW39081006	1 U	5 U	10 U	10 U
dup	08/10/2006	MW39081006-Dup	1 U	5 U	10 U	10 U
	01/25/2007	MW39012507	1 U	5 U	10 U	10 U
dup	01/25/2007	MW39012507-Dup	1 U	5 U	10 U	10 U
	08/16/2007	MW39081607	1.8	5 U	10 U	10 U
dup	08/16/2007	MW39081607-Dup	1.8	5 U	10 U	10 U
	01/23/2008	MW39012308	3.4	5 U	10 U	10 U
dup	01/23/2008	MW39012308-Dup	3.5	5 U	10 U	10 U
	08/21/2008	MW39082108	2.7	5 U	10 U	10 U
dup	08/21/2008	MW39082108-Dup	2.7	5 U	10 U	10 U
	02/02/2009	MW39020209	1.1	5 U	10 U	10 U
dup	02/02/2009	MW39020209-Dup	1.2	5 U	10 U	10 U
	08/12/2009	MW39081209	**5.2**	5.00	10 U	10 U
dup	08/12/2009	MW39081209-Dup	**5.6**	5 U	10 U	10 U
	01/21/2010	MW39012110	1.6	6.70	10 U	10 U
dup	01/21/2010	MW39012110-Dup	1.6	5 U	10 U	10 U
	08/17/2010	MW39081710	**12**	6.50	13.7	10 U
dup	08/17/2010	MW39081710-Dup	**12**	8.20	12.8	10 U
	01/21/2011	MW39012111	0.506	6.8	10 U	10 U
	08/31/2011	MW39083111	1.13	7.5	10 U	10 U
dup	08/31/2011	MW39DUP083111	1.2	7.4	10.2	10 U
MW-48S	08/20/2008	MW48S082008	**12**	5 U	10 U	10 U
	10/08/2008	MW-48S100808	**9.0**	5.50	10 U	10 U
	02/02/2009	MW48S020209	**6.6**	5 U	10.9	10 U
	04/09/2009	MW48S040909	4.9	5 U	10 U	10 U
	08/19/2009	MW48S081909	**6.6**	9.80	10 U	10 U
	01/27/2010	MW48S012710	**12**	6.40	10 U	10 U
	08/17/2010	MW48S081710	**18**	7.70	10 U	10 U
	01/24/2011	MW48S012411	**20.6**	6.7	10 U	10 U
	08/31/2011	MW48S083111	**27.2**	7.1	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5^a	48^b	590	4,800
MW-49D	08/19/2008	MW49D081908	**7.2**	5 U	10 U	10 U
	10/03/2008	MW49D100308	**5.9**	5 U	10 U	10 U
	01/26/2009	MW49D012609	**15**	5 U	10 U	10 U
	04/06/2009	MW49D040609	**14**	5 U	10 U	10 U
	08/14/2009	MW49D081409	**21**	5 U	10 U	10 U
	01/12/2010	MW49D011210	**14**	7.80	10 U	10 U
	08/11/2010	MW49D081110	**21**	6.30	10 U	10 U
	01/13/2011	MW49D011311	**33.4**	5 U	10 U	10 U
	08/23/2011	MW49D082311	**51.1**	8.3	10 U	10 U
MW-50S	08/19/2008	MW50S081908	**9.0**	5.20	10 U	10 U
	10/08/2008	MW-50S100808	4.4	7.90	10 U	10 U
	01/30/2009	MW50S013009	**6.8**	5.10	10 U	10 U
	04/09/2009	MW50S040909	1.8	7.40	10 U	10 U
	08/19/2009	MW50S081909	1.6	9.30	10 U	10 U
	01/26/2010	MW50S012610	**21**	5.80	10 U	10 U
	08/16/2010	MW50S081610	**13**	10.2	10 U	10 U
	01/21/2011	MW50S012111	**15**	9.6	10 U	10 U
	08/30/2011	MW50S083011	**21.8**	10.5	10 U	10 U
MW-51D	08/12/2008	MW51D081208	1.2	5 U	10 U	10 U
	10/06/2008	MW-51D100608	1.3	5 U	10 U	10 U
	01/26/2009	MW51D012609	1.3	5 U	10 U	10 U
	04/06/2009	MW51D040609	1.0	5 U	10 U	10 U
	08/05/2009	MW51D080509	1.1	5 U	10 U	10 U
	01/13/2010	MW51D011310	1.3	6.80	10 U	10 U
	08/12/2010	MW51D081210	1.0	5.10	10 U	10 U
	01/13/2011	MW51D011311	0.868	5 U	10 U	10 U
	08/24/2011	MW51D082411	0.872	6.9	10 U	10 U
MW-52D	08/14/2008	MW52D081508	**7.5**	5.00	10 U	10 U
	10/07/2008	MW-52D100708	**7.7**	5 U	10 U	10 U
	01/30/2009	MW52D013009	**27**	5 U	10 U	10 U
	04/09/2009	MW52D040909	**42**	5 U	10 U	10 U
	08/18/2009	MW52D081809	**42**	6.90	10 U	10 U
	01/25/2010	MW52D012510	**53**	5 U	10 U	10 U
	08/16/2010	MW52D081610	**51**	8.90	10 U	10 U
	01/20/2011	MW52012011	**37.2**	8	10 U	10 U
	08/30/2011	MW52D083011	**54.3**	8.1	10 U	10 U
MW-53S	08/14/2008	MW53S081408	**5.6**	7.20	10 U	10 U
	10/07/2008	MW-53S100708	**11**	5.60	10 U	10 U
	01/28/2009	MW53S012809	**11**	5.10	10 U	10 U
	04/10/2009	MW53S041009	**17**	7.60	10 U	10 U
	08/18/2009	MW53S081809	4.8	9.20	10 U	10 U
	01/20/2010	MW53S012010	**39**	6.30	10 U	10 U
	08/16/2010	MW53S081610	**25**	9.00	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
	01/18/2011	MW53S011811	**48.5**	12.3	10 U	10 U
	08/11/2011	MW53S081111	**57.9**	9.1	10 U	10 U
MW-53D	08/14/2008	MW53D081408	2.0	5 U	10 U	10 U
	10/07/2008	MW-53D100708	4.9	5 U	10 U	10 U
	01/28/2009	MW53D012809	**11**	5 U	10 U	10 U
	04/10/2009	MW53D041009	**20**	5 U	10 U	10 U
	08/17/2009	MW53D081709	**15**	6.10	10 U	10 U
	08/16/2010	MW53D081610	**9.4**	8.90	10 U	10 U
	01/20/2010	MW53D012010	**16**	5.10	10 U	10 U
	08/16/2010	MW53D081610	**9.4**	8.9	10 U	10 U
	09/07/2010	MW55D090710	**7.4**	6.80	10 U	10 U
	01/18/2011	MW53D011811	**9.6**	6.4	10 U	10 U
	08/11/2011	MW53D081111	**12.4**	7.3	10 U	10 U
MW-55S	08/20/2010	MW55S082010	**35**	12.1	10 U	10 U
	01/14/2011	MW55S011411	**36.7**	9.9	10 U	10 U
	08/08/2011	MW55S080811	**36.5**	12.2	10 U	10 U
MW-55D	09/07/2010	MW55D090710	**7.4**	6.8	10 U	10 U
	01/14/2011	MW55D011411	**9.18**	5 U	10 U	10 U
	08/08/2011	MW55D080811	**8**	7.5	10 U	10 U
MW-57S	08/15/2008	MW57S081508	**41**	6.60	10 U	10 U
	10/06/2008	MW-57S100608	**17**	7.40	10 U	10 U
	01/27/2009	MW57S012709	**23**	6.20	10 U	10 U
	04/07/2009	MW57S040709	**46**	7.10	10 U	10 U
	08/06/2009	MW57S080609	**51**	9.40	10 U	10 U
	01/13/2010	MW57S011310	**61**	9.60	10 U	10 U
	08/12/2010	MW57S081210	**40**	11.0	10 U	10 U
	01/14/2011	MW57S011411	**38.5**	10.4	10 U	10 U
	08/25/2011	MW57S082511	**36.9**	10.1	10 U	10 U
MW-57D	08/14/2008	MW57D081508	**19**	5 U	10 U	10 U
	10/06/2008	MW-57D100608	**6.8**	5 U	10 U	10 U
dup	10/06/2008	MW-57D100608-Dup	**8.8**	5 U	10 U	10 U
	01/27/2009	MW57D012709	**11**	5 U	10 U	10 U
dup	01/27/2009	MW57D012709-Dup	**11**	5 U	10 U	10 U
	04/07/2009	MW57D040709	**17**	5 U	10 U	10 U
dup	04/07/2009	MW57D040709-Dup	**17**	5 U	10 U	10 U
	08/06/2009	MW57D080609	**21**	6.50	10 U	10 U
	01/13/2010	MW57D011310	**21**	6.50	10 U	10 U
dup	01/13/2010	MW57D011310-Dup	**22**	6.70	10 U	10 U
	08/12/2010	MW57D081210	**19**	10.5	10 U	10 U
dup	08/12/2010	MW57D081210-Dup	**14**	7.20	10 U	10 U
	01/14/2011	MW57D011411	**18.6**	7.7	10 U	10 U
dup	01/14/2011	MW57DDUP011411	**17.6**	7.2	10 U	10 U
	08/25/2011	MW57D082511	**20.4**	7.7	10 U	10 U
dup	08/25/2011	MW57DDUP082511	**21**	6.7	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
MW-58D	08/13/2008	MW58D081308	**7.3**	5 U	10 U	10 U
	10/08/2008	MW-58D100808	**6.9**	5 U	10 U	10 U
	01/27/2009	MW58D012709	**10**	5 U	10 U	10 U
	04/07/2009	MW58D040709	**11**	5 U	10 U	10 U
	08/06/2009	MW58D080609	**14**	5 U	10 U	10 U
	01/14/2010	MW58D011410	**13**	5.00	10 U	10 U
	08/12/2010	MW58D081210	**10**	5 U	10 U	10 U
	01/19/2011	MW58D011911	**2.72**	5 U	10 U	10 U
	08/26/2011	MW58D082611	**10.3**	5 U	10 U	10 U
EPA-5S	08/11/2008	EPA5S081108	1.1	18.3	10 U	10 U
	10/02/2008	EPA5S100208	1.3	15.0	10 U	10 U
	01/23/2009	EPA5S012309	1 U	22.8	10 U	10 U
	04/03/2009	EPA5S040309	1 U	28.1	10 U	10 U
	08/05/2009	EPA5S080509	1 U	20.7	10 U	10 U
	01/08/2010	EPA5S010810	1 U	20.7	10 U	10 U
	01/12/2011	EPA5S011211	0.311	20.8	10 U	10 U
	08/09/2011	EPA5S080911	**5.74**	20.5	10 U	10 U
EPA-5D	08/11/2008	EPA5D081108	1 U	5 U	10 U	10 U
	10/02/2008	EPA5D100208	1 U	5 U	10 U	10 U
	01/23/2009	EPA5D012309	1 U	5 U	10 U	10 U
	04/03/2009	EPA5D040309	1 U	5.40	10 U	10 U
	08/05/2009	EPA5D080509	1 U	7.50	10 U	10 U
	01/08/2010	EPA5D010810	1 U	11.5	10 U	10 U
	08/11/2010	EPA5D081110	1 U	10.1	10 U	10 U
	01/12/2011	EPA5D011211	**13.3**	9.4	10 U	10 U
	08/09/2011	EPA5D080911	0.486	8.4	10 U	10 U
EPA-6S	08/18/2008	EPA6S081808	**86**	5 U	10 U	10 U
	10/07/2008	EPA-6S100708	**48**	5 U	10 U	10 U
	01/29/2009	EPA6S012909	**45**	5 U	10 U	10 U
	04/10/2009	EPA6S041009	**75**	5 U	10 U	10 U
	08/12/2009	EPA6S081209	**80**	5.20	10 U	10 U
	01/25/2010	EPA6S012510	**78**	6.70	10 U	10 U
	08/13/2010	EPA6S081310	**78**	9.6	10 U	10 U
	01/19/2011	EPA6S011911	**63.1**	7.9	10 U	10 U
dup	01/19/2011	EPA6SDUP011911	**63.6**	8.3	10 U	10 U
	08/10/2011	EPA6S081011	**66.9**	6.9	10 U	10 U
EPA-6D	08/18/2008	EPA6D081808	**7.1**	5 U	10 U	10 U
	10/07/2008	EPA-6D100708	3.5	5 U	10 U	10 U
	01/29/2009	EPA6D012909	1.9	5 U	10 U	10 U
	04/10/2009	EPA6D041009	**6.8**	5 U	10 U	10 U
	08/12/2009	EPA6D081209	**7.2**	5 U	10 U	10 U
	01/25/2010	EPA6D012510	3.0	5.80	10 U	10.0
	08/13/2010	EPA6D081310	10 U	7.7	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
	01/19/2011	EPA6D011911	**8.08**	5 U	10 U	10 U
	08/10/2011	EPA6D081011	**7.15**	6.8	10 U	10 U
Carty Lake Monitoring Wells (UWBZ)						
MW-30	08/13/2002	GW-133	10 U	5 U	10 U	10 U
USDFW-1	05/04/2004	USDFW1-050404	5 U	10 U	10 U	10 U
	08/13/2004	USDFW1-081304	5 U	5 U	10 U	10 U
	10/25/2004	USDFW1-102504	5 U	5 U	10 U	10 U
	01/28/2005	USDFW1012805	2.5 U	4.36	2.5 U	5 U
	07/28/2005	USDFW1072805	2.5 U	5.01	2.5 U	5 U
	02/01/2006	USDFW1020106	1.9	5.40	10 U	10 U
	08/11/2006	USDFW1081106	1.8	5 U	10 U	10 U
	01/22/2007	USDFW1012207	2.4	5 U	10 U	10 U
	08/27/2007	USDFW1082707	2.6	5 U	10 U	10 U
	01/28/2008	USDFW1012808	1.9	5.70	10 U	10 U
	08/21/2008	USDW1082108	1.8	5.00	10 U	10 U
	02/03/2009	USDFW1020309	1.6	7.10	10 U	10 U
	08/07/2009	USDFW1080709	1.9	8.80	10 U	10 U
	01/28/2010	USDFW1012810	1.9	8.00	10 U	10 U
	08/26/2010	USDFW1082610	2.2	11.5	10 U	10 U
	01/26/2011	USDFW1012611	1.79	12.8	10 U	10 U
	09/06/2011	USDFW1090611	2.04	11.6	10 U	10 U
USDFW-2	05/04/2004	USDFW2-050404	**7.9**	10 U	10 U	10 U
	08/13/2004	USDFW2-081304	**9.3**	5 U	10 U	10 U
	10/25/2004	USDFW2-102504	**9**	5 U	10 U	10 U
	01/28/2005	USDFW2012805	**23.3**	3.58	2.5 U	5 U
	07/28/2005	USDFW2072805	**9.03**	4.12	2.5 U	5 U
	02/01/2006	USDFW2020106	**6.5**	5 U	10 U	10 U
	08/11/2006	NS	NS	NS	NS	NS
	01/22/2007	USDFW2012207	**11**	5 U	10 U	10 U
	08/27/2007	USDFW2082707	**11**	5 U	10 U	10 U
	01/28/2008	USDFW2012808	**9.2**	5 U	10 U	10 U
USDFW-3	05/04/2004	USDFW3-050404	**11.1**	10 U	10 U	10 U
	08/13/2004	USDFW3-081304	**15.1**	5 U	10 U	10 U
	10/25/2004	USDFW3-102504	**13.6**	5 U	10 U	10 U
	01/28/2005	USDFW3012805	**13.2**	2.5 U	2.5 U	5 U
	07/28/2005	USDFW3072805	**13.7**	3.52	2.5 U	5 U
	02/01/2006	USDFW3020106	**8.4**	5 U	10 U	10 U
	08/11/2006	USDFW3081106	**14**	5 U	10 U	10 U
	01/22/2007	USDFW3012207	**14**	5 U	10 U	10 U
	08/27/2007	USDFW3082707	**15**	5 U	10 U	10 U
	01/28/2008	USDFW3012808	**12**	5 U	10 U	10 U
RMW-2S	08/21/2008	RMW2S082108	2.4	5 U	10 U	10 U
	10/09/2008	RMW2S100908	2.5	5.50	10 U	10 U
	02/03/2009	RMW2S020309	2.2	6.00	10 U	10 U
	04/08/2009	RMW2S040809	2.2	5.00	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
	08/07/2009	RMW2S080709	3.1	8.00	10 U	10 U
	01/28/2010	RMW2S012810	2.9	6.30	10 U	10 U
	08/26/2010	RMW2S082610	3.3	8.40	10 U	10 U
	01/26/2011	RMW2S012611	0.503	6.5	10 U	10 U
	09/06/2011	RMW2S090611	4.46	6.8	10 U	10 U
RMW-2D	08/21/2008	RMW2D082108	1 U	5 U	10 U	10 U
	10/09/2008	RMW2D100908	1 U	5.20	10 U	10 U
	02/03/2009	RMW2D020309	1 U	5 U	10 U	10 U
	04/08/2009	RMW2D040809	1 U	5 U	10 U	10 U
	08/07/2009	RMW2D080709	1 U	7.10	10 U	10 U
	01/28/2010	RMW2D012810	1 U	5.30	10 U	10 U
	08/26/2010	RMW2D082610	1 U	6.10	10 U	10 U
	01/26/2011	RMW2D012611	2.8	7.9	10 U	10 U
	09/06/2011	RMW2D090611	0.481	7.8	10 U	10 U
LWBZ: Cells 1 and 2 and Carty Lake						
Cell 1 (LWBZ)						
MW-40	01/23/2004	MW40-012304	5 U	5 U	10 U	10 U
	04/30/2004	MW40-043004	5 U	5 U	10 U	10 U
	08/11/2004	MW40-081104	5 U	5 U	10 U	10 U
	10/29/2004	MW40-102904[c]	5 U	5 U	10 U	10 U
	01/27/2005	MW40012705	2.5 U	5.97	2.5 U	2.5 U
	07/20/2005	NS	NS	NS	NS	NS
	01/27/2006	MW40012706	1 U	5 U	10 U	10 U
	08/08/2006	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS
	08/06/2007	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS
	08/11/2008	NS	NS	NS	NS	NS
	02/02/2009	MW40020209	1 U	5 U	10 U	10 U
	08/19/2009	MW40081909	1 U	6.20	10 U	10 U
	01/29/2010	MW40012910	1 U	5.20	10 U	10 U
	08/25/2010	MW40082510	1.1	6.50	10 U	10 U
	01/24/2011	MW40012411	1.1	7.6	10 U	10 U
	09/02/2011	MW40090211	1.1	8.1	10 U	10 U
MW-41	08/12/2002	GW-148	4 U	28.1	10 U	10 U
	01/29/2004	MW41-012904	5 U	5.9	10 U	10 U
	04/29/2004	MW41-042904	5 U	5 U	10 U	10 U
	08/12/2004	MW41-081204	5 U	5 U	10 U	10 U
	11/08/2004	MW41-110804	5 U	5 U	10 U	10 U
	01/27/2005	MW41012705	2.5 U	6.62	2.5 U	2.5 U
	07/20/2005	NS	NS	NS	NS	NS
	01/30/2006	MW41013006	1 U	5 U	10 U	11.9
	08/08/2006	NS	NS	NS	NS	NS
	01/18/2007	NS	NS	NS	NS	NS

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
	08/06/2007	NS	NS	NS	NS	NS
	01/17/2008	NS	NS	NS	NS	NS
	08/11/2008	NS	NS	NS	NS	NS
Cell 2 (LWBZ)						
MW-22	08/08/2002	GW-143	5 U	5 U	10 U	10 U
	01/23/2004	MW22-012304	5 U	5 U	10 U	10 U
	04/28/2004	MW22-042804	5 U	5 U	10 U	10 U
	08/06/2004	MW22-080604	10 U	5 U	10 U	10 U
	10/26/2004	MW22-102604	5 U	5 U	10 U	10 U
	01/25/2005	MW22012505	2.5 U	7.63	2.5 U	5 U
	07/25/2005	MW22072505	2.5 U	2.62	2.5 U	5 U
	01/25/2006	MW22012506	1 U	5 U	10 U	10 U
	08/10/2006	MW22081006	1 U	5 U	10 U	10 U
	01/25/2007	MW22012507	1 U	5 U	10 U	10 U
	08/16/2007	MW22081607	1.3	5 U	10 U	10 U
	01/22/2008	MW22012208	1 U	5 U	10 U	10 U
MW-33	01/21/2004	MW33-012104	5 U	5 U	10 U	10 U
	04/27/2004	MW33-042704	5 U	5 U	10 U	10 U
	07/28/2004	MW33-072804	5 U	5 U	10 U	10 U
	10/19/2004	MW33-101904	10 U	5 U	10 U	10 U
	01/20/2005	MW33012005	2.5 U	5 U	2.5 U	5 U
	07/20/2005	MW33072005	2.5 U	2.5 U	2.5 U	5 U
	01/20/2006	MW33012006	1 U	5 U	10 U	10 U
	08/04/2006	MW33080406	1 U	5 U	10 U	10 U
	01/19/2007	MW33011907	1.2	5 U	10 U	10 U
	08/09/2007	MW33080907	1.4	5 U	10 U	10 U
	01/15/2008	MW33011508	1 U	5 U	10 U	10 U
	08/11/2008	MW33081108	1 U	5 U	10 U	10 U
	01/11/2010	MW33011110	1.1	6.60	10 U	10 U
	08/09/2011	MW33080911	0.993	6.7	10 U	10 U
MW-34	08/08/2002	GW-144	5 U	5 U	10 U	10 U
	01/21/2004	MW34-012104	5 U	5 U	10 U	10 U
	04/27/2004	MW34-042704	5 U	5 U	10 U	10 U
	07/29/2004	MW34-072904	5 U	5 U	10 U	10 U
	10/20/2004	MW34-102004	10 U	5 U	10 U	10 U
	01/21/2005	MW34012105	2.5 U	6.98	2.5 U	5 U
	07/20/2005	MW34072105	2.5 U	3.08	2.5 U	5 U
	01/23/2006	MW34012306	1 U	5 U	10 U	10 U
	08/07/2006	MW34080706	1 U	5 U	10 U	10 U
	01/18/2007	MW34011807	1.8	5 U	10 U	10 U
	08/10/2007	MW34081007	1.6	5 U	10 U	10 U
	01/16/2008	MW34011608	1 U	5 U	10 U	11.6

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
MW-35	08/13/2002	GW-145	4 U	5 U	10 U	10 U
dup	08/13/2002	GW-150	4 U	5 U	10 U	10 U
	01/21/2004	MW35-012104	5 U	5 U	10 U	10 U
	04/28/2004	MW35-042804	5 U	5 U	10 U	10 U
	07/30/2004	MW35-073004	5 U	5 U	10 U	10 U
	10/25/2004	MW35-102504	5 U	5 U	10 U	10 U
	01/24/2005	MW35012405	2.5 U	9.98	2.5 U	5 U
	07/20/2005	MW35072205	3.63	4.79	2.5 U	5 U
	01/24/2006	MW35012406	4.5	5 U	10 U	10 U
	08/08/2006	MW35080806	3.7	5 U	10 U	10 U
	01/24/2007	MW35012407	4.8	5 U	10 U	10 U
	08/14/2007	MW35081407	4.7	5 U	10 U	10 U
	01/18/2008	MW35011808	3.8	5 U	10 U	10 U
	08/14/2008	MW35081408	3.5	5.40	10 U	10 U
	01/30/2009	MW35013009	3.4	5 U	10 U	10 U
	08/18/2009	MW35081809	3.1	7.60	10 U	10 U
	01/22/2010	MW35012210	3.4	6.30	10 U	10 U
	08/16/2010	MW35081610	2.7	8.60	10 U	10 U
	01/20/2011	MW35012011	3.18	5 U	10 U	10 U
	08/29/2011	MW35082911	3.28	8.9	10 U	10 U
MW-36	08/07/2002	GW-146	5 U	5 U	10 U	10 U
	01/26/2004	MW36-012604	5 U	**112**	10 U	11.5
	04/28/2004	MW36-042804	5 U	5 U	10 U	10 U
	07/30/2004	MW36-073004	5 U	5 U	10 U	10 U
	10/26/2004	MW36-102604	5 U	5 U	10 U	10 U
	01/25/2005	MW36012505	2.5 U	6.16	2.5 U	5 U
	07/25/2005	MW36072705	2.5 U	2.5 U	2.5 U	5 U
	01/25/2006	MW36012506	1 U	5 U	10 U	10 U
	08/08/2006	MW36080806	1 U	5 U	10 U	10 U
	01/24/2007	MW36012407	1.0	5 U	10 U	10 U
	08/15/2007	MW36081507	1.4	5 U	10 U	10 U
	01/22/2008	MW36012208	1 U	5 U	10 U	10 U
	08/19/2008	MW36081908	1 U	5 U	10 U	10 U
	01/30/2009	MW36013009	1 U	5 U	10 U	10 U
	08/19/2009	MW36081909	1 U	8.20	10 U	10 U
	01/26/2010	MW36012610	1 U	5.60	10 U	10 U
	08/16/2010	MW36081610	1 U	7.80	10 U	10 U
	01/21/2011	MW36012111	0.66	5.8	10 U	10 U
	08/30/2011	MW36083011	0.671	6.5	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
MW-37	08/12/2002	GW-147	4 U	5 U	10 U	10 U
	01/27/2004	MW37-012704	5 U	5 U	10 U	10 U
	04/29/2004	MW37-042904	5 U	5 U	10 U	10 U
	08/06/2004	MW37-080604	10 U	5 U	10 U	10 U
	10/22/2004	MW37-102204	5 U	5 U	10 U	10 U
	01/26/2005	MW37012605	2.5 U	5.9	2.5 U	2.5 U
	07/25/2005	MW37072605	2.5 U	2.5 U	2.5 U	5 U
	01/26/2006	MW37012606	1 U	5 U	10 U	10 U
	08/09/2006	MW37080906	1 U	5 U	10 U	10 U
	01/26/2007	MW370120607	1 U	5 U	49.6	10 U
	08/17/2007	MW37081707	1.3	5 U	10 U	10 U
	01/23/2008	MW37012308	1 U	5 U	10 U	10 U
	08/20/2008	MW37082008	1 U	5 U	10 U	10 U
	01/27/2010	MW37012710	1 U	6.4	10 U	10 U
	08/31/2011	MW37083111	0.639	7.1	10 U	10 U
MW-54	08/12/2008	MW54081208	1.1	5 U	10 U	10 U
	10/06/2008	MW-54100608	1 U	5 U	10 U	10 U
	01/26/2009	MW54012609	1 U	5.30	10 U	10 U
	04/06/2009	MW54040609	1 U	6.10	10 U	10 U
	08/05/2009	MW54080509	1 U	5.90	10 U	10 U
	01/13/2010	MW54011310	1.1	6.50	10 U	10 U
	08/12/2010	MW54081210	1 U	8.10	10 U	10 U
	01/13/2011	MW54011311	0.675	5.7	10 U	10 U
	08/24/2011	MW54082411	0.808	7.9	10 U	10 U
MW-55	08/14/2008	MW55081408	1 U	5 U	10 U	10 U
	10/03/2008	MW55100308	1 U	5 U	10 U	10 U
	01/27/2009	MW55012709	1 U	5 U	10 U	10 U
	04/07/2009	MW55040709	1 U	5 U	10 U	10 U
	08/06/2009	MW55080609	1 U	5 U	10 U	10 U
	01/14/2010	MW55011410	1.0	6.00	10 U	16.2
	08/12/2010	MW55081210	1 U	7.70	10 U	10 U
	01/14/2011	MW55011411	1 U	6	10 U	10 U
	08/08/2011	MW55080811	0.938	8	10 U	10 U
MW-56	08/21/2008	MW56082108	2.2	5 U	10 U	10 U
	10/08/2008	MW-56100808	3.2	5 U	10 U	10 U
	01/27/2009	MW56012709	2.4	5 U	10 U	10 U
	04/07/2009	MW56040709	2.4	5 U	10 U	10 U
	08/06/2009	MW56080609	2.7	5.90	10 U	10 U
	01/14/2010	MW56011410	2.9	8.50	10 U	10 U
	08/12/2010	MW56081210	2.8	7.80	10 U	10 U
	01/19/2011	MW56011911	2.78	6.1	10 U	10 U
	08/26/2011	MW56082611	2.87	6.6	10 U	10 U

Table 3-10
Dissolved Metals in Groundwater—Cells 1 and 2 and RNWR (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level			5[a]	48[b]	590	4,800
MW-59	08/19/2008	MW59081908	**6.0**	5 U	10 U	10 U
	10/06/2008	MW-59100608	2.7	5 U	10 U	10 U
	01/29/2009	MW59012909	3.1	5 U	10 U	10 U
	04/09/2009	MW59040909	4.5	5.40	10 U	10 U
	08/17/2009	MW59081709	4.3	6.50	10 U	10 U
	01/21/2010	MW59012110	1.8	6.50	10 U	10 U
	08/13/2010	MW59081310	4.7	6.90	10 U	10 U
	01/20/2011	MW59012011	3.36	8.4	10 U	10 U
	08/29/2011	MW59082911	3.72	7.3	10 U	10 U
MW-62	09/08/2010	MW62090810	1.0	7.20	10 U	10 U
	01/14/2011	MW62011411	1 U	6.2	10 U	10 U
	08/25/2011	MW62082511	0.889	6.6	10 U	10 U
Carty Lake (LWBZ)						
MW-60	09/03/2008	MW60090308	1 U	5.60	10 U	10 U
	10/09/2008	MW601000908	1 U	6.20	10 U	10 U
	02/03/2009	MW60020309	1 U	5 U	10 U	10 U
	04/08/2009	MW60040809	1 U	5.50	10 U	10 U
	08/07/2009	MW60080709	1 U	7.20	10 U	10 U
	01/28/2010	MW60012810	1 U	6.90	10 U	10 U
	08/25/2010	MW60082510	1 U	7.80	10 U	10 U
	01/24/2011	MW60012411	0.556	7.4	10 U	10 U
	09/06/2011	MW60090611	0.81	8.2	10 U	10 U
MW-61	09/03/2010	MW61090310	1.7	6.30	10 U	10 U
	01/24/2011	MW61012411	1.34	7.9	10 U	10 U
	09/02/2011	MW61090211	1.47	10	10 U	10 U

NOTES:

Bold = detected concentration that exceeds MTCA Method B groundwater cleanup level. non-detect values ("U") were not compared with MTCA Method B groundwater cleanup level.

dup = duplicate sample.

LWBZ = lower water-bearing zone.

MTCA = Model Toxics Control Act.

µg/L = micrograms per liter.

NS = not sampled.

RNWR = Ridgefield National Wildlife Refuge.

UWBZ = upper water-bearing zone.

U = not detected at or above method reporting limit.

[a] MTCA Method A CUL listed for arsenic, which is representative of background conditions.

[b] Hexavalent chromium screening criteria.

[c] Samples were switched because of mislabeling.

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
UWBZ: Cells 1 and 2 Cell 1 (UWBZ)				
MW-7	08/12/2002	GW-125	**0.52**	0.5 U
	07/25/2005	MW7072705	**1.33**	0.475 U
	01/27/2006	NS	NS	NS
	08/10/2006	MW7081006	**1.97**	0.48 U
	01/25/2007	MW7012507	**1.35**	0.48 U
	08/06/2007	NS	NS	NS
	01/16/2008	NS	NS	NS
	09/05/2008	MW7090508	**2.05**	0.477 U
	02/04/2009	MW7020409	**1.86**	**0.918**
	08/19/2009	MW7081909	0.450	0.475 U
	01/26/2010	MW7012610	**1.97**	**2.42**
	08/24/2010	MW7082410	**0.503**	0.432
	01/25/2011	MW7012511	**1.44**	**1.1**
	09/01/2011	MW7090111	0.0995	0.193 U
MW-8S	08/13/2002	GW-126	0.49	0.5 U
MW-42	08/12/2002	GW-137	**26**	0.5 U
	07/20/2005	NS	NS	NS
	01/27/2006	NS	NS	NS
	08/10/2006	NS	NS	NS
	01/18/2007	NS	NS	NS
	08/06/2007	NS	NS	NS
	01/16/2008	NS	NS	NS
MW-43	08/12/2002	GW-138	**27**	0.5 U
	07/20/2005	NS	NS	NS
	01/27/2006	NS	NS	NS
	08/10/2006	NS	NS	NS
	01/18/2007	NS	NS	NS
	08/06/2007	NS	NS	NS
	01/16/2008	NS	NS	NS
MW-44	08/13/2002	GW-139	**16**	0.5 U
	07/20/2005	NS	NS	NS
	01/27/2006	NS	NS	NS
	08/10/2006	NS	NS	NS
	01/18/2007	NS	NS	NS
	08/06/2007	NS	NS	NS
	01/16/2008	NS	NS	NS
	01/16/2008	NS	NS	NS
	02/02/2009	MW44020209	**174**	**46.5**
	08/19/2009	MW44081909	**10.3**	**4.37**
	01/29/2011	NS	NS	NS
	08/25/2010	MW44082510	**4.65**	**2.76**
	01/24/2011	MW44012411	0.449	**1.17**
	09/02/2011	MW44090211	**6.53**	**3.67**

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
E-4	07/12/2007	E4-21071207	**3.63**	0.486 U
	09/13/2007	E4-23091307	**14.1**	**19.2**
	02/12/2008	E4021208	**4.04**	**1.48**
	08/22/2008	E4082208	**1.28**	0.475 U
	01/13/2009	E4011309	**2.50**	**1.48**
EPA-4S	09/03/2008	EPA4S090308	0.239 U	0.478 U
	10/02/2008	EPA4S100208	0.25 U	0.5 U
	02/10/2009	EPA4S021009	0.238 U	0.475 U
	04/16/2009	EPA4S041609	0.237 U	0.475 U
	08/13/2009	EPA4S081309	0.237 U	0.474 U
	01/29/2010	EPA4S012910	0.0833	0.19 U
	08/24/2010	EPA4S082410	0.163	0.436
	01/25/2011	EPA4S012511	0.119	0.19 U
	09/01/2011	EPA4S090111	0.243	0.305
EPA-4D	09/03/2008	EPA4D090308	0.24 U	0.479 U
	10/02/2008	EPA4D100208	0.24 U	0.479 U
	02/10/2009	EPA4D021009	0.237 U	0.475 U
	04/16/2009	EPA4D041609	0.238 U	0.476 U
	08/13/2009	EPA4D081309	0.237 U	0.474 U
	01/29/2010	EPA4D012910	0.076 U	0.19 U
	08/24/2010	EPA4D082410	0.076 U	0.19 U
	01/25/2011	EPA4D012511	0.0763 U	0.191 U
	09/01/2011	EPA4D090111	0.077 U	0.192 U
Cell 2 (UWBZ)				
MW-10	08/06/2002	GW-121	0.4	**1.3**
	01/23/2007	MW10012307	0.314	0.474 U
	01/17/2008	MW10011708	0.269	**0.514**
MW-13	08/08/2002	GW-127	0.25 U	0.5 U
MW-14	08/08/2002	GW-128	0.34	0.5 U
MW-15	08/08/2002	GW-140	**3.8**	0.5 U
	07/20/2005	MW15072205	**4.06**	0.48 U
	01/23/2006	NS	NS	NS
	08/07/2006	MW15080706	**3.18**	0.475 U
	01/18/2007	MW15011807	**3.31**	0.475 U
	08/10/2007	MW15081007	**1.98**	0.475 U
	01/16/2008	MW15011608	**1.88**	**0.731**
	08/13/2008	MW15081308	**1.78**	0.477 U
	09/03/2008	MW15090308	**2.26**	0.473 U
	01/26/2009	MW15012609	**2.44**	**0.601**
	08/17/2009	MW15081709	**1.11**	**0.695**
	01/12/2010	MW15011210	**0.996**	**0.854**
	08/11/2010	MW15081110	**1.75**	**2.43**
	01/13/2011	MW15011311	0.348	0.293
	08/23/2011	MW15082311	0.27	0.323

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
MW-16	08/07/2002	GW-129	**5.1**	**19**
	07/25/2005	MW16072505	**2.09**	**0.843**
	01/25/2006	NS	NS	NS
	08/10/2006	MW16081006	**2.62**	**0.693**
	01/25/2007	MW16012507	**3.19**	0.474 U
	08/16/2007	MW16081607	**1.40**	0.475 U
	01/22/2008	MW16012208	**1.47**	**0.979**
	08/19/2008	MW16081908	**3.13**	**1.14**
	01/30/2009	MW16013009	**0.772**	0.474 U
	08/12/2009	MW16081209	**1.42**	**0.882**
	01/21/2010	MW16012110	0.353	0.335
	08/17/2010	MW16081710	**1.72**	**0.598**
	01/21/2011	MW16012111	0.133	0.191 U
	08/30/2011	MW16083011	**1.41**	0.449
MW-17	08/07/2002	GW-130	**0.9**	**0.93**
	07/25/2005	MW17072505	**0.768**	**0.784**
	01/24/2006	NS	NS	NS
	08/08/2006	MW17080806	**0.620**	0.503 U
	01/24/2007	MW17012407	**0.639**	0.475 U
	08/15/2007	MW17081507	0.237 U	0.474 U
	01/18/2008	MW17011808	**0.638**	0.475 U
MW-21	08/08/2002	GW-131	**12**	0.5 U
	07/25/2005	MW21072505	**9.91**	**0.874**
	01/25/2006	NS	NS	NS
	08/10/2006	MW21081006	**1.28**	0.475 U
	01/25/2007	MW21012507	**2.29**	0.477 U
	08/16/2007	MW21081607	**0.835**	0.473 U
	01/22/2008	MW21012208	**1.44**	**0.871**
	08/19/2008	MW21081908	**1.13**	**1.69**
	01/30/2009	MW21013009	**1.07**	**0.534**
	08/12/2009	MW21081209	**0.640**	0.476 U
	01/21/2010	MW21012110	0.491	**0.682**
	08/17/2010	MW21081710	**2.55**	**0.968**
	01/21/2011	MW21012111	0.15	0.192 U
	08/30/2011	MW21083011	**0.867**	1.22
MW-23	08/06/2002	GW-124	**2.1**	0.5 U
	07/20/2005	MW23072105	**2.81**	0.477 U
	01/20/2006	NS	NS	NS
	08/07/2006	MW23080706	**1.05**	0.474 U
	01/23/2007	MW23012307	**0.626**	0.474 U
	08/09/2007	MW23080907	**0.771**	0.475 U
	01/15/2008	MW23011508	**1.02**	**0.679**
	08/11/2008	MW23081108	**0.610**	0.474 U
	01/11/2010	MW23011110	**0.851**	0.461
	08/30/2011	NS	NS	NS

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
MW-25	08/12/2002	GW-141	0.36	0.5 U
MW-26	07/25/2005	MW26072505	**32.2**	**0.98**
	01/24/2006	NS	NS	NS
	08/08/2006	MW26080806	**23.8**	0.506 U
	01/24/2007	MW26012407	**6.96**	0.479 U
	08/15/2007	MW26081507	**6.83**	0.475 U
	01/18/2008	MW26011808	**9.51**	0.478 U
	08/15/2008	MW26081508	**10.7**	**0.954**
	01/28/2009	MW26012809	**8.73**	**0.782**
	08/18/2009	MW26081809	**7.00**	**1.28**
	01/25/2010	MW26012510	**15.9**	**0.972**
	08/16/2010	MW26081610	**8.45**	**1.07**
	01/20/2011	MW26012011	**22.2**	**1.25**
	08/30/2011	MW26083011	**19**	**0.789**
MW-27	07/20/2005	MW27072205	**4.59**	0.476 U
	01/23/2006	NS	NS	NS
	08/07/2006	MW27080706	**2.24**	0.475 U
	01/24/2007	MW27012407	**1.06**	0.474 U
	08/14/2007	MW27081407	**0.784**	0.479 U
	01/17/2008	MW27011708	**1.07**	**0.645**
	08/15/2008	MW27081508	**1.10**	**0.554**
	01/22/2010	MW27012210	**1.47**	0.298
	08/29/2011	MW27082911	**1.53**	0.192 U
MW-38	08/07/2002	GW-135	**1.3**	0.5 U
dup	08/07/2002	GW-135-Dup	**1.4**	0.5 U
	07/25/2005	MW38072605	**0.876**	**0.574**
	01/26/2006	NS	NS	NS
	08/10/2006	MW38081006	0.282	0.478 U
dup	08/10/2006	MW38081006-Dup	0.315	0.506 U
	01/25/2007	MW38012507	0.442	0.475 U
dup	01/25/2007	MW38012507-Dup	0.435	0.474 U
	08/16/2007	MW38081607	0.238 U	0.476 U
dup	08/16/2007	MW38081607-Dup	0.237 U	0.474 U
	01/23/2008	MW38012308	0.309	0.478 U
dup	01/23/2008	MW38012308-Dup	0.346	0.487
	08/21/2008	MW38082108	**0.969**	**0.810**
dup	08/21/2008	MW38082108-Dup	**0.558**	0.497 U
	02/02/2009	MW38020209	0.412	0.472 U
dup	02/02/2009	MW38020209-Dup	0.406	0.473 U
	08/12/2009	MW38081209	**0.607**	**0.542**
dup	08/12/2009	MW38081209-Dup	0.468	0.477 U
	01/21/2010	MW38012110	0.305	**0.510**
dup	01/21/2010	MW38012110-Dup	0.252	0.316
	08/17/2010	MW38081710	0.249	0.312
dup	08/17/2010	MW38081710-Dup	0.265	0.308
	01/21/2011	MW38012111	0.125	0.476

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
	08/31/2011	MW38083111	**0.567**	**0.785**
dup	08/31/2011	MW38DUP083111	0.395	0.365
MW-39	08/07/2002	GW-136	**0.57**	0.5 U
	07/25/2005	MW39072605	**2.01**	**0.545**
dup	07/25/2005	MW39072605-Dup	**1.75**	0.499
	01/26/2006	NS	NS	NS
	08/10/2006	MW39081006	0.24 U	0.48 U
dup	08/10/2006	MW39081006-Dup	0.238 U	0.477 U
	01/25/2007	MW39012507	0.237 U	0.474 U
dup	01/25/2007	MW39012507-Dup	0.238 U	0.476 U
	08/16/2007	MW39081607	0.237 U	0.475 U
dup	08/16/2007	MW39081607-Dup	0.239 U	0.477 U
	01/23/2008	MW39012308	**1.09**	**0.753**
dup	01/23/2008	MW39012308-Dup	**0.962**	**0.758**
	08/21/2008	MW39082108	**0.635**	**0.612**
dup	08/21/2008	MW39082108-Dup	**0.727**	**0.672**
	02/02/2009	MW38020209	0.412	0.472 U
dup	02/02/2009	MW38020209-Dup	0.406	0.473 U
	08/12/2009	MW39081209	**0.953**	**1.05**
dup	08/12/2009	MW39081209-Dup	**0.711**	**0.838**
	01/21/2010	MW39012110	0.131	0.281
dup	01/21/2010	MW39012110-Dup	0.138	0.305
	08/17/2010	MW39081710	**1.40**	**0.994**
dup	08/17/2010	MW39081710-Dup	**1.28**	**0.964**
	01/21/2011	MW39012111	0.0764 U	0.191 U
	08/31/2011	MW39083111	0.254	0.293
dup	08/31/2011	MW39DUP083111	0.213	0.247
MW-48S	08/20/2008	MW48S082008	**2.28**	**1.48**
	10/08/2008	MW-48S100808	0.243 U	**4.44**
	02/02/2009	MW48S020209	**0.671**	**0.513**
	04/09/2009	MW48S040909	0.339	**0.502**
	08/19/2009	MW48S081909	0.326	0.474 U
	01/27/2010	MW48S012710	**0.514**	**1.00**
	08/17/2010	MW48S081710	**2.12**	**2.21**
	01/24/2011	MW48S012411	0.11	0.193 U
	08/31/2011	MW48S083111	**0.823**	**0.973**
MW-49D	08/19/2008	MW49D081908	**3.62**	**0.945**
	10/03/2008	MW49D100308	**5.76**	**1.66**
	01/26/2009	MW49D012609	**2.67**	**0.937**
	04/06/2009	MW49D040609	**5.35**	**1.17**
	08/14/2009	MW49D081409	**2.81**	**1.88**
	01/12/2010	MW49D011210	**1.10**	**0.598**
	08/11/2010	MW49D081110	**1.94**	**0.554**
	01/13/2011	MW49D011311	**1.85**	**0.902**
	08/23/2011	MW49D082311	**1.24**	**1.02**

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
MW-50S	08/19/2008	MW50S081908	0.316	0.474 U
	10/08/2008	MW-50S100808	0.481	0.473 U
	01/30/2009	MW50S013009	0.286	0.473 U
	04/09/2009	MW50S040909	0.307	0.473 U
	08/19/2009	MW50S081909	0.237 U	0.473 U
	01/26/2010	MW50S012610	0.243	0.317
	08/16/2010	MW50S081610	0.202	0.261
	01/21/2011	MW50S012111	0.0763 U	0.191 U
	08/30/2011	MW50S083011	0.174	0.205 U
MW-51D	08/12/2008	MW51D081208	0.417	0.474 U
	10/06/2008	MW-51D100608	0.461	0.474 U
	01/26/2009	MW51D012609	0.492	0.472 U
	04/06/2009	MW51D040609	**0.539**	0.479 U
	08/05/2009	MW51D080509	0.473	0.476 U
	01/13/2010	MW51D011310	0.359	0.231
	08/12/2010	MW51D081210	0.301	0.191 U
	01/13/2011	MW51D011311	0.128	0.192 U
	08/24/2011	MW51D082411	0.252	0.201 U
MW-52D	08/14/2008	MW52D081508	**2.87**	**0.519**
	10/07/2008	MW-52D100708	**1.49**	**1.05**
	01/30/2009	MW52D013009	**1.03**	0.478 U
	04/09/2009	MW52D040909	**0.742**	0.476 U
	08/18/2009	MW52D081809	**0.514**	0.479 U
	01/25/2010	MW52D012510	0.466	**1.09**
	08/16/2010	MW52D081610	0.350	**0.557**
	01/20/2011	MW52012011	0.404	**0.536**
	08/30/2011	MW52D083011	**0.595**	**2.04**
MW-53S	08/14/2008	MW53S081408	**1.69**	0.475 U
	10/07/2008	MW-53S100708	**17.2**	**0.508**
	01/28/2009	MW53S012809	**3.25**	0.478 U
	04/10/2009	MW53S041009	**1.92**	**0.808**
	08/18/2009	MW53S081809	**1.45**	0.473 U
	01/20/2010	MW53S012010	**18.1**	**0.614**
	08/16/2010	MW53S081610	**2.55**	0.385
	01/18/2011	MW53S011811	**14.3**	**0.744**
	08/11/2011	MW53S081111	**13.1**	**0.528**
MW-53D	08/14/2008	MW53D081408	**2.97**	0.476 U
	10/07/2008	MW-53D100708	**1.50**	**0.633**
	01/28/2009	MW53D012809	**2.28**	0.495
	04/10/2009	MW53D041009	**1.48**	0.474 U
	08/17/2009	MW53D081709	**1.02**	**0.968**
	01/20/2010	MW53D012010	**0.591**	**0.526**
	08/16/2010	MW53D081610	**0.707**	**0.524**
	01/18/2011	MW53D011811	**0.803**	**1.59**
	08/11/2011	MW53D081111	0.483	0.339

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
MW-55S	08/20/2010	MW55S082010	**3.39**	**0.776**
	01/14/2011	MW55S011411	**4.04**	0.5
	08/08/2011	MW55S080811	**2.99**	0.419
MW-55D	09/07/2010	MW55D090710	0.649 U	0.332 U
	01/14/2011	MW55D011411	0.463	0.235
	08/08/2011	MW55D080811	**0.628**	0.204 U
MW-57S	08/15/2008	MW57S081508	**6.14**	**0.635**
	10/06/2008	MW-57S100608	**20.2**	**0.701**
	01/27/2009	MW57S012709	**8.51**	**0.929**
	04/07/2009	MW57S040709	**6.76**	**0.791**
	08/06/2009	MW57S080609	**26.6**	**0.717**
	01/13/2010	MW57S011310	**23.0**	**1.34**
	08/12/2010	MW57S081210	**5.99**	**0.606**
	01/14/2011	MW57S011411	**25.3**	**0.734**
	08/25/2011	MW57S082511	**13.9**	**0.502**
MW-57D	08/14/2008	MW57D081508	**5.71**	**0.779**
	10/06/2008	MW-57D100608	**5.52**	**0.931**
dup	10/06/2008	MW-57D100608-Dup	**5.73**	**0.644**
	01/27/2009	MW57D012709	**5.96**	**0.557**
dup	01/27/2009	MW57D012709-Dup	**5.46**	**0.608**
	04/07/2009	MW57D040709	**4.85**	**0.582**
dup	04/07/2009	MW57D040709-Dup	**5.08**	**0.569**
	08/06/2009	MW57D080609	**4.17**	0.473 U
	01/13/2010	MW57D011310	**3.48**	**0.707**
dup	01/13/2010	MW57D011310-Dup	**3.85**	**0.761**
	08/12/2010	MW57D081210	**3.37**	0.419
dup	08/12/2010	MW57D081210-Dup	**4.02**	0.424
	01/14/2011	MW57D011411	**4.08**	0.49
dup	01/14/2011	MW57DDUP011411	**4.01**	0.462
	08/25/2011	MW57D082511	**1.58**	0.257
dup	08/25/2011	MW57DDUP082511	**1.83**	0.277
MW-58D	08/13/2008	MW58D081308	**0.533**	0.475 U
	10/08/2008	MW-58D100808	**0.756**	0.477 U
	01/27/2009	MW58D012709	**0.553**	0.473 U
	04/07/2009	MW58D040709	0.474	0.477 U
	08/06/2009	MW58D080609	0.476	0.473 U
	01/14/2010	MW58D011410	0.328	0.302
	08/12/2010	MW58D081210	0.278	0.19 U
	01/19/2011	MW58D011911	**0.507**	0.26
	08/26/2011	MW58D082611	0.37	0.194 U
EPA-5S	08/11/2008	EPA5S081108	0.238 U	0.476 U
	10/02/2008	EPA5S100208	0.300	0.5 U
	01/23/2009	EPA5S012309	0.236 U	0.472 U
	04/03/2009	EPA5S040309	0.238 U	0.477 U
	08/05/2009	EPA5S080509	0.238 U	0.475 U
	01/08/2010	EPA5S010810	0.0756 U	0.223
	08/11/2010	EPA5S081110	0.0759 U	0.19 U

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
	01/12/2011	EPA5S011211	0.0765 U	0.262
	08/09/2011	EPA5S080911	0.131	0.204 U
EPA-5D	08/11/2008	EPA5D081108	0.238 U	0.476 U
	10/02/2008	EPA5D100208	0.286	0.474 U
	01/23/2009	EPA5D012309	0.237 U	0.473 U
	04/03/2009	EPA5D040309	0.260	0.48 U
	08/05/2009	EPA5D080509	0.242	0.479 U
	01/08/2010	EPA5D010810	0.0963	0.245
	08/11/2010	EPA5D081110	0.0936	0.398
	01/12/2011	EPA5D011211	0.0765 U	0.482
	08/09/2011	EPA5D080911	0.232	0.205 U
EPA-6S	08/18/2008	EPA6S081808	**1.10**	0.516 U
	10/07/2008	EPA-6S100708	**1.12**	0.474 U
	01/29/2009	EPA6S012909	**1.08**	0.472 U
	04/10/2009	EPA6S041009	**1.12**	0.473 U
	08/12/2009	EPA6S081209	**1.12**	0.483 U
	01/25/2010	EPA6S012510	**0.931**	0.307
	08/13/2010	EPA6S081310	**0.771**	0.19 U
	01/19/2011	EPA6S011911	**0.912**	0.326
	01/19/2011	EPA6SDUP011911	**1.04**	0.388
	08/10/2011	EPA6S081011	**0.652**	0.204 U
EPA-6D	08/18/2008	EPA6D081808	**0.782**	0.525 U
	10/07/2008	EPA-6D100708	**1.20**	0.474 U
	01/29/2009	EPA6D012909	**0.894**	0.479 U
	04/10/2009	EPA6D041009	**0.858**	0.473 U
	08/12/2009	EPA6D081209	**1.02**	0.484 U
	01/25/2010	EPA6D012510	0.106	**0.687**
	08/13/2010	EPA6D081310	0.482	0.191 U
	01/19/2011	EPA6D011911	**0.68**	0.342
	08/10/2011	EPA6D081011	0.469	0.203 U
Carty Lake Monitoring Wells (UWBZ)				
MW-30	08/13/2002	GW-133	0.35	0.5 U
USDFW-1	07/28/2005	USDFW1072805	**0.767**	0.476 U
	02/01/2006	NS	NS	NS
	08/11/2006	USDFW1081106	0.488	0.476 U
	01/22/2007	USDFW1012207	**0.532**	0.473 U
	08/27/2007	USDFW1082707	0.298	0.475 U
	01/28/2008	USDFW1012808	0.444	**0.596**
	08/21/2008	USDW1082108	0.394	0.476 U
	02/03/2009	USDFW1020309	0.423	0.484 U
	08/07/2009	USDFW1080709	0.388	0.473 U
	01/28/2010	USDFW1012810	0.277	0.282
	08/26/2010	USDFW1082610	0.316	0.323
	01/26/2011	USDFW1012611	0.338	0.326
	09/06/2011	USDFW1090611	0.401	0.193 U
USDFW-2	08/27/2007	USDFW2082707	0.241 U	0.482 U
	01/28/2008	USDFW2012808	0.238 U	0.477 U

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
USDFW-3	07/28/2005	USDFW3072805	0.397	0.5 U
	01/22/2007	USDFW3012207	0.237 U	0.475 U
RMW-2S	08/21/2008	RMW2S082108	**0.784**	**0.901**
	10/09/2008	RMW2S100908	0.393	0.474 U
	02/03/2009	RMW2S020309	0.242 U	0.485 U
	04/08/2009	RMW2S040809	0.267	0.474
	08/07/2009	RMW2S080709	0.236 U	0.473 U
	01/28/2010	RMW2S012810	0.108	0.19 U
	08/26/2010	RMW2S082610	0.342	0.437
	01/26/2011	RMW2S012611	0.179	0.245
	09/06/2011	RMW2S090611	0.434	0.319
RMW-2D	08/21/2008	RMW2D082108	0.290	**0.569**
	10/09/2008	RMW2D100908	**0.613**	0.474 U
	02/03/2009	RMW2D020309	0.246	0.48 U
	04/08/2009	RMW2D040809	0.293	0.473 U
	08/07/2009	RMW2D080709	0.237 U	0.474 U
	01/28/2010	RMW2D012810	0.130	0.189 U
	08/26/2010	RMW2D082610	0.0840	0.19 U
	01/26/2011	RMW2D012611	0.134	0.219
	09/06/2011	RMW2D090611	0.158	0.194 U
LWBZ: Cells 1 and 2 and Carty Lake Cell 1 (LWBZ)				
MW-40	08/08/2002	GW-151	**2**	0.48 U
	07/20/2005	NS	NS	NS
	01/27/2006	NS	NS	NS
	08/10/2006	NS	NS	NS
	01/18/2007	NS	NS	NS
	08/06/2007	NS	NS	NS
	01/16/2008	NS	NS	NS
	08/12/2008	NS	NS	NS
	02/02/2009	MW40020209	0.481	0.474 U
	08/19/2009	MW40081909	0.326	0.475 U
	01/29/2010	MW40012910	0.317	0.191 U
	08/25/2010	MW40082510	0.308	0.202
	01/24/2011	MW40012411	0.111	0.191 U
	09/02/2011	MW40090211	0.251	0.269
MW-41	08/12/2002	GW-148	0.42	**0.73**
	07/20/2005	NS	NS	NS
	01/30/2006	NS	NS	NS
	08/10/2006	NS	NS	NS
	01/18/2007	NS	NS	NS
	08/06/2007	NS	NS	NS
	01/16/2008	NS	NS	NS
	08/12/2008	NS	NS	NS

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
Cell 2 (LWBZ)				
MW-22	08/08/2002	GW-143	**1.2**	0.5 U
	07/25/2005	MW22072505	**0.754**	0.475 U
	01/25/2006	NS	NS	NS
	08/10/2006	MW22081006	**0.837**	0.475 U
	01/25/2007	MW22012507	**0.826**	0.476 U
	08/16/2007	MW22081607	0.469	0.477 U
	01/22/2008	MW22012208	**0.617**	**0.530**
MW-33	08/07/2002	GW-122	0.35	0.5 U
MW-34	08/08/2002	GW-144	**0.55**	0.5 U
	07/20/2005	MW34072105	**0.611**	0.475 U
	01/23/2006	NS	NS	NS
	08/07/2006	MW34080706	**0.827**	0.475 U
	01/19/2007	NS	NS	NS
	08/10/2007	MW34081007	0.425	0.475 U
	01/16/2008	MW34011608	**0.867**	**0.867**
MW-35	08/13/2002	GW-145	**1.9**	0.5 U
dup	08/13/2002	GW-145 Dup	**1.8**	0.5 U
	07/20/2005	MW35072205	**1.0**	0.48 U
	01/24/2006	NS	NS	NS
	08/08/2006	MW35080806	**2.54**	0.507 U
	01/24/2007	MW35012407	**1.6**	0.475 U
	08/14/2007	MW35081407	**1.79**	0.474 U
	01/18/2008	MW35011808	**2.41**	0.478 U
	08/14/2008	MW35081408	**2130**	474 U
	01/30/2009	MW35013009	**2.36**	0.478 U
	08/18/2009	MW35081809	**1.17**	0.474 U
	01/22/2010	MW35012210	**1.60**	0.317
	08/16/2010	MW35081610	**1.31**	0.261
	01/20/2011	MW35012011	**1.41**	0.396
	08/29/2011	MW35082911	**1.25**	0.218
MW-36	08/07/2002	GW-146	0.43	0.5 U
	01/30/2009	MW36013009	0.237 U	0.473 U
MW-37	08/12/2002	GW-147	0.25 U	0.5 U
MW-54	08/12/2008	MW54081208	0.300	**0.570**
	10/06/2008	MW-54100608	0.238 U	0.475 U
	01/26/2009	MW54012609	0.236 U	0.473 U
	04/06/2009	MW54040609	0.268	0.484 U
	08/05/2009	MW54080509	0.237 U	0.473 U
	01/13/2010	MW54011310	0.135	0.198
	08/12/2010	MW54081210	0.0833	0.189 U
	01/13/2011	MW54011311	0.0764 U	0.191 U
	08/24/2011	MW54082411	0.122	0.201 U
MW-55	08/14/2008	MW55081408	**0.800**	0.476 U
	10/03/2008	MW55100308	**1.02**	**0.796**
	01/27/2009	MW55012709	**0.951**	0.472 U
	04/07/2009	MW55040709	**0.895**	0.474 U
	08/06/2009	MW55080609	**0.745**	0.476 U

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
	01/14/2010	MW55011410	**0.640**	0.477
	08/12/2010	MW55081210	**1.89**	0.206
	01/14/2011	MW55011411	**0.563**	0.257
	08/08/2011	MW55080811	**0.538**	0.204 U
MW-56	08/21/2008	MW56082108	0.246 U	0.492 U
	10/08/2008	MW-56100808	0.237 U	0.475 U
	01/27/2009	MW56012709	0.237 U	0.473 U
	04/07/2009	MW56040709	0.238 U	0.477 U
	08/06/2009	MW56080609	0.237 U	0.473 U
	01/14/2010	MW56011410	0.0755 U	0.337
	08/12/2010	MW56081210	0.0764 U	0.191 U
	01/19/2011	MW56011911	0.107	0.22
	08/26/2011	MW56082611	0.0908	0.193 U
MW-59	08/19/2008	MW59081908	0.248 U	0.496 U
	10/06/2008	MW-59100608	0.238 U	**1.25**
	01/29/2009	MW59012909	0.237 U	0.473 U
	04/09/2009	MW59040909	0.236 U	0.473 U
	08/17/2009	MW59081709	0.237 U	0.484
	01/21/2010	MW59012110	0.0798	0.189 U
	08/13/2010	MW59081310	0.0758 U	0.189 U
	01/20/2011	MW59012011	0.113	0.259
	08/29/2011	MW59082911	0.0771 U	0.193 U
MW-62	09/08/2010	MW62090810	0.140 U	0.321 U
	01/14/2011	MW62011411	0.0763 U	0.191 U
	08/25/2011	MW62082511	0.126	0.2 U
Carty Lake (LWBZ)				
MW-60	09/03/2008	MW60090308	0.385	0.477 U
	10/09/2008	MW601000908	0.366	0.476 U
	02/03/2009	MW60020309	0.355	0.481 U
	04/08/2009	MW60040809	0.330	0.477 U
	08/07/2009	MW60080709	0.300	0.474 U
	01/28/2010	MW60012810	0.207	0.197
	08/25/2010	MW60082510	0.208	0.292
	01/28/2010	MW60012810	0.207	0.197
	08/25/2010	MW60082510	0.208	0.292
	01/24/2011	MW60012411	0.0904	0.19 U
	09/06/2011	MW60	0.273	0.194 U

Table 3-11
Petroleum Hydrocarbons in Groundwater—Cells 1 and 2 and RNWR (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater Cleanup Level			0.5	0.5
MW-61	09/03/2010	MW61090310	0.0789 U	0.197 U
	01/24/2011	MW61012411	0.0762 U	0.19 U
	09/02/2011	MW61090211	0.0773 U	0.193 U

NOTES:

Bold = detected concentration that exceeds MTCA Method A Groundwater Cleanup Level. non-detect values ("U") were not compared with MTCA Method B groundwater cleanup level.

dup = duplicate sample
LWBZ = lower water-bearing zone.
mg/L = milligrams per kilogram.
MTCA = Model Toxics Control Act.
NS = not sampled.
RNWR = Ridgefield National Wildlife Refuge.
U = not detected at or above method reporting limit.
UWBZ = upper water-bearing zone.

Table 3-12
Dioxins in Groundwater—Cells 1 and 2 and RNWR (pg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,7,8,9-HxCDD	1,2,3,7,8,9-HxCDF	1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDF	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDD	2,3,7,8-TCDF	OCDD	OCDF	Dioxin TEQ
MTCA Method B Groundwater CUL			NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Washington Maximum Contaminant Level			NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	30	NV	NV	NV	NV
MW-38	MW38082108	08/21/2008	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	7.2 U	7.4 U	210	220	14
MW-39	MW39082108	08/21/2008	350	47 J	10 U	10 U	31 J	26 J	10 U	10 U	10 U	10 U	10 U	10 U	20 J	9 U	5.9 U	3800	140	29
	MW39082108 Dup	08/21/2008	185	18.3 J	1.51 J	0.679 U	8.59 J	12.4 J	2.42 J	2.29 J	0.818 U	0.3 U	2.33 J	2.77 U	3.5 U	0.273 U	1.54 U	1400	35.3 J	6.6
MW-56	MW56082108	08/21/2008	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5.1 U	5.5 U	29 U	280	14
USDFW-1	USDW1082108	08/21/2008	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	4.5 U	4.9 U	43 J	21 U	13

NOTES:

CUL = cleanup level.

dup = duplicate sample.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

J = estimated value.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

NV = no value.

OCDD = octachloro dibenzo-p-dioxin.

OCDF = octachloro dibenzofuran.

PeCDD = pentachloro dibenzo-p-dioxin.

PeCDF = pentachloro dibenzofuran.

pg/L = picograms per liter.

RNWR = Ridgefield National Wildlife Refuge.

TEQ = toxicity equivalent.

TCDD = tetrachloro dibenzo-p-dioxin.

TCDF = tetrachloro dibenzofuran.

U = not detected at or above method reporting limit.

UJ = not detected above estimated detection limit.

Table 3-13
Dissolved Metals in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater CULs			5[a]	48[b]	590	4,800
Shallow UWBZ						
MW-9S	07/27/2004	MW9R-072704	**5.2**	5 U	10 U	10 U
	10/22/2004	MW9R-102204	**24**	5 U	10 U	10 U
	01/19/2005	MW9S011905	**52.5**	7.5 U	2.5 U	2.5 U
	4/26/2005	MW9S042705	**58**	20 U	20 U	15 U
	07/19/2005	MW9S072005	**26.6**	20 U	20 U	15 U
	10/19/2005	MW9S101905	**61**	5 U	10 U	10 U
	01/19/2006	MW9S011906	**41**	5 U	10 U	10 U
	04/26/2006	MW9S042606	**45**	5.20	10 U	10 U
	08/01/2006	MW9S080106	**28**	5 U	10 U	10 U
	10/25/2006	MW9S102506	**55**	5 U	10 U	10 U
	01/09/2007	MW9S010907	**50**	5 U	10 U	10 U
	04/10/2007	MW9S041007	**45**	5 U	10 U	10 U
	08/08/2007	MW9S080807	**20**	5 U	10 U	10 U
	01/10/2008	MW9S011008	**55**	5.10	10 U	10 U
	08/07/2008	MW9S080708	**36**	6.60	10 U	10 U
	01/20/2009	MW9S012309	**68**	6.30	10 U	10 U
	08/03/2009	MW9S080309	**68**	9.70	10 U	10 U
	01/07/2010	MW9S010710	**98**	7.7	10 U	10 U
MW-20S	01/22/2004	MW20-012204	5 U	5 U	10 U	10 U
	05/03/2004	MW20-050304	5 U	10 U	10 U	10 U
	07/27/2004	MW20-072704	5 U	5 U	10 U	10 U
	10/21/2004	MW20-102104	4 U	5 U	10 U	10 U
	01/20/2005	MW20S012005	2.5 U	8.84	2.5 U	2.5 U
	4/26/2005	MW20S042705	1.71	20 U	20 U	15 U
	07/19/2005	MW20S071905	2.5 U	20 U	20 U	15 U
	10/20/2005	MW20S102005	1 U	5 U	10 U	10 U
	01/19/2006	MW20S011906	2.5	5 U	10 U	10 U
	04/27/2006	MW20S042706	2.4	5 U	10 U	10 U
	08/02/2006	MW20S080206	3.0	5 U	10 U	10 U
	10/25/2006	MW20S102506	4.1	5 U	10 U	10 U
	01/10/2007	MW20S011007	3.0	5 U	10 U	10 U
	04/11/2007	MW20S041107	3.2	5 U	10 U	10 U
	08/08/2007	MW20S080807	3.2	5 U	10 U	10 U
	01/11/2008	MW20S011108	2.2	5 U	10 U	44.0
	08/08/2008	MW20S080808	2.3	5 U	10 U	10 U
	01/20/2009	MW20S012209	1 U	5 U	10 U	10 U
	08/04/2009	MW20S080409	3.2	5 U	10 U	10 U
	01/08/2010	MW20S010810	2.6	5 U	10 U	10 U
MW-28S	01/22/2004	MW28-012204	5 U	5 U	10 U	10.1
	05/03/2004	MW28-050304	5 U	10 U	10 U	10 U
	07/26/2005	NS	NS	NS	NS	NS
	10/21/2005	NS	NS	NS	NS	NS
	01/19/2005	NS	NS	NS	NS	NS
	04/26/2005	NS	NS	NS	NS	NS
	07/19/2005	NS	NS	NS	NS	NS
	10/20/2005	NS	NS	NS	NS	NS
	01/19/2006	MW28S011906	1 U	5 U	10 U	10 U

Table 3-13
Dissolved Metals in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater CULs			5[a]	48[b]	590	4,800
	04/27/2006	MW28S042706	1 U	5 U	10 U	10 U
	08/02/2006	NS	NS	NS	NS	NS
	10/25/2006	NS	NS	NS	NS	NS
	01/11/2007	MW28S011107	1 U	5 U	10 U	10 U
	04/10/2007	MW28S041007	1 U	5 U	10 U	10 U
	08/07/2007	NS	NS	NS	NS	NS
	01/11/2008	NS	NS	NS	NS	NS
	08/08/2008	NS	NS	NS	NS	NS
	01/20/2009	NS	NS	NS	NS	NS
	08/04/2009	NS	NS	NS	NS	NS
	01/08/2010	NS	NS	NS	NS	NS
MW-45S	07/26/2004	MW46-072604	**19.9**	5 U	10 U	10 U
	10/21/2004	MW46-102104	**35.7**	5 U	10 U	10 U
	01/20/2005	MW45S012005	**34.1**	10.2	2.5 U	2.5 U
	04/26/2005	MW45S042705	**24.2**	20 U	20 U	15 U
dup	04/26/2005	MW45S042705-Dup	**32.5**	20 U	20 U	15 U
	07/19/2005	MW45S072005	**36.4**	20 U	20 U	15 U
	10/21/2005	MW45S102105	2.7	7.90	10 U	10 U
	01/19/2006	MW45S011906	**23**	5 U	10 U	10 U
	04/28/2006	MW45S042806	**27**	5 U	10 U	10 U
	08/03/2006	MW45S080306	**27**	5 U	10 U	10 U
	10/25/2006	MW45S102506	2.4	5 U	10 U	10 U
	01/10/2007	MW45S011007	**6.6**	5 U	14.5	10 U
	04/11/2007	MW45S041107	**10**	5 U	10 U	10 U
	08/08/2007	MW45S080807	4.7	5 U	10 U	10 U
	01/11/2008	MW45S011108	3.4	5.00	10 U	10 U
	08/08/2008	MW45S080808	**5.9**	5.70	10 U	10 U
	01/20/2009	MW45S012209	1.3	5 U	10 U	10 U
	08/04/2009	MW45S080409	4.0	9.60	10 U	10 U
	01/07/2010	MW45S010710	2.2	7.6	10 U	10 U
MW-46S	07/27/2004	MW48-072704	**32.6**	5 U	10 U	10 U
	10/21/2004	MW48-102104	**31.8**	5 U	10 U	10 U
	01/20/2005	MW46S012005	**47.1**	13.9	2.5 U	2.5 U
	04/26/2005	MW46S042705	**12.0**	20 U	20 U	15 U
	07/19/2005	MW46S072005	**51.2**	20 U	20 U	15 U
	10/19/2005	MW46S101905	**11**	8.00	10 U	10 U
	01/19/2006	MW46S011906	**37**	5 U	10 U	10 U
	04/27/2006	MW46S042706	**35**	5 U	10 U	10 U
	08/03/2006	MW46S080306	**40**	5 U	10 U	10 U
	10/25/2006	MW46S102506	**52**	5 U	10 U	10 U
	01/11/2007	MW46S011107	**56**	5 U	10 U	10 U
	04/11/2007	MW46S041107	**44**	5 U	10 U	10 U
	08/08/2007	MW46S080807	**42**	5 U	10 U	10 U
	01/11/2008	MW46S011108	**38**	5 U	10 U	10 U
	08/08/2008	MW46S080808	**53**	5 U	10 U	10 U
	01/20/2009	MW46S012309	**18**	5.40	10 U	12.7
	08/04/2009	MW46S080409	**43**	6.10	10 U	10 U

Table 3-13
Dissolved Metals in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater CULs			5^a	48^b	590	4,800
	01/08/2010	MW46S010810	**32**	5	10 U	10 U
	08/24/2011	MW46S	**24.1**	--	--	--
MW-47S	07/26/2004	MW51-072604	5 U	5 U	10 U	10 U
	10/21/2004	MW51-102104	4 U	5 U	10 U	10 U
	01/19/2005	MW47S011905	2.88	7.5 U	2.5 U	5.69
	04/26/2005	MW47S042605	2.51	20 U	20 U	15 U
	07/19/2005	MW47S071905	3.3	20 U	20 U	15 U
	10/18/2005	MW47S101805	3.1	7.20	10 U	10 U
	01/18/2006	MW47S011806	3.0	5 U	10 U	10 U
	04/26/2006	MW47S042606	2.8	5 U	10 U	10 U
	08/01/2006	MW47S080106	3.4	5 U	10 U	10 U
	10/24/2006	MW47S102406	4.2	5 U	10 U	10 U
	01/09/2007	MW47S010907	3.8	5 U	10 U	10 U
	04/10/2007	MW47S041007	2.9	5 U	10 U	10 U
	08/07/2007	MW47S080707	3.9	5 U	10 U	10 U
	01/10/2008	MW47S011008	3.2	5 U	10 U	10 U
	08/07/2008	MW47S080708	3.0	5 U	10 U	10 U
	01/20/2009	MW47S012109	2.3	5 U	10 U	10 U
	08/03/2009	MW47S080309	2.7	5.90	10 U	10 U
	01/07/2010	MW47S010710	3.1	7.3	10 U	10 U
Deep UWBZ						
MW-20D	07/27/2004	MW49-072704	5 U	5 U	10 U	10 U
	10/21/2004	MW49-102104	4 U	5 U	10 U	10 U
	01/20/2005	MW20D012005	**5.31**	7.86	2.5 U	2.5 U
	04/26/2005	MW20D042705	**5.75**	20 U	20 U	15 U
	07/19/2005	MW20D071905	**7.36**	20 U	20 U	15 U
	10/20/2005	MW20D102005	3.2	7.00	10 U	10 U
	01/19/2006	MW20D011906	**9.8**	5 U	10 U	10 U
	04/27/2006	MW20D042706	1 U	5 U	10 U	10 U
	08/02/2006	MW20D080206	**7.6**	5 U	10 U	10 U
	10/25/2006	MW20D102506	**6.1**	5 U	10 U	10 U
	01/10/2007	MW20D011007	**7.2**	5 U	10 U	10 U
	04/11/2007	MW20D041107	**6.3**	5 U	10 U	10 U
	08/08/2007	MW20D080807	**5.3**	5 U	10 U	10 U
	01/11/2008	MW20D011108	4.7	5 U	10 U	10 U
	08/08/2008	MW20080808	4.3	5 U	10 U	10 U
	01/20/2009	MW20D012209	1.3	5 U	10 U	10 U
	08/04/2009	MW20D080409	4.1	5 U	10 U	10 U
	01/08/2010	MW20D010810	3.5	5 U	10 U	10 U
MW-29	01/22/2004	MW29-012204	5 U	5 U	10 U	10 U
	04/30/2004	MW29-043004	5 U	5 U	10 U	10 U
MW-29D	10/21/2004	MW29R-102104	4 U	5 U	10 U	10 U
	01/19/2005	MW29D011905	2.5 U	7.5 U	2.5 U	2.5 U
	04/26/2005	MW29D042605	0.618	20 U	20 U	15 U
	07/19/2005	MW29D071905	2.5 U	20 U	20 U	15 U
	10/18/2005	MW29D101805	1.2	6.30	10 U	10 U
	01/18/2006	MW29D011806	1.1	5 U	10 U	10 U

Table 3-13
Dissolved Metals in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater CULs			5^a	48^b	590	4,800
	04/26/2006	MW29D042606	1.1	5 U	10 U	10 U
	08/01/2006	MW29D080106	1 U	5 U	10 U	10 U
	10/24/2006	MW29D102406	1.3	5 U	10 U	10 U
	01/09/2007	MW29D010907	1.5	5 U	10 U	10 U
	04/10/2007	MW29D041007	1.5	5 U	10 U	10 U
	08/07/2007	MW29D080707	1.8	5 U	10 U	10 U
	01/10/2008	MW29D011008	1.1	5 U	10 U	10 U
	08/07/2008	MW29D080708	1 U	5 U	10 U	10 U
	01/20/2009	MW29D012109	1 U	5 U	10 U	10 U
	08/03/2009	MW29D080309	1 U	5 U	10 U	10 U
	01/07/2010	MW29D010710	1.1	6.8	10 U	10 U
MW-45D	07/26/2004	MW45-072604	5 U	5 U	10 U	10 U
	10/21/2004	MW45-102104	4 U	5 U	10 U	10 U
	01/20/2005	MW45D012005	2.5 U	7.5 U	2.5 U	2.5 U
	04/26/2005	MW45D042705	0.5 U	20 U	20 U	15 U
dup	04/26/2005	MW45D042705-Dup	0.5 U	20 U	20 U	15 U
	07/19/2005	MW45D072005	2.5 U	20 U	20 U	15 U
	10/21/2005	MW45D102105	1 U	6.90	10 U	10 U
dup	10/21/2005	MW45D102105-Dup	1 U	5 U	10 U	10 U
	01/19/2006	MW45D011906	1 U	5 U	10 U	10 U
	04/28/2006	MW45D042806	1 U	5 U	10 U	10 U
dup	04/28/2006	MW45D042806-Dup	1 U	5 U	10 U	10 U
	08/03/2006	MW45D080306	1 U	5 U	10 U	10 U
dup	08/03/2006	MW45D080306-Dup	1 U	5 U	10 U	10 U
	10/25/2006	MW45D102506	1 U	5 U	10 U	10 U
dup	10/25/2006	MW45D102506-Dup	1 U	5 U	10 U	10 U
	01/10/2007	MW45D011007	1.1	5 U	10 U	10 U
dup	01/10/2007	MW45D011007-Dup	1.1	5 U	10 U	10 U
	04/11/2007	MW45D041107	1.2	5 U	10 U	10 U
dup	04/11/2007	MW45D041107-Dup	1 U	5 U	10 U	10 U
	08/08/2007	MW45D080807	1.5	5 U	10 U	10 U
	01/11/2008	MW45D011108	1 U	5 U	10 U	10 U
	08/08/2008	MW45D080808	1 U	5 U	10 U	10 U
	01/20/2009	MW45D012209	1 U	5 U	10 U	10 U
dup	01/20/2009	MW45D012209-Dup	1 U	5 U	10 U	10 U
	08/04/2009	MW45D080409	1 U	5 U	10 U	10 U
	01/07/2010	MW45D010710	1 U	5 U	10 U	10 U
MW-46D	07/27/2004	MW47-072704	5 U	5 U	10 U	10 U
	10/21/2004	MW47-102104	4 U	5 U	10 U	10 U
	01/20/2005	MW46D012005	2.5 U	7.5 U	2.5 U	2.88
	04/26/2005	MW46D042705	0.5 U	20 U	20 U	15 U
	07/19/2005	MW46D072005	2.5 U	20 U	20 U	15 U
	10/19/2005	MW46D101905	1 U	5 U	10 U	10 U
	01/19/2006	MW46D011906	1 U	5 U	10 U	10 U
	04/27/2006	MW46D042706	1 U	5 U	10 U	10 U
	08/03/2006	MW46D080306	1 U	5 U	10 U	10 U
	10/25/2006	MW46D102506	1.1	5 U	10 U	10 U
	01/11/2007	MW46D011107	1.3	5 U	10 U	10 U

Table 3-13
Dissolved Metals in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater CULs			5[a]	48[b]	590	4,800
	04/11/2007	MW46D041107	1.3	5 U	10 U	10 U
	08/08/2007	MW46D080807	1.9	5 U	10 U	10 U
	01/11/2008	MW46D011108	1.0	5 U	10 U	10 U
	08/08/2008	MW46D080808	1 U	5 U	10 U	10 U
	01/20/2009	MW46D012309	1 U	5 U	10 U	10 U
	08/04/2009	MW46D080409	1 U	6.50	10 U	10 U
	01/08/2010	MW46D010810	1 U	6.3	10 U	10 U
MW-47D	07/26/2004	MW50-072604	5 U	5 U	10 U	10 U
	10/21/2004	MW50-102104	4 U	5 U	10 U	10 U
	01/19/2005	MW47D011905	2.5 U	7.5 U	2.5 U	2.99
	04/26/2005	MW47D042605	0.862	20 U	20 U	15 U
	07/19/2005	MW47D071905	2.5 U	20 U	20 U	15 U
	10/18/2005	MW47D101805	1.5	7.60	10 U	10 U
	01/18/2006	MW47D011806	1.3	5 U	10 U	10 U
	04/26/2006	MW47D042606	1.4	5 U	10 U	10 U
	08/01/2006	MW47D080106	1.3	5 U	10 U	10 U
	10/24/2006	MW47D102406	1.6	5 U	10 U	10 U
	01/09/2007	MW47D010907	1.7	5 U	10 U	10 U
	04/10/2007	MW47D041007	1.7	5 U	10 U	10 U
	08/07/2007	MW47D080707	2.2	5 U	10 U	10 U
	01/10/2008	MW47D011008	1.3	5 U	10 U	10 U
	08/07/2008	MW47D080708	1.3	5 U	10 U	10 U
	01/20/2009	MW47D012109	1.3	5 U	10 U	10 U
	08/03/2009	MW47D080309	1.4	5.00	10 U	10 U
	01/07/2010	MW47D010710	1.4	6.5	10 U	10 U

NOTES:

Bold number indicates a detected concentration that exceeds one or more of its screening criteria.

-- = not available.

CUL = cleanup level.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

µg/L = micrograms per liter.

NS = not sampled.

U = not detected at or above method reporting limit.

UWBZ = upper water-bearing zone.

[a] MTCA Method A CUL.

[b] Hexavalent chromium screening criteria.

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol
MTCA Method B Groundwater CULs			NV	480	NV	NV	NV	NV	800	4	NV	0.73
Shallow UWBZ												
MW-9S	07/27/2004	MW9R-072704	2.1	--	0.48 U	9.5	0.88	0.48 U	0.48 U	0.48 U	0.48 U	**14**
	10/22/2004	MW9R-102204	0.74	--	0.48 U	3.0	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**3.4 J**
	01/19/2005	MW9S011905	--	1.36	0.191 U	0.191 U	0.191 U	0.301	0.191 U	0.305	0.191 U	0.191 U
	04/26/2005	MW9S042705	--	1.73	0.192 U	0.222	0.524	0.432	0.192 U	0.345	0.192 U	**1.18**
	07/19/2005	MW9S072005	--	1.64	0.19 U	0.266	0.287	0.237	0.19 U	0.19 U	0.19 U	**1.24**
	10/19/2005	MW9S101905	--	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U	1.45 U
	01/19/2006	MW9S011906	--	4.87	4.44	28.4	0.95 U	0.95 U	0.95 U	1.47	2.63	**47.7**
	04/26/2006	MW9S042606	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U
	08/01/2006	MW9S080106	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.51 U
	10/25/2006	MW9S102506	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	01/09/2007	MW9S010907	--	5.45	6.63	19.7	0.951 U	3.88	2.38	2.41	3.12	**45.3**
	04/10/2007	MW9S041007	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/08/2007	MW9S080807	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/10/2008	MW9S011008	--	5.27	6.91	17.5	0.955 U	4.01	2.82	2.98	4.10	**43.2**
	08/07/2008	MW9S080708	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/23/2009	MW9S012309	--	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	1.42 U
	08/03/2009	MW9S080309	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	01/07/2010	MW9S010710		0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
MW-20S	08/05/2002	GW-120	0.5 U	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/22/2004	MW20-012204	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**1.3**
	05/03/2004	MW20-050304	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	07/27/2004	MW20-072704	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	10/21/2004	MW20-102104	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 UJ
	01/20/2005	MW20S012005	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U
	04/26/2005	MW20S042705	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	07/19/2005	MW20S071905	--	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U
	10/20/2005	MW20S102005	--	5 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U
	01/19/2006	MW20S011906	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	04/27/2006	MW20S042706	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U
	08/02/2006	MW20S080206	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.51 U
	10/25/2006	MW20S102506	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/10/2007	MW20S011007	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	04/11/2007	MW20S041107	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/08/2007	MW20S080807	--	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	1.45 U
	01/11/2008	MW20S011108	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/08/2008	MW20S080808	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/22/2009	MW20S012209	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U
	08/04/2009	MW20S080409	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/08/2010	MW20S010810		0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol
MTCA Method B Groundwater CULs			NV	480	NV	NV	NV	NV	800	4	NV	0.73
MW-28S	08/07/2002	GW-119	0.49 U	--	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
	01/22/2004	MW28-012204	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**1.1**
	05/03/2004	MW28-050304	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	07/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/21/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	07/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2006	MW28S011906	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	04/27/2006	MW28S042706	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U
	08/02/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2007	MW28S011107	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	04/10/2007	MW28S041007	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	08/07/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/08/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-45S	07/26/2004	MW46-072604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	10/21/2004	MW46-102104	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 UJ
	01/20/2005	MW45S012005	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	04/26/2005	MW45S042705	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	04/26/2005	MW45S042705-Dup	--	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U	0.191 U
	07/19/2005	MW45S072005	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	10/21/2005	MW45S102105	--	5 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U
	01/19/2006	MW45S011906	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	04/28/2006	MW45S042806	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U
	08/03/2006	MW45S080306	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	10/25/2006	MW45S102506	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	01/10/2007	MW45S011007	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	04/11/2007	MW45S041107	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/08/2007	MW45S080807	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/11/2008	MW45S011108	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/08/2008	MW45S080808	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/22/2009	MW45S012209	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/04/2009	MW45S080409	--	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	1.42 U
	01/07/2010	MW45S010710		0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol
MTCA Method B Groundwater CULs			NV	480	NV	NV	NV	NV	800	4	NV	0.73
MW-46S	07/27/2004	MW48-072704	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	10/21/2004	MW48-102104	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 UJ
	01/20/2005	MW46S012005	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	04/26/2005	MW46S042705	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	07/19/2005	MW46S072005	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	10/19/2005	MW46S101905	--	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	1.43 U
	01/19/2006	MW46S011906	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	04/27/2006	MW46S042706	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U
	08/03/2006	MW46S080306	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	10/25/2006	MW46S102506	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/11/2007	MW46S011107	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	04/11/2007	MW46S041107	--	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	1.43 U
	08/08/2007	MW46S080807	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/11/2008	MW46S011108	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/08/2008	MW46S080808	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/23/2009	MW46S012309	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	08/04/2009	MW46S080409	--	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	1.42 U
	01/08/2010	MW46S010810		0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
MW-47S	07/26/2004	MW51-072604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	10/21/2004	MW51-102104	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 UJ
	01/19/2005	MW47S011905	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U
	04/26/2005	MW47S042605	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U
	07/19/2005	MW47S071905	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U
	10/18/2005	MW47S101805	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	01/18/2006	MW47S011806	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	04/26/2006	MW47S042606	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U
	08/01/2006	MW47S080106	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.52 U
	10/24/2006	MW47S102406	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/09/2007	MW47S010907	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	04/10/2007	MW47S041007	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
	08/07/2007	MW47S080707	--	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U	1.49 U
	01/10/2008	MW47S011008	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/07/2008	MW47S080708	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/21/2009	MW47S012109	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/03/2009	MW47S080309		0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
	01/07/2010	MW47S010710		0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol
MTCA Method B Groundwater CULs			NV	480	NV	NV	NV	NV	800	4	NV	0.73
Deep UWBZ												
MW-20D	07/27/2004	MW49-072704	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**0.96**
	10/21/2004	MW49-102104	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 UJ
	01/20/2005	MW20D012005	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	04/26/2005	MW20D042705	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	07/19/2005	MW20D071905	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U
	10/20/2005	MW20D102005	--	5 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	5 U
	01/19/2006	MW20D011906	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	04/27/2006	MW20D042706	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U
	08/02/2006	MW20D080206	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.52 U
	10/25/2006	MW20D102506	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/10/2007	MW20D011007	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	04/11/2007	MW20D041107	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/08/2007	MW20D080807	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/11/2008	MW20D011108	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/08/2008	MW20080808	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/22/2009	MW20D012209	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
	08/04/2009	MW20D080409	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/08/2010	MW20D010810		0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
MW-29	08/06/2002	GW-123	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
	01/22/2004	MW29-012204	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	04/30/2004	MW29-043004	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
MW-29D	10/21/2004	MW29R-102104	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 UJ
	01/19/2005	MW29D011905	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	**0.996**
	04/26/2005	MW29D042605	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	**3.27**
	07/19/2005	MW29D071905	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	**2.26**
	10/18/2005	MW29D101805	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/18/2006	MW29D011806	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	04/26/2006	MW29D042606	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U
	08/01/2006	MW29D080106	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.51 U
	10/24/2006	MW29D102406	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/09/2007	MW29D010907	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**8.45**
	04/10/2007	MW29D041007	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	08/07/2007	MW29D080707	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/10/2008	MW29D011008	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	08/07/2008	MW29D080708	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/21/2009	MW29D012109	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	**1.45**
	08/03/2009	MW29D080309	--	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	**3.98**
	01/07/2010	MW29D010710		0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol
MTCA Method B Groundwater CULs			NV	480	NV	NV	NV	NV	800	4	NV	0.73
MW-45D	07/26/2004	MW45-072604	2.4	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**120**
	10/21/2004	MW45-102104	2.0	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	**120 J**
	01/20/2005	MW45D012005	--	0.188 U	0.188 U	2.34	0.188 U	0.188 U	0.188 U	0.188 U	0.535	**24.2**
	04/26/2005	MW45D042705	--	0.305	0.19 U	2.24	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**105**
	04/26/2005	MW45D042705-Dup	--	0.302	0.853	2.13	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**114**
	07/19/2005	MW45D072005	--	0.19 U	0.19 U	1.78	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**81**
	10/21/2005	MW45D102105	--	5 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	**64.5**
dup	10/21/2005	MW45D102105-Dup	--	5 U	1 U	5 U	1 U	1 U	5 U	5 U	1 U	**56.3**
	01/19/2006	MW45D011906	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	**47.0**
	04/28/2006	MW45D042806	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**61.8**
dup	04/28/2006	MW45D042806-Dup	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**72.9**
	08/03/2006	MW45D080306	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**75.2**
dup	08/03/2006	MW45D080306-Dup	--	1.12	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	**84.0**
	10/25/2006	MW45D102506	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**72.0**
dup	10/25/2006	MW45D102506-Dup	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	**58.8**
	01/10/2007	MW45D011007	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	**38.2**
dup	01/10/2007	MW45D011007-Dup	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**38.1**
	04/11/2007	MW45D041107	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**35.9**
dup	04/11/2007	MW45D041107-Dup	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	**28.6**
	08/08/2007	MW45D080807	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**36.7**
	01/11/2008	MW45D011108	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	**70.1**
	08/08/2008	MW45D080808	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	**34.9**
	01/22/2009	MW45D012209	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	**40.2**
dup	01/22/2009	MW45D012209-Dup	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	**45.3**
	08/04/2009	MW45D080409	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	**53.0**
	01/07/2010	MW45D010710	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	**35.5**
	08/24/2011	MW45D	--	--	--	--	--	--	--	--	--	**19.4**
	08/24/2011	MW45DDUP	--	--	--	--	--	--	--	--	--	**50.6**
MW-46D	07/27/2004	MW47-072704	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	10/21/2004	MW47-102104	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 UJ
	01/20/2005	MW46D012005	--	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.238
	04/26/2005	MW46D042705	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.216
	07/19/2005	MW46D072005	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.226
	10/19/2005	MW46D101905	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U
	01/19/2006	MW46D011906	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	04/27/2006	MW46D042706	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**12.1**
	08/03/2006	MW46D080306	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	10/25/2006	MW46D102506	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/11/2007	MW46D011107	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	04/11/2007	MW46D041107	--	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	1.43 U
	08/08/2007	MW46D080807	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chlorinated Phenolics									
			2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol
MTCA Method B Groundwater CULs			NV	480	NV	NV	NV	NV	800	4	NV	0.73
	01/11/2008	MW46D011108	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	08/08/2008	MW46D080808	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	01/23/2009	MW46D012309	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
	08/04/2009	MW46D080409	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/08/2010	MW46D010810	--	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	1.42 U
MW-47D	07/26/2004	MW50-072604	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
	10/21/2004	MW50-102104	0.48 U	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 UJ
	01/19/2005	MW47D011905	--	0.226 U	0.226 U	0.226 U	0.226 U	0.226 U	0.226 U	0.226 U	0.226 U	0.226 U
	04/26/2005	MW47D042605	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U
	07/19/2005	MW47D071905	--	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U	0.189 U
	10/18/2005	MW47D101805	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	01/18/2006	MW47D011806	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	04/26/2006	MW47D042606	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U
	08/01/2006	MW47D080106	--	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.52 U
	10/24/2006	MW47D102406	--	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	1.42 U
	01/09/2007	MW47D010907	--	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.43 U
	04/10/2007	MW47D041007	--	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.42 U
	08/07/2007	MW47D080707	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/10/2008	MW47D011008	--	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	1.43 U
	08/07/2008	MW47D080708	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	01/21/2009	MW47D012109	--	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	1.42 U
	08/03/2009	MW47D080309	--	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	1.42 U
	01/07/2010	MW47D010710	--	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	1.42 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs									Noncarcinogenic PAHs		
			Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3 -cd) pyrene	TEQ cPAHs	Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene
MTCA Method B Groundwater CULs			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	1.5	32
Shallow UWBZ														
MW-9S	07/27/2004	MW9R-072704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	2.0	--	0.43
	10/22/2004	MW9R-102204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	2.4 J	--	0.096 U
	01/19/2005	MW9S011905	0.0191 U	0.0191 U	--	--	0.0955 U	0.0191 U	0.0191 U	0.0191 U	ND	2.45	0.287 U	0.0478 U
	04/26/2005	MW9S042705	0.0192 U	0.0192 U	--	--	0.0958 U	0.0909	0.0192 U	0.04	0.011	1.16	0.287 U	0.0565
	07/19/2005	MW9S072005	0.0307	0.019 U	--	--	0.141	0.0702	0.019 U	0.019 U	**0.019**	0.217	0.285 U	0.0475 U
	10/19/2005	MW9S101905	0.966 U	0.966 U	0.966 U	0.966 U	--	0.966 U	0.966 U	0.966 U	ND	0.966 U	0.966 U	0.966 U
	01/19/2006	MW9S011906	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	4.27	**3.27**	3.23
	04/26/2006	MW9S042606	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1.95	1 U	1 U
	08/01/2006	MW9S080106	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	1.01 U	1.01 U
	10/25/2006	MW9S102506	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U
	01/09/2007	MW9S010907	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	5.10	**3.02**	1.64
	04/10/2007	MW9S041007	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	2.15	0.951 U	0.951 U
	08/08/2007	MW9S080807	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	2.83	1.04	0.951 U
	01/10/2008	MW9S011008	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	6.15	**4.12**	2.50
	08/07/2008	MW9S080708	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	1.40	0.951 U	0.951 U
	01/23/2009	MW9S012309	0.943 U	0.943 U	0.943 U	0.943 U	--	0.943 U	0.943 U	0.943 U	ND	2.24	**1.58**	0.943 U
	08/03/2009	MW9S080309	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U	0.947 U
	01/07/2010	MW9S010710	0.949 U	0.949 U	0.949 U	0.949 U		0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
MW-20S	08/05/2002	GW-120	0.099 U	0.099 U	0.099 U	0.099 U	--	0.099 U	0.099 U	0.099 U	ND	0.099 U	--	0.099 U
	01/22/2004	MW20-012204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	05/03/2004	MW20-050304	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.19
	07/27/2004	MW20-072704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	10/21/2004	MW20-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	01/20/2005	MW20S012005	0.0189 U	0.0189 U	--	--	0.0943 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.283 U	0.0472 U
	04/26/2005	MW20S042705	0.019 U	0.019 U	--	--	0.0951 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U	0.0476 U
	07/19/2005	MW20S071905	0.0191 U	0.0191 U	--	--	0.0953 U	0.0191 U	0.0191 U	0.0191 U	ND	0.191 U	0.286 U	0.0477 U
	10/20/2005	MW20S102005	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	01/19/2006	MW20S011906	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	04/27/2006	MW20S042706	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	08/02/2006	MW20S080206	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	1.01 U	1.01 U
	10/25/2006	MW20S102506	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/10/2007	MW20S011007	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U
	04/11/2007	MW20S041107	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	08/08/2007	MW20S080807	0.963 U	0.963 U	0.963 U	0.963 U	--	0.963 U	0.963 U	0.963 U	ND	0.963 U	0.963 U	0.963 U
	01/11/2008	MW20S011108	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	08/08/2008	MW20S080808	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	01/22/2009	MW20S012209	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U	0.954 U
	08/04/2009	MW20S080409	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/08/2010	MW20S010810	0.947 U	0.947 U	0.947 U	0.947 U		0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U	0.947 U

Location	Date Collected	Sample Name	cPAHs									Noncarcinogenic PAHs		
			Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3 -cd) pyrene	TEQ cPAHs	Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene
MTCA Method B Groundwater CULs			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	1.5	32
MW-28S	08/07/2002	GW-119	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	ND	0.097 U	--	0.097 U
	01/22/2004	MW28-012204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	05/03/2004	MW28-050304	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	07/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/21/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	07/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2006	MW28S011906	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	04/27/2006	MW28S042706	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	08/02/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2007	MW28S011107	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	04/10/2007	MW28S041007	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	08/07/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/08/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-45S	07/26/2004	MW46-072604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	10/21/2004	MW46-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	01/20/2005	MW45S012005	0.019 U	0.019 U	--	--	0.095 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U	0.0475 U
	04/26/2005	MW45S042705	0.019 U	0.019 U	--	--	0.0948 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.284 U	0.0474 U
	04/26/2005	MW45S042705-Dup	0.0191 U	0.0191 U	--	--	0.0955 U	0.0191 U	0.0191 U	0.0191 U	ND	0.191 U	0.287 U	0.0478 U
	07/19/2005	MW45S072005	0.019 U	0.019 U	--	--	0.095 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U	0.0475 U
	10/21/2005	MW45S102105	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	01/19/2006	MW45S011906	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	04/28/2006	MW45S042806	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	08/03/2006	MW45S080306	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	10/25/2006	MW45S102506	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U
	01/10/2007	MW45S011007	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	04/11/2007	MW45S041107	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	08/08/2007	MW45S080807	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	01/11/2008	MW45S011108	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	08/08/2008	MW45S080808	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/22/2009	MW45S012209	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U	0.947 U
	08/04/2009	MW45S080409	0.943 U	0.943 U	0.943 U	0.943 U	--	0.943 U	0.943 U	0.943 U	ND	0.943 U	0.943 U	0.943 U
	01/07/2010	MW45S010710	0.946 U	0.946 U	0.946 U	0.946 U		0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U	0.946 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs									Noncarcinogenic PAHs		
			Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3 -cd) pyrene	TEQ cPAHs	Dibenzo- furan	1-Methyl- naphthalene	2-Methyl- naphthalene
MTCA Method B Groundwater CULs			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	1.5	32
MW-46S	07/27/2004	MW48-072704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	10/21/2004	MW48-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	01/20/2005	MW46S012005	0.019 U	0.019 U	--	--	0.095 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U	0.0475 U
	04/26/2005	MW46S042705	0.019 U	0.019 U	--	--	0.095 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U	0.0475 U
	07/19/2005	MW46S072005	0.019 U	0.019 U	--	--	0.0949 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U	0.0474 U
	10/19/2005	MW46S101905	0.955 U	0.955 U	0.955 U	0.955 U	--	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U	0.955 U
	01/19/2006	MW46S011906	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	04/27/2006	MW46S042706	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	08/03/2006	MW46S080306	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	10/25/2006	MW46S102506	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/11/2007	MW46S011107	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U
	04/11/2007	MW46S041107	0.954 U	0.954 U	0.954 U	0.954 U	--	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U	0.954 U
	08/08/2007	MW46S080807	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/11/2008	MW46S011108	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	08/08/2008	MW46S080808	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/23/2009	MW46S012309	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U	0.946 U
	08/04/2009	MW46S080409	0.944 U	0.944 U	0.944 U	0.944 U	--	0.944 U	0.944 U	0.944 U	ND	0.944 U	0.944 U	0.944 U
	01/08/2010	MW46S010810	0.949 U	0.949 U	0.949 U	0.949 U		0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
MW-47S	07/26/2004	MW51-072604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	10/21/2004	MW51-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	01/19/2005	MW47S011905	0.0189 U	0.0189 U	--	--	0.0945 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U	0.0473 U
	04/26/2005	MW47S042605	0.0189 U	0.0189 U	--	--	0.0946 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U	0.0473 U
	07/19/2005	MW47S071905	0.0189 U	0.0189 U	--	--	0.0946 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U	0.0473 U
	10/18/2005	MW47S101805	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U
	01/18/2006	MW47S011806	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	04/26/2006	MW47S042606	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	08/01/2006	MW47S080106	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	1.01 U	1.01 U
	10/24/2006	MW47S102406	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/09/2007	MW47S010907	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	04/10/2007	MW47S041007	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U	0.947 U
	08/07/2007	MW47S080707	0.996 U	0.996 U	0.996 U	0.996 U	--	0.996 U	0.996 U	0.996 U	ND	0.996 U	0.996 U	0.996 U
	01/10/2008	MW47S011008	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	08/07/2008	MW47S080708	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/21/2009	MW47S012109	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	08/03/2009	MW47S080309	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U	0.945 U
	01/07/2010	MW47S010710	0.948 U	0.948 U	0.948 U	0.948 U		0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs									Noncarcinogenic PAHs		
			Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3 -cd) pyrene	TEQ cPAHs	Dibenzo- furan	1-Methyl- naphthalene	2-Methyl- naphthalene
MTCA Method B Groundwater CULs			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	1.5	32
Deep UWBZ														
MW-20D	07/27/2004	MW49-072704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.19	--	0.26
	10/21/2004	MW49-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.17 J	--	0.096 U
	01/20/2005	MW20D012005	0.019 U	0.019 U	--	--	0.0949 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U	0.0709
	04/26/2005	MW20D042705	0.019 U	0.019 U	--	--	0.0948 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.284 U	0.0474 U
	07/19/2005	MW20D071905	0.0189 U	0.0189 U	--	--	0.0946 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U	0.0473 U
	10/20/2005	MW20D102005	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	01/19/2006	MW20D011906	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	04/27/2006	MW20D042706	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	08/02/2006	MW20D080206	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	1.01 U	1.01 U
	10/25/2006	MW20D102506	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	01/10/2007	MW20D011007	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	04/11/2007	MW20D041107	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	08/08/2007	MW20D080807	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	01/11/2008	MW20D011108	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	08/08/2008	MW20080808	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/22/2009	MW20D012209	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U	0.945 U
	08/04/2009	MW20D080409	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	01/08/2010	MW20D010810	0.951 U	0.951 U	0.951 U	0.951 U		0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
MW-29	08/06/2002	GW-123	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	01/22/2004	MW29-012204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	04/30/2004	MW29-043004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
MW-29D	10/21/2004	MW29R-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	01/19/2005	MW29D011905	0.0189 U	0.0189 U	--	--	0.0943 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.283 U	0.0471 U
	04/26/2005	MW29D042605	0.0189 U	0.0189 U	--	--	0.0947 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U	0.0473 U
	07/19/2005	MW29D071905	0.0189 U	0.0189 U	--	--	0.0943 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.283 U	0.0472 U
	10/18/2005	MW29D101805	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	01/18/2006	MW29D011806	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U
	04/26/2006	MW29D042606	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	08/01/2006	MW29D080106	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	1.01 U	1.01 U
	10/24/2006	MW29D102406	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	01/09/2007	MW29D010907	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	04/10/2007	MW29D041007	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U	0.946 U
	08/07/2007	MW29D080707	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	01/10/2008	MW29D011008	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	08/07/2008	MW29D080708	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	01/21/2009	MW29D012109	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U	0.945 U
	08/03/2009	MW29D080309	0.944 U	0.944 U	0.944 U	0.944 U	--	0.944 U	0.944 U	0.944 U	ND	0.944 U	0.944 U	0.944 U
	01/07/2010	MW29D010710	0.946 U	0.946 U	0.946 U	0.946 U		0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U	0.946 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs									Noncarcinogenic PAHs		
			Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3 -cd) pyrene	TEQ cPAHs	Dibenzo- furan	1-Methyl- naphthalene	2-Methyl- naphthalene
MTCA Method B Groundwater CULs			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	1.5	32
MW-45D	07/26/2004	MW45-072604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	10/21/2004	MW45-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	01/20/2005	MW45D012005	0.0188 U	0.0188 U	--	--	0.0941 U	0.0188 U	0.0188 U	0.0188 U	ND	0.188 U	0.282 U	0.047 U
	04/26/2005	MW45D042705	0.019 U	0.019 U	--	--	0.0952 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.286 U	0.0476 U
	04/26/2005	MW45D042705-Dup	0.019 U	0.019 U	--	--	0.095 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U	0.0475 U
	07/19/2005	MW45D072005	0.019 U	0.019 U	--	--	0.142	0.019 U	0.019 U	0.019 U	**0.016**	0.19 U	0.284 U	0.0474 U
	10/21/2005	MW45D102105	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
dup	10/21/2005	MW45D102105-Dup	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	01/19/2006	MW45D011906	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U
	04/28/2006	MW45D042806	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
dup	04/28/2006	MW45D042806-Dup	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	08/03/2006	MW45D080306	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
dup	08/03/2006	MW45D080306-Dup	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U
	10/25/2006	MW45D102506	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
dup	10/25/2006	MW45D102506-Dup	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U	0.946 U
	01/10/2007	MW45D011007	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
dup	01/10/2007	MW45D011007-Dup	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	04/11/2007	MW45D041107	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U
dup	04/11/2007	MW45D041107-Dup	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U
	08/08/2007	MW45D080807	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	01/11/2008	MW45D011108	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	08/08/2008	MW45D080808	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U
	01/22/2009	MW45D012209	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
dup	01/22/2009	MW45D012209-Dup	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	08/04/2009	MW45D080409	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U	0.945 U
	01/07/2010	MW45D010710	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U	0.947 U
	08/24/2011	MW45D	--	--	--	--	--	--	--	--	--	--	--	--
	08/24/2011	MW45DDUP	--	--	--	--	--	--	--	--	--	--	--	--
MW-46D	07/27/2004	MW47-072704	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	10/21/2004	MW47-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	01/20/2005	MW46D012005	0.019 U	0.019 U	--	--	0.0951 U	0.019 U	0.019 U	0.019 U	ND	0.19 U	0.285 U	0.0475 U
	04/26/2005	MW46D042705	0.0189 U	0.0189 U	--	--	0.0947 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U	0.0473 U
	07/19/2005	MW46D072005	0.0189 U	0.0189 U	--	--	0.0943 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.283 U	0.0472 U
	10/19/2005	MW46D101905	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U	0.946 U
	01/19/2006	MW46D011906	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	04/27/2006	MW46D042706	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	08/03/2006	MW46D080306	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	10/25/2006	MW46D102506	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	01/11/2007	MW46D011107	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	04/11/2007	MW46D041107	0.952 U	0.952 U	0.952 U	0.952 U	--	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U
	08/08/2007	MW46D080807	0.947 U	0.947 U	0.947 U	0.947 U	--	0.947 U	0.947 U	0.947 U	ND	0.947 U	0.947 U	0.947 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	cPAHs									Noncarcinogenic PAHs		
			Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(b+k) fluoranthene	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3 -cd) pyrene	TEQ cPAHs	Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene
MTCA Method B Groundwater CULs			NV	0.012	NV	NV	NV	NV	NV	NV	0.012	32	1.5	32
	01/11/2008	MW46D011108	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U
	08/08/2008	MW46D080808	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	01/23/2009	MW46D012309	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U	0.945 U
	08/04/2009	MW46D080409	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	01/08/2010	MW46D010810	0.947 U	0.947 U	0.947 U	0.947 U		0.947 U	0.947 U	0.947 U		0.947 U	0.947 U	0.947 U
MW-47D	07/26/2004	MW50-072604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	10/21/2004	MW50-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	ND	0.096 U	--	0.096 U
	01/19/2005	MW47D011905	0.0226 U	0.0226 U	--	--	0.113 U	0.0226 U	0.0226 U	0.0226 U	ND	0.226 U	0.339 U	0.0565 U
	04/26/2005	MW47D042605	0.0189 U	0.0189 U	--	--	0.0947 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U	0.0473 U
	07/19/2005	MW47D071905	0.0189 U	0.0189 U	--	--	0.0945 U	0.0189 U	0.0189 U	0.0189 U	ND	0.189 U	0.284 U	0.0473 U
	10/18/2005	MW47D101805	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	01/18/2006	MW47D011806	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	04/26/2006	MW47D042606	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	ND	1 U	1 U	1 U
	08/01/2006	MW47D080106	1.01 U	1.01 U	1.01 U	1.01 U	--	1.01 U	1.01 U	1.01 U	ND	1.01 U	1.01 U	1.01 U
	10/24/2006	MW47D102406	0.949 U	0.949 U	0.949 U	0.949 U	--	0.949 U	0.949 U	0.949 U	ND	0.949 U	0.949 U	0.949 U
	01/09/2007	MW47D010907	0.951 U	0.951 U	0.951 U	0.951 U	--	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U
	04/10/2007	MW47D041007	0.95 U	0.95 U	0.95 U	0.95 U	--	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U
	08/07/2007	MW47D080707	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/10/2008	MW47D011008	0.953 U	0.953 U	0.953 U	0.953 U	--	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U
	08/07/2008	MW47D080708	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	01/21/2009	MW47D012109	0.948 U	0.948 U	0.948 U	0.948 U	--	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U
	08/03/2009	MW47D080309	0.945 U	0.945 U	0.945 U	0.945 U	--	0.945 U	0.945 U	0.945 U	ND	0.945 U	0.945 U	0.945 U
	01/07/2010	MW47D010710	0.946 U	0.946 U	0.946 U	0.946 U	--	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U	0.946 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs										
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater CULs			960	NV	4,800	NV	6.3	4.4	640	640	160	NV	480
Shallow UWBZ													
MW-9S	07/27/2004	MW9R-072704	4.1	0.1	1.5	0.096 U	--	2.6	0.41	2.2	1.1	0.87	0.28
	10/22/2004	MW9R-102204	2.1 J	0.096 U	1.9 J	0.096 U	--	0.21	0.42	1.2	0.11	0.096 U	0.35
	01/19/2005	MW9S011905	2.16	0.16	2.9	0.0191 U	1.43 U	0.323	0.631	2.41	0.0978	0.182	0.401
	04/26/2005	MW9S042705	2.95	0.158	2.12	0.0192 U	1.44 U	0.192 U	0.574	3.23	1.09	0.252	0.453
	07/19/2005	MW9S072005	0.894	0.0905	1.12	0.019 U	1.42 U	0.411	0.412	1.38	0.833	0.0934	0.473
	10/19/2005	MW9S101905	1.57	0.966 U	1.74	0.966 U	0.966 U	0.966 U	0.966 U	2.12	0.966 U	0.966 U	0.966 U
	01/19/2006	MW9S011906	5.72	0.95 U	0.95 U	0.95 U	0.95 U	**4.97**	0.95 U	5.14	53.9	0.95 U	0.95 U
	04/26/2006	MW9S042606	2.71	1 U	1 U	1 U	1 U	1.60	1 U	3.27	13.6	1 U	1 U
	08/01/2006	MW9S080106	1.19	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.18	3.10	1.01 U	1.01 U
	10/25/2006	MW9S102506	2.26	0.952 U	1.16	0.952 U	0.952 U	0.952 U	0.952 U	2.70	1.67	0.952 U	0.952 U
	01/09/2007	MW9S010907	5.79	0.951 U	1.10	0.951 U	0.951 U	**4.76**	0.951 U	6.40	42.6	0.951 U	0.951 U
	04/10/2007	MW9S041007	3.43	0.951 U	1.52	0.951 U	0.951 U	1.87	0.951 U	3.61	17.6	0.951 U	0.951 U
	08/08/2007	MW9S080807	5.51	0.951 U	0.951 U	0.951 U	0.951 U	3.40	0.951 U	3.53	4.90	0.951 U	0.951 U
	01/10/2008	MW9S011008	8.17	0.955 U	1.92	0.955 U	0.955 U	**5.56**	0.955 U	7.34	59.6	0.955 U	0.955 U
	08/07/2008	MW9S080708	2.87	0.951 U	0.951 U	0.951 U	0.951 U	1.27	0.951 U	2.06	2.94	0.951 U	0.951 U
	01/23/2009	MW9S012309	5.33	0.943 U	0.953	0.943 U	0.943 U	2.36	0.943 U	4.10	29.2	0.943 U	0.943 U
	08/03/2009	MW9S080309	3.87	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	3.16	0.947 U	0.947 U	0.947 U
	01/07/2010	MW9S010710	4.12	0.949 U	1.42	0.949 U	0.949 U	0.949 U	0.949 U	3.84	0.949 U	0.949 U	0.949 U
MW-20S	08/05/2002	GW-120	0.099 U	0.099 U	0.099 U	0.099 U	--	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U
	01/22/2004	MW20-012204	0.096 U	0.096 U	0.26	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	05/03/2004	MW20-050304	0.096 U	0.096 U	0.23	0.096 U	--	0.11	0.096 U	0.096 U	3.3	0.096 U	0.096 U
	07/27/2004	MW20-072704	0.096 U	0.096 U	0.15	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/21/2004	MW20-102104	0.096 U	0.096 U	0.16 J	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/20/2005	MW20S012005	0.0189 U	0.0189 U	0.202	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0472 U	0.0189 U	0.0189 U
	04/26/2005	MW20S042705	0.019 U	0.019 U	0.145	0.019 U	1.43 U	0.19 U	0.019 U	0.019 U	0.0476 U	0.019 U	0.019 U
	07/19/2005	MW20S071905	0.0191 U	0.0191 U	0.101	0.0191 U	1.43 U	0.191 U	0.0191 U	0.0191 U	0.0477 U	0.0191 U	0.0191 U
	10/20/2005	MW20S102005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW20S011906	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	04/27/2006	MW20S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/02/2006	MW20S080206	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	10/25/2006	MW20S102506	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/10/2007	MW20S011007	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	04/11/2007	MW20S041107	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/08/2007	MW20S080807	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
	01/11/2008	MW20S011108	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/08/2008	MW20S080808	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/22/2009	MW20S012209	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	08/04/2009	MW20S080409	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/08/2010	MW20S010810	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs										
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater CULs			960	NV	4,800	NV	6.3	4.4	640	640	160	NV	480
MW-28S	08/07/2002	GW-119	0.097 U	0.097 U	0.097 U	0.097 U	--	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
	01/22/2004	MW28-012204	0.096 U	0.096 U	0.27	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	05/03/2004	MW28-050304	0.096 U	0.096 U	0.33	0.096 U	--	0.096 U	0.096 U	0.096 U	0.80	0.096 U	0.096 U
	07/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/21/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	07/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2006	MW28S011906	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	04/27/2006	MW28S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/02/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2007	MW28S011107	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	04/10/2007	MW28S041007	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	08/07/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/08/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-45S	07/26/2004	MW46-072604	0.096 U	0.096 U	0.21	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/21/2004	MW46-102104	0.096 U	0.096 U	0.25 J	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/20/2005	MW45S012005	0.019 U	0.019 U	0.354	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0475 U	0.019 U	0.019 U
	04/26/2005	MW45S042705	0.019 U	0.019 U	0.212	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0474 U	0.019 U	0.019 U
	04/26/2005	MW45S042705-Dup	0.0191 U	0.0191 U	0.227	0.0191 U	1.43 U	0.191 U	0.0191 U	0.0191 U	0.0478 U	0.0191 U	0.0191 U
	07/19/2005	MW45S072005	0.019 U	0.019 U	0.114	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0475 U	0.019 U	0.019 U
	10/21/2005	MW45S102105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW45S011906	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	04/28/2006	MW45S042806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW45S080306	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	10/25/2006	MW45S102506	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	01/10/2007	MW45S011007	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	04/11/2007	MW45S041107	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/08/2007	MW45S080807	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/11/2008	MW45S011108	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/08/2008	MW45S080808	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/22/2009	MW45S012209	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/04/2009	MW45S080409	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U
	01/07/2010	MW45S010710	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U

Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)

Location	Date Collected	Sample Name	Noncarcinogenic PAHs										
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater CULs			960	NV	4,800	NV	6.3	4.4	640	640	160	NV	480
MW-46S	07/27/2004	MW48-072704	0.096 U	0.096 U	0.29	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/21/2004	MW48-102104	0.096 U	0.096 U	0.31 J	0.096 U	--	0.096 U	0.096 U	0.096 U	0.28	0.096 U	0.096 U
	01/20/2005	MW46S012005	0.019 U	0.019 U	0.51	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0475 U	0.019 U	0.019 U
	04/26/2005	MW46S042705	0.019 U	0.019 U	0.315	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0475 U	0.019 U	0.0192
	07/19/2005	MW46S072005	0.0194	0.019 U	0.198	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0502	0.019 U	0.019 U
	10/19/2005	MW46S101905	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	01/19/2006	MW46S011906	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	04/27/2006	MW46S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW46S080306	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	10/25/2006	MW46S102506	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/11/2007	MW46S011107	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	04/11/2007	MW46S041107	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	08/08/2007	MW46S080807	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/11/2008	MW46S011108	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/08/2008	MW46S080808	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/23/2009	MW46S012309	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	08/04/2009	MW46S080409	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U
	01/08/2010	MW46S010810	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
MW-47S	07/26/2004	MW51-072604	0.096 U	0.096 U	0.27	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/21/2004	MW51-102104	0.096 U	0.096 U	0.24 J	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/19/2005	MW47S011905	0.0189 U	0.0189 U	0.298	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0581	0.0397	0.0189 U
	04/26/2005	MW47S042605	0.0189 U	0.0189 U	0.187	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0473 U	0.0194	0.0189 U
	07/19/2005	MW47S071905	0.0189 U	0.0189 U	0.137	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0473 U	0.0189 U	0.0292
	10/18/2005	MW47S101805	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	01/18/2006	MW47S011806	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	04/26/2006	MW47S042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW47S080106	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	10/24/2006	MW47S102406	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/09/2007	MW47S010907	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	04/10/2007	MW47S041007	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/07/2007	MW47S080707	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U	0.996 U
	01/10/2008	MW47S011008	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/07/2008	MW47S080708	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/21/2009	MW47S012109	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/03/2009	MW47S080309	0.945 U	0.945 U	0.945 U	0.945 U	1.02	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	01/07/2010	MW47S010710	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (μg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs										
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater CULs			960	NV	4,800	NV	6.3	4.4	640	640	160	NV	480
Deep UWBZ													
MW-20D	07/27/2004	MW49-072704	0.73	0.096 U	0.16	0.096 U	--	0.23	0.096 U	0.37	0.47	0.36	0.096 U
	10/21/2004	MW49-102104	0.52 J	0.096 U	0.18 J	0.096 U	--	0.21	0.096 U	0.43	0.26	0.28 J	0.096 U
	01/20/2005	MW20D012005	0.574	0.019 U	0.253	0.019 U	1.42 U	0.313	0.0496	0.308	0.186	0.435	0.0486
	04/26/2005	MW20D042705	0.372	0.019 U	0.244	0.019 U	1.42 U	0.261	0.0515	0.316	0.0474 U	0.308	0.0318
	07/19/2005	MW20D071905	0.121	0.0189 U	0.144	0.0189 U	1.42 U	0.189 U	0.0366	0.212	0.0473 U	0.0852	0.0213
	10/20/2005	MW20D102005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW20D011906	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	04/27/2006	MW20D042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/02/2006	MW20D080206	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	10/25/2006	MW20D102506	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	2.34	0.95 U	0.95 U
	01/10/2007	MW20D011007	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	04/11/2007	MW20D041107	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/08/2007	MW20D080807	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/11/2008	MW20D011108	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/08/2008	MW20080808	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/22/2009	MW20D012209	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	08/04/2009	MW20D080409	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/08/2010	MW20D010810	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
MW-29	08/06/2002	GW-123	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/22/2004	MW29-012204	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	04/30/2004	MW29-043004	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	1.7	0.096 U	0.096 U
MW-29D	10/21/2004	MW29R-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/19/2005	MW29D011905	0.0189 U	0.0189 U	0.0509	0.0189 U	1.41 U	0.189 U	0.0189 U	0.0189 U	0.0471 U	0.0189 U	0.0189 U
	04/26/2005	MW29D042605	0.0189 U	0.0189 U	0.085	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0324	0.0473 U	0.087	0.0189 U
	07/19/2005	MW29D071905	0.0189 U	0.0189 U	0.0361	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0472 U	0.0189 U	0.0189 U
	10/18/2005	MW29D101805	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/18/2006	MW29D011806	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	04/26/2006	MW29D042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW29D080106	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	10/24/2006	MW29D102406	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	6.29	0.95 U	0.95 U
	01/09/2007	MW29D010907	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	04/10/2007	MW29D041007	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	08/07/2007	MW29D080707	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/10/2008	MW29D011008	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/07/2008	MW29D080708	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/21/2009	MW29D012109	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	08/03/2009	MW29D080309	0.944 U	0.944 U	0.944 U	0.944 U	0.954	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U
	01/07/2010	MW29D010710	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U

Location	Date Collected	Sample Name	Noncarcinogenic PAHs										
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater CULs			960	NV	4,800	NV	6.3	4.4	640	640	160	NV	480
MW-45D	07/26/2004	MW45-072604	0.096 U	0.096 U	0.13	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/21/2004	MW45-102104	0.096 U	0.096 U	0.16 J	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/20/2005	MW45D012005	0.0188 U	0.0188 U	0.17	0.0188 U	1.41 U	0.188 U	0.0188 U	0.0188 U	0.047 U	0.0188 U	0.0188 U
	04/26/2005	MW45D042705	0.019 U	0.019 U	0.15	0.019 U	1.43 U	0.19 U	0.019 U	0.019 U	0.0476 U	0.019 U	0.019 U
	04/26/2005	MW45D042705-Dup	0.019 U	0.019 U	0.16	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0475 U	0.019 U	0.019 U
	07/19/2005	MW45D072005	0.019 U	0.019 U	0.117	0.019 U	1.42 U	0.19 U	0.019 U	0.019 U	0.0474 U	0.019 U	0.019 U
	10/21/2005	MW45D102105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	10/21/2005	MW45D102105-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW45D011906	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	04/28/2006	MW45D042806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	04/28/2006	MW45D042806-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW45D080306	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
dup	08/03/2006	MW45D080306-Dup	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	10/25/2006	MW45D102506	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
dup	10/25/2006	MW45D102506-Dup	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	01/10/2007	MW45D011007	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
dup	01/10/2007	MW45D011007-Dup	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	04/11/2007	MW45D041107	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
dup	04/11/2007	MW45D041107-Dup	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	08/08/2007	MW45D080807	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/11/2008	MW45D011108	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/08/2008	MW45D080808	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	01/22/2009	MW45D012209	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
dup	01/22/2009	MW45D012209-Dup	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	08/04/2009	MW45D080409	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	01/07/2010	MW45D010710	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	08/24/2011	MW45D	--	--	--	--	--	--	--	--	--	--	--
	08/24/2011	MW45DDUP	--	--	--	--	--	--	--	--	--	--	--
MW-46D	07/27/2004	MW47-072704	0.096 U	0.096 U	0.098	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/21/2004	MW47-102104	0.096 U	0.096 U	0.12 J	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/20/2005	MW46D012005	0.019 U	0.019 U	0.165	0.019 U	1.43 U	0.19 U	0.019 U	0.019 U	0.0475 U	0.0228	0.019 U
	04/26/2005	MW46D042705	0.0189 U	0.0189 U	0.11	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0473 U	0.0189 U	0.0189 U
	07/19/2005	MW46D072005	0.0189 U	0.0189 U	0.0559	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0472 U	0.0189 U	0.0189 U
	10/19/2005	MW46D101905	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	01/19/2006	MW46D011906	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	04/27/2006	MW46D042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.71	1 U	1 U
	08/03/2006	MW46D080306	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	10/25/2006	MW46D102506	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/11/2007	MW46D011107	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	04/11/2007	MW46D041107	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	08/08/2007	MW46D080807	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U

Table 3-14
Semivolatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Noncarcinogenic PAHs										
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater CULs			960	NV	4,800	NV	6.3	4.4	640	640	160	NV	480
	01/11/2008	MW46D011108	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	08/08/2008	MW46D080808	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	01/23/2009	MW46D012309	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	08/04/2009	MW46D080409	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/08/2010	MW46D010810	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
MW-47D	07/26/2004	MW50-072604	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	10/21/2004	MW50-102104	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U
	01/19/2005	MW47D011905	0.0226 U	0.0226 U	0.0579	0.0226 U	1.69 U	0.226 U	0.0226 U	0.0226 U	0.116	0.0226 U	0.0226 U
	04/26/2005	MW47D042605	0.0189 U	0.0189 U	0.0548	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0473 U	0.0413	0.0189 U
	07/19/2005	MW47D071905	0.0189 U	0.0189 U	0.0243	0.0189 U	1.42 U	0.189 U	0.0189 U	0.0189 U	0.0473 U	0.0189 U	0.0189 U
	10/18/2005	MW47D101805	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	01/18/2006	MW47D011806	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	04/26/2006	MW47D042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW47D080106	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	10/24/2006	MW47D102406	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
	01/09/2007	MW47D010907	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	04/10/2007	MW47D041007	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	08/07/2007	MW47D080707	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/10/2008	MW47D011008	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	08/07/2008	MW47D080708	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	01/21/2009	MW47D012109	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	08/03/2009	MW47D080309	0.945 U	0.945 U	0.945 U	0.945 U	1.07	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	01/07/2010	MW47D010710	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U

NOTES:

Bold number indicates a detected concentration that exceeds one or more of its screening criteria.

-- = not available.

cPAH = carcinogenic polycyclic aromatic hydrocarbon.

CUL = cleanup level.

J = analyte was positively identified; associated numerical value is approximate concentration of analyte in sample.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

µg/L = micrograms per liter.

ND = not detected.

NS = not sampled.

NV = no value.

PAH = polycyclic aromatic hydrocarbon.

U = not detected at or above method reporting limit.

UWBZ = upper water-bearing zone.

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Di-chloroethane	1,1-Di-chloroethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane
MTCA Method B Groundwater CULs			1.7	7,200	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022
Shallow UWBZ															
MW-9S	07/27/2004	MW9R-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	10/22/2004	MW9R-102204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	01/19/2005	MW9S011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW9S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW9S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/19/2005	MW9S101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW9S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2006	MW9S042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW9S080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW9S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/09/2007	MW9S010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.01	1 U	1 U
	04/10/2007	MW9S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW9S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2008	MW9S011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.91	1 U	1 U
	08/07/2008	MW9S080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW9S012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2009	MW9S080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW9S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-20S	08/05/2002	GW-120	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U
	01/22/2004	MW20-012204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	05/03/2004	MW20-050304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	07/27/2004	MW20-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW20-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW20S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW20S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW20S071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/20/2005	MW20S102005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW20S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/27/2006	MW20S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/02/2006	MW20S080206	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW20S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2007	MW20S011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW20S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW20S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW20S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW20S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW20S012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW20S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	MW20S010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-28S	08/07/2002	GW-119	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U
	01/22/2004	MW28-012204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	05/03/2004	MW28-050304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	07/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/21/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Di-chloroethane	1,1-Di-chloroethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane
MTCA Method B Groundwater CULs			1.7	7,200	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022
	07/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2006	MW28S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/27/2006	MW28S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/02/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2007	MW28S011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2007	MW28S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/08/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-45S	07/26/2004	MW46-072604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW46-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW45S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW45S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW45S042705-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW45S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/21/2005	MW45S102105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW45S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/28/2006	MW45S042806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW45S080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW45S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2007	MW45S011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW45S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW45S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW45S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW45S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW45S012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW45S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW45S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-46S	07/27/2004	MW48-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW48-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW46S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW46S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW46S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/19/2005	MW46S101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW46S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/27/2006	MW46S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW46S080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW46S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2007	MW46S011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW46S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW46S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW46S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW46S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Di-chloroethane	1,1-Di-chloroethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane
MTCA Method B Groundwater CULs			1.7	7,200	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022
	01/20/2009	MW46S012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW46S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	MW46S010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-47S	07/26/2004	MW51-072604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW51-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	01/19/2005	MW47S011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW47S042605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW47S071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/18/2005	MW47S101805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2006	MW47S011806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2006	MW47S042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW47S080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/24/2006	MW47S102406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/09/2007	MW47S010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2007	MW47S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2007	MW47S080707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2008	MW47S011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2008	MW47S080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW47S012109	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2009	MW47S080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW47S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Deep UWBZ															
MW-20D	07/27/2004	MW49-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW49-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW20D012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW20D042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW20D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/20/2005	MW20D102005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW20D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/27/2006	MW20D042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/02/2006	MW20D080206	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW20D102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2007	MW20D011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW20D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW20D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW20D011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW20080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW20D012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW20D080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	MW20D010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-29	08/06/2002	GW-123	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U
	01/22/2004	MW29-012204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	04/30/2004	MW29-043004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-29D	10/21/2004	MW29R-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	01/19/2005	MW29D011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW29D042605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW29D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Di-chloroethane	1,1-Di-chloroethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane
MTCA Method B Groundwater CULs			1.7	7,200	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022
	10/18/2005	MW29D101805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2006	MW29D011806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2006	MW29D042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW29D080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/24/2006	MW29D102406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/09/2007	MW29D010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2007	MW29D041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2007	MW29D080707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2008	MW29D011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2008	MW29D080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW29D012109	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2009	MW29D080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW29D010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/22/2011	MW29D	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-45D	07/26/2004	MW45-072604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW45-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW45D012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW45D042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	04/26/2005	MW45D042705-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW45D072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/21/2005	MW45D102105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	10/21/2005	MW45D102105-DUP	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW45D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/28/2006	MW45D042806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	04/28/2006	MW45D042806-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW45D080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/03/2006	MW45D080306-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW45D102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	10/25/2006	MW45D102506-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2007	MW45D011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/10/2007	MW45D011007-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW45D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	04/11/2007	MW45D041107-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW45D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW45D011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW45D080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW45D012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/20/2009	MW45D012209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW45D080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW45D010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2011	MW45D	--	--	--	--	--	--	--	--	--	--	--	--	--
dup	08/24/2011	MW45DDUP	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/27/2004	MW47-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW47-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW46D012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW46D042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW46D072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Location	Date Collected	Sample Name	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Di-chloroethane	1,1-Di-chloroethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane
MTCA Method B Groundwater CULs			1.7	7,200	0.22	0.77	1600	400	NV	NV	0.0063	80	400	0.031	0.022
	10/19/2005	MW46D101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW46D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/27/2006	MW46D042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW46D080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW46D102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2007	MW46D011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW46D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW46D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW46D011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW46D080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW46D012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW46D080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	MW46D010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/22/2011	MW46D	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-47D	07/26/2004	MW50-072604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW50-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U	2.0 U
	01/19/2005	MW47D011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW47D042605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW47D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/18/2005	MW47D101805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2006	MW47D011806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2006	MW47D042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW47D080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/24/2006	MW47D102406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/09/2007	MW47D010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2007	MW47D041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2007	MW47D080707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2008	MW47D011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2008	MW47D080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW47D012109	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2009	MW47D080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW47D010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/22/2011	MW47D	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	2-Butanone	2-Chloro-toluene	2-Hexanone	4-Chloro-toluene	4-Isopropyl-toluene
MTCA Method B Groundwater CULs			720	0.48	0.64	400	NV	NV	1.8	NV	4,800	160	NV	NV	NV
Shallow UWBZ															
MW-9S	07/27/2004	MW9R-072704	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	10/22/2004	MW9R-102204	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	01/19/2005	MW9S011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW9S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	07/19/2005	MW9S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ
	10/19/2005	MW9S101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/19/2006	MW9S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/26/2006	MW9S042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/01/2006	MW9S080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	10/25/2006	MW9S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/09/2007	MW9S010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/10/2007	MW9S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2007	MW9S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/10/2008	MW9S011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/07/2008	MW9S080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/20/2009	MW9S012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/03/2009	MW9S080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/07/2010	MW9S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
MW-20S	08/05/2002	GW-120	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	--	20 U	2 U	20 U	2 U	2 U
	01/22/2004	MW20-012204	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	05/03/2004	MW20-050304	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	07/27/2004	MW20-072704	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	10/21/2004	MW20-102104	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	01/20/2005	MW20S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW20S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	07/19/2005	MW20S071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ
	10/20/2005	MW20S102005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/19/2006	MW20S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/27/2006	MW20S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/02/2006	MW20S080206	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	10/25/2006	MW20S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/10/2007	MW20S011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/11/2007	MW20S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2007	MW20S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/11/2008	MW20S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2008	MW20S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/20/2009	MW20S012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/04/2009	MW20S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/08/2010	MW20S010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
MW-28S	08/07/2002	GW-119	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	--	20 U	2 U	20 U	2 U	2 U
	01/22/2004	MW28-012204	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	05/03/2004	MW28-050304	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	07/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/21/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	2-Butanone	2-Chloro-toluene	2-Hexanone	4-Chloro-toluene	4-Isopropyl-toluene
MTCA Method B Groundwater CULs			720	0.48	0.64	400	NV	NV	1.8	NV	4,800	160	NV	NV	NV
	07/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2006	MW28S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/27/2006	MW28S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/02/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2007	MW28S011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/10/2007	MW28S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/07/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/08/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-45S	07/26/2004	MW46-072604	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	10/21/2004	MW46-102104	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	01/20/2005	MW45S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW45S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW45S042705-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	07/19/2005	MW45S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ
	10/21/2005	MW45S102105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/19/2006	MW45S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/28/2006	MW45S042806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/03/2006	MW45S080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	10/25/2006	MW45S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/10/2007	MW45S011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/11/2007	MW45S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2007	MW45S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/11/2008	MW45S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2008	MW45S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/20/2009	MW45S012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/04/2009	MW45S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/07/2010	MW45S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
MW-46S	07/27/2004	MW48-072704	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	10/21/2004	MW48-102104	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	01/20/2005	MW46S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW46S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	07/19/2005	MW46S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ
	10/19/2005	MW46S101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/19/2006	MW46S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/27/2006	MW46S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/03/2006	MW46S080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	10/25/2006	MW46S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/11/2007	MW46S011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/11/2007	MW46S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2007	MW46S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/11/2008	MW46S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2008	MW46S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U

Location	Date Collected	Sample Name	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	2-Butanone	2-Chloro-toluene	2-Hexanone	4-Chloro-toluene	4-Isopropyl-toluene
MTCA Method B Groundwater CULs			720	0.48	0.64	400	NV	NV	1.8	NV	4,800	160	NV	NV	NV
	01/20/2009	MW46S012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/04/2009	MW46S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/08/2010	MW46S010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
MW-47S	07/26/2004	MW51-072604	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	10/21/2004	MW51-102104	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	01/19/2005	MW47S011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW47S042605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U		1 U	1 U
	07/19/2005	MW47S071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ
	10/18/2005	MW47S101805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/18/2006	MW47S011806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/26/2006	MW47S042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/01/2006	MW47S080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	10/24/2006	MW47S102406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/09/2007	MW47S010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/10/2007	MW47S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/07/2007	MW47S080707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/10/2008	MW47S011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/07/2008	MW47S080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/20/2009	MW47S012109	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/03/2009	MW47S080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/07/2010	MW47S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
Deep UWBZ															
MW-20D	07/27/2004	MW49-072704	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	10/21/2004	MW49-102104	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	01/20/2005	MW20D012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW20D042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	07/19/2005	MW20D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ
	10/20/2005	MW20D102005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/19/2006	MW20D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/27/2006	MW20D042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/02/2006	MW20D080206	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	10/25/2006	MW20D102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/10/2007	MW20D011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/11/2007	MW20D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2007	MW20D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/11/2008	MW20D011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2008	MW20080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/20/2009	MW20D012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/04/2009	MW20D080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/08/2010	MW20D010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
MW-29	08/06/2002	GW-123	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	--	20 U	2 U	20 U	2 U	2 U
	01/22/2004	MW29-012204	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	04/30/2004	MW29-043004	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
MW-29D	10/21/2004	MW29R-102104	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	01/19/2005	MW29D011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW29D042605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	07/19/2005	MW29D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ

Location	Date Collected	Sample Name	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	2-Butanone	2-Chloro-toluene	2-Hexanone	4-Chloro-toluene	4-Isopropyl-toluene
MTCA Method B Groundwater CULs			720	0.48	0.64	400	NV	NV	1.8	NV	4,800	160	NV	NV	NV
	10/18/2005	MW29D101805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/18/2006	MW29D011806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/26/2006	MW29D042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/01/2006	MW29D080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	10/24/2006	MW29D102406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/09/2007	MW29D010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/10/2007	MW29D041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/07/2007	MW29D080707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/10/2008	MW29D011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/07/2008	MW29D080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/20/2009	MW29D012109	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/03/2009	MW29D080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/07/2010	MW29D010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/22/2011	MW29D	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-45D	07/26/2004	MW45-072604	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	10/21/2004	MW45-102104	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	01/20/2005	MW45D012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW45D042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
dup	04/26/2005	MW45D042705-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	07/19/2005	MW45D072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ
	10/21/2005	MW45D102105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
dup	10/21/2005	MW45D102105-DUP	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/19/2006	MW45D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/28/2006	MW45D042806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
dup	04/28/2006	MW45D042806-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/03/2006	MW45D080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
dup	08/03/2006	MW45D080306-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	10/25/2006	MW45D102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
dup	10/25/2006	MW45D102506-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/10/2007	MW45D011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
dup	01/10/2007	MW45D011007-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/11/2007	MW45D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
dup	04/11/2007	MW45D041107-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2007	MW45D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/11/2008	MW45D011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2008	MW45D080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/20/2009	MW45D012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
dup	01/20/2009	MW45D012209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/04/2009	MW45D080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/07/2010	MW45D010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/24/2011	MW45D	--	--	--	--	--	--	--	--	--	--	--	--	--
dup	08/24/2011	MW45DDUP	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/27/2004	MW47-072704	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	10/21/2004	MW47-102104	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	01/20/2005	MW46D012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW46D042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	07/19/2005	MW46D072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ

Location	Date Collected	Sample Name	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	2-Butanone	2-Chloro-toluene	2-Hexanone	4-Chloro-toluene	4-Isopropyl-toluene
MTCA Method B Groundwater CULs			720	0.48	0.64	400	NV	NV	1.8	NV	4,800	160	NV	NV	NV
	10/19/2005	MW46D101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/19/2006	MW46D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/27/2006	MW46D042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/03/2006	MW46D080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	10/25/2006	MW46D102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/11/2007	MW46D011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/11/2007	MW46D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2007	MW46D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/11/2008	MW46D011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/08/2008	MW46D080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/20/2009	MW46D012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/04/2009	MW46D080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/08/2010	MW46D010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/22/2011	MW46D	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-47D	07/26/2004	MW50-072604	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	--	20 U	2.0 U	20 U	2.0 U	2.0 U
	10/21/2004	MW50-102104	0.50 U	0.50 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	20 U	2.0 U	20 U	2.0 U	2.0 U
	01/19/2005	MW47D011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	04/26/2005	MW47D042605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
	07/19/2005	MW47D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	--	1 UJ	1 UJ
	10/18/2005	MW47D101805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/18/2006	MW47D011806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/26/2006	MW47D042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/01/2006	MW47D080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	10/24/2006	MW47D102406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/09/2007	MW47D010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	04/10/2007	MW47D041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/07/2007	MW47D080707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/10/2008	MW47D011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/07/2008	MW47D080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/20/2009	MW47D012109	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/03/2009	MW47D080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	01/07/2010	MW47D010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U
	08/22/2011	MW47D	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform
MTCA Method B Groundwater CULs			640	800	0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2
Shallow UWBZ															
MW-9S	07/27/2004	MW9R-072704	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/22/2004	MW9R-102204	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/19/2005	MW9S011905	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW9S042705	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	07/19/2005	MW9S072005	--	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ
	10/19/2005	MW9S101905	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	01/19/2006	MW9S011906	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/26/2006	MW9S042606	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/01/2006	MW9S080106	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	10/25/2006	MW9S102506	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/09/2007	MW9S010907	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/10/2007	MW9S041007	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2007	MW9S080807	20 U	50 U	0.580	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/10/2008	MW9S011008	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/07/2008	MW9S080708	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/20/2009	MW9S012309	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/03/2009	MW9S080309	20 U	50 U	**1.30**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/07/2010	MW9S010710	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
MW-20S	08/05/2002	GW-120	20 U	20 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/22/2004	MW20-012204	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/03/2004	MW20-050304	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/27/2004	MW20-072704	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW20-102104	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW20S012005	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW20S042705	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	07/19/2005	MW20S071905	--	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ
	10/20/2005	MW20S102005	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	01/19/2006	MW20S011906	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/27/2006	MW20S042706	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/02/2006	MW20S080206	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	10/25/2006	MW20S102506	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/10/2007	MW20S011007	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/11/2007	MW20S041107	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2007	MW20S080807	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/11/2008	MW20S011108	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2008	MW20S080808	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/20/2009	MW20S012209	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/04/2009	MW20S080409	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/08/2010	MW20S010810	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
MW-28S	08/07/2002	GW-119	20 U	20 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/22/2004	MW28-012204	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/03/2004	MW28-050304	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/21/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloroform
MTCA Method B Groundwater CULs			640	800	0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2
	07/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2006	MW28S011906	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/27/2006	MW28S042706	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/02/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2007	MW28S011107	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/10/2007	MW28S041007	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/07/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/08/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-45S	07/26/2004	MW46-072604	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW46-102104	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW45S012005	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW45S042705	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW45S042705-Dup	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	07/19/2005	MW45S072005	--	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ
	10/21/2005	MW45S102105	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	01/19/2006	MW45S011906	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/28/2006	MW45S042806	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/03/2006	MW45S080306	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	10/25/2006	MW45S102506	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/10/2007	MW45S011007	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/11/2007	MW45S041107	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2007	MW45S080807	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/11/2008	MW45S011108	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2008	MW45S080808	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/20/2009	MW45S012209	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/04/2009	MW45S080409	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/07/2010	MW45S010710	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
MW-46S	07/27/2004	MW48-072704	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW48-102104	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW46S012005	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW46S042705	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	07/19/2005	MW46S072005	--	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ
	10/19/2005	MW46S101905	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	01/19/2006	MW46S011906	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/27/2006	MW46S042706	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/03/2006	MW46S080306	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	10/25/2006	MW46S102506	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/11/2007	MW46S011107	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/11/2007	MW46S041107	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2007	MW46S080807	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/11/2008	MW46S011108	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2008	MW46S080808	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloroform
MTCA Method B Groundwater CULs			640	800	0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2
	01/20/2009	MW46S012309	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/04/2009	MW46S080409	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/08/2010	MW46S010810	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
MW-47S	07/26/2004	MW51-072604	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW51-102104	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/19/2005	MW47S011905	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW47S042605	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	07/19/2005	MW47S071905	--	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ
	10/18/2005	MW47S101805	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	01/18/2006	MW47S011806	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/26/2006	MW47S042606	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/01/2006	MW47S080106	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	10/24/2006	MW47S102406	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/09/2007	MW47S010907	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/10/2007	MW47S041007	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/07/2007	MW47S080707	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/10/2008	MW47S011008	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/07/2008	MW47S080708	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/20/2009	MW47S012109	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/03/2009	MW47S080309	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/07/2010	MW47S010710	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
Deep UWBZ															
MW-20D	07/27/2004	MW49-072704	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW49-102104	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW20D012005	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW20D042705	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	07/19/2005	MW20D071905	--	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ
	10/20/2005	MW20D102005	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	01/19/2006	MW20D011906	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/27/2006	MW20D042706	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/02/2006	MW20D080206	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	10/25/2006	MW20D102506	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/10/2007	MW20D011007	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/11/2007	MW20D041107	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2007	MW20D080807	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/11/2008	MW20D011108	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2008	MW20080808	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/20/2009	MW20D012209	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/04/2009	MW20D080409	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/08/2010	MW20D010810	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
MW-29	08/06/2002	GW-123	20 U	20 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/22/2004	MW29-012204	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	04/30/2004	MW29-043004	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-29D	10/21/2004	MW29R-102104	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/19/2005	MW29D011905	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW29D042605	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	07/19/2005	MW29D071905	--	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ

Location	Date Collected	Sample Name	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloroform
MTCA Method B Groundwater CULs			640	800	0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2
	10/18/2005	MW29D101805	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	01/18/2006	MW29D011806	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/26/2006	MW29D042606	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/01/2006	MW29D080106	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	10/24/2006	MW29D102406	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/09/2007	MW29D010907	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/10/2007	MW29D041007	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/07/2007	MW29D080707	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/10/2008	MW29D011008	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/07/2008	MW29D080708	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/20/2009	MW29D012109	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/03/2009	MW29D080309	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/07/2010	MW29D010710	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/22/2011	MW29D	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-45D	07/26/2004	MW45-072604	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW45-102104	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW45D012005	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW45D042705	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
dup	04/26/2005	MW45D042705-Dup	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	07/19/2005	MW45D072005	--	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ
	10/21/2005	MW45D102105	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
dup	10/21/2005	MW45D102105-DUP	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	01/19/2006	MW45D011906	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/28/2006	MW45D042806	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
dup	04/28/2006	MW45D042806-Dup	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/03/2006	MW45D080306	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
dup	08/03/2006	MW45D080306-Dup	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	10/25/2006	MW45D102506	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
dup	10/25/2006	MW45D102506-Dup	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/10/2007	MW45D011007	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
dup	01/10/2007	MW45D011007-Dup	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/11/2007	MW45D041107	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
dup	04/11/2007	MW45D041107-Dup	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2007	MW45D080807	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/11/2008	MW45D011108	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2008	MW45D080808	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/20/2009	MW45D012209	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
dup	01/20/2009	MW45D012209-Dup	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/04/2009	MW45D080409	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/07/2010	MW45D010710	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/24/2011	MW45D	--	--	--	--	--	--	--	--	--	--	--	--	--
dup	08/24/2011	MW45DDUP	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/27/2004	MW47-072704	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW47-102104	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW46D012005	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW46D042705	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	07/19/2005	MW46D072005	--	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chloro-benzene	Chloro-ethane	Chloroform
MTCA Method B Groundwater CULs			640	800	0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2
	10/19/2005	MW46D101905	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	01/19/2006	MW46D011906	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/27/2006	MW46D042706	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/03/2006	MW46D080306	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	10/25/2006	MW46D102506	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/11/2007	MW46D011107	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/11/2007	MW46D041107	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2007	MW46D080807	20 U	50 U	0.370	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/11/2008	MW46D011108	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/08/2008	MW46D080808	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/20/2009	MW46D012309	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/04/2009	MW46D080409	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/08/2010	MW46D010810	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/22/2011	MW46D	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-47D	07/26/2004	MW50-072604	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW50-102104	20 U	20 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/19/2005	MW47D011905	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	04/26/2005	MW47D042605	--	--	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	07/19/2005	MW47D071905	--	--	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	--	1 UJ	1 UJ	1 UJ	1 UJ
	10/18/2005	MW47D101805	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U
	01/18/2006	MW47D011806	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/26/2006	MW47D042606	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/01/2006	MW47D080106	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	10/24/2006	MW47D102406	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/09/2007	MW47D010907	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	04/10/2007	MW47D041007	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/07/2007	MW47D080707	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/10/2008	MW47D011008	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/07/2008	MW47D080708	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/20/2009	MW47D012109	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/03/2009	MW47D080309	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	01/07/2010	MW47D010710	20 U	50 U	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	08/22/2011	MW47D	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chloro-methane	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methylene chloride	Naph-thalene	n-Butyl-benzene
MTCA Method B Groundwater CULs			3.4	0.52	80	1,600	80	0.24[a]	800	0.56	800	16,000[b]	5.8	160	NV
Shallow UWBZ															
MW-9S	07/27/2004	MW9R-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	28	2.0 U
	10/22/2004	MW9R-102204	0.50 U	0.50 U	0.50 U	0.50 U	0.75	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	01/19/2005	MW9S011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW9S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	07/19/2005	MW9S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 UJ	1.22 J	1 UJ
	10/19/2005	MW9S101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/19/2006	MW9S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	18.5	1 U
	04/26/2006	MW9S042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	32.1	1 U
	08/01/2006	MW9S080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	20.8	1 U
	10/25/2006	MW9S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	5.32	1 U
	01/09/2007	MW9S010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.83	20 U	67.3	1 U
	04/10/2007	MW9S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2007	MW9S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	7.27 U	1 U
	01/10/2008	MW9S011008	1 U	1 U	1 U	1 U	1 U	1 U	2.16	1 U	1 U	2.88	20 U	54.2	1 U
	08/07/2008	MW9S080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	2.83	1 U
	01/20/2009	MW9S012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	49.7	1 U
	08/03/2009	MW9S080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/07/2010	MW9S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
MW-20S	08/05/2002	GW-120	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	0.5 U	2 U	2 U	2 U
	01/22/2004	MW20-012204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	05/03/2004	MW20-050304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	07/27/2004	MW20-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW20-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW20S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW20S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	07/19/2005	MW20S071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 UJ	1 UJ	1 UJ
	10/20/2005	MW20S102005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/19/2006	MW20S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/27/2006	MW20S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/02/2006	MW20S080206	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	10/25/2006	MW20S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/10/2007	MW20S011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/11/2007	MW20S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2007	MW20S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/11/2008	MW20S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2008	MW20S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/20/2009	MW20S012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/04/2009	MW20S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/08/2010	MW20S010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
MW-28S	08/07/2002	GW-119	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	0.5 U	2 U	2 U	2 U
	01/22/2004	MW28-012204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	05/03/2004	MW28-050304	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	07/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/21/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Location	Date Collected	Sample Name	Chloromethane	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene
MTCA Method B Groundwater CULs			3.4	0.52	80	1,600	80	0.24[a]	800	0.56	800	16,000[b]	5.8	160	NV
	07/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2006	MW28S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/27/2006	MW28S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/02/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2007	MW28S011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/10/2007	MW28S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/07/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/08/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-45S	07/26/2004	MW46-072604	0.50 U	0.50 U	0.50 U	0.50 U	0.56	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW46-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW45S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW45S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW45S042705-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	07/19/2005	MW45S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 UJ	1 UJ	1 UJ
	10/21/2005	MW45S102105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/19/2006	MW45S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/28/2006	MW45S042806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/03/2006	MW45S080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	10/25/2006	MW45S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/10/2007	MW45S011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/11/2007	MW45S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2007	MW45S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/11/2008	MW45S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2008	MW45S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/20/2009	MW45S012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/04/2009	MW45S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/07/2010	MW45S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
MW-46S	07/27/2004	MW48-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW48-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW46S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW46S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	07/19/2005	MW46S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 UJ	1 UJ	1 UJ
	10/19/2005	MW46S101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/19/2006	MW46S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/27/2006	MW46S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/03/2006	MW46S080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	10/25/2006	MW46S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/11/2007	MW46S011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/11/2007	MW46S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2007	MW46S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/11/2008	MW46S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2008	MW46S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U

Location	Date Collected	Sample Name	Chloro-methane	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methylene chloride	Naph-thalene	n-Butyl-benzene
MTCA Method B Groundwater CULs			3.4	0.52	80	1,600	80	0.24[a]	800	0.56	800	16,000[b]	5.8	160	NV
	01/20/2009	MW46S012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/04/2009	MW46S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/08/2010	MW46S010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
MW-47S	07/26/2004	MW51-072604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW51-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	01/19/2005	MW47S011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW47S042605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	07/19/2005	MW47S071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 UJ	1 UJ	1 UJ
	10/18/2005	MW47S101805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/18/2006	MW47S011806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/26/2006	MW47S042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/01/2006	MW47S080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	10/24/2006	MW47S102406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/09/2007	MW47S010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/10/2007	MW47S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/07/2007	MW47S080707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/10/2008	MW47S011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/07/2008	MW47S080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/20/2009	MW47S012109	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/03/2009	MW47S080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/07/2010	MW47S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
Deep UWBZ															
MW-20D	07/27/2004	MW49-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW49-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW20D012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW20D042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	07/19/2005	MW20D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 UJ	1 UJ	1 UJ
	10/20/2005	MW20D102005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/19/2006	MW20D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.52	1 U
	04/27/2006	MW20D042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/02/2006	MW20D080206	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	10/25/2006	MW20D102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/10/2007	MW20D011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/11/2007	MW20D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2007	MW20D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/11/2008	MW20D011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2008	MW20080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/20/2009	MW20D012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/04/2009	MW20D080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/08/2010	MW20D010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
MW-29	08/06/2002	GW-123	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	0.5 U	2 U	2 U	2 U
	01/22/2004	MW29-012204	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	04/30/2004	MW29-043004	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
MW-29D	10/21/2004	MW29R-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	01/19/2005	MW29D011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW29D042605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	07/19/2005	MW29D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 UJ	1 UJ	1 UJ

Location	Date Collected	Sample Name	Chloro-methane	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methylene chloride	Naph-thalene	n-Butyl-benzene
MTCA Method B Groundwater CULs			3.4	0.52	80	1,600	80	0.24[a]	800	0.56	800	16,000[b]	5.8	160	NV
	10/18/2005	MW29D101805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/18/2006	MW29D011806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/26/2006	MW29D042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/01/2006	MW29D080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	10/24/2006	MW29D102406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/09/2007	MW29D010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/10/2007	MW29D041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/07/2007	MW29D080707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/10/2008	MW29D011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	57.1	1 U
	08/07/2008	MW29D080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/20/2009	MW29D012109	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/03/2009	MW29D080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/07/2010	MW29D010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/22/2011	MW29D	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-45D	07/26/2004	MW45-072604	0.50 U	0.50 U	0.50 U	0.50 U	0.52	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW45-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.81	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW45D012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW45D042705	1 U	1 U	1 U	1 U	1.09	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
dup	04/26/2005	MW45D042705-Dup	1 U	1 U	1 U	1 U	1.05	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	07/19/2005	MW45D072005	1 UJ	1 UJ	1 UJ	1 UJ	1.17 J	1 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 UJ	1 UJ	1 UJ
	10/21/2005	MW45D102105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
dup	10/21/2005	MW45D102105-DUP	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/19/2006	MW45D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/28/2006	MW45D042806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
dup	04/28/2006	MW45D042806-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/03/2006	MW45D080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
dup	08/03/2006	MW45D080306-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	10/25/2006	MW45D102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
dup	10/25/2006	MW45D102506-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/10/2007	MW45D011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
dup	01/10/2007	MW45D011007-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/11/2007	MW45D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
dup	04/11/2007	MW45D041107-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2007	MW45D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/11/2008	MW45D011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2008	MW45D080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/20/2009	MW45D012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
dup	01/20/2009	MW45D012209-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/04/2009	MW45D080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/07/2010	MW45D010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/24/2011	MW45D	--	--	--	--	--	--	--	--	--	--	--	--	--
dup	08/24/2011	MW45DDUP	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/27/2004	MW47-072704	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW47-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	01/20/2005	MW46D012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW46D042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	07/19/2005	MW46D072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 UJ	1 UJ	1 UJ

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Chloro-methane	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Ethyl-benzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methylene chloride	Naph-thalene	n-Butyl-benzene
MTCA Method B Groundwater CULs			3.4	0.52	80	1,600	80	0.24[a]	800	0.56	800	16,000[b]	5.8	160	NV
	10/19/2005	MW46D101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/19/2006	MW46D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/27/2006	MW46D042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/03/2006	MW46D080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	10/25/2006	MW46D102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/11/2007	MW46D011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/11/2007	MW46D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2007	MW46D080807	1 U	1 U	1 U	1 U	3.33	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/11/2008	MW46D011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/08/2008	MW46D080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/20/2009	MW46D012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/04/2009	MW46D080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/08/2010	MW46D010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/22/2011	MW46D	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-47D	07/26/2004	MW50-072604	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	10/21/2004	MW50-102104	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	2.0 U	2.0 U	2.0 U
	01/19/2005	MW47D011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	04/26/2005	MW47D042605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
	07/19/2005	MW47D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 UJ	1 UJ	1 UJ
	10/18/2005	MW47D101805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/18/2006	MW47D011806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/26/2006	MW47D042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/01/2006	MW47D080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	10/24/2006	MW47D102406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/09/2007	MW47D010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	04/10/2007	MW47D041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/07/2007	MW47D080707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/10/2008	MW47D011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/07/2008	MW47D080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/20/2009	MW47D012109	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/03/2009	MW47D080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	01/07/2010	MW47D010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	08/22/2011	MW47D	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetrachloro-ethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloro-ethene	Trichlorofluoro-methane	Vinyl chloride
MTCA Method B Groundwater CULs			NV	16,000	NV	1.5	NV	0.081	640	160	0.24[a]	0.49	2,400	0.029
Shallow UWBZ														
MW-9S	07/27/2004	MW9R-072704	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/22/2004	MW9R-102204	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/19/2005	MW9S011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
	04/26/2005	MW9S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW9S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/19/2005	MW9S101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW9S011906	1 U	1 U	1 U	1 U	1 U	1 U	1.23	1 U	1 U	1 U	1 U	1 U
	04/26/2006	MW9S042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW9S080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW9S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/09/2007	MW9S010907	1 U	1.55	1 U	1 U	1 U	1 U	2.43	1 U	1 U	1 U	1 U	1 U
	04/10/2007	MW9S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW9S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2008	MW9S011008	1 U	1.80	1 U	1 U	1 U	1 U	3.09	1 U	1 U	1 U	1 U	1 U
	08/07/2008	MW9S080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW9S012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2009	MW9S080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW9S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-20S	08/05/2002	GW-120	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/22/2004	MW20-012204	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/03/2004	MW20-050304	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/27/2004	MW20-072704	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW20-102104	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW20S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
	04/26/2005	MW20S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW20S071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/20/2005	MW20S102005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW20S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/27/2006	MW20S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/02/2006	MW20S080206	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW20S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2007	MW20S011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW20S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW20S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW20S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW20S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW20S012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW20S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	MW20S010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-28S	08/07/2002	GW-119	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/22/2004	MW28-012204	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.74	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	05/03/2004	MW28-050304	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	07/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/21/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04/26/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)

Location	Date Collected	Sample Name	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetrachloro-ethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloro-ethene	Trichlorofluoro-methane	Vinyl chloride
MTCA Method B Groundwater CULs			NV	16,000	NV	1.5	NV	0.081	640	160	0.24[a]	0.49	2,400	0.029
	07/19/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/19/2006	MW28S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/27/2006	MW28S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/02/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2007	MW28S011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2007	MW28S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/11/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/08/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-45S	07/26/2004	MW46-072604	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**6.5**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW46-102104	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW45S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
	04/26/2005	MW45S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2005	MW45S042705-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW45S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/21/2005	MW45S102105	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW45S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/28/2006	MW45S042806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW45S080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW45S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2007	MW45S011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW45S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW45S080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW45S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW45S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW45S012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW45S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW45S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-46S	07/27/2004	MW48-072704	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW48-102104	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW46S012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
	04/26/2005	MW46S042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW46S072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/19/2005	MW46S101905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW46S011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/27/2006	MW46S042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW46S080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW46S102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2007	MW46S011107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW46S041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW46S080807	1 U	1 U	1 U	1 U	1 U	**4.41**	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW46S011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW46S080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetrachloro-ethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloro-ethene	Trichlorofluoro-methane	Vinyl chloride
MTCA Method B Groundwater CULs			NV	16,000	NV	1.5	NV	0.081	640	160	0.24[a]	0.49	2,400	0.029
	01/20/2009	MW46S012309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW46S080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	MW46S010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-47S	07/26/2004	MW51-072604	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW51-102104	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/19/2005	MW47S011905	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
	04/26/2005	MW47S042605	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW47S071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/18/2005	MW47S101805	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2006	MW47S011806	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2006	MW47S042606	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW47S080106	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/24/2006	MW47S102406	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/09/2007	MW47S010907	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2007	MW47S041007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2007	MW47S080707	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2008	MW47S011008	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2008	MW47S080708	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW47S012109	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2009	MW47S080309	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW47S010710	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Deep UWBZ														
MW-20D	07/27/2004	MW49-072704	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW49-102104	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**0.53**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW20D012005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
	04/26/2005	MW20D042705	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW20D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/20/2005	MW20D102005	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW20D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/27/2006	MW20D042706	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/02/2006	MW20D080206	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW20D102506	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2007	MW20D011007	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW20D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW20D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW20D011108	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW20080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW20D012209	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW20D080409	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	MW20D010810	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-29	08/06/2002	GW-123	2 U	0.5 U	2 U	0.5 U	2 U	**28**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	01/22/2004	MW29-012204	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**27**	0.57	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	04/30/2004	MW29-043004	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**21**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
MW-29D	10/21/2004	MW29R-102104	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**17**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/19/2005	MW29D011905	1 U	1 U	1 U	1 U	1 U	**18.8**	1 U	1 U	1 U	1 U	1 U	0.2 U
	04/26/2005	MW29D042605	1 U	1 U	1 U	1 U	1 U	**20.1**	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW29D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	**13.4 J**	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Location	Date Collected	Sample Name	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetrachloro-ethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloro-ethene	Trichlorofluoro-methane	Vinyl chloride
MTCA Method B Groundwater CULs			NV	16,000	NV	1.5	NV	0.081	640	160	0.24[a]	0.49	2,400	0.029
	10/18/2005	MW29D101805	1 U	1 U	1 U	1 U	1 U	**9.12**	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2006	MW29D011806	1 U	1 U	1 U	1 U	1 U	**11.6**	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2006	MW29D042606	1 U	1 U	1 U	1 U	1 U	**13.7**	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW29D080106	1 U	1 U	1 U	1 U	1 U	**6.51**	1 U	1 U	1 U	1 U	1 U	1 U
	10/24/2006	MW29D102406	1 U	1 U	1 U	1 U	1 U	**18.8**	1 U	1 U	1 U	1 U	1 U	1 U
	01/09/2007	MW29D010907	1 U	1 U	1 U	1 U	1 U	**18.5**	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2007	MW29D041007	1 U	1 U	1 U	1 U	1 U	**5.61**	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2007	MW29D080707	1 U	1 U	1 U	1 U	1 U	**15.2**	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2008	MW29D011008	1 U	1 U	1 U	1 U	1 U	**15.1**	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2008	MW29D080708	1 U	1 U	1 U	1 U	1 U	**4.60**	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW29D012109	1 U	1 U	1 U	1 U	1 U	**11.1**	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2009	MW29D080309	1 U	1 U	1 U	1 U	1 U	**9.84**	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW29D010710	1 U	1 U	1 U	1 U	1 U	**12.1**	1 U	1 U	1 U	1 U	1 U	1 U
	08/22/2011	MW29D	--	--	--	--	--	**9.85**	--	--	--	--	--	--
MW-45D	07/26/2004	MW45-072604	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**6.3**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW45-102104	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**6.8**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW45D012005	1 U	1 U	1 U	1 U	1 U	**5.68**	1 U	1 U	1 U	1 U	1 U	0.2 U
	04/26/2005	MW45D042705	1 U	1 U	1 U	1 U	1 U	**6.78**	1 U	1 U	1 U	1 U	1 U	1 U
dup	04/26/2005	MW45D042705-Dup	1 U	1 U	1 U	1 U	1 U	**6.36**	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW45D072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	**4.96 J**	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/21/2005	MW45D102105	1 U	1 U	1 U	1 U	1 U	**2.06**	1 U	1 U	1 U	1 U	1 U	1 U
dup	10/21/2005	MW45D102105-DUP	1 U	1 U	1 U	1 U	1 U	**2.14**	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW45D011906	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/28/2006	MW45D042806	1 U	1 U	1 U	1 U	1 U	**3.52**	1 U	1 U	1 U	1 U	1 U	1 U
dup	04/28/2006	MW45D042806-Dup	1 U	1 U	1 U	1 U	1 U	**3.36**	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW45D080306	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	08/03/2006	MW45D080306-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW45D102506	1 U	1 U	1 U	1 U	1 U	**5.04**	1 U	1 U	1 U	1 U	1 U	1 U
dup	10/25/2006	MW45D102506-Dup	1 U	1 U	1 U	1 U	1 U	**5.24**	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2007	MW45D011007	1 U	1 U	1 U	1 U	1 U	**5.14**	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/10/2007	MW45D011007-Dup	1 U	1 U	1 U	1 U	1 U	**4.98**	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW45D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
dup	04/11/2007	MW45D041107-Dup	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW45D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW45D011108	1 U	1 U	1 U	1 U	1 U	**4.51**	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW45D080808	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW45D012209	1 U	1 U	1 U	1 U	1 U	**3.16**	1 U	1 U	1 U	1 U	1 U	1 U
dup	01/20/2009	MW45D012209-Dup	1 U	1 U	1 U	1 U	1 U	**3.20**	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW45D080409	1 U	1 U	1 U	1 U	1 U	**3.08**	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW45D010710	1 U	1 U	1 U	1 U	1 U	**3.65**	1 U	1 U	1 U	1 U	1 U	1 U
	08/24/2011	MW45D	--	--	--	--	--	**5.75**	--	--	--	--	--	--
dup	08/24/2011	MW45DDUP	--	--	--	--	--	**5.7**	--	--	--	--	--	--
	07/27/2004	MW47-072704	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**9.3**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW47-102104	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**9.8**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/20/2005	MW46D012005	1 U	1 U	1 U	1 U	1 U	**8.95**	1 U	1 U	1 U	1 U	1 U	0.2 U
	04/26/2005	MW46D042705	1 U	1 U	1 U	1 U	1 U	**10.7**	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW46D072005	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	**7.82 J**	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Table 3-15
Volatile Organic Compounds in Groundwater—Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetrachloro-ethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloro-ethene	Trichlorofluoro-methane	Vinyl chloride
MTCA Method B Groundwater CULs			NV	16,000	NV	1.5	NV	0.081	640	160	0.24[a]	0.49	2,400	0.029
	10/19/2005	MW46D101905	1 U	1 U	1 U	1 U	1 U	**3.76**	1 U	1 U	1 U	1 U	1 U	1 U
	01/19/2006	MW46D011906	1 U	1 U	1 U	1 U	1 U	**3.92**	1 U	1 U	1 U	1 U	1 U	1 U
	04/27/2006	MW46D042706	1 U	1 U	1 U	1 U	1 U	**5.91**	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2006	MW46D080306	1 U	1 U	1 U	1 U	1 U	**1.71**	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2006	MW46D102506	1 U	1 U	1 U	1 U	1 U	**7.96**	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2007	MW46D011107	1 U	1 U	1 U	1 U	1 U	**7.83**	1 U	1 U	1 U	1 U	1 U	1 U
	04/11/2007	MW46D041107	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2007	MW46D080807	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	01/11/2008	MW46D011108	1 U	1 U	1 U	1 U	1 U	**6.85**	1 U	1 U	1 U	1 U	1 U	1 U
	08/08/2008	MW46D080808	1 U	1 U	1 U	1 U	1 U	**2.20**	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW46D012309	1 U	1 U	1 U	1 U	1 U	**5.13**	1 U	1 U	1 U	1 U	1 U	1 U
	08/04/2009	MW46D080409	1 U	1 U	1 U	1 U	1 U	**5.05**	1 U	1 U	1 U	1 U	1 U	1 U
	01/08/2010	MW46D010810	1 U	1 U	1 U	1 U	1 U	**6.4**	1 U	1 U	1 U	1 U	1 U	1 U
	08/22/2011	MW46D	--	--	--	--	--	**6.9**	--	--	--	--	--	--
MW-47D	07/26/2004	MW50-072604	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**20**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	10/21/2004	MW50-102104	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	**19**	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	01/19/2005	MW47D011905	1 U	1 U	1 U	1 U	1 U	**17.2**	1 U	1 U	1 U	1 U	1 U	0.2 U
	04/26/2005	MW47D042605	1 U	1 U	1 U	1 U	1 U	**20.8**	1 U	1 U	1 U	1 U	1 U	1 U
	07/19/2005	MW47D071905	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	**14.5 J**	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
	10/18/2005	MW47D101805	1 U	1 U	1 U	1 U	1 U	**8.28**	1 U	1 U	1 U	1 U	1 U	1 U
	01/18/2006	MW47D011806	1 U	1 U	1 U	1 U	1 U	**9.45**	1 U	1 U	1 U	1 U	1 U	1 U
	04/26/2006	MW47D042606	1 U	1 U	1 U	1 U	1 U	**8.61**	1 U	1 U	1 U	1 U	1 U	1 U
	08/01/2006	MW47D080106	1 U	1 U	1 U	1 U	1 U	**9.61**	1 U	1 U	1 U	1 U	1 U	1 U
	10/24/2006	MW47D102406	1 U	1 U	1 U	1 U	1 U	**15.3**	1 U	1 U	1 U	1 U	1 U	1 U
	01/09/2007	MW47D010907	1 U	1 U	1 U	1 U	1 U	**15.5**	1 U	1 U	1 U	1 U	1 U	1 U
	04/10/2007	MW47D041007	1 U	1 U	1 U	1 U	1 U	**2.27**	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2007	MW47D080707	1 U	1 U	1 U	1 U	1 U	**7.12**	1 U	1 U	1 U	1 U	1 U	1 U
	01/10/2008	MW47D011008	1 U	1 U	1 U	1 U	1 U	**13.6**	1 U	1 U	1 U	1 U	1 U	1 U
	08/07/2008	MW47D080708	1 U	1 U	1 U	1 U	1 U	**4.58**	1 U	1 U	1 U	1 U	1 U	1 U
	01/20/2009	MW47D012109	1 U	1 U	1 U	1 U	1 U	**11.0**	1 U	1 U	1 U	1 U	1 U	1 U
	08/03/2009	MW47D080309	1 U	1 U	1 U	1 U	1 U	**8.64**	1 U	1 U	1 U	1 U	1 U	1 U
	01/07/2010	MW47D010710	1 U	1 U	1 U	1 U	1 U	**7.86**	1 U	1 U	1 U	1 U	1 U	1 U
	08/22/2011	MW47D	--	--	--	--	--	**15.4**	--	--	--	--	--	--

NOTES:
Bold number indicates a detected concentration that exceeds one or more of its screening criteria.
-- = not available.
CUL = cleanup level.
J = analyte was positively identified; associated numerical value is approximate concentration of analyte in sample.
MTCA = Washington State Department of Ecology's Model Toxics Control Act.
µg/L = micrograms per liter.
NS = not sampled.
NV = no value.
U = not detected at or above method reporting limit.
UWBZ = upper water-bearing zone.
[a] 1,3-Dichloropropene screening criteria.
[b] m-Xylenes screening criteria.

Table 3-16
Petroleum Hydrocarbons in Groundwater—Cell 3 (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater CUL			0.5	0.5
Shallow UWBZ				
MW-9S	10/19/2005	MW9S101905	0.457	0.479 U
	01/19/2006	MW9S011906	**0.961**	0.476 U
	04/26/2006	MW9S042606	**1.05**	0.477 U
	08/01/2006	MW9S080106	**1.52**	**0.576**
	10/25/2006	MW9S102506	**1.28**	**0.686**
	01/09/2007	MW9S010907	**0.760**	0.475 U
	04/10/2007	MW9S041007	**0.686**	0.479 U
	08/10/2007	MW9S081007	**0.882**	0.475 U
	01/10/2008	MW9S011008	**1.69**	0.478 U
	08/07/2008	MW9S080708	**1.89**	**0.701**
	01/20/2009	MW9S012309	**2.23**	**0.986**
	08/03/2009	MW9S080309	**1.53**	**0.873**
	01/07/2010	MW9S010710	**0.985**	**0.887**
MW-20S	08/05/2002	GW-120	0.280	0.520 U
	10/20/2005	MW20S102005	0.239 U	0.478 U
	01/19/2006	MW20S011906	0.238 U	0.477 U
	04/27/2006	MW20S042706	0.239 U	0.479 U
	08/02/2006	MW20S080206	0.326	0.5 U
	10/25/2006	MW20S102506	0.337	0.474 U
	01/10/2007	MW20S011007	0.239 U	0.478 U
	04/11/2007	MW20S041107	0.238 U	0.476 U
	08/08/2007	MW20S080807	0.238 U	0.477 U
	01/11/2008	MW20S011108	0.237 U	0.474 U
	08/08/2008	MW20S080808	0.416	0.492
	01/20/2009	MW20S012209	0.372	**0.637**
	08/04/2009	MW20S080409	0.243	**0.748**
	01/08/2010	MW20S010810	0.26	0.473 U
MW-28S	08/07/2002	GW-119	0.250 U	0.500 U
	10/19/2005	NS	NS	NS
	01/19/2006	MW28S011906	0.238 U	0.476 U
	04/27/2006	MW28S042706	0.238 U	0.476 U
	08/02/2006	NS	NS	NS
	10/25/2006	NS	NS	NS
	01/11/2007	NS	NS	NS
	04/10/2007	NS	NS	NS
	08/07/2007	NS	NS	NS
	01/11/2008	NS	NS	NS
	08/08/2008	NS	NS	NS
	01/20/2009	NS	NS	NS
	08/04/2009	NS	NS	NS
	01/08/2010	NS	NS	NS

Table 3-16
Petroleum Hydrocarbons in Groundwater—Cell 3 (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater CUL			0.5	0.5
MW-45S	10/21/2005	MW45S102105	0.238 U	0.475 U
	01/19/2006	MW45S011906	0.237 U	0.474 U
	04/28/2006	MW45S042806	0.384	0.478 U
	08/03/2006	MW45S080306	**0.537**	0.5 U
	10/25/2006	MW45S102506	0.262	0.476 U
	01/10/2007	MW45S011007	0.292	0.475 U
	04/11/2007	MW45S041107	0.237 U	0.474 U
	08/08/2007	MW45S080807	0.267	0.475 U
	01/11/2008	MW45S011108	0.238 U	0.477 U
	08/08/2008	MW45S080808	**0.578**	0.476 U
	01/20/2009	MW45S012209	**0.556**	**0.719**
	08/14/2009	MW45S081409	0.237 U	0.473 U
	01/07/2010	MW45S010710	0.368	0.474 U
MW-46S	10/19/2005	MW46S101905	0.24 U	0.48 U
	01/19/2006	MW46S011906	0.237 U	0.475 U
	04/27/2006	MW46S042706	0.331	0.479 U
	08/03/2006	MW46S080306	**0.558**	**0.713**
	10/25/2006	MW46S102506	0.416	0.48 U
	01/11/2007	MW46S011107	0.237 U	0.474 U
	04/11/2007	MW46S041107	0.238 U	0.475 U
	08/08/2007	MW46S080807	0.283	0.473 U
	01/11/2008	MW46S011108	0.287	0.477 U
	08/08/2008	MW46S080808	**0.658**	0.475 U
	01/20/2009	MW46S012309	**0.575**	**0.547**
	08/04/2009	MW46S080409	**0.525**	**0.508**
	01/08/2010	MW46S010810	**0.398**	**0.474 U**
MW-47S	10/18/2005	MW47S101805	0.242 U	0.484 U
	01/18/2006	MW47S011806	0.238 U	0.475 U
	04/26/2006	MW47S042606	0.238 U	0.476 U
	08/01/2006	MW47S080106	0.25 U	0.5 U
	10/24/2006	MW47S102406	0.238 U	0.477 U
	01/09/2007	MW47S010907	0.238 U	0.475 U
	04/10/2007	MW47S041007	0.237 U	0.474 U
	08/07/2007	MW47S080707	0.238 U	0.475 U
	01/10/2008	MW47S011008	0.239 U	0.477 U
	08/07/2008	MW47S080708	0.307	0.473 U
	01/20/2009	MW47S012109	0.298	**0.735**
	08/03/2009	MW47S080309	0.237 U	0.473 U
	01/07/2010	MW47S010710	0.237 U	0.473 U

Table 3-16
Petroleum Hydrocarbons in Groundwater—Cell 3 (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater CUL			0.5	0.5
Deep UWBZ				
MW-20D	10/20/2005	MW20D102005	0.238 U	0.476 U
	01/19/2006	MW20D011906	0.237 U	0.473 U
	04/27/2006	MW20D042706	0.238 U	0.476 U
	08/02/2006	MW20D080206	0.25 U	0.5 U
	10/25/2006	MW20D102506	0.238 U	0.476 U
	01/10/2007	MW20D011007	0.455	0.475 U
	04/11/2007	MW20D041107	0.237 U	0.475 U
	08/08/2007	MW20D080807	0.238 U	0.476 U
	01/11/2008	MW20D011108	0.238 U	0.476 U
	08/08/2008	MW20080808	0.237 U	0.474 U
	01/20/2009	MW20D012209	0.236 U	0.472 U
	08/04/2009	MW20D080409	0.237 U	0.475 U
	01/08/2010	MW20D010810	0.237 U	0.474 U
MW-29	08/06/2002	GW-123	0.250 U	0.500 U
MW-29D	10/18/2005	MW29D101805	0.237 U	0.475 U
	01/18/2006	MW29D011806	0.238 U	0.475 U
	04/26/2006	MW29D042606	0.238 U	0.476 U
	08/01/2006	MW29D080106	0.25 U	0.5 U
	10/24/2006	MW29D102406	0.238 U	0.475 U
	01/09/2007	MW29D010907	0.237 U	0.473 U
	04/10/2007	MW29D041007	0.237 U	0.474 U
	08/07/2007	MW29D080707	0.238 U	0.476 U
	01/10/2008	MW29D011008	0.239 U	0.477 U
	08/07/2008	MW29D080708	0.237 U	0.474 U
	01/20/2009	MW29D012109	0.237 U	**0.551**
	08/03/2009	MW29D080309	0.238 U	0.475 U
MW-45D	10/21/2005	MW45D102105	0.238 U	0.476 U
dup	10/21/2005	MW45D102105-DUP	0.238 U	0.476 U
	01/19/2006	MW45D011906	0.237 U	0.474 U
	04/28/2006	MW45D042806	0.334	0.48 U
dup	04/28/2006	MW45D042806-Dup	0.259	0.479 U
	08/03/2006	MW45D080306	**0.509**	0.5 U
dup	08/03/2006	MW45D080306-Dup	0.482	0.5 U
	10/25/2006	MW45D102506	0.311	0.476 U
dup	10/25/2006	MW45D102506-Dup	0.315	0.475 U
	01/10/2007	MW45D011007	0.361	0.475 U
dup	01/10/2007	MW45D011007-Dup	0.368	0.473 U
	04/11/2007	MW45D041107	0.281	0.476 U
dup	04/11/2007	MW45D041107-Dup	0.305	0.475 U
	08/08/2007	MW45D080807	0.238 U	0.477 U

Table 3-16
Petroleum Hydrocarbons in Groundwater—Cell 3 (mg/L)
Former PWT Site RI/FS

Location	Date Collected	Sample Name	Diesel-Range Organics	Residual-Range Organics
MTCA Method A Groundwater CUL			0.5	0.5
	01/11/2008	MW45D011108	0.238 U	0.476 U
	08/08/2008	MW45D080808	0.486	0.474 U
	01/20/2009	MW45D012209	0.404	**0.665**
dup	01/20/2009	MW45D012209-Dup	0.389	**0.629**
	08/04/2009	MW45D080409	0.414	0.477
	01/07/2010	MW45D010710	0.255	0.473 U
MW-46D	10/19/2005	MW46D101905	0.239 U	0.477 U
	01/19/2006	MW46D011906	0.237 U	0.475 U
	04/27/2006	MW46D042706	0.238 U	0.476 U
	08/03/2006	MW46D080306	0.25 U	0.5 U
	10/25/2006	MW46D102506	0.238 U	0.476 U
	01/11/2007	MW46D011107	0.238 U	0.476 U
	04/11/2007	MW46D041107	0.237 U	0.475 U
	08/08/2007	MW46D080807	0.238 U	0.477 U
	01/11/2008	MW46D011108	0.237 U	0.474 U
	08/08/2008	MW46D080808	0.237 U	0.474 U
	01/20/2009	MW46D012309	0.237 U	0.475 U
	08/04/2009	MW46D080409	0.237 U	0.475 U
	01/08/2010	MW46D010810	0.237 U	0.474 U
MW-47D	10/18/2005	MW47D101805	0.238 U	0.476 U
	01/18/2006	MW47D011806	0.237 U	0.475 U
	04/26/2006	MW47D042606	0.239 U	0.478 U
	08/01/2006	MW47D080106	0.25 U	0.5 U
	10/24/2006	MW47D102406	0.237 U	0.474 U
	01/09/2007	MW47D010907	0.238 U	0.476 U
	04/10/2007	MW47D041007	0.237 U	0.475 U
	08/07/2007	MW47D080707	0.237 U	0.475 U
	01/10/2008	MW47D011008	0.238 U	0.476 U
	08/07/2008	MW47D080708	0.237 U	0.474 U
	01/20/2009	MW47D012109	0.236 U	**0.586**
	08/03/2009	MW47D080309	0.237 U	0.474 U
	01/07/2010	MW47D010710	0.237 U	0.474 U

NOTES:

Bold number indicates a detected concentration that exceeds one or more of its screening criteria.

CUL = cleanup level.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

µg/L = micrograms per liter.

NS = not sampled.

U = not detected at or above method reporting limit.

UWBZ = upper water-bearing zone.

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
Outfall No. 1:															
10/30/1986	--	--	--	--	--	--	--	--	--	--	6000	--	--	--	**107**
	--	--	--	--	--	--	--	--	--	--	9000	--	--	--	--
03/03/1987	--	--	--	--	--	--	--	--	--	--	10100	--	--	--	**970**
11/24/1997	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**750**
02/11/1997	--	**8**	--	ND	--	**21**	--	ND	--	20	ND	--	ND	--	**2.8**
11/13/1998	5.9	**6**	2.6	2.5	24.7	**22.8**	1 U	1 U	10 U	9.5	5000 U	10000 U	5 U, 10 U	--	**2.23**
12/28/1998	81	**5.5**	69	1.5	285	**12.5**	23	3 U	133	**287**	5000 U	486000	25 U	**15.3**	**130**
12/28/1998	75.5	**4.9**	61.5	3.1	53.4	4.2	22	3 U	116	46.4	5000 U	491000	25 U	--	**90.5**
02/02/1999	10.1	**7.4**	4.5	1.3	18.7	8.7	1.5	1 U	18.1	5 U	5000 U	33000	1 U	**0.58**	**4.92**
11/10/1999	11	**10**	5 U	5 U	29	**27**	--	--	10 U	10 U	5000 U	6000	--	0.1 U	**1.9**
12/01/1999	8	**7**	5 U	5 U	25	**23**	--	--	10 U	10 U	5000 U	5000 U	--	0.1 U	**1.1**
02/01/2000	11	**10**	5 U	5 U	21	**14**	--	--	10 U	10 U	5000 U	6000	--	0.1 U	**1.4**
05/04/2000	6	**6**	5 U	5 U	22	**22**	--	--	10 U	10 U	5000 U	6000	--	0.1 U	**1.3**
02/02/2001	10 U	--	5 U	--	18.8	--	--	--	10 U	--	5000 U	ND	--	0.1 U	**0.6**
06/05/2001	15	--	5 U	--	26.8	--	--	--	18.8	--	5000 U	5000 U	--	0.096 U	**1.3**
08/21/2001	15.4	--	5 U	--	23.4	--	--	--	13.1	--	--	--	--	0.096 U	0.48 U
09/26/2001	10.5	--	9.1	--	55.5	--	--	--	10 U	--	5000 U	5000 U	--	0.097 U	**2.7**
10/10/2001	13.1	--	12.2	--	36.6	--	--	--	17.3	--	5000 U	102000	--	0.096 U	**1.5**
10/23/2001	11.1	--	5 U	--	26.4	--	--	--	10 U	--	5000 U	5000 U	--	0.097 U	**1**
11/14/2001	12.5	--	5 U	--	17.9	--	--	--	10 U	--	5000 U	10000	--	0.097 U	**1.4**
11/28/2001	11.9	--	5 U	--	11.9	--	--	--	10 U	--	5000 U	5000 U	--	0.097 U	**1**
12/10/2001	12.3	--	5 U	--	18.5	--	--	--	10 U	--	5000 U	11000	--	0.096 U	0.48 U
01/02/2002	12.9	--	6.8	--	21.6	--	--	--	13.1	--	5000 U	24000	--	0.097 U	**0.68**
01/18/2002	10 U	--	5 U	--	20	--	--	--	10 U	--	5000 U	13000	--	0.097 U	**0.68**
02/06/2002	7.3	--	5 U	--	24.5	--	--	--	28.4	--	5000 U	9000	--	0.097 U	**0.5**
03/12/2002	10.7	--	5 U	--	17	--	--	--	10 U	--	5000 U	9000	--	0.1 U	**1.4**
04/26/2002	17	--	5 U	--	16.1	--	--	--	10 U	--	5000 U	5000 U	--	0.097 U	0.49 U
01/30/2003	13.6	--	10.3	--	23.7	--	--	--	17.7	--	5000 U	105000	--	**0.35**	**2.6**
03/07/2003	12.9	--	5 U	--	15.1	--	--	--	17.9	--	5000 U	55000	--	0.096 U	**1.1**
04/23/2003	--	**6.6**	--	5 U	--	**21.2**	--	--	--	10 U	5000 U	5000 U	--	0.096 U	**0.96**
10/15/2003	7.1	**6.7**	--	--	23.1	**23.5**	--	--	35.8	32	5000 U	5000	0.55	0.096 U	**3.4**
11/19/2003	8.5	**8**	10.5	5 U	15.1	**11.4**	2 U	2 U	10 U	10 U	5000 U	9000	0.47 U	0.094 U	**1.8**
12/10/2003	12.8	**6.2**	8.3	--	29.7	**11**	4.1	--	26.1	--	5000 U	5000 U	--	0.096 U	**1.7**
01/14/2004	20 U	20 U	5 U	5 U	10 U	10 U	2 U	2 U	10 U	10 U	5000 U	11000	0.48 U	0.095 U	**1.7**

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
02/17/2004	5 U	5 U	5 U	5 U	13.9	10 U	2 U	2 U	10 U	10 U	5000 U	5000 U	0.48 U	0.096 U	**1.8**
03/25/2004	8	**7.3**	5 U	5 U	10 U	10 U	2 U	2 U	10 U	10 U	5000 U	5000 U	0.36 U	0.048 U	**0.81**
04/14/2004	10.4	--	5 U	--	12.2	--	2 U	--	10 U	--	5000 U	5000 U	0.36 U	0.048 U	**0.69**
05/27/2004	6.5	**8**	5 U	5 U	27.3	**25.7**	2 U	2 U	10 U	10 U	5000 U	5000	0.48 U	0.096 U	**3.1**
08/25/2004	23.7	**23.3**	5 U	5 U	28.3	**25.9**	2 U	2 U	10 U	10 U	5000 U	5000 U	0.50 U	0.098 U	**6.2**
09/13/2004	21.2	**16.1**	7.5	5 U	26.2	**24.6**	2 U	2 U	13.3	10 U	5000 U	17000	0.50 U	0.097 U	**5.0**
10/08/2004	16.5	**10.1**	8.2	5 U	25.7	**15.6**	2 U	2 U	10 U	10 U	5000 U	17000	0.48 U	**0.12**	**3.6**
11/15/2004	8.7	**8.5**	5 U	5 U	15.9	**12.8**	2 U	2 U	12.1	10 U	5000 U	20000	0.30 U	0.048 U	**0.96**
12/07/2004	5.9	5 U	5 U	5 U	10 U	10 U	2 U	2 U	10 U	10 U	5000 U	13000	0.30 U	0.048 U	**1.3**
01/07/2005	6.5	**5.6**	5 U	5 U	11.8	**11.4**	2 U	2 U	10 U	11.4	5000 U	--	0.30 U	0.048 U	**1.1**
03/16/2005	6.9	**5.3**	5 U	5 U	16.8	10 U	4.2	2 U	54.3	10 U	5000 U	--	0.48 U	0.095 U	**0.94**
04/25/2005	50 U	50 U	20 U	20 U	--	--	--	--	15 U	15 U	--	9000	0.19 U	--	**0.732**
05/18/2005	13.9	--	20 U	20 U	--	--	--	--	15 U	15 U	--	--	0.192 U	--	0.192 U
06/22/2005	10.3	**10**	6.51	3.21	--	--	--	--	14.5	15.6	--	2000	0.19 U	--	**0.663**
09/30/2005	14.1	**11.1**	8.3	5 U	26.1	**25.4**	0.641	0.1 U	10 U	10 U	5000 U	15000	0.949 U	0.949 U	1.42 U
10/31/2005	12.8	**10**	5 U	5 U	15.4	**11.2**	1.19	0.1 U	12.6	10 U	5000 U	77000	0.955 U	--	**4.4**
11/29/2005	7.54	**6.94**	5 U	5 U	11.7	**11.3**	0.25	0.1 U	10 U	10 U	5000 U	5000 U	0.962 U	0.962 U	1.44 U
12/30/2005	8.18	**6.63**	5 U	5 U	10.4	10 U	0.668	0.1 U	10 U	10 U	5000 U	6000	0.95 U	0.95 U	1.42 U
01/06/2006	8.25	**4.96**	6.3	5 U	10.4	10 U	1.35	0.444	10 U	10 U	5000 U	7000	0.951 U	0.951 U	1.43 U
02/21/2006	6.79	**5.67**	5 U	5 U	10.9	10 U	0.215	0.1 U	10 U	10 U	5000 U	6000	0.956 U	0.956 U	1.43 U
03/09/2006	7.38	**4.67**	7	5 U	10 U	10 U	0.956	0.496	10 U	10 U	5000 U	17000	0.947 U	0.947 U	1.42 U
04/10/2006	8.61	**7.91**	5.56 U	5 U	14.4	**12.6**	0.134	0.1 U	11.1 U	10 U	5000 U	5000 U	0.95 U	0.95 U	1.42 U
05/22/2006	11.1	**10.5**	5 U	5 U	10.1	**11.2**	0.168	0.1 U	10.5	10 U	5000 U	5000	0.951 U	0.951 U	1.43 U
07/12/2006	9	**8.82**	5 U	5 U	10 U	10 U	0.792	0.1 U	11.7	42.3	5000 U	8000	1.01 U	1.01 U	1.52 U
09/18/2006	6.71	**6.73**	5 U	5 U	10 U	10 U	0.81	0.1 U	10 U	10 U	5000 U	8000	0.951 U	0.951 U	1.43 U
10/16/2006	6.21	**6.81**	5.7	5 U	28	**15.5**	0.234	0.1 U	10 U	10 U	5000 U	8000	0.955 U	0.955 U	1.43 U
11/02/2006	5.68	**5.67**	5 U	5 U	13.6	10 U	0.252	0.1 U	11.8	12.5	5000 U	5000 U	0.953 U	0.953 U	1.43 U
12/11/2006	5.93	**4.9**	5 U	5 U	10	10 U	0.284	0.1 U	10 U	10 U	5000 U	10000	4.75 U	0.95 U	4.75 U
02/14/2007	5.06	**5.1**	5 U	5 U	10.9	10 U	0.235	0.1 U	12.5	10 U	5000 U	5000 U	0.947 U	0.947 U	1.42 U
03/02/2007	5.7	**4.89**	5 U	5 U	10 U	10 U	0.188	0.1 U	10 U	17.9	5000 U	5000 U	0.948 U	0.948 U	1.42 U
05/02/2007	8.68	**8.49**	5 U	5 U	10 U	10 U	0.14	0.1 U	10 U	65.7	5000 U	5000 U	0.953 U	0.953 U	1.43 U
06/05/2007	6.56	**6.79**	5 U	5 U	10 U	10 U	2.42	2.03	10 U	10 U	5000 U	7000	0.951 U	0.951 U	1.43 U
10/16/2007	5.46	**6.47**	5 U	5 U	10.1	**12.6**	0.1 U	0.1 U	15.1	14.1	5000 U	5000 U	0.95 U	0.952 U	1.43 U
11/29/2007	5.35	**4.75**	5 U	5 U	10 U	10 U	0.303	0.1 U	10 U	10 U	5000 U	11000	0.96 U	0.95 U	1.42 U
12/18/2007	1 U	1 U	6.8	5 U	10 U	10 U	0.84	0.1 U	10 U	10 U	5000 U	34000	0.95 U	0.946 U	1.42 U

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
01/03/2008	3.66	**3.85**	5 U	5 U	10 U	10 U	0.3	0.1 U	10.2	10 U	5000 U	13000	0.95 U	0.949 U	1.42 U
03/13/2008	4.56	**4.71**	5 U	5 U	10 U	10 U	0.332	0.1 U	14.1	13.3	5000 U	5000 U	2.00 U	2 U	3.01 U
04/08/2008	3.68	**3.57**	5 U	5 U	10.1	**12.7**	0.18	0.1	10 U	70.4	5000 U	8000	0.95 U	0.951 U	1.43 U
05/13/2008	7.64	**7.34**	5 U	5 U	10 U	**11.2**	0.129	0.1 U	10 U	10 U	5000 U	5000 U	0.948 U	0.948 U	1.42 U
06/03/2008	11.1	**10**	5 U	5 U	22.4	**21.6**	0.343	0.1 U	18.1	18.5	5000 U	5000 U	0.95 U	0.95 U	1.42 U
10/03/2008	10.8	**9.43**	5 U	5 U	10 U	10 U	0.849	0.31	10 U	10 U	5000 U	5000 U	0.95 U	0.947 U	1.42 U
11/20/2008	6.01	**5.9**	5 U	5 U	10 U	10 U	0.154	0.1 U	14	17.4	5000 U	5000 U	0.95 U	0.948 U	1.42 U
01/07/2009	5.63	**4.32**	2.58	1.32	16.1	**12.8**	0.571	0.1 U	10.7	10 U	5000 U	11000	0.946 U	0.946 U	1.42 U
02/10/2009	5.85	**5.25**	1.15	1 U	9.01	6.7	0.205	0.1 U	16.7	15.1	5000 U	5000 U	1.03 U	1.03 U	1.54 U
03/17/2009	4.35	**3.67**	1.82	1.15	11	**9.35**	0.388	0.1 U	10 U	10 U	5000 U	5000 U	0.946 U	0.946 U	1.42 U
04/28/2009	5.19	**4.98**	1.19	1 U	9.43	8.43	0.26	0.136	10 U	10 U	5000 U	5000	0.948 U	0.948 U	1.42 U
05/04/2009	5.72	**5.17**	2.96	2.31	21.8	**19.5**	0.234	0.1 U	10.2	10 U	5000 U	5000 U	0.946 U	0.946 U	1.42 U
08/12/2009	1 U	**1 U**	11.6	10.7	5.05	4.43	3.41	1.81	10 U	10 U	5000 U	94000	--	--	--
10/14/2009	1.44	**1.25**	8.81	9.01	6.43	5.87	0.894	0.644	65.4	69.6	5000 U	5000 U	0.951 U	0.951 U	**2.32**
11/06/2009	6.66	**1 U**	2.22	1 U	14.9	13.2	0.22	0.1 U	33.1	28.8	5000 U	5000 U	0.946 U	0.473 U	0.946 U
12/15/2009	6.12	**3.1**	1.69	1 U	11	**9.15**	0.315	0.1 U	10 U	10 U	5000 U	7000	0.944 U	0.944 U	1.42 U
01/15/2010	--	--	--	--	11.4	--	--	--	11.9	11.5	--	--	--	0.0473 U	0.473 U
02/03/2010	--	--	--	--	38.1	--	--	--	16.2	10 U	--	--	--	**0.456**	**0.825**
03/11/2010	--	--	--	--	9.02	--	--	--	17.3	12.4	--	--	--	--	0.472 U
04/02/2010	--	--	--	--	9.55	--	--	--	10 U	10 U	--	--	--	--	0.478 U
05/04/2010	--	--	--	--	12.2	--	--	--	10 U	14.1	--	5000 U	--	0.0472 U	0.474 U
06/10/2010	--	--	--	--	11.2	--	--	--	12.1	26.7	--	5000 U	--	0.0476 U	**0.55**
Outfall No. 2:															
	--	--	--	--	--	--	--	--	--	--	10000	--	--	--	--
03/03/1987	--	--	--	--	--	--	--	--	--	--	4600	--	--	--	**190**
	--	--	--	--	--	--	--	--	--	--	14600	--	--	--	--
11/24/1997	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**60.0**
02/11/1997	--	**30**	--	**31**	--	**44**	--	**6**	--	**157**	ND	--	0.7	--	**11.0**
05/13/1998	49.2	**2.3**	58.8	1.4	85.3	**9**	17.1	1 U	650	**176**	8260	486000	1 U	--	**3.4**
05/13/1998	46.4	**2.4**	53.9	1.4	79.7	**9**	16.6	1 U	620	18.1	9430	576000	1 U	--	**6.0**
11/13/1998	7	**2.6**	6.6	1.3	15	**20.9**	2.8	1 U	442	**340**	5000 U	16000	5 U, 10 U	**0.125**	**14.0**
11/13/1998	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1 U
12/28/1998	1.1	1 U	1 U	1 U	3.1	2.3	1 U	3 U	314	**228**	5000 U	10000 U	1 U	0.1 U	1 U
02/02/1999	2.8	**1.6**	1.6	1 U	4.4	3.5	1.1	1 U	221	**169**	5000 U	10000 U	1 U	0.1 U	**1.28**
03/03/1999	1.8	1 U	2.4	1.1	4.7	2.7	1.4	1 U	389	**328**	5000 U	13000	1 U	--	**1.1**

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	$11^a/74^b$	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration^c	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490^b	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100^d	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100^d	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
12/01/1999	6	**1**	11	5 U	16	10 U	--	--	436	**290**	5000 U	39000	--	0.1 U	**1**
02/01/2000	54	5 U	88	5 U	125	10 U	--	--	578	62	5000 U	342000	--	0.1 U	**6.0**
05/04/2000	33	**4**	51	5 U	119	**11**	--	--	670	84	5000 U	482000	--	0.1 U	**2**
02/02/2001	14.2	--	35.3	--	81.1	--	--	--	441	--	5000 U	102000	--	0.1 U	**2.1**
06/05/2001	10 U	--	5 U	--	10 U	--	--	--	296	--	5000 U	5000 U	--	0.096 U	**2.7**
08/22/2001	10 U	--	5.3	--	21.4	--	--	--	322	--	--	--	--	0.096 U	**5.7**
09/26/2001	5 U	--	5 U	--	13.3	--	--	--	172	--	5000 U	20000	--	0.096 U	**2.3**
10/10/2001	10.5	--	9.6	--	25.1	--	--	--	379	--	5000 U	94000	--	0.096 U	**1.7**
10/23/2001	5 U	--	5 U	--	10 U	--	--	--	138	--	5000 U	5000 U	--	0.097 U	**1**
11/14/2001	10 U	--	5 U	--	10 U	--	--	--	133	--	5000 U	13000	--	0.097 U	**1.1**
11/28/2001	7.2	--	6.4	--	13.1	--	--	--	153	--	5000 U	51000	--	0.097 U	**1.5**
12/10/2001	6.8	--	7.1	--	16.8	--	--	--	217	--	5000 U	93000	--	0.098 U	**1.8**
01/02/2002	5.4	--	6.8	--	15.3	--	--	--	252	--	5000 U	63000	--	0.097 U	**1.7**
01/18/2002	16.4	--	21.7	--	44.5	--	--	--	563	--	5000 U	228000	--	0.098 U	**1.9**
02/06/2002	12.1	--	17.4	--	37.6	--	--	--	675	--	5000 U	102000	--	0.096 U	**1.3**
03/12/2002	10	--	8.2	--	20.3	--	--	--	378	--	5000 U	66000	--	0.1 U	**2**
04/26/2002	10 U	--	5 U	--	10 U	--	--	--	703	--	5000 U	16000	--	0.098 U	**1.3**
01/30/2003	10.5	--	15.1	--	35.9	--	--	--	331	--	5000 U	202000	--	0.097 U	**1.5**
03/07/2003	5 U	--	5 U	--	10 U	--	--	--	161	--	5000 U	18000	--	0.096 U	**1.8**
04/23/2003	--	5 U	--	5 U	--	10 U	--	--	--	**191**	5000 U	28000	--	0.096 U	**1.8**
10/15/2003	1.7	--	--	--	--	--	--	--	215	**167**	5000 U	28000	--	0.096 U	**1.9**
11/19/2003	5 U	5 U	6.2	5 U	10 U	10 U	2.1	2.2	98.4	93.6	5000 U	27000	0.47 U	0.094 U	**2.4**
12/10/2003	--	--	--	--	--	--	--	--	204	**165**	5000 U	11000	--	0.096 U	**1.1**
01/14/2004	20 U	20 U	5 U	5 U	10 U	10 U	2 U	2 U	159	**136**	5000 U	15000	0.48 U	0.095 U	**1.3**
02/17/2004	5 U	5 U	5 U	5 U	10 U	10 U	2 U	2 U	249	**222**	5000 U	7000	0.48 U	0.096 U	**1.3**
03/25/2004	5 U	5 U	5 U	5 U	10 U	10 U	2 U	2 U	277	**274**	5000 U	5000 U	0.36 U	0.048 U	**1.2**
04/14/2004	10 U	--	5 U	--	10 U	--	2 U	--	273	--	5000 U	5000 U	0.36 U	0.048 U	**1.3**
05/27/2004	5 U	5 U	5 U	5 U	10 U	10 U	2 U	2 U	172	**127**	5000 U	8000	0.48 U	0.096 U	**1.7**
08/25/2004	4 U	4 U	5 U	5 U	10 U	10 U	2 U	2 U	165	**130**	5000 U	16000	0.48 U	0.095 U	**4.0**
09/13/2004	7.4	5 U	7.8	5 U	12.8	10 U	3.9	2 U	174	85.2	5000 U	83000	0.83	0.098 U	**13.0**
10/08/2004	5 U	5 U	8.1	5 U	12.6	10 U	5.2	2 U	168	89.9	29000	85000	2.4 U	0.096 U	**4.4**
11/15/2004	5 U	5 U	5 U	5 U	10 U	10 U	2 U	2 U	245	**228**	5000 U	20000	0.30 U	0.048 U	**0.75**
12/07/2004	5 U	5 U	5 U	5 U	10 U	10 U	3	2 U	197	**135**	5000 U	44000	0.3 U	0.048 U	**1.7**
01/07/2005	5 U	5 U	5 U	5 U	14.5	10 U	6.6	2 U	438	**231**	5200	--	0.3 U	0.048 U	**1.4**
03/16/2005	5 U	5 U	5 U	5 U	10.6	10 U	6.6	2 U	501	**321**	5000 U	--	0.5 U	0.098 U	**2.4**

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
04/25/2005	50 U	50 U	20 U	20 U	--	--	--	--	149	**133**	--	8000	0.194 U	--	**2.39**
05/18/2005	2.95	--	20 U	20 U	--	--	--	--	246	**160**	--	--	1.9 U	--	1.9 U
06/22/2005	2.5 U	2.5 U	4.73	2.5 U	--	--	--	--	387	**361**	--	4000	0.192 U	--	**1.37**
09/30/2005	3.45	**2**	5 U	5 U	10 U	10 U	1.93	0.262	152	110	5000 U	34000	0.953 U	0.953 U	**2.05**
10/31/2005	1.29	1 U	5 U	5 U	10 U	10 U	0.706	0.1 U	96.1	90.5	5000 U	6000	0.951 U	--	**4.4**
11/29/2005	1 U	1 U	5 U	5 U	10 U	10 U	0.16	0.1 U	248	**259**	5000 U	5000 U	0.95 U	0.95 U	1.42 U
12/30/2005	1.17	1 U	5 U	5 U	10 U	10 U	0.335	0.1 U	183	**184**	5000 U	5000 U	0.948 U	0.948 U	1.42 U
01/06/2006	1 U	1 U	5 U	5 U	10 U	10 U	0.61	0.136	115	104	5000 U	5000	0.95 U	0.95 U	1.42 U
02/21/2006	1 U	1 U	5 U	5 U	10 U	10 U	0.2	0.1 U	248	**266**	5000 U	5000 U	0.951 U	0.951 U	1.43 U
03/09/2006	1.45	1 U	5 U	5 U	10 U	10 U	1.09	0.148	250	**209**	5000 U	6000	0.949 U	0.949 U	1.42 U
04/10/2006	1 U	1 U	5.56 U	5 U	11.1 U	10 U	0.1 U	0.1 U	324	**330**	5000 U	5000 U	0.951 U	0.951 U	1.43 U
05/22/2006	1 U	1 U	5 U	5 U	10 U	10 U	0.309	0.1 U	224	**180**	5000 U	7000	0.952 U	0.952 U	1.43 U
07/12/2006	1.05	1 U	5 U	5 U	10 U	10 U	0.425	0.1 U	354	**367**	5000 U	8000	1.02 U	1.02 U	1.53 U
09/18/2006	1.75	**1.84**	5 U	5 U	10 U	10 U	0.468	0.1 U	224	**176**	5000 U	5000 U	0.949 U	0.949 U	1.42 U
10/16/2006	1 U	1 U	5 U	5 U	10 U	10 U	0.462	0.1 U	163	**127**	5000 U	8000	0.96 U	0.96 U	1.44 U
11/02/2006	1 U	1 U	5 U	5 U	10 U	10 U	0.401	0.1 U	146	**128**	5000 U	5000 U	0.949 U	**1.08**	1.42 U
12/11/2006	1 U	1 U	5 U	5 U	10 U	10 U	0.305	0.1 U	136	**129**	5000 U	6000	4.75 U	0.95 U	4.75 U
02/14/2007	1 U	1 U	5 U	5 U	10 U	10 U	0.521	0.1 U	234	**210**	5000 U	5000 U	0.949 U	0.949 U	1.42 U
03/02/2007	1 U	1 U	5 U	5 U	10 U	10 U	0.438	0.1 U	161	**131**	5000 U	5000 U	0.948 U	0.948 U	1.42 U
05/02/2007	1.67	1 U	5 U	5 U	10 U	10 U	0.1 U	0.1 U	431	**314**	5000 U	24000	0.954 U	0.954 U	1.43 U
06/05/2007	1.24	**1.48**	5 U	5 U	10 U	10 U	0.957	2.2	407	**365**	5000 U	10000	0.97 U	0.97 U	1.45 U
10/16/2007	1 U	1 U	5 U	5 U	10 U	10 U	0.16	0.1 U	326	**334**	5000 U	7000	0.95 U	0.952 U	1.43 U
11/29/2007	1 U	1 U	5 U	5 U	10 U	10 U	0.147	0.1 U	222	**212**	5000 U	5000 U	0.97 U	0.967 U	1.45 U
12/18/2007	1 U	1 U	5 U	5 U	10 U	10 U	0.15	0.1 U	111	111	5000 U	5000 U	0.95 U	0.949 U	1.42 U
01/03/2008	1.07	1 U	5 U	5 U	10 U	10 U	0.179	0.1 U	192	**174**	5000 U	8000	0.96 U	0.95 U	1.42 U
01/31/2008	--	--	--	--	--	--	--	--	157	**153**	--	--	--	--	--
03/13/2008	1 U	1 U	5 U	5 U	10 U	10 U	0.278	0.1 U	125	116	5000 U	5000 U	0.96 U	0.95 U	1.42 U
04/08/2008	1 U	1 U	5 U	5 U	10 U	10 U	0.48	0.1 U	183	**171**	5000 U	22000	0.96 U	0.955 U	1.43 U
05/13/2008	1.24	1 U	5 U	5 U	10 U	**10.3**	0.532	0.1 U	148	**126**	5000 U	13000	0.947 U	0.947 U	1.42 U
06/03/2008	1 U	1 U	5 U	5 U	10 U	10 U	0.182	0.1 U	110	103	5000 U	5000 U	0.95 U	0.947 U	1.42 U
10/03/2008	1.54	1 U	5 U	5 U	10 U	10 U	0.862	0.1 U	241	**207**	5000 U	17000	0.95 U	0.948 U	1.42 U
11/20/2008	1 U	1 U	5 U	5 U	10 U	10 U	0.232	0.1 U	92.2	81.4	5000 U	5000 U	0.95 U	0.955 U	1.43 U
01/07/2009	1 U	1 U	1 U	1 U	2.44	0.894	0.354	0.1 U	83.8	75.6	5000 U	5000	0.948 U	0.948 U	1.42 U
02/10/2009	1 U	1 U	1 U	1 U	2.86	1.42	0.744	0.1 U	96.2	59.4	5000 U	5000 U	1.01 U	1.01 U	1.52 U
03/17/2009	1 U	1 U	1 U	1 U	1.43	1.23	0.184	0.1 U	94.8	89.9	5000 U	5000 U	0.945 U	0.945 U	1.42 U

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
04/28/2009	1 U	1 U	1 U	1 U	2.63	2.13	0.222	0.1 U	98	98.4	5000 U	6000	0.946 U	0.946 U	1.42 U
05/04/2009	1.21	1 U	1 U	1 U	3.7	2.62	0.719	0.1 U	109	88.4	5000 U	5000 U	0.946 U	0.946 U	1.42 U
08/12/2009	1 U	1 U	1.02	1 U	4.85	4.63	0.532	0.1 U	143	**123**	5000 U	1380000	1.03 U	1.03 U	1.54 U
10/14/2009	1 U	1 U	1.05	1 U	4.62	2.23	0.893	0.1 U	92.8	80.9	5000 U	5000 U	0.944 U	0.944 U	**2.15**
11/06/2009	3.44	1 U	3.82	1 U	15.2	2.49	3.99	0.1 U	207	69.2	5000 U	22000	0.948 U	0.474 U	0.948 U
12/15/2009	1 U	1 U	1 U	1 U	2.13	1.25	0.349	0.1 U	55.4	49.2	5000 U	5000 U	0.95 U	0.95 U	1.42 U
01/15/2010	--	--	--	--	24.4	--	--	--	115	25.7	--	--	--	**0.0473**	0.473 U
02/03/2010	--	--	--	--	22.4	--	--	--	130	46.8	--	--	--	**0.076**	0.473 U
03/11/2010	--	--	--	--	2.6	--	--	--	87.0	77.2	--	--	--	--	**4.3**
04/02/2010	--	--	--	--	2.42	--	--	--	67.2	55.6	--	--	--	--	**0.808**
05/04/2010	--	--	--	--	1.66	--	--	--	79.7	72.6	--	6000	--	0.0474 U	0.473 U
06/10/2010	--	--	--	--	1.89	--	--	--	101	97.5	--	5000 U	--	0.0476 U	**0.552**
09/23/2010	--	--	--	--	2.69	--	--	--	92.6	13.2	--	5000	--	0.0495 U	0.477 U
10/26/2010	--	--	--	--	--	--	--	--	149	**123**	--	6000	--	0.0475 U	0.474 U
11/09/2010	--	--	--	--	--	--	--	--	217	24.5	--	266000	--	**0.0571**	0.478 U
12/20/2010	--	--	--	--	--	--	--	--	162	86.4	--	66000	--	0.0478 U	**0.629**
02/16/2011	--	--	--	--	--	--	--	--	112	111	--	9000	--	0.0476 U	0.478 U
03/29/2011	--	--	--	--	--	--	--	--	136	**137**	--	5000 U	--	0.0478 U	**1.76**
04/13/2011	--	--	--	--	--	--	--	--	125	114	--	5000 U	--	0.0477 U	**0.602**
05/11/2011	--	--	--	--	--	--	--	--	133	52.8	--	66000	--	0.0477 U	0.478 U
06/28/2011	--	--	--	--	--	--	--	--	123	92.1	--	25000	--	0.0475 U	0.475 U
07/12/2011	--	--	--	--	--	--	--	--	169	**161**	--	17000	--	0.0475 U	0.477 U
09/27/2011	--	--	--	--	--	--	--	--	221	82	--	29000	--	0.0477 U	0.478 U
10/11/2011	--	--	--	--	--	--	--	--	119	111	--	5000 U	--	0.0477 U	0.479 U
11/16/2011	--	--	--	--	--	--	--	--	60.2	65.3	--	5000	--	0.0478 U	0.477 U
12/28/2011	--	--	--	--	--	--	--	--	89.6	83.4	--	6000	--	**0.094**	--
01/18/2012	--	--	--	--	--	--	--	--	87.2	95.2	--	6000	--	**0.019**	**0.324**
Outfall No. 3:															
10/30/1986	--	--	--	--	--	--	--	--	--	--	3000	--	--	--	**68.0**
	--	--	--	--	--	--	--	--	--	--	6000	--	--	--	--
03/03/1987	--	--	--	--	--	--	--	--	--	--	3200	--	--	--	**210**
11/24/1997	--	--	--	--	--	--	--	--	--	--	7700	--	--	--	**230**
02/11/1997	--	**53**	--	10	--	**18**	--	**3**	--	**205**	ND	--	0.8	--	**9.0**
	--	**50**	--	8	--	**15**	--	2	--	**170**	ND	--	0.6	--	**9.0**
05/13/1998	47.3	**37.3**	7.9	**32**	23.9	**11.1**	2	1 U	509	**389**	5000 U	10000 U	1 U	0.1 U	**185**

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
11/13/1998	17.8	**10.8**	11	2.2	33.1	**14**	4.6	1 U	381	**232**	5000 U	21000	5 U, 10 U	**0.106**	**2.48**
11/13/1998	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.18**
11/13/1998	29	**5.5**	10.8	2.1	25.8	**10.2**	2.8	1 U	544	**392**	5000 U	19000	5 U, 10 U	--	**7.5**
12/28/1998	16.7	**4.3**	19.5	1.9	15.5	**23.5**	2.7	3 U	135	5.4	5000 U	54000	10 U	1 U	**151**
02/02/1999	8.1	**3.5**	6.6	1.5	15.8	6.9	2.8	1 U	122	69.4	5000 U	26000	1 U	0.1 U	**6.0**
03/03/1999	13.5	**2.6**	17.8	1.4	24.3	6.5	6	1 U	245	85.8	5000 U	10000 U	1 U	--	**8.8**
11/10/1999	12	**6**	16	5 U	31	**12**	--	--	164	82	5000 U	44000	--	0.1 U	**13.0**
12/01/1999	9	**4**	7	5 U	24	**13**	--	--	719	**595**	5000 U	33000	--	0.1 U	**8.0**
02/01/2000	27	**5**	34	5 U	52	10 U	--	--	368	**124**	5000 U	150000	--	0.2 U	**6.7**
05/04/2000	26	**8**	38	5 U	72	**14**	--	--	353	21	5000 U	260000	--	0.1 U	**6.4**
02/02/2001	56.9	--	81.2	--	127	--	--	--	595	--	5000 U	660000	--	0.1 U	**3.7**
06/05/2001	10 U	--	5 U	--	15.3	--	--	--	480	--	5000 U	9000	--	**0.11**	**9.5**
08/21/2001	10 U	--	5 U	--	19	--	--	--	970	--	--	--	--	0.096 U	**5.8**
09/26/2001	7	--	14.2	--	20.1	--	--	--	507	--	5000 U	57000	--	0.096 U	**10**
10/10/2001	13.8	--	22.5	--	36	--	--	--	528	--	6300	166000	--	0.096 U	--
10/23/2001	15.1	--	19.6	--	41.8	--	--	--	289	--	5000 U	230000	--	0.097 U	**6.9**
11/14/2001	22.5	--	28	--	42.4	--	--	--	296	--	5000 U	256000	--	0.097 U	**7.1**
11/28/2001	25.4	--	36	--	51.3	--	--	--	258	--	5000 U	124000	--	0.096 U	**4.5**
12/10/2001	25	--	32.2	--	58.5	--	--	--	465	--	5000 U	226000	--	0.096 U	**6.5**
01/02/2002	6.2	--	9.1	--	12.8	--	--	--	236	--	5000 U	45000	--	0.096 U	**3.5**
01/18/2002	11.4	--	10.9	--	25.5	--	--	--	427	--	5000 U	73000	--	0.096 U	**3.1**
02/06/2002	16.4	--	20.3	--	42.3	--	--	--	469	--	5000 U	98000	--	0.097 U	**11.0**
03/12/2002	30.2	--	33.1	--	79.1	--	--	--	262	--	5000 U	262000	--	0.096 U	**16**
04/26/2002	18	--	5 U	--	10 U	--	--	--	256	--	5000 U	20000	--	0.097 U	**4.9**
01/30/2003	20.9	--	30.1	--	58.4	--	--	--	302	--	5000 U	398000	--	0.096 U	**4.3**
03/07/2003	7.2	--	5.8	--	15.6	--	--	--	171	--	5000 U	75000	--	0.096 U	**2.5**
04/23/2003	--	5 U	--	5 U	--	10 U	--	--	--	**362**	5000 U	21000	--	0.096 U	**2.6**
10/15/2003	4.8	**4**	--	--	15.8	--	--	--	279	**148**	5000 U	43000	--	0.096 U	**5.6**
11/19/2003	8.8	**5.1**	11.1	10	19.5	**13**	4.6	**2.6**	94.3	77	5000 U	44000	0.78	0.094 U	**5.1**
12/10/2003	21.9	**19.6**	34.7	**24.1**	18.4	--	2.6	--	233	**159**	5000 U	33000	0.55	0.096 U	**8.2**
01/14/2004	20 U	20 U	5 U	5 U	12.2	10 U	2 U	2 U	143	92.3	5000 U	32000	0.49 U	0.098 U	**3.3**
02/17/2004	8	**6.5**	5 U	5 U	13.5	10 U	2.4	2 U	453	**332**	5000 U	23000	0.77	0.096 U	**17**
03/25/2004	5 U	5 U	5.9	5 U	14.1	10 U	4.4	2 U	573	**407**	5000 U	28000	0.36 U	0.048 U	**2.6**
04/14/2004	15.5	--	12.8	--	32.6	--	3.2	--	376	--	5000 U	35000	0.76	0.048 U	**7.3**
05/27/2004	5.4	5 U	6.7	5 U	14.9	**13.5**	3.1	2 U	173	118	5000 U	36000	0.48 U	0.096 U	**8.9**

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
08/25/2004	22.3	**21.7**	5.2	5 U	22.9	**15**	2 U	2 U	305	**218**	5000 U	6000	1.74	0.095 U	**30.0**
09/13/2004	53.8	**43.5**	**102**	**67**	44.6	**18.9**	8.9	2 U	146	10.5	5000 U	108000	1.2	0.097 U	**20.0**
10/08/2004	24	**18.3**	32.3	**20.2**	34.7	**12.5**	9	2 U	179	31.2	5000 U	119000	0.48 U	0.096 U	**7.0**
11/15/2004	7.8	**6.3**	5 U	5 U	10 U	10 U	2 U	2 U	61.8	15.7	5000 U	7000	3	0.048 U	**12.0**
12/07/2004	11.1	**7.7**	11.5	5 U	17.4	10 U	7.5	2 U	381	38.7	5000 U	97000	0.8	0.048 U	**13.0**
01/07/2005	6.1	5 U	7.8	5 U	21.6	10 U	3.6	2 U	414	10 U	5000 U	--	0.3 U	0.048 U	**5.0**
03/16/2005	5 U	5 U	5 U	5 U	10 U	10 U	2.9	2 U	84.6	10 U	5000 U	--	0.5 U	0.097 U	**4.4**
04/25/2005	50 U	50 U	20 U	20 U	--	--	--	--	113	22.9	--	9000	0.191 U	--	**1.34**
05/18/2005	5.12	--	20 U	20 U	--	--	--	--	152	15 U	--	--	1.9 U	--	**2.17**
06/22/2005	2.5 U	--	7.5	--	--	--	--	--	164	--	--	2000	0.192 U	0.0192 U	0.192 U
09/30/2005	10.7	**5.76**	17.4	5 U	27.1	**12.2**	8.25	0.321	175	89.5	5000 U	102000	0.956 U	0.956 U	**5.1**
10/31/2005	11.8	**6.27**	21	5.3	20.8	**11.2**	9.81	0.832	195	63.7	5000 U	65000	0.948 U	--	**22.4**
11/29/2005	4.25	**3.92**	5.3	5 U	10 U	10 U	0.56	0.154	273	**255**	5000 U	5000 U	0.951 U	0.951 U	**5.2**
12/30/2005	4.72	**3.77**	5 U	5 U	10 U	10 U	0.791	0.1 U	88.9	73.2	5000 U	10000	0.952 U	0.952 U	**4.2**
01/06/2006	4.42	**2.86**	5	5 U	10 U	10 U	1.98	0.438	97.3	63.5	5000 U	28000	0.95 U	0.95 U	**4.9**
02/21/2006	3.65	**2.82**	5 U	5 U	10 U	10 U	0.563	0.1 U	381	**300**	5000 U	6000	0.949 U	0.949 U	**2.22**
03/09/2006	2.01	**1.5**	5 U	5 U	16.6	10 U	0.452	0.598	51.7	12.4	5000 U	7000	0.952 U	0.952 U	1.43 U
04/10/2006	2.17	**1.68**	5.56 U	5 U	23.9	10 U	0.1 U	0.1 U	17.6	10 U	5000 U	5000 U	0.951 U	0.951 U	**8.6**
05/22/2006	3.56	**2.36**	5 U	5 U	17	10 U	0.348	0.1 U	68.1	10 U	5000 U	9000	0.953 U	0.953 U	**3.1**
07/12/2006	2.86	**2.43**	5 U	5 U	35.6	**23**	0.555	0.1 U	98.1	76.6	5000 U	7000	1.01 U	1.01 U	1.52 U
09/18/2006	2.14	**2.31**	5 U	5 U	10 U	10 U	0.1 U	0.1 U	14.2	10 U	5000 U	5000 U	0.949 U	0.949 U	**2.58**
10/16/2006	2.14	**2.55**	5 U	5 U	10 U	10 U	0.296	0.1 U	67	28.3	5000 U	6000	1.23	0.958 U	**7.7**
11/02/2006	4.43	**3.53**	5 U	5 U	10 U	10 U	1.78	0.1 U	108	10 U	5000 U	46000	0.947 U	0.947 U	**1.91**
12/11/2006	4.91	**2.23**	7.4	5 U	10 U	10 U	2.72	0.1 U	98.7	56.5	5000 U	70000	4.76 U	0.951 U	4.76 U
02/14/2007	8.32	**3.54**	13	5 U	28.8	10 U	8.63	0.1 U	283	10 U	5000 U	127000	0.951 U	0.951 U	**4.9**
03/02/2007	5.02	**3.31**	5 U	5 U	10 U	10 U	1.77	0.1 U	97.3	10 U	5000 U	31000	0.955 U	0.955 U	**4.6**
05/02/2007	8.32	**5.08**	12.2	5 U	22.1	10 U	1.23	0.1 U	314	13	5000 U	104000	0.949 U	0.949 U	1.42 U
06/05/2007	2.77	**3.36**	5 U	5 U	10 U	10 U	0.275	1.28	309	**185**	5000 U	5000 U	0.966 U	0.966 U	1.45 U
10/16/2007	2.02	**2.04**	5 U	5 U	10 U	10 U	0.566	0.1 U	493	20.6	5000 U	21000	0.95 U	**1.32**	**3.3**
11/29/2007	3.19	**2.94**	5 U	5 U	10 U	10 U	0.19	0.1 U	24.4	10 U	5000 U	7000	0.95 U	0.948 U	1.42 U
12/18/2007	1 U	1 U	5 U	5 U	10 U	10 U	0.19	0.1 U	17.9	10 U	5000 U	5000	0.95 U	0.948 U	1.42 U
01/03/2008	2.78	**2.55**	5 U	5 U	10 U	10 U	0.1 U	0.1 U	36.1	15.4	5000 U	12000	0.96 U	0.95 U	1.42 U
03/13/2008	3.41	**2.74**	5 U	5 U	10 U	10 U	0.117	0.1 U	26.8	21.1	5000 U	5000 U	0.95 U	0.951 U	1.43 U
04/08/2008	2.96	**2.51**	7.1	5 U	10 U	10 U	0.19	0.1 U	48.9	10 U	5000 U	60000	0.95 U	0.952 U	1.43 U
05/13/2008	2.66	**2.66**	5 U	5.4	10 U	10 U	0.2	0.1 U	284	**153**	5000 U	6000	0.956 U	0.956 U	**2.14**

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
06/03/2008	6.62	**5.77**	5.2	5 U	10 U	10 U	0.134	0.1 U	23.9	10 U	5000 U	5000 U	0.95 U	0.947 U	1.42 U
10/03/2008	8.02	1 U	6	5 U	10 U	10 U	1.28	0.1 U	141	10 U	5000 U	114000	0.95 U	0.945 U	1.42 U
11/20/2008	3.14	**2.64**	5.3	5 U	10 U	10 U	0.33	0.1 U	68	13.9	5000 U	10000 U	0.95 U	0.949 U	1.42 U
01/07/2009	3.19	**2.66**	1.1	1 U	3.32	1.56	0.545	0.1 U	98.1	62.5	5000 U	9000	0.949 U	0.949 U	1.42 U
02/10/2009	5.28	**2.98**	3.99	1 U	12.1	3.14	2.64	0.1 U	184	10 U	5000 U	71000	1.01 U	1.01 U	1.52 U
03/17/2009	4.12	**3.38**	1 U	1 U	0.909	0.5 U	0.1 U	0.1 U	17.5	10 U	5000 U	5000 U	0.943 U	0.943 U	1.42 U
04/28/2009	2	**1.82**	1 U	1 U	2.06	1.21	0.127	0.1 U	41.6	21	5000 U	7000	0.944 U	0.944 U	1.42 U
05/04/2009	1.65	**1.35**	1 U	1 U	2.5	0.857	0.302	0.1 U	174	10 U	5000 U	29000	0.946 U	0.946 U	1.42 U
08/12/2009	1 U	1 U	3.39	2.98	0.61	0.5 U	0.1 U	0.1 U	33.7	10 U	5000 U	7000	1.02 U	1.02 U	1.52 U
10/14/2009	1 U	1 U	3.25	2.66	5.16	0.514	0.248	0.137	64.6	10 U	5000 U	95000	0.944 U	0.944 U	**2.65**
11/06/2009	14	1 U	14.8	1 U	39.5	6.55	12.9	0.1 U	524	10 U	5000 U	22000	0.949 U	0.474 U	0.949 U
12/15/2009	6.91	**2.07**	1.1	1 U	18.5	7.97	1.25	0.1 U	62.9	10 U	5000 U	43000	0.948 U	0.948 U	1.42 U
01/15/2010	--	--	--	--	62.3	--	--	--	284	10 U	--	--	--	**0.104**	0.474 U
02/03/2010	--	--	--	--	39.7	--	--	--	246	24.8	--	--	--	**0.123**	0.473 U
03/11/2010	--	--	--	--	3.39	--	--	--	39.3	15.2	--	--	--	--	0.473 U
04/02/2010	--	--	--	--	13.6	--	--	--	115	45.8	--	--	--	--	0.474 U
05/04/2010	--	--	--	--	3.16	--	--	--	89.8	57.7	--	13000	--	0.0473 U	0.472 U
06/10/2010	--	--	--	--	1.71	--	--	--	25.9	10.5	--	5000 U	--	0.0475 U	**2.49**
09/23/2010	--	--	--	--	4.1	--	--	--	214.0	84.2	--	18000	--	0.0477 U	0.473 U
10/26/2010	--	--	--	--	--	--	--	--	157	10 U	--	51000	--	0.0493 U	**2.83**
11/09/2010	--	--	--	--	--	--	--	--	144	14.8	--	211000	--	**0.0662**	**2.42**
12/20/2010	--	--	--	--	--	--	--	--	221	58.2	--	153000	--	**0.0571**	**0.771**
02/16/2011	--	--	--	--	--	--	--	--	130	110	--	28000	--	0.0476 U	0.477 U
03/29/2011	--	--	--	--	--	--	--	--	152	4.99	--	60000	--	0.0478 U	**1.51**
04/13/2011	--	--	--	--	--	--	--	--	167	18.6	--	78000	--	0.0476 U	**0.946**
05/11/2011	--	--	--	--	--	--	--	--	147	2.00 U	--	204000	--	0.0476 U	0.477 U
07/12/2011	--	--	--	--	--	--	--	--	200	39.8	--	15000	--	**0.0568**	**4.57**
09/27/2011	--	--	--	--	--	--	--	--	292	9	--	262000	--	**0.105**	0.477 U
10/11/2011	--	--	--	--	--	--	--	--	26.8	5.37	--	5000 U	--	0.0476 U	0.478 U
11/16/2011	--	--	--	--	--	--	--	--	176	10.2	--	42000	--	**0.0572**	0.478 U
12/28/2011	--	--	--	--	--	--	--	--	142	26.2	--	33000	--	**0.0287**	--
01/18/2012	--	--	--	--	--	--	--	--	64.4	16.1	--	21000	--	**0.019**	**0.294**
Outfall No. 4:															
11/24/1997	--	--	--	5	--	**22**	--	--	--	--	8200	--	--	--	**190**
	--	--	--	--	--	--	--	--	--	--	12200	--	--	--	--

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
02/11/1997	--	**29**	--	7	--	**20**	--	ND	--	**263**	7000	--	0.7	--	**11.0**
05/13/1998	77.3	**6.8**	88.1	2.1	119	**11.9**	22.6	1 U	536	48.5	6240	608000	1 U	0.1 U	**6.6**
11/13/1998	17.2	**11.1**	10.8	1.7	32.5	**13.6**	4.5	1 U	371	**233**	5000 U	23000	5 U, 10 U	--	**14.3**
12/28/1998	47.4	**4.6**	39.6	2.1	92.9	**24.9**	8.9	3 U	676	5.7	5000 U	189000	2 U	0.4 U	**14.2**
02/02/1999	10.7	**4.9**	5.2	1.1	14.1	5.7	1.6	1 U	269	**214**	5000 U	11000	1 U	0.1 U	**3.4**
03/03/1999	11.8	**3.5**	6.3	1	17.4	5	1.6	1 U	99	67.7	5000 U	10000 U	1 U	--	**3.0**
11/10/1999	72	**6**	**104**	6	169	**20**	--	--	983	**145**	6000	697000	--	0.1 U	**19.0**
12/01/1999	41	**5**	62	7	94	**12**	--	--	1180	**369**	7000	318000	--	0.1 U	**5.0**
02/01/2000	55	5 U	82	5	117	10 U	--	--	812	**163**	5000 U	452000	--	0.1 U	**17**
05/04/2000	74	**6**	**106**	5 U	130	**13**	--	--	726	100	5000 U	524000	--	0.1 U	**12.0**
02/02/2001	36.3	--	59.2	--	92.4	--	--	--	559	--	5000 U	236000	--	0.1 U	**4.7**
06/05/2001	18	--	14.5	--	33.3	--	--	--	906	--	5000 U	58000	--	0.097 U	**25**
08/22/2001	18.2	--	14.2	--	33.9	--	--	--	397	--	--	--	--	0.096 U	**20.0**
09/26/2001	11.2	--	11	--	23.3	--	--	--	374	--	5000 U	57000	--	0.096 U	**16**
10/10/2001	14.4	--	18.5	--	32.2	--	--	--	414	--	5000 U	186000	--	0.096 U	**3.9**
10/23/2001	12.8	--	12.8	--	25.4	--	--	--	404	--	--	95000	--	0.097 U	**6.6**
11/14/2001	63.5	--	64.9	--	93.3	--	--	--	549	--	6400	644000	--	0.097 U	**7.5**
11/28/2001	7.6	--	7.7	--	11	--	--	--	206	--	5000 U	45000	--	0.097 U	**3.9**
12/10/2001	34.9	--	42.2	--	75.6	--	--	--	578	--	5000 U	348000	--	0.096 U	**4.6**
01/02/2002	11	--	15.7	--	24.4	--	--	--	339	--	5000 U	75000	--	0.096 U	**4.8**
01/18/2002	43.6	--	54.5	--	89.3	--	--	--	732	--	5100	460000	--	0.097 U	**7.2**
02/06/2002	8.8	--	12	--	22.7	--	--	--	1160	--	5000 U	24000	--	0.097 U	**2**
03/12/2002	13.7	--	16.3	--	35.4	--	--	--	563	--	5000 U	121000	--	0.096 U	**3.9**
04/26/2002	10 U	--	5 U	--	10 U	--	--	--	5510	--	5000 U	9000	--	0.097 U	0.49 U
01/30/2003	24.8	--	32.5	--	35	--	--	--	237	--	5000 U	177000	--	0.097 U	**14**
03/07/2003	14	--	15.1	--	31.2	--	--	--	272	--	5000 U	163000	--	0.096 U	**4.4**
04/23/2003	--	**7**	--	5 U	--	**12.2**	--	--	--	**257**	5000 U	308000	--	0.096 U	**37.0**
10/15/2003	10.7	**6.1**	--	--	12.9	--	2.3	--	307	**204**	5000 U	77000	0.82	0.096 U	**9.3**
11/19/2003	6.4	5 U	6.2	5 U	11.2	10 U	2.6	2 U	89.5	87.7	5000 U	34000	0.73	0.094 U	**4.6**
12/10/2003	11.9	--	9.2	--	16.1	--	4.7	--	306	**142**	5000 U	110000	0.66	0.096 U	**8.0**
01/14/2004	20 U	20 U	17.2	5 U	28.1	10 U	12.8	2 U	449	**226**	5000 U	120000	0.48 U	0.096 U	**8.3**
02/17/2004	11	5 U	17	5 U	27.7	10 U	6.8	2 U	510	**367**	5000 U	110000	0.48 U	0.096 U	**6.4**
03/25/2004	5 U	5 U	10.3	5 U	27.5	10 U	5.2	2 U	771	**609**	5000 U	88000	0.79	0.048 U	**10.0**
04/14/2004	15.1	--	8.4	--	26.9	--	2 U	--	966	--	5000 U	34000	0.98	0.048 U	**8.5**
05/27/2004	11.4	**8.7**	7.8	5 U	21.5	**14.5**	3.1	2 U	273	**193**	5000 U	46000	1.24	0.096 U	**16**

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
08/25/2004	12.6	**5.4**	7.7	5 U	20.6	10 U	5.6	2 U	579	**327**	5000 U	79000	0.48 U	0.095 U	**7.3**
09/13/2004	15.6	**11.1**	8	5 U	15.7	10 U	2.9	2 U	165	95.2	5000 U	49000	0.83	0.097 U	**10.0**
10/08/2004	11.7	5 U	14.8	5 U	17.7	10 U	5.8	2 U	233	**128**	5000 U	124000	0.48 U	0.096 U	**4.5**
11/15/2004	9.5	5 U	7.1	5 U	19.2	10 U	4.4	2 U	1820	**1570**	5000 U	31000	0.30 U	0.048 U	0.48 U
12/07/2004	5	5 U	6.1	5 U	10 U	10 U	2.3	2 U	309	**238**	5000 U	34000	0.48	0.048 U	**6.1**
01/07/2005	5 U	5 U	5.5	5 U	14.4	10 U	2 U	2 U	640	**547**	5000 U	--	0.3 U	0.048 U	**2.4**
03/16/2005	8.5	5 U	9.5	5 U	25.4	10 U	12.3	2 U	784	**435**	5000 U	--	0.5 U	0.097 U	**3.7**
04/25/2005	50 U	50 U	20 U	20 U	--	--	--	--	275	**283**	--	3000	0.195 U	--	**2.35**
05/18/2005	4.2	--	20 U	20 U	--	--	--	--	444	**325**	--	--	1.91 U	--	1.91 U
06/22/2005	2.5 U	**3.28**	7.14	2.5 U	--	--	--	--	873	**785**	--	7000	0.198 U	--	**2.53**
09/30/2005	7.37	**4.99**	11.2	5 U	10.8	10 U	2.46	0.1 U	150	**145**	5000 U	43000	0.95 U	0.95 U	**2.12**
10/31/2005	3.45	**2.42**	5 U	5 U	10 U	10 U	1.02	0.1 U	162	**142**	5000 U	27000	0.963 U	--	**5.1**
11/29/2005	4.01	**3.01**	10.9	9.8	10 U	10 U	2.22	0.135	438	**346**	5000 U	11000	0.951 U	0.951 U	**7.1**
12/30/2005	6.71	**5.76**	5 U	5 U	10 U	10 U	0.773	0.1 U	265	**264**	5000 U	6000	0.951 U	0.951 U	1.43 U
01/06/2006	3.53	**1.76**	5 U	5 U	10 U	10 U	1.6	0.124	158	**134**	5000 U	22000	0.948 U	0.948 U	1.42 U
02/21/2006	1.49	**1.14**	5 U	5 U	10 U	10 U	0.757	0.129	3310	**2900**	5000 U	5000 U	0.951 U	0.951 U	1.43 U
03/09/2006	3.48	**1.87**	5 U	5 U	10 U	10 U	1.31	0.134	517	**243**	5000 U	6000	0.951 U	0.951 U	1.43 U
04/10/2006	2.68	**2.04**	5.56 U	5 U	11.1 U	10 U	0.273	0.1 U	582	**582**	5000 U	5000 U	0.951 U	0.951 U	1.43 U
05/22/2006	3.75	**2.87**	5 U	5 U	10 U	10 U	0.939	0.1 U	470	**418**	5000 U	10000	0.95 U	0.95 U	**1.78**
07/12/2006	5.18	**3.9**	6.9	5.2	21	**23.6**	1.28	0.1 U	1180	**1130**	5000 U	12000	1.01 U	1.01 U	**2.85**
09/18/2006	9.95	**9.16**	5.4	5 U	13.7	10 U	0.806	0.1 U	417	**345**	5000 U	13000	0.952 U	0.952 U	**2.66**
10/16/2006	1.04	**1.79**	5 U	5 U	10 U	10 U	2.34	0.1 U	2580	**1870**	5000 U	5000	0.951 U	0.951 U	1.43 U
11/02/2006	4.3	**3.45**	5 U	5 U	10 U	10 U	0.83	0.1 U	165	**133**	5000 U	9000	0.949 U	0.949 U	**2.21**
12/11/2006	2.48	**1.41**	5 U	5 U	10 U	10 U	1.29	0.1 U	241	**214**	5000 U	15000	4.76 U	0.952 U	4.76 U
02/14/2007	4.99	**3.72**	6.4	5 U	10 U	10 U	1.91	0.1 U	298	10	5000 U	30000	0.949 U	0.949 U	**4.7**
03/02/2007	2.97	**1.54**	5 U	5 U	10 U	10 U	1.22	0.1 U	238	**157**	5000 U	14000	0.946 U	0.946 U	1.42 U
05/02/2007	5.48	**1.67**	9.4	5 U	10 U	10 U	0.1 U	0.1 U	361	**147**	5000 U	77000	0.951 U	0.951 U	1.43 U
06/05/2007	1.71	**2.22**	5 U	5 U	10 U	10 U	0.968	0.372	2950	**2810**	5000 U	5000 U	0.951 U	0.951 U	1.43 U
10/16/2007	8.05	**1.43**	13.8	5 U	26.9	10 U	7.25	0.207	1480	**1050**	5000 U	84000	0.95 U	0.949 U	**1.45**
11/29/2007	6.72	**1.39**	11.1	5 U	17	10 U	4.41	0.103	418	**201**	5000 U	110000	0.96 U	0.95 U	1.42 U
12/18/2007	1 U	1 U	11.9	6.2	15	10 U	3.85	2.08	203	**153**	5000 U	59000	0.95 U	0.947 U	1.42 U
01/03/2008	5.12	**3.46**	5	5 U	10 U	10 U	1.07	0.1 U	483	**421**	5000 U	11000	0.95 U	0.951 U	1.43 U
01/31/2008	--	--	--	--	--	--	--	--	518	**409**	--	--	--	--	--
03/13/2008	2.97	**1.59**	5.6	5 U	10.2	10 U	1.15	0.1 U	351	**303**	5000 U	10000	0.95 U	0.951 U	1.43 U
04/08/2008	4.9	**2.49**	9.6	5 U	15.9	10 U	1.49	0.1 U	824	**692**	5000 U	10000	0.96 U	0.959 U	1.44 U

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
05/13/2008	5.8	**4.51**	9.3	7.4	17.1	**21.4**	1.18	0.1 U	1360	**1130**	5000 U	11000	0.95 U	0.95 U	**1.66**
06/03/2008	6.84	**3.09**	10.6	5 U	15.8	10 U	3.08	0.1 U	138	33.3	5000 U	49000	0.95 U	0.947 U	**1.53**
10/03/2008	1 U	**1.5**	5.0	5 U	10 U	10 U	0.696	0.1 U	1770	**1690**	5000 U	5000 U	0.95 U	0.953 U	1.43 U
11/20/2008	9.07	**1.16**	18.3	5 U	31.7	10 U	6.88	0.1 U	557	**263**	5000 U	112000	0.95 U	0.949 U	1.42 U
01/07/2009	2.45	**1.2**	2.09	1 U	8.18	2.94	1.34	0.1 U	330	**241**	5000 U	19000	0.943 U	0.943 U	1.41 U
02/10/2009	9.52	**1.18**	11.4	1 U	25.8	3.43	8.28	0.1 U	200	63.4	5000 U	94000	1.01 U	1.01 U	1.52 U
03/17/2009	2.61	1 U	2.94	1 U	9.92	4.08	2.68	0.1 U	1910	**1400**	5000 U	13000	0.948 U	0.948 U	1.42 U
04/28/2009	3.66	**2.63**	2.36	1 U	12.9	8.61	1.18	0.1 U	261	**213**	5000 U	22000	0.95 U	0.95 U	1.42 U
05/04/2009	1 U	1 U	1 U	1 U	1.44	0.892	1.01	0.1 U	1710	**1400**	5000 U	5000 U	0.948 U	0.948 U	1.42 U
05/13/2009	--	--	--	--	--	--	--	--	2100	**2000**	--	--	--	--	--
08/12/2009	1 U	1 U	1 U	1 U	3.43	3.31	0.92	0.314	1550	**1440**	5000 U	8000	1.01 U	1.01 U	1.52 U
10/14/2009	2.84	1 U	5.04	3.13	10.4	4.69	1.65	0.1 U	263	**166**	5000 U	22000	0.949 U	0.949 U	**4.82**
11/06/2009	5.61	1 U	6.01	1 U	25.6	3.22	4.81	0.1 U	448	**536**	5000 U	296,000	0.949 U	0.474 U	0.949 U
12/15/2009	5.16	1 U	6.53	1 U	14.7	2	3.38	0.1 U	218	99.4	5000 U	88,000	0.946 U	0.946 U	1.42 U
01/15/2010	--	--	--	--	69.4	--	--	--	430	55.6	--	--	--	0.0473 U	0.473 U
02/03/2010	--	--	--	--	98	--	--	--	378	12.2	--	--	--	**0.104**	0.474 U
03/11/2010	--	--	--	--	37.3	--	--	--	335	119	--	--	--	--	**0.748**
04/02/2010	--	--	--	--	5.55	--	--	--	160	117	--	--	--	--	**1.17**
05/04/2010	--	--	--	--	44.3	--	--	--	624	**332**	--	149000	--	0.0478 U	**0.662**
06/10/2010	--	--	--	--	14.1	--	--	--	1150	**814**	--	17000	--	0.0556 U	**0.863**
09/23/2010	--	--	--	--	226	--	--	--	872.0	14.0	--	1430000	--	**1.67**	**2.68**
10/26/2010	--	--	--	--	--	--	--	--	1870	**1130**	--	15000	--	0.0474 U	0.473 U
11/09/2010	--	--	--	--	--	--	--	--	496	24.4	--	1320000	--	**0.124**	**2.69**
12/20/2010	--	--	--	--	--	--	--	--	223	70	--	357000	--	0.0478 U	0.475 U
02/16/2011	--	--	--	--	--	--	--	--	141	90.7	--	65000	--	0.0477 U	0.477 U
03/29/2011	--	--	--	--	--	--	--	--	1390	**1150**	--	18000	--	0.0477 U	0.476 U
04/13/2011	--	--	--	--	--	--	--	--	2230	**1120**	--	120000	--	0.0477 U	0.477 U
05/11/2011	--	--	--	--	--	--	--	--	237	16.7	--	517000	--	0.048 U	0.480 U
06/28/2011	--	--	--	--	--	--	--	--	637	**391**	--	165000	--	0.0479 U	**0.758**
07/12/2011	--	--	--	--	--	--	--	--	1080	**854**	--	157000	--	0.0479 U	**0.812**
09/27/2011	--	--	--	--	--	--	--	--	452	37.3	--	777000	--	**0.154**	0.479 U
10/11/2011	--	--	--	--	--	--	--	--	557	**202**	--	43000	--	0.0476 U	0.477 U
11/16/2011	--	--	--	--	--	--	--	--	301	**147**	--	10000	--	0.0476 U	0.476 U
12/28/2011	--	--	--	--	--	--	--	--	394	**166**	--	83000	--	**0.00951**	--
01/18/2012	--	--	--	--	--	--	--	--	104	58.7	--	50000	--	**0.019**	0.475U

Table 3-17
Summary of Stormwater Sampling Results
Former PWT Site RI/FS

Date	Arsenic (µg/L)		Total Recoverable Chromium (µg/L)		Copper (µg/L)		Lead (µg/L)		Zinc (µg/L)		Oil & Grease (µg/L)	Total Suspended Solids (µg/L)	Total Tetrachloro-phenols (µg/L)	Benzo(a) pyrene (µg/L)	Pentachloro-phenol (µg/L)
	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved					
USEPA WQC Freshwater CCC (chronic)	NV	150	NV	11[a]/74[b]	NV	9	NV	2.5	NV	120	NV	NV	NV	NV	15.0
Background Concentration[c]	NV	5.0	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MTCA Method B Surface Water CULs	NV	0.098	NV	490[b]	NV	2700	NV	NV	NV	17000	NV	NV	NV	0.03	1.5
USEPA WQC HH consumption of organisms and water	NV	0.018	100[d]	NV	NV	1300	NV	NV	NV	7400	NV	NV	NV	0.0038	0.27
USEPA WQC HH consumption of organisms only	NV	0.14	100[d]	NV	NV	NV	NV	NV	NV	26000	NV	NV	NV	0.018	3.0
Outfall No. 5:															
10/11/2010	October not sampled—no flow														
11/22/2011	--	--	--	--	--	--	--	--	25.9	2.47	--	69000	--	0.0477 U	0.475 U
12/28/2011	--	--	--	--	--	--	--	--	54	28.4	--	79000	--	**0.0476**	--
01/18/2012	--	--	--	--	--	--	--	--	13.3	2.5	--	16000	--	**0.00951**	--
Outfall No. 6:															
10/11/2010	October not sampled—no flow														
11/09/2010	--	--	--	--	--	--	--	--	34.6	33.4	--	226000	--	0.0478 U	0.475 U
12/20/2010	--	--	--	--	--	--	--	--	52	59	--	66000	--	0.0473 U	**1.68**
02/16/2011	--	--	--	--	--	--	--	--	10.0 U	10.0 U	--	15000	--	0.0476 U	0.476 U
03/29/2011	--	--	--	--	--	--	--	--	25	24.4	--	12000	--	0.0478 U	0.476 U
04/14/2011	--	--	--	--	--	--	--	--	51.4	41.9	--	181000	--	0.0477 U	0.476 U
05/11/2011	--	--	--	--	--	--	--	--	25.8	3.62	--	365000	--	0.0476 U	0.477 U
11/22/2011	--	--	--	--	--	--	--	--	97	2.61	--	692000	--	0.0477 U	0.476 U
12/28/2011	--	--	--	--	--	--	--	--	111	40.2	--	206000	--	**0.0476**	--
01/18/2012	--	--	--	--	--	--	--	--	86.2	1.99	--	262000	--	**0.00953**	0.475 U

-- = not analyzed.
Bold results exceed one or more of the screening criteria. non-detect values ("U") were not compared with screening criteria.
CCC = criterion continuous concentration.
CUL = cleanup level.
HH = human health.
MTCA = Model Toxics Control Act.
µg/L = micrograms per liter.
ND = not detected.
NV = no value.
U = not detected at or above method reporting limit.
USEPA = U.S. Environmental Protection Agency.
WQC = water quality criteria.

[a] Hexavalent chromium value.

[b] Trivalent chromium value.

[c] Based on MTCA Method A groundwater CUL based on background concentration in the state of Washington.

[d] Based on USEPA maximum contaminant level.

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-01 LRIS-LR-01-SS 04/19/2010 0-10 cm	LRIS-LR-02 LRIS-LR-02-SS 04/19/2010 0-10 cm	LRIS-LR-03 LRIS-LR-03-SS 04/19/2010 0-10 cm	LRIS-LR-04 LRIS-LR-04-SS 04/19/2010 0-10 cm	LRIS-LR-05 LRIS-LR-05-SS 04/19/2010 0-10 cm	LRIS-LR-06 LRIS-LR-06-SS 04/19/2010 0-10 cm	LRIS-LR-07 LRIS-LR-07-SS 04/19/2010 0-10 cm
Phenols (µg/kg)											
Phenol	120	NV	NV	NV	4.4 J	5.9 J	9.3 U	7.1 J	54 U	9.7 J	16
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	9.1 U	11 U	9.3 U	11 U	54 U	10 U	6.5 J
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	6.6 J	4.9 J	19 U	10 J	110 U	11 J	13 J
2,4-Dimethylphenol	NV	NV	NV	NV	9.1 U	11 U	9.3 U	11 U	54 U	10 U	8.9 U
Pentachlorophenol	1,200	NV	310	250	180	17	15	11 U	91	68	12 U
Metals (mg/kg)											
Arsenic	14	33	NV	NV	4.8	5.2	4.8	6.2	6.1	5.3	5.1
Cadmium	2.1	4.98	NV	NV	0.2 J	0.3 J	0.24 J	0.12 J	0.24 J	0.27 J	0.045 J
Chromium	72	111	NV	NV	19	22	19	22	25	21	18
Copper	400	149	NV	NV	22	26	20	25	28	25	17
Lead	360	128	NV	NV	17	13	11	12	14	12	8.9
Mercury	0.66	1.06	NV	NV	0.055 J	0.067 J	0.18 J	0.016 J	0.063 J	0.056 J	0.035 J
Nickel	26	48.6	NV	NV	15	18	16	18	18	18	15
Silver	0.58	NV	NV	NV	0.13 J	0.14 J	0.13 J	0.16 J	0.17 J	0.15 J	0.13 J
Zinc	3,200	459	NV	NV	80	89	81	89	100	91	70
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)											
Total PAH	17,000	22,800	NV	NV	393	236	310	173	4,479	3,044	84.5
Total LPAH	NV	NV	NV	NV	39.8	39.9	31.4	26.9	462	333	13.6
Naphthalene	NV	561	NV	NV	1.7 J	1.6 J	0.97 J	1.9 J	5.2 J	4	1.8 U
Acenaphthylene	NV	NV	NV	NV	6.1	2.1 J	2.1	1.8 J	24	22	1.8 U
Acenaphthene	NV	NV	NV	NV	1.2 J	2.3 U	1.7 J	2.3 U	17	14	0.69 J
Fluorene	NV	536	NV	NV	2.5	4.1	3.1	4.2	20	24	2.1
Phenanthrene	NV	1170	NV	NV	14	23	15	12	330	220	6.8
Anthracene	NV	845	NV	NV	13	6.8	7.6	4.7	62	45	1.3 J
2-Methylnaphthalene	NV	NV	NV	NV	1.3 J	2.3 U	0.94 J	2.3 U	3.7 J	3.6	1.8 U
Total HPAH	NV	NV	NV	NV	353	196	278	146	4,017	2,711	70.9
Fluoranthene	NV	2230	NV	NV	56	46	58	36	1100	810	17
Pyrene	NV	1520	NV	NV	58	44	49	29	910	630	14
Benzo(a)anthracene	NV	1050	NV	NV	26	13	25	11	250	190	5.5
Chrysene	NV	1290	NV	NV	49	24	52	16	590	490	7.6
Benzofluoranthene, Total	NV	NV	NV	NV	84	34	51	28	770	390	11
Benzo(a)pyrene	NV	1450	NV	NV	28	14	20	11	200	120	5
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	22	9.4	9.6	6.3	85	36	3.7
Dibenzo(a,h)anthracene	NV	NV	NV	NV	6	4.5 U	3.8	4.5 U	29	12	3.6 U
Benzo(g,h,i)perylene	NV	NV	NV	NV	24	9.2	10	6.8	83	33	5.3
Chlorinated Hydrocarbons (µg/kg)											
1,4-Dichlorobenzene	NV	NV	NV	NV	4.6 U	5.7 U	4.6 U	5.7 U	27 U	5.1 U	4.4 U
1,2-Dichlorobenzene	NV	NV	NV	NV	4.6 U	5.7 U	4.6 U	5.7 U	27 U	5.1 U	4.4 U
1,2,4-Trichlorobenzene	NV	NV	NV	NV	4.6 U	5.7 U	4.6 U	5.7 U	27 U	5.1 U	4.4 U
Hexachlorobenzene	NV	NV	NV	NV	4.6 U	5.7 U	4.6 U	5.7 U	27 U	5.1 U	4.4 U

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-01 LRIS-LR-01-SS 04/19/2010 0-10 cm	LRIS-LR-02 LRIS-LR-02-SS 04/19/2010 0-10 cm	LRIS-LR-03 LRIS-LR-03-SS 04/19/2010 0-10 cm	LRIS-LR-04 LRIS-LR-04-SS 04/19/2010 0-10 cm	LRIS-LR-05 LRIS-LR-05-SS 04/19/2010 0-10 cm	LRIS-LR-06 LRIS-LR-06-SS 04/19/2010 0-10 cm	LRIS-LR-07 LRIS-LR-07-SS 04/19/2010 0-10 cm
Phthalates (µg/kg)											
Dimethyl phthalate	NV	NV	NV	NV	9.1 U	11 U	9.3 U	11 U	54 U	10 U	8.9 U
Diethyl phthalate	NV	NV	NV	NV	1.6 J	3.6 J	2.2 J	11 U	54 U	2.1 J	2.1 J
Di-n-butyl phthalate	380	NV	NV	NV	3.7 J	7.4 J	12 J	21 J	20 J	12 J	18 U
Butylbenzyl phthalate	NV	NV	NV	NV	9.1 U	11 U	16 U	17	25 J	11 U	9.2 U
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	19 J	32 J	29 J	45 J	80 J	27 J	13 J
Di-n-octyl phthalate	39	NV	NV	NV	18 U	23 U	19 U	23 U	**110 U**	20 U	18 U
Miscellaneous Extractables (µg/kg)											
Benzyl alcohol	NV	NV	NV	NV	4.3 J	11 U	9.3 U	3.6 J	54 U	10 U	4.6 J
Benzoic acid	2,900	NV	NV	NV	100 J	120 J	79 J	140 J	1400 U	160 J	120 J
Dibenzofuran	200	NV	NV	NV	1.5 J	2.6 J	1 J	1.5 J	12 J	13	0.99 J
Hexachlorobutadiene	NV	NV	NV	NV	4.6 U	5.7 U	4.6 U	5.7 U	27 U	5.1 U	4.4 U
N-Nitrosodiphenylamine	NV	NV	NV	NV	4.6 U	5.7 U	4.6 U	5.7 U	27 U	5.1 U	4.4 U
Total Petroleum Hydrocarbons (mg/kg)											
Diesel #2 Range	340	NV	NV	NV	NV	NV	NV	NV	50 U	14 J	NV
Motor Oil Range	3,600	NV	NV	NV	NV	NV	NV	NV	30 J	32 J	NV
Polychlorinated Biphenyl (PCB) Aroclors (µg/kg)											
Total PCB Aroclors	110	676	NV	NV	18 U	NV	NV	NV	NV	NV	NV
PCB Aroclors (µg/kg)											
Aroclor 1016	NV	NV	NV	NV	18 U	NV	NV	NV	NV	NV	NV
Aroclor 1221	NV	NV	NV	NV	18 U	NV	NV	NV	NV	NV	NV
Aroclor 1232	NV	NV	NV	NV	18 U	NV	NV	NV	NV	NV	NV
Aroclor 1242	NV	NV	NV	NV	18 U	NV	NV	NV	NV	NV	NV
Aroclor 1248	NV	NV	NV	NV	18 U	NV	NV	NV	NV	NV	NV
Aroclor 1254	NV	NV	NV	NV	18 U	NV	NV	NV	NV	NV	NV
Aroclor 1260	NV	NV	NV	NV	18 U	NV	NV	NV	NV	NV	NV
Dioxins (ng/kg)											
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	**37**	**3.3**	NV	1.6	**30**	NV	1.4
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	470 J	38	NV	13 J	300 J	NV	21
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	13000 J	1000	NV	420 J	9700 J	NV	360
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	190 J	16	NV	6.2 J	140 J	NV	8.1
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	1400 J	100	NV	45 J	1100 J	NV	40
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	13	1 J	NV	0.59 U	9.9	NV	0.58 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	14	1.5 J	NV	0.72 U	21	NV	0.93 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	5.8	0.86 J	NV	0.46 U	3.4 J	NV	0.29 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	7.5	0.75 J	NV	0.46 U	6.2	NV	0.5 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	70	4.9	NV	2 J	45	NV	1.9 J
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	0.94 J	0.09 J	NV	0.4 U	0.68 J	NV	0.17 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	13 J	1.8 J	NV	1 U	10 J	NV	0.68 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	5.2	0.41 U	NV	0.38 U	5.2	NV	0.42 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	2.8 J	0.41 J	NV	0.68 UJ	2.5 J	NV	0.41 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	6.5	0.49 J	NV	0.36 U	4.7	NV	0.22 J
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	**5.9 J**	0.66 J	NV	0.45 U	**7.7 J**	NV	0.55 U

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-01	LRIS-LR-02	LRIS-LR-03	LRIS-LR-04	LRIS-LR-05	LRIS-LR-06	LRIS-LR-07
Sample ID					LRIS-LR-01-SS	LRIS-LR-02-SS	LRIS-LR-03-SS	LRIS-LR-04-SS	LRIS-LR-05-SS	LRIS-LR-06-SS	LRIS-LR-07-SS
Sample Date					04/19/2010	04/19/2010	04/19/2010	04/19/2010	04/19/2010	04/19/2010	04/19/2010
Sample Depth					0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	2.4	0.7 J	NV	0.81	2.5	NV	0.45 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	0.28 U	0.12 U	NV	0.19 U	0.44 J	NV	0.19 U
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	720	52	NV	22	530	NV	28
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	2,600 J	190	NV	85 J	2,600 J	NV	73
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	370	20	NV	11	320	NV	6.4
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	240	24	NV	10	230	NV	7.9
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	76	3.3	NV	2.3	72	NV	0.55 U
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	16	1.3	NV	0.81	17	NV	0.41 U
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	12	2.3	NV	2.3	15	NV	0.65
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	10	0.95	NV	0.23 U	5.6	NV	0.19 U

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-08 LRIS-LR-08-SS 04/19/2010 0-10 cm	LRIS-LR-09 LRIS-LR-09-SS 04/19/2010 0-10 cm	LRIS-LR-10 LRIS-LR-10-SS 04/19/2010 0-10 cm	LRIS-LR-11 LRIS-LR-11-SS 04/20/2010 0-10 cm	LRIS-LR-12 LRIS-LR-12-SS 04/20/2010 0-10 cm	LRIS-LR-13 LRIS-LR-13-SS 04/20/2010 0-10 cm	LRIS-LR-14 LRIS-LR-14-SS 04/20/2010 0-10 cm	LRIS-LR-15 LRIS-LR-15-SS 04/20/2010 0-10 cm
Phenols (µg/kg)												
Phenol	120	NV	NV	NV	25	3.7 J	20	2.8 J	11	11	5.1 J	6.3 J
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	8.5 U	8.9 U	9.1 U	9.6 U	0.63 J	9.4 U	8.8 U	9.2 U
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	100	3 J	13 J	3.5 J	49	28	2.3 J	34
2,4-Dimethylphenol	NV	NV	NV	NV	8.5 U	8.9 U	9.1 U	9.6 U	7.1 U	9.4 U	8.8 U	9.2 U
Pentachlorophenol	1,200	NV	310	250	**400**	8.9 U	140	9.6 U	44	16	24	9.2 U
Metals (mg/kg)												
Arsenic	14	33	NV	NV	9.9	4.9	9	5.1	6	5.6	3.7	4.6
Cadmium	2.1	4.98	NV	NV	0.13 J	0.19 J	0.17 J	0.21 J	0.071 J	0.26 J	0.22 J	0.29 J
Chromium	72	111	NV	NV	28	19	25	18	21	20	15	19
Copper	400	149	NV	NV	19	19	25	19	13	20	17	21
Lead	360	128	NV	NV	9.6	9.9	12	10	5.7	9.9	8.8	11
Mercury	0.66	1.06	NV	NV	0.031 J	0.041 J	0.11 J	0.053	0.029	0.045	0.035	0.046
Nickel	26	48.6	NV	NV	14	16	16	15	10	15	13	16
Silver	0.58	NV	NV	NV	0.11 J	0.13 J	0.13 J	0.12 J	0.078 J	0.13 J	0.1 J	0.13 J
Zinc	3,200	459	NV	NV	120	77	120	77	100	85	74	91
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)												
Total PAH	17,000	22,800	NV	NV	700	128	947	63.4	492	139	373	93.1
Total LPAH	NV	NV	NV	NV	77.8	16.1	119	9.1	89.6	19.8	42.0	15.3
Naphthalene	NV	561	NV	NV	3.2	1.6 J	11	0.46 J	4.5	4.7	3	1.3 J
Acenaphthylene	NV	NV	NV	NV	10	1.2 J	6.5	1.9 U	1.6	0.85 J	1.7 J	0.78 J
Acenaphthene	NV	NV	NV	NV	3.4	0.83 J	4.7	1.9 U	28	1.2 J	2.6	0.66 J
Fluorene	NV	536	NV	NV	6.3	1.9	7.2	0.64 J	15	1.3 J	3.4	1.3 J
Phenanthrene	NV	1170	NV	NV	30	7	57	4.4	27	8	25	7.8
Anthracene	NV	845	NV	NV	24	2.5	28	0.77 J	11	2.4	5.2	2.6
2-Methylnaphthalene	NV	NV	NV	NV	1.7 U	1.1 J	4.7	1.9 U	2.5	1.3 J	1.1 J	0.83 J
Total HPAH	NV	NV	NV	NV	622	112	828	54.3	403	119	331	77.9
Fluoranthene	NV	2230	NV	NV	98	25	200	14	140	30	90	16
Pyrene	NV	1520	NV	NV	90	22	190	11	110	25	78	13
Benzo(a)anthracene	NV	1050	NV	NV	45	9.2	72	3.7	29	7.1	22	6.7
Chrysene	NV	1290	NV	NV	72	12	100	8.3	38	14	48	8.1
Benzofluoranthene, Total	NV	NV	NV	NV	180	23	160	9.4	43	19	46	13
Benzo(a)pyrene	NV	1450	NV	NV	68	10	56	2.8 J	18	7.2	16	7
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	29	5	21	2 J	10	6.6	11	6.3
Dibenzo(a,h)anthracene	NV	NV	NV	NV	11	3.5 U	7.6	3.9 U	4.6	3.3 J	4.5	3.7 U
Benzo(g,h,i)perylene	NV	NV	NV	NV	29	3.7	21	1.1 J	10	7	15	5.9
Chlorinated Hydrocarbons (µg/kg)												
1,4-Dichlorobenzene	NV	NV	NV	NV	4.2 U	4.4 U	4.5 U	4.8 U	3.6 U	4.7 U	4.4 U	4.6 U
1,2-Dichlorobenzene	NV	NV	NV	NV	4.2 U	4.4 U	4.5 U	4.8 U	3.6 U	4.7 U	4.4 U	4.6 U
1,2,4-Trichlorobenzene	NV	NV	NV	NV	4.2 U	4.4 U	4.5 U	4.8 U	3.6 U	4.7 U	4.4 U	4.6 U
Hexachlorobenzene	NV	NV	NV	NV	4.2 U	4.4 U	4.5 U	4.8 U	3.6 U	4.7 U	4.4 U	4.6 U

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-08 LRIS-LR-08-SS 04/19/2010 0-10 cm	LRIS-LR-09 LRIS-LR-09-SS 04/19/2010 0-10 cm	LRIS-LR-10 LRIS-LR-10-SS 04/19/2010 0-10 cm	LRIS-LR-11 LRIS-LR-11-SS 04/20/2010 0-10 cm	LRIS-LR-12 LRIS-LR-12-SS 04/20/2010 0-10 cm	LRIS-LR-13 LRIS-LR-13-SS 04/20/2010 0-10 cm	LRIS-LR-14 LRIS-LR-14-SS 04/20/2010 0-10 cm	LRIS-LR-15 LRIS-LR-15-SS 04/20/2010 0-10 cm
Phthalates (µg/kg)												
Dimethyl phthalate	NV	NV	NV	NV	8.5 U	8.9 U	9.1 U	9.6 U	7.1 U	0.52 J	0.48 J	9.2 U
Diethyl phthalate	NV	NV	NV	NV	8.5 U	2.5 J	9.1 U	9.6 U	7.1 U	9.4 U	8.8 U	9.2 U
Di-n-butyl phthalate	380	NV	NV	NV	33	3.2 J	3.6 J	20	1.9 J	4 J	20	23
Butylbenzyl phthalate	NV	NV	NV	NV	8.5 U	8.9 U	9.1 U	35	7.1 U	4.6 J	49	62
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	45 J	26 J	46 J	19 J	13 J	48 J	36 J	31 J
Di-n-octyl phthalate	39	NV	NV	NV	17 U	18 U	18 U	19 U	14 U	19 U	18 U	18 U
Miscellaneous Extractables (µg/kg)												
Benzyl alcohol	NV	NV	NV	NV	15	8.9 U	17	9.6 U	1.8 J	9.4 U	8.8 U	9.2 U
Benzoic acid	2,900	NV	NV	NV	320	72 J	130 J	71 J	53 J	78 J	73 J	85 J
Dibenzofuran	200	NV	NV	NV	2.5 J	0.9 J	9.3	9.6 U	2.8 J	0.97 J	2.1 J	9.2 U
Hexachlorobutadiene	NV	NV	NV	NV	4.2 U	4.4 U	4.5 U	4.8 U	3.6 U	4.7 U	4.4 U	4.6 U
N-Nitrosodiphenylamine	NV	NV	NV	NV	4.2 U	4.4 U	4.5 U	4.8 U	3.6 U	4.7 U	4.4 U	4.6 U
Total Petroleum Hydrocarbons (mg/kg)												
Diesel #2 Range	340	NV	NV	NV	NV	NV	42 U	NV	31 U	NV	NV	NV
Motor Oil Range	3,600	NV	NV	NV	NV	NV	84 U	NV	63 U	NV	NV	NV
Polychlorinated Biphenyl (PCB) Aroclors (µg/kg)												
Total PCB Aroclors	110	676	NV	NV	16 U	NV	17 U	NV	14 U	NV	17 U	NV
PCB Aroclors (µg/kg)												
Aroclor 1016	NV	NV	NV	NV	16 U	NV	17 U	NV	14 U	NV	17 U	NV
Aroclor 1221	NV	NV	NV	NV	16 U	NV	17 U	NV	14 U	NV	17 U	NV
Aroclor 1232	NV	NV	NV	NV	16 U	NV	17 U	NV	14 U	NV	17 U	NV
Aroclor 1242	NV	NV	NV	NV	16 U	NV	17 U	NV	14 U	NV	17 U	NV
Aroclor 1248	NV	NV	NV	NV	16 U	NV	17 U	NV	14 U	NV	17 U	NV
Aroclor 1254	NV	NV	NV	NV	16 U	NV	17 U	NV	14 U	NV	17 U	NV
Aroclor 1260	NV	NV	NV	NV	16 U	NV	17 U	NV	14 U	NV	17 U	NV
Dioxins (ng/kg)												
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	**220**	**580**	**57**	**2.5**	**61**	**16**	**13**	1.2
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	640 J	250	180 J	26	180 J	210	92 J	19
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	120000 J	2100	15000 J	900	18000 J	7900 J	4600 J	370
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	770 J	180 J	150 J	12	160 J	56	71 J	0.19 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	8700 J	5400 J	1600 J	89	2000 J	540	510 J	44
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	47	140	10	0.67 U	9.5	3.3 J	4.5	0.28 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	**190**	45	27	2.1 J	25	6.6	8.2	0.51 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	14	**730 J**	11	1.1 J	20	3.5 J	3.1 J	0.42 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	55	31	10	0.79 J	9.9	2.8 J	3.7	0.49 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	240	**720**	69	3.8 U	80	28	17	2.1 U
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	4	16	0.75 J	0.24 U	1.4 J	0.27 U	0.75 J	0.27 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	45 J	**1800**	51 J	1.9 U	41 J	8.1	4.1 J	1 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	30	6.1	5.7	0.4 U	4.6	1.4 J	1.9 J	0.38 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	8.5 J	**180**	11 J	0.37 U	13 J	1.9 J	1.1 J	0.36 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	39	5.3	11	0.59 J	5.7	1.6 J	2.7 J	0.31 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	**56 J**	0.87 U	**9.7 J**	0.46 U	**5.8 J**	**1.9 J**	**2 J**	0.45 U

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-08	LRIS-LR-09	LRIS-LR-10	LRIS-LR-11	LRIS-LR-12	LRIS-LR-13	LRIS-LR-14	LRIS-LR-15
Sample ID					LRIS-LR-08-SS	LRIS-LR-09-SS	LRIS-LR-10-SS	LRIS-LR-11-SS	LRIS-LR-12-SS	LRIS-LR-13-SS	LRIS-LR-14-SS	LRIS-LR-15-SS
Sample Date					04/19/2010	04/19/2010	04/19/2010	04/20/2010	04/20/2010	04/20/2010	04/20/2010	04/20/2010
Sample Depth					0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	7.4	0.38 U	2.9	0.57 U	1.2	0.97 J	0.84	0.58 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	**0.59 J**	**5.2**	**2.3**	0.24 U	**0.83**	0.45 U	0.22 U	0.2 U
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	2400	720	490	38	510	220	260	21
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	16,000 J	15000	3,500 J	200	3,700 J	1100	1,200 J	87
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	2200	350	350	19	370	100	140	7.6
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	840	15000	590	20	660	150	80	10
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	510	67	100	1.2	78	13	28	0.71
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	42	1500	160	0.37 U	200	15	6.3	0.36 U
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	39	9.7	46	0.57	11	3.6	4.5	0.58
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	5.4	110	53	0.24 U	20	8.1	1.7	0.2 U

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-15 LRIS-LR-65-SS 04/20/2010 0-10 cm	LRIS-LR-16 LRIS-LR-16-SS 04/20/2010 0-10 cm	LRIS-LR-17 LRIS-LR-17-SS 04/20/2010 0-10 cm	LRIS-LR-18 LRIS-LR-18-SS 04/20/2010 0-10 cm	LRIS-LR-19 LRIS-LR-19-SS 04/21/2010 0-10 cm	LRIS-LR-20 LRIS-LR-20-SS 04/21/2010 0-10 cm	LRIS-LR-21 LRIS-LR-21-SS 04/21/2010 0-10 cm	LRIS-LR-22 LRIS-LR-22-SS 04/21/2010 0-10 cm
Phenols (µg/kg)												
Phenol	120	NV	NV	NV	9 U	11 J	10	3.2 J	7.7 J	9.6 J	11	24
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	9 U	4.5 J	7.8 U	8.5 U	8.8 U	10 U	7.8 U	8 U
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	13 J	220	16	7.1 J	12 J	8.8 J	23	51
2,4-Dimethylphenol	NV	NV	NV	NV	9 U	13 U	7.8 U	8.5 U	8.8 U	10 U	7.8 U	8 U
Pentachlorophenol	1,200	NV	310	250	9 U	76	8.7	7.9 J	**380**	**490**	7.8 U	**310**
Metals (mg/kg)												
Arsenic	14	33	NV	NV	4.3	6.5	5.6	4.8	7.3	9.2	4.6	5.5
Cadmium	2.1	4.98	NV	NV	0.053 J	0.31 J	0.061 J	0.56	0.14 J	0.27 J	0.02 J	0.17 J
Chromium	72	111	NV	NV	16	20	13	20	25	23	14	14
Copper	400	149	NV	NV	16	30	11	24	27	30	13	15
Lead	360	128	NV	NV	9.7	14	6.4	14	14	32	6.9	8.3
Mercury	0.66	1.06	NV	NV	0.079	0.081	0.024 J	0.083	0.038 J	0.096 J	0.018 J	0.02 J
Nickel	26	48.6	NV	NV	14	17	12	17	15	17	14	11
Silver	0.58	NV	NV	NV	0.11 J	0.14 J	0.083 J	0.13 J	0.12 J	0.13 J	0.083 J	0.084 J
Zinc	3,200	459	NV	NV	64	99	56	92	75	100	49	69
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)												
Total PAH	17,000	22,800	NV	NV	132	2,127	130	297	2,863	2,237	61.7	817
Total LPAH	NV	NV	NV	NV	18.5	310	15.7	41.7	225	195	9.9	94.1
Naphthalene	NV	561	NV	NV	1.5 J	13	1.6 U	4	9.4	7	0.96 J	2.7
Acenaphthylene	NV	NV	NV	NV	0.98 J	5.9	1.3 J	2.5	35	20	0.47 J	4.9
Acenaphthene	NV	NV	NV	NV	1.8 U	25	0.78 J	3	4.1	5.3	0.37 J	7.7
Fluorene	NV	536	NV	NV	2.3	29	2.2	3.6	7.1	12	1.4 J	13
Phenanthrene	NV	1170	NV	NV	9.2	190	6.4	21	81	100	4.8	47
Anthracene	NV	845	NV	NV	2.7	37	3.4	5.2	84	46	1.1 J	18
2-Methylnaphthalene	NV	NV	NV	NV	1.8 U	10	1.6 U	2.4	4.6	5	0.78 J	1.6 U
Total HPAH	NV	NV	NV	NV	114	1,817	115	255	2,638	2,042	51.9	723
Fluoranthene	NV	2230	NV	NV	32	600	31	51	380	420	11	170
Pyrene	NV	1520	NV	NV	25	440	28	52	350	390	9.4	140
Benzo(a)anthracene	NV	1050	NV	NV	6.9	130	7.8	17	110	140	4.6	54
Chrysene	NV	1290	NV	NV	12	220	12	27	570	320	5.6	95
Benzofluoranthene, Total	NV	NV	NV	NV	20	260	20	44	750	470	8.1	150
Benzo(a)pyrene	NV	1450	NV	NV	6.8	87	7	24	160	120	3.3	49
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	4.3	35	3.2	15	150	80	4.2	26
Dibenzo(a,h)anthracene	NV	NV	NV	NV	3.6 U	9.8	3.1 U	4.3	38	26	3.1 U	10
Benzo(g,h,i)perylene	NV	NV	NV	NV	5.1	35	4.1	21	130	76	4.1	29
Chlorinated Hydrocarbons (µg/kg)												
1,4-Dichlorobenzene	NV	NV	NV	NV	4.5 U	6.7 U	3.9 U	4.3 U	4.4 U	5.1 U	3.9 U	4 U
1,2-Dichlorobenzene	NV	NV	NV	NV	4.5 U	6.7 U	3.9 U	4.3 U	4.4 U	5.1 U	3.9 U	4 U
1,2,4-Trichlorobenzene	NV	NV	NV	NV	4.5 U	6.7 U	3.9 U	4.3 U	4.4 U	5.1 U	3.9 U	4 U
Hexachlorobenzene	NV	NV	NV	NV	4.5 U	6.7 U	3.9 U	4.3 U	4.4 U	5.1 U	3.9 U	4 U

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-15 LRIS-LR-65-SS 04/20/2010 0-10 cm	LRIS-LR-16 LRIS-LR-16-SS 04/20/2010 0-10 cm	LRIS-LR-17 LRIS-LR-17-SS 04/20/2010 0-10 cm	LRIS-LR-18 LRIS-LR-18-SS 04/20/2010 0-10 cm	LRIS-LR-19 LRIS-LR-19-SS 04/21/2010 0-10 cm	LRIS-LR-20 LRIS-LR-20-SS 04/21/2010 0-10 cm	LRIS-LR-21 LRIS-LR-21-SS 04/21/2010 0-10 cm	LRIS-LR-22 LRIS-LR-22-SS 04/21/2010 0-10 cm
Phthalates (µg/kg)												
Dimethyl phthalate	NV	NV	NV	NV	9 U	2.2 J	7.8 U	2.2 J	8.8 U	10 U	2.7 J	15
Diethyl phthalate	NV	NV	NV	NV	9 U	13 U	7.8 U	8.5 U	8.8 U	10 U	7.8 U	8 U
Di-n-butyl phthalate	380	NV	NV	NV	16 J	20 J	3 J	5.5 J	19	23	25 U	28 U
Butylbenzyl phthalate	NV	NV	NV	NV	43	9.6 J	6.3 J	12	24	43	40	51
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	27 J	75 J	16 J	22 J	21 J	43 J	120 U	40 J
Di-n-octyl phthalate	39	NV	NV	NV	18 U	27 U	16 U	17 U	18 U	20 U	16 U	16 U
Miscellaneous Extractables (µg/kg)												
Benzyl alcohol	NV	NV	NV	NV	5.3 J	13 U	7.8 U	3.2 J	2.2 J	10	7.8 U	29
Benzoic acid	2,900	NV	NV	NV	72 J	170 J	72 J	69 J	77 J	140 J	91 J	210
Dibenzofuran	200	NV	NV	NV	0.69 J	16	0.94 J	2.5 J	4.4 J	8.2 J	0.38 J	5.2 J
Hexachlorobutadiene	NV	NV	NV	NV	4.5 U	6.7 U	3.9 U	4.3 U	4.4 U	5.1 U	3.9 U	4 U
N-Nitrosodiphenylamine	NV	NV	NV	NV	4.5 U	6.7 U	3.9 U	4.3 U	4.4 U	5.1 U	3.9 U	4 U
Total Petroleum Hydrocarbons (mg/kg)												
Diesel #2 Range	340	NV	NV	NV	NV	59 U	NV	NV	40 U	45 U	NV	8.3 J
Motor Oil Range	3,600	NV	NV	NV	NV	76 J	NV	NV	81 U	89 U	NV	25 J
Polychlorinated Biphenyl (PCB) Aroclors (µg/kg)												
Total PCB Aroclors	110	676	NV	NV	NV	25 U	NV	NV	NV	NV	NV	NV
PCB Aroclors (µg/kg)												
Aroclor 1016	NV	NV	NV	NV	NV	25 U	NV	NV	NV	NV	NV	NV
Aroclor 1221	NV	NV	NV	NV	NV	25 U	NV	NV	NV	NV	NV	NV
Aroclor 1232	NV	NV	NV	NV	NV	25 U	NV	NV	NV	NV	NV	NV
Aroclor 1242	NV	NV	NV	NV	NV	25 U	NV	NV	NV	NV	NV	NV
Aroclor 1248	NV	NV	NV	NV	NV	25 U	NV	NV	NV	NV	NV	NV
Aroclor 1254	NV	NV	NV	NV	NV	25 U	NV	NV	NV	NV	NV	NV
Aroclor 1260	NV	NV	NV	NV	NV	25 U	NV	NV	NV	NV	NV	NV
Dioxins (ng/kg)												
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	NV	**14**	**4.3**	1.7	**110**	**260**	0.51	NV
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	NV	170 J	55	14	3500 J	2600 J	3.9 J	NV
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	NV	5500 J	1100	270	40000 J	92000 J	96 J	NV
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	NV	60 J	32	4.8 U	780 J	1000 J	1.7 U	NV
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	NV	600 J	190	30	4800 J	11000 J	13 J	NV
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	NV	3.7 J	2.1 U	0.49 J	54 J	61	0.21 U	NV
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	NV	4.4	0.2 U	0.37 U	49 J	99	0.23 J	NV
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	NV	2.8 J	0.47 U	0.66 U	17 J	**36**	0.15 U	NV
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	NV	2.4 J	1.1 J	0.36 U	20 J	40	0.089 U	NV
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	NV	22	9.4	2 J	180	**520**	0.62 J	NV
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	NV	0.59 J	0.2 U	0.28 U	2.4 U	3.9 J	0.094 U	NV
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	NV	5 J	1.8 J	1.2 U	27 J	81 J	0.23 U	NV
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	NV	1.5 J	0.32 U	0.83 U	6.1 U	35	0.15 U	NV
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	NV	1.3 U	0.32 U	0.75 U	3.5 J	14 J	0.24 UJ	NV
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	NV	1.9 J	0.98 J	0.29 U	17 J	39	0.079 U	NV
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	NV	**1.6 J**	0.39 U	0.96 U	**9.3 J**	**36 J**	0.16 U	NV

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-15 LRIS-LR-65-SS 04/20/2010 0-10 cm	LRIS-LR-16 LRIS-LR-16-SS 04/20/2010 0-10 cm	LRIS-LR-17 LRIS-LR-17-SS 04/20/2010 0-10 cm	LRIS-LR-18 LRIS-LR-18-SS 04/20/2010 0-10 cm	LRIS-LR-19 LRIS-LR-19-SS 04/21/2010 0-10 cm	LRIS-LR-20 LRIS-LR-20-SS 04/21/2010 0-10 cm	LRIS-LR-21 LRIS-LR-21-SS 04/21/2010 0-10 cm	LRIS-LR-22 LRIS-LR-22-SS 04/21/2010 0-10 cm
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	NV	1.2	0.41 J	0.87	3.5 U	15	0.15 U	NV
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	NV	0.3 U	0.14 U	0.54 U	**1.2 U**	**1.2 U**	0.14 U	NV
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	NV	230	120	18	4100	3800	6.1	NV
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	NV	1,200 J	300	67	9,200 J	21,000 J	27 J	NV
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	NV	100	45	5.9	1200	2200	2.9	NV
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	NV	94	24	11	690	1800	3.2	NV
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	NV	15	2.5	0.96 U	130	370	0.26	NV
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	NV	7.3	0.32 U	0.75 U	17	67	0.24 U	NV
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	NV	7	0.68	1.4	6.7	43	0.15 U	NV
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	NV	3	0.14 U	0.54 U	21	89	0.14 U	NV

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-23 LRIS-LR-23-SS 04/21/2010 0-10 cm	LRIS-LR-23 LRIS-LR-73-SS 04/21/2010 0-10 cm	LRIS-LR-24 LRIS-LR-24-SS 04/21/2010 0-10 cm	LRIS-LR-25 LRIS-LR-25-SS 04/21/2010 0-10 cm	LRIS-LR-26 LRIS-LR-26-SS 04/21/2010 0-10 cm	LRIS-LR-27 LRIS-LR-27-SS 04/21/2010 0-10 cm	LRIS-LR-28 LRIS-LR-28-SS 04/21/2010 0-10 cm
Phenols (µg/kg)											
Phenol	120	NV	NV	NV	12	10	19 J	23 J	36	15	13
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	7.6 U	7.8 U	16 J	8.3 J	7.5 U	8.4 U	7 U
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	63	130	4.5 J	52 J	190	26	23
2,4-Dimethylphenol	NV	NV	NV	NV	7.6 U	7.8 U	9 U	19 U	7.5 U	8.4 U	7 U
Pentachlorophenol	1,200	NV	310	250	7.6 U	7.8 U	**510 J**	**740 J**	45	4.9 J	2.8 J
Metals (mg/kg)											
Arsenic	14	33	NV	NV	3.2	3.2	6	12	8.1	4.6	5.7
Cadmium	2.1	4.98	NV	NV	0.25 U	0.25 U	0.16 J	0.22 J	0.16 J	0.073 J	0.23 U
Chromium	72	111	NV	NV	15	16	19	24	21	18	13
Copper	400	149	NV	NV	13	14	22	23	16	19	8.5
Lead	360	128	NV	NV	5.2	5.7	10	9.8	6.7	8.3	5.4
Mercury	0.66	1.06	NV	NV	0.014 J	0.017 J	0.044 J	0.051 J	0.017 J	0.03 J	0.021 UJ
Nickel	26	48.6	NV	NV	14	15	15	14	13	16	12
Silver	0.58	NV	NV	NV	0.094 J	0.1 J	0.12 J	0.12 J	0.081 J	0.13 J	0.073 J
Zinc	3,200	459	NV	NV	46	53	93	120	78	66	57
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)											
Total PAH	17,000	22,800	NV	NV	50.2	58.7	975	4,160	506	116	55.0
Total LPAH	NV	NV	NV	NV	6.7	11.3	144	1,149	99.2	17.0	12.9
Naphthalene	NV	561	NV	NV	0.63 J	0.95 J	8.6	260	17	1.8	2.4
Acenaphthylene	NV	NV	NV	NV	1.5 U	1.6 U	10	31	4.7	0.55 J	0.38 J
Acenaphthene	NV	NV	NV	NV	1.5 U	1.6 U	6.5	92	15	1 J	1.4 U
Fluorene	NV	536	NV	NV	0.3 J	1.2 J	20	110	8.7	2.1	1.6
Phenanthrene	NV	1170	NV	NV	2.6	5.1	59	410	35	7.8	5.4
Anthracene	NV	845	NV	NV	0.94 J	1.5 J	35	160	13	2.3	1.7
2-Methylnaphthalene	NV	NV	NV	NV	1.5 U	0.91 J	4.5	86	5.8	1.4 J	1.4 U
Total HPAH	NV	NV	NV	NV	43.5	47.5	831	3,011	406	99.1	42.1
Fluoranthene	NV	2230	NV	NV	7.1	13	150	850	110	26	10
Pyrene	NV	1520	NV	NV	5.5	11	130	690	91	22	9
Benzo(a)anthracene	NV	1050	NV	NV	3.9	2.7	58	210	24	7.2	2.8
Chrysene	NV	1290	NV	NV	6.3	4.4	100	400	55	13	4.2
Benzofluoranthene, Total	NV	NV	NV	NV	9.9	5.7	180	480	66	12	5.4
Benzo(a)pyrene	NV	1450	NV	NV	3.8	2.4	76	170	22	5.6	2.5
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	3	3.7	59	89	16	5.1	3.5
Dibenzo(a,h)anthracene	NV	NV	NV	NV	3 U	3.1 U	15	35	6.4	3.1 J	1.8 J
Benzo(g,h,i)perylene	NV	NV	NV	NV	2.5	3	63	87	16	5.1	2.9
Chlorinated Hydrocarbons (µg/kg)											
1,4-Dichlorobenzene	NV	NV	NV	NV	3.8 U	3.9 U	4.5 U	9.3 U	3.7 U	4.2 U	3.5 U
1,2-Dichlorobenzene	NV	NV	NV	NV	3.8 U	3.9 U	4.5 U	9.3 U	3.7 U	4.2 U	3.5 U
1,2,4-Trichlorobenzene	NV	NV	NV	NV	3.8 U	3.9 U	4.5 U	9.3 U	3.7 U	4.2 U	3.5 U
Hexachlorobenzene	NV	NV	NV	NV	3.8 U	3.9 U	4.5 U	9.3 U	3.7 U	4.2 U	3.5 U

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-23 LRIS-LR-23-SS 04/21/2010 0-10 cm	LRIS-LR-23 LRIS-LR-73-SS 04/21/2010 0-10 cm	LRIS-LR-24 LRIS-LR-24-SS 04/21/2010 0-10 cm	LRIS-LR-25 LRIS-LR-25-SS 04/21/2010 0-10 cm	LRIS-LR-26 LRIS-LR-26-SS 04/21/2010 0-10 cm	LRIS-LR-27 LRIS-LR-27-SS 04/21/2010 0-10 cm	LRIS-LR-28 LRIS-LR-28-SS 04/21/2010 0-10 cm
Phthalates (µg/kg)											
Dimethyl phthalate	NV	NV	NV	NV	7.6 U	7.8 U	9 U	19 U	7.5 U	8.4 U	7 U
Diethyl phthalate	NV	NV	NV	NV	7.6 U	7.8 U	9 U	19 U	7.5 U	8.4 U	7 U
Di-n-butyl phthalate	380	NV	NV	NV	21	16 U	41	27 UJ	13 J	17 U	4 J
Butylbenzyl phthalate	NV	NV	NV	NV	25	11 U	40	90	21	8.4 U	8.8 U
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	19 J	120 U	47 J	82 J	36 J	130 U	110 U
Di-n-octyl phthalate	39	NV	NV	NV	15 U	16 U	18 U	37 U	15 U	17 U	14 U
Miscellaneous Extractables (µg/kg)											
Benzyl alcohol	NV	NV	NV	NV	7.6 U	7.8 U	29	28	7.5 U	6.2 J	9.2
Benzoic acid	2,900	NV	NV	NV	190 U	68 J	240	220 J	190 U	77 J	64 J
Dibenzofuran	200	NV	NV	NV	7.6 U	0.66 J	9.5	83	6.3 J	0.82 J	1.3 J
Hexachlorobutadiene	NV	NV	NV	NV	3.8 U	3.9 U	4.5 U	9.3 U	3.7 U	4.2 U	3.5 U
N-Nitrosodiphenylamine	NV	NV	NV	NV	3.8 U	3.9 U	4.5 U	9.3 U	3.7 U	4.2 U	3.5 U
Total Petroleum Hydrocarbons (mg/kg)											
Diesel #2 Range	340	NV	NV	NV	NV	NV	NV	39 U	NV	NV	NV
Motor Oil Range	3,600	NV	NV	NV	NV	NV	NV	35 J	NV	NV	NV
Polychlorinated Biphenyl (PCB) Aroclors (µg/kg)											
Total PCB Aroclors	110	676	NV	NV	NV	NV	NV	NV	NV	NV	NV
PCB Aroclors (µg/kg)											
Aroclor 1016	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Aroclor 1221	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Aroclor 1232	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Aroclor 1242	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Aroclor 1248	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Aroclor 1254	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Aroclor 1260	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Dioxins (ng/kg)											
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	0.59	NV	**170**	**260**	NV	0.93	0.84
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	5.6 J	NV	570 J	980 J	NV	14 J	3.9 J
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	120 J	NV	70000 J	68000 J	NV	170 J	260 J
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	2.5 J	NV	700 J	680 J	NV	4.2 J	3.3 J
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	14 J	NV	5600 J	7800 J	NV	23 J	30 J
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	0.17 U	NV	44	43	NV	0.52 U	0.19 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	0.34 U	NV	**210**	100	NV	0.51 J	0.23 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	0.17 U	NV	26	**53**	NV	0.26 J	0.22 J
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	0.62 J	NV	55	38	NV	0.46 U	0.3 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	0.58 J	NV	220	320	NV	0.98 J	1.3 J
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	0.26 U	NV	4.8 J	3.7 J	NV	0.24 U	0.22 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	0.47 J	NV	48 J	120 J	NV	0.46 J	0.35 J
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	0.14 U	NV	28	24	NV	0.24 U	0.15 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	0.15 UJ	NV	8.9 J	**58 J**	NV	0.26 UJ	0.17 UJ
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	0.24 U	NV	30	27	NV	0.2 U	0.22 J
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	0.15 U	NV	**58 J**	**31 J**	NV	0.28 U	0.17 U

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

Location ID	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-23	LRIS-LR-23	LRIS-LR-24	LRIS-LR-25	LRIS-LR-26	LRIS-LR-27	LRIS-LR-28
Sample ID					LRIS-LR-23-SS	LRIS-LR-73-SS	LRIS-LR-24-SS	LRIS-LR-25-SS	LRIS-LR-26-SS	LRIS-LR-27-SS	LRIS-LR-28-SS
Sample Date					04/21/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010	04/21/2010
Sample Depth					0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	0.3 J	NV	7.5	10	NV	0.58 J	0.25 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	0.084 U	NV	**1.1 J**	**15**	NV	0.21 U	0.085 U
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	7.2	NV	2100	2200	NV	13	8.5
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	28 J	NV	12,000 J	16,000 J	NV	47 J	59 J
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	7.4	NV	1900	1600	NV	8.8	7.1
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	5.4	NV	910	2100	NV	7.5	9.4
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	0.58	NV	430	330	NV	1.3	0.59
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	0.17	NV	69	500	NV	0.38	0.36
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	1	NV	30	75	NV	1.9	0.59
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	0.11	NV	18	190	NV	0.38	0.11 U

Table 3-18
Lake River Surface Sediment Screening Results
Former PWT Site RI/FS

NOTES:

Bold indicates values that exceed screening criteria; if values were non-detects ("U" or "UJ"), 1/2 the reported concentration was compared with screening criteria. Estimated values were compared with the screening criteria.

Total HPAH (high PAH) is the total of fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzofluoranthenes, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene.

Total LPAH (low PAH) is the total of naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, and 2-methylnaphthalene.

Total PAH includes the following PAHs: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, 2-methylnaphthalene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, total benzofluoranthenes, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene.

Total PCB Aroclors is the sum of the individual Aroclors. If no Aroclors were detected, the total is reported as non-detect (U) at the detection limit of the individual Aroclors.

cm = centimeter(s).

DEQ = Oregon Department of Environmental Quality.

J = Estimated value. Reported concentration used in dioxin TEQ and Total PAH calculations calculations.

mg/kg = milligrams per kilogram.

µg/kg = micrograms per kilogram.

ng/kg = nanograms per kilogram.

NV = no value.

TEQ = toxicity equivalent.

U = Not detected. 1/2 the reported concentration used in dioxin TEQ and Total PAH calculations.

UJ = Not detected. The reported value is estimated. 1/2 the reported concentration used in dioxin TEQ and Total PAH calculations.

[a] Avocet 2011 freshwater sediment benthic screening criteria.

[b] McDonald et al. (2000) probable effect concentration values developed for predicting sediment toxicity.

[c] Values represent the default value protective of bird, freshwater fish, and mammal populations (DEQ 2007).

[d] Pentachlorophenol value based on DEQ (2007) human fish consumption screening level value; dioxin TEQ based on natural background; see Appendix K for derivation.

[e] Represents criteria for 4-methylphenol.

Table 3-19
Lake River Subsurface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-01 LRIS-LR-01-SB-1-2 4/26/2010 1-2 ft	LRIS-LR-01 LRIS-LR-01-SB-4-5 4/26/2010 4-5 ft	LRIS-LR-03 LRIS-LR-03-SB-1-2 4/27/2010 1-2 ft	LRIS-LR-03 LRIS-LR-03-SB-3-4 4/27/2010 3-4 ft	LRIS-LR-05 LRIS-LR-05-SB-1-2 4/27/2010 1-2 ft	LRIS-LR-05 LRIS-LR-05-SB-9-10.5 4/27/2010 9-10.5 ft	LRIS-LR-05 LRIS-LR-55-SB-9-10.5 4/27/2010 9-10.5 ft
Phenols (µg/kg)											
Phenol	120	NV	NV	NV	4.5 J	9.8	6.8 J	7.9	14	15	12
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	8.4 U	6.9 U	8.5 U	7.9 U	1.9 J	6.1 U	6.1 U
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	5.4 J	14 U	17 U	5.3 J	12 J	12 U	12 U
2,4-Dimethylphenol	NV	NV	NV	NV	8.4 U	6.9 U	8.5 U	7.9 U	7.8 U	6.1 U	6.1 U
Pentachlorophenol	1,200	NV	310	250	8.7	6.9 U	11	11	41	6.1 U	6.1 U
Metals (mg/kg)											
Arsenic	14	33	NV	NV	5.4	2	6.2	6.9	6.6	0.98	0.88
Cadmium	2.1	4.98	NV	NV	0.85	0.2 U	0.51	0.71	0.34	0.22 U	0.21 U
Chromium	72	111	NV	NV	24	18	24	25	21	8.1	8.4
Copper	400	149	NV	NV	28	20	31	30	27	7	6.8
Lead	360	128	NV	NV	20	5.5	20	22	18	2.7	2.6
Mercury	0.66	1.06	NV	NV	0.089	0.02 J	0.15	0.092	0.064	0.016 U	0.011 J
Nickel	26	48.6	NV	NV	18	17	19	20	19	10	9.4
Silver	0.58	NV	NV	NV	0.17 J	0.11 J	0.18 J	0.19 J	0.16 J	0.047 J	0.045 J
Zinc	3,200	459	NV	NV	120	45	120	140	110	22	21
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)											
Total PAH	17,000	22,800	NV	NV	401	12.9	349 J	659	7,006	2.4 U	11.7
Total LPAH	NV	NV	NV	NV	69.1	4.4	48.6 J	153	3,796	1.2 U	3.8
Naphthalene	NV	561	NV	NV	14	0.52 J	2.8 J	26	18	1.2 U	1.2 U
Acenaphthylene	NV	NV	NV	NV	3.1	1.4 U	1.3 J	3	8.9	1.2 U	1.2 U
Acenaphthene	NV	NV	NV	NV	2.6	1.4 U	4.8 J	16	300	1.2 U	1.2 U
Fluorene	NV	536	NV	NV	4	1.4 U	3.3 J	7.9	290	1.2 U	1.2 U
Phenanthrene	NV	1,170	NV	NV	32	0.7 J	25 J	79	3,000	1.2 U	0.19 J
Anthracene	NV	845	NV	NV	9.2	1.4 U	9.7 J	16	170	1.2 U	1.2 U
2-Methylnaphthalene	NV	NV	NV	NV	4.2	0.34 J	1.7 J	5.2	9.4	1.2 U	1.2 U
Total HPAH	NV	NV	NV	NV	332	8.5	301 J	505	3,210	2.4 U	2.4 U
Fluoranthene	NV	2,230	NV	NV	76	1.4 U	83 J	140	1,400	1.2 U	1.2 U
Pyrene	NV	1,520	NV	NV	76	1.4 U	75 J	130	1,100	1.2 U	1.2 U
Benzo(a)anthracene	NV	1,050	NV	NV	27	1.7 U	25 J	46	170	1.5 U	1.5 U
Chrysene	NV	1,290	NV	NV	40	0.14 J	39 J	59	210	1.5 U	1.5 U
Benzofluoranthene, Total	NV	NV	NV	NV	52	2.8 U	40 J	62	190	2.4 U	2.4 U
Benzo(a)pyrene	NV	1,450	NV	NV	24	2.1 U	15 J	29	75	1.8 U	1.8 U
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	14	2.8 U	9.2 J	16	25	2.4 U	2.4 U
Dibenzo(a,h)anthracene	NV	NV	NV	NV	5	2.8 U	4.5 J	6.4	11	2.4 U	2.4 U
Benzo(g,h,i)perylene	NV	NV	NV	NV	18	1.7 U	9.9 J	17	29	1.5 U	1.5 U
Chlorinated Hydrocarbons (µg/kg)											
1,4-Dichlorobenzene	NV	NV	NV	NV	4.2 U	3.4 U	4.2 UJ	3.9 U	3.9 U	3 U	3.1 U
1,2-Dichlorobenzene	NV	NV	NV	NV	4.2 U	3.4 U	4.2 UJ	3.9 U	3.9 U	3 U	3.1 U
1,2,4-Trichlorobenzene	NV	NV	NV	NV	4.2 U	3.4 U	4.2 UJ	3.9 U	3.9 U	3 U	3.1 U
Hexachlorobenzene	NV	NV	NV	NV	4.2 U	3.4 U	4.2 UJ	3.9 U	3.9 U	3 U	3.1 U

Table 3-19
Lake River Subsurface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-01 LRIS-LR-01-SB-1-2 4/26/2010 1-2 ft	LRIS-LR-01 LRIS-LR-01-SB-4-5 4/26/2010 4-5 ft	LRIS-LR-03 LRIS-LR-03-SB-1-2 4/27/2010 1-2 ft	LRIS-LR-03 LRIS-LR-03-SB-3-4 4/27/2010 3-4 ft	LRIS-LR-05 LRIS-LR-05-SB-1-2 4/27/2010 1-2 ft	LRIS-LR-05 LRIS-LR-05-SB-9-10.5 4/27/2010 9-10.5 ft	LRIS-LR-05 LRIS-LR-55-SB-9-10.5 4/27/2010 9-10.5 ft
Phthalates (µg/kg)											
Dimethyl phthalate	NV	NV	NV	NV	8.4 U	6.9 U	8.5 UJ	7.9 U	7.8 U	6.1 U	6.1 U
Diethyl phthalate	NV	NV	NV	NV	8.4 U	6.9 U	8.5 UJ	7.9 U	7.8 U	6.1 U	6.1 U
Di-n-butyl phthalate	380	NV	NV	NV	17 U	14 U	17 UJ	19 U	16 U	12 U	12 U
Butylbenzyl phthalate	NV	NV	NV	NV	15 U	6.9 U	12 UJ	11 U	15 U	6.1 U	6.1 U
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	130 U	100 U	130 UJ	120 U	120 U	91 U	92 U
Di-n-octyl phthalate	39	NV	NV	NV	2.4 J	14 U	17 UJ	1.2 J	16 U	12 U	12 U
Miscellaneous Extractables (µg/kg)											
Benzyl alcohol	NV	NV	NV	NV	8.4 U	6.9 U	8.5 UJ	7.9 U	5.2 J	2.6 J	2.4 J
Benzoic acid	2,900	NV	NV	NV	97 J	63 J	210 UJ	85 J	110 J	150 UJ	150 UJ
Dibenzofuran	200	NV	NV	NV	3.5 J	6.9 U	2.2 J	4.7 J	52	6.1 U	6.1 U
Hexachlorobutadiene	NV	NV	NV	NV	4.2 U	3.4 U	4.2 UJ	3.9 U	3.9 U	3 U	3.1 U
N-Nitrosodiphenylamine	NV	NV	NV	NV	1.9 J	3.4 U	4.2 UJ	3.9 U	3.9 U	3 U	3.1 U
Dioxins (ng/kg)											
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	**6.4**	NV	NV	NV	**17**	NV	NV
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	27	NV	NV	NV	120	NV	NV
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	2,200	NV	NV	NV	8800 J	NV	NV
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	27	NV	NV	NV	55	NV	NV
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	210	NV	NV	NV	600	NV	NV
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	2.2 J	NV	NV	NV	3.3	NV	NV
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	4.7	NV	NV	NV	6.1	NV	NV
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	1.5 U	NV	NV	NV	3.5	NV	NV
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	2.7 J	NV	NV	NV	4.5	NV	NV
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	8.8	NV	NV	NV	30	NV	NV
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	0.2 J	NV	NV	NV	0.45 J	NV	NV
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	4.4	NV	NV	NV	7.3 J	NV	NV
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	1.5 J	NV	NV	NV	2.5 J	NV	NV
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	0.75 U	NV	NV	NV	1 J	NV	NV
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	1.2 J	NV	NV	NV	2.1 J	NV	NV
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	1.6 U	NV	NV	NV	**2.3 J**	NV	NV
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	1.7	NV	NV	NV	1.5	NV	NV
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	0.54 U	NV	NV	NV	0.36 J	NV	NV
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	88	NV	NV	NV	190	NV	NV
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	460	NV	NV	NV	1,300	NV	NV
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	54	NV	NV	NV	110	NV	NV
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	60	NV	NV	NV	160	NV	NV
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	14	NV	NV	NV	14	NV	NV
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	5.7	NV	NV	NV	8.3	NV	NV
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	11	NV	NV	NV	6.4	NV	NV
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	2.4	NV	NV	NV	3.4	NV	NV

Table 3-19
Lake River Subsurface Sediment Screening Results
Former PWT Site RI/FS

Location ID	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-06	LRIS-LR-06	LRIS-LR-08	LRIS-LR-08	LRIS-LR-09	LRIS-LR-09
Sample ID					LRIS-LR-06-SB-1-2	LRIS-LR-06-SB-3-4	LRIS-LR-08-SB-1-2	LRIS-LR-08-SB-3-4	LRIS-LR-09-SB-1-2	LRIS-LR-09-SB-4-5
Sample Date					4/28/2010	4/28/2010	4/28/2010	4/28/2010	4/29/2010	4/29/2010
Sample Depth					1-2 ft	3-4 ft	1-2 ft	3-4 ft	1-2 ft	4-5 ft
Phenols (µg/kg)										
Phenol	120	NV	NV	NV	20 J	24	6.4 U	24	24 J	22 J
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	7.7 UJ	8.1 U	6.4 U	8.3 U	NV	NV
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	2.5 J	16 U	13 U	31	**360**	**280 J**
2,4-Dimethylphenol	NV	NV	NV	NV	7.7 UJ	8.1 U	6.4 U	8.3 U	NV	NV
Pentachlorophenol	1,200	NV	310	250	7.7 UJ	8.1 U	**3,100**	22	NV	7.9 J
Metals (mg/kg)										
Arsenic	14	33	NV	NV	5.1 J	5.3 J	4 J	5.8 J	NV	NV
Cadmium	2.1	4.98	NV	NV	0.26 UJ	0.32 UJ	0.087 J	0.57 J	NV	NV
Chromium	72	111	NV	NV	23 J	23 J	16 J	23 J	NV	NV
Copper	400	149	NV	NV	29	30	29	33	NV	NV
Lead	360	128	NV	NV	10	8.8	14	16	NV	NV
Mercury	0.66	1.06	NV	NV	0.049	0.059	0.038	0.082	NV	NV
Nickel	26	48.6	NV	NV	20 J	21 J	13 J	18 J	NV	NV
Silver	0.58	NV	NV	NV	0.18 J	0.18 J	0.11 J	0.19 J	NV	NV
Zinc	3,200	459	NV	NV	57	57	88	110	NV	NV
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)										
Total PAH	17,000	22,800	NV	NV	27.4	22.3	**38,577**	575	164 J	116 J
Total LPAH	NV	NV	NV	NV	7.9	7.4	10,447	137	13.3 J	10.3 J
Naphthalene	NV	561	NV	NV	1.4 J	1.6 U	7.1	20	NV	NV
Acenaphthylene	NV	NV	NV	NV	0.7 J	1.6 U	16	5.9	1.1 J	0.6 J
Acenaphthene	NV	NV	NV	NV	1.5 UJ	1.6 U	920	8.6	0.64 J	1 J
Fluorene	NV	536	NV	NV	0.84 J	1.6 U	**1,000**	12	1.1 J	1.1 J
Phenanthrene	NV	1,170	NV	NV	2.9 J	2.6	**7,300**	62	8.3 J	5.5 J
Anthracene	NV	845	NV	NV	0.74 J	1.6 U	**1,200**	23	2.2 J	1.7 J
2-Methylnaphthalene	NV	NV	NV	NV	0.58 J	0.78 J	3.5	5.7	NV	0.35 J
Total HPAH	NV	NV	NV	NV	19.5	14.9	28,130	438	151 J	106 J
Fluoranthene	NV	2,230	NV	NV	3.5 J	3.2 U	**12,000**	100	42 J	18 J
Pyrene	NV	1,520	NV	NV	4 J	3.9	**8,900**	100	33 J	20 J
Benzo(a)anthracene	NV	1,050	NV	NV	1.8 J	2 U	**2,100**	39	12 J	9.6 J
Chrysene	NV	1,290	NV	NV	1.1 J	1 J	**2,100**	47	18 J	14 J
Benzofluoranthene, Total	NV	NV	NV	NV	3.1 J	3.2 U	1,700	61	22 J	18 J
Benzo(a)pyrene	NV	1,450	NV	NV	1.4 J	2.4 U	760	39	9.4 J	10 J
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	3.1 UJ	2.5 J	230	22	5.6 J	5.8 J
Dibenzo(a,h)anthracene	NV	NV	NV	NV	3.1 UJ	3.2 U	110	3.3 U	2.6 J	3.1 J
Benzo(g,h,i)perylene	NV	NV	NV	NV	1.5 J	0.52 J	230	28	6.5 J	7.4 J
Chlorinated Hydrocarbons (µg/kg)										
1,4-Dichlorobenzene	NV	NV	NV	NV	3.9 UJ	4 U	3.2 U	4.2 U	NV	NV
1,2-Dichlorobenzene	NV	NV	NV	NV	3.9 UJ	4 U	3.2 U	4.2 U	NV	NV
1,2,4-Trichlorobenzene	NV	NV	NV	NV	3.9 UJ	4 U	3.2 U	4.2 U	NV	NV
Hexachlorobenzene	NV	NV	NV	NV	3.9 UJ	4 U	3.2 U	4.2 U	NV	NV

Table 3-19
Lake River Subsurface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-06 LRIS-LR-06-SB-1-2 4/28/2010 1-2 ft	LRIS-LR-06 LRIS-LR-06-SB-3-4 4/28/2010 3-4 ft	LRIS-LR-08 LRIS-LR-08-SB-1-2 4/28/2010 1-2 ft	LRIS-LR-08 LRIS-LR-08-SB-3-4 4/28/2010 3-4 ft	LRIS-LR-09 LRIS-LR-09-SB-1-2 4/29/2010 1-2 ft	LRIS-LR-09 LRIS-LR-09-SB-4-5 4/29/2010 4-5 ft
Phthalates (µg/kg)										
Dimethyl phthalate	NV	NV	NV	NV	7.7 UJ	8.1 U	6.4 U	8.3 U	NV	NV
Diethyl phthalate	NV	NV	NV	NV	7.7 UJ	8.1 U	6.4 U	8.3 U	NV	NV
Di-n-butyl phthalate	380	NV	NV	NV	15 UJ	16 U	13 U	17 U	2.5 J	2.7 J
Butylbenzyl phthalate	NV	NV	NV	NV	7.7 UJ	8.1 U	6.4 U	8.3 U	4.1 J	3.2 J
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	120 UJ	120 U	97 U	130 U	11 J	16 J
Di-n-octyl phthalate	39	NV	NV	NV	15 UJ	16 U	**260 U**	17 U	NV	NV
Miscellaneous Extractables (µg/kg)										
Benzyl alcohol	NV	NV	NV	NV	7.7 UJ	4 J	6.4 U	8.3 U	NV	1 J
Benzoic acid	2,900	NV	NV	NV	190 UJ	79 J	160 UJ	180 J	55 J	82 J
Dibenzofuran	200	NV	NV	NV	7.7 UJ	8.1 U	91	4 J	NV	0.36 J
Hexachlorobutadiene	NV	NV	NV	NV	3.9 UJ	4 U	3.2 U	4.2 U	NV	NV
N-Nitrosodiphenylamine	NV	NV	NV	NV	3.9 UJ	4 U	3.2 U	4.2 U	NV	NV
Dioxins (ng/kg)										
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	NV	NV	**910**	**6.9**	1.5	**3.1**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	NV	NV	1400 J	18 J	20	19
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	NV	NV	260000 J	1300 J	460	800
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	NV	NV	4100 J	31 J	8.3	12
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	NV	NV	30000 J	140 J	49	84
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	NV	NV	200	1.6 J	0.77 J	2 J
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	NV	NV	**1,300**	12	0.72 J	0.35 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	NV	NV	**70**	1.4 J	0.4 U	0.96 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	NV	NV	**380**	3.4 J	0.43 U	1.3 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	NV	NV	**1,200**	6.2	2.1 J	5.4
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	NV	NV	48 J	0.63 U	0.16 U	0.38 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	NV	NV	120 J	1.5 J	0.68 J	2 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	NV	NV	**200**	1 J	0.26 U	0.93 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	NV	NV	15 J	0.53 UJ	0.29 U	0.79 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	NV	NV	**190**	2.2 J	0.25 J	0.31 J
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	NV	NV	**410 J**	**1.8 J**	0.34 J	1.1 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	NV	NV	**93**	1.6	0.56 U	0.93
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	NV	NV	**3.9 J**	**1.1**	0.18 U	0.6 U
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	NV	NV	13,000	83	28	34
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	NV	NV	53,000 J	270 J	92	170
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	NV	NV	16,000	110	9.7	18
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	NV	NV	4,500	51	13	33
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	NV	NV	6,300	43	1.4	1.5
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	NV	NV	680	11	0.29 U	0.79 U
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	NV	NV	1,300	42	1.6	2.6
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	NV	NV	280	6.6	0.18 U	0.6 U

Table 3-19
Lake River Subsurface Sediment Screening Results
Former PWT Site RI/FS

Location ID	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-10	LRIS-LR-10	LRIS-LR-12	LRIS-LR-12	LRIS-LR-14	LRIS-LR-14
Sample ID					LRIS-LR-10-SB-1-2	LRIS-LR-10-SB-5-6	LRIS-LR-12-SB-1-2	LRIS-LR-12-SB-4-5	LRIS-LR-14-SB-1-2	LRIS-LR-14-SB-4-5
Sample Date					4/28/2010	4/28/2010	4/28/2010	4/28/2010	4/28/2010	4/28/2010
Sample Depth					1-2 ft	5-6 ft	1-2 ft	4-5 ft	1-2 ft	4-5 ft
Phenols (µg/kg)										
Phenol	120	NV	NV	NV	36	32	61	14	63	63
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	8.2 U	4 J	8.5 U	7.7 U	7.4 U	8.6 U
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	4.9 J	18	17 U	21	15	17 U
2,4-Dimethylphenol	NV	NV	NV	NV	8.2 U	7.4 U	8.5 U	7.7 U	7.4 U	8.6 U
Pentachlorophenol	1,200	NV	310	250	78	5.9 J	15	7.7 U	7.4 U	8.6 U
Metals (mg/kg)										
Arsenic	14	33	NV	NV	7.2 J	5.3 J	7.7 J	5.9 J	6.1 J	4.8 J
Cadmium	2.1	4.98	NV	NV	0.22 J	0.54 J	0.018 J	1.1 J	0.078 J	0.28 UJ
Chromium	72	111	NV	NV	26 J	25 J	43 J	27 J	21 J	28 J
Copper	400	149	NV	NV	29	26	30	31	35	35
Lead	360	128	NV	NV	14	14	12	17	33	10
Mercury	0.66	1.06	NV	NV	0.054	0.064	0.047	0.11	0.046	0.029
Nickel	26	48.6	NV	NV	17 J	18 J	21 J	17 J	19 J	25 J
Silver	0.58	NV	NV	NV	0.16 J	0.18 J	0.18 J	0.17 J	0.16 J	0.21 J
Zinc	3,200	459	NV	NV	120	100	180	130	96	65
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)										
Total PAH	17,000	22,800	NV	NV	992	702	827	711	232	16.5
Total LPAH	NV	NV	NV	NV	203	161	453	112	71.4	5.7
Naphthalene	NV	561	NV	NV	22	27	110	23	16	0.68 J
Acenaphthylene	NV	NV	NV	NV	5.2	8.1	2.3	11	6.6	1.7 U
Acenaphthene	NV	NV	NV	NV	12	26	80	3.8	3.2	1.7 U
Fluorene	NV	536	NV	NV	19	16	41	6.9	4.2	1.7 U
Phenanthrene	NV	1,170	NV	NV	92	63	170	45	30	1 J
Anthracene	NV	845	NV	NV	45	12	30	17	7.9	1.7 U
2-Methylnaphthalene	NV	NV	NV	NV	7.7	8.9	20	5.7	3.5	0.63 J
Total HPAH	NV	NV	NV	NV	789	541	374	598	161	10.8
Fluoranthene	NV	2,230	NV	NV	190	110	130	99	40	1.7 U
Pyrene	NV	1,520	NV	NV	180	120	110	120	38	1.7 U
Benzo(a)anthracene	NV	1,050	NV	NV	68	39	24	46	11	2.1 U
Chrysene	NV	1,290	NV	NV	110	55	34	59	15	0.59 J
Benzofluoranthene, Total	NV	NV	NV	NV	140	81	35	97	19	3.4 U
Benzo(a)pyrene	NV	1,450	NV	NV	45	56	18	77	12	2.6 U
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	23	30	10	38	9.9	3.4 U
Dibenzo(a,h)anthracene	NV	NV	NV	NV	8.2	8.9	3.4 U	9.2	3.9	3.4 U
Benzo(g,h,i)perylene	NV	NV	NV	NV	25	41	11	53	12	2.1 U
Chlorinated Hydrocarbons (µg/kg)										
1,4-Dichlorobenzene	NV	NV	NV	NV	4.1 U	3.7 U	4.2 U	3.9 U	3.7 U	4.3 U
1,2-Dichlorobenzene	NV	NV	NV	NV	4.1 U	3.7 U	4.2 U	3.9 U	3.7 U	4.3 U
1,2,4-Trichlorobenzene	NV	NV	NV	NV	4.1 U	3.7 U	4.2 U	3.9 U	3.7 U	4.3 U
Hexachlorobenzene	NV	NV	NV	NV	4.1 U	3.7 U	4.2 U	3.9 U	3.7 U	4.3 U

Table 3-19
Lake River Subsurface Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-LR-10 LRIS-LR-10-SB-1-2 4/28/2010 1-2 ft	LRIS-LR-10 LRIS-LR-10-SB-5-6 4/28/2010 5-6 ft	LRIS-LR-12 LRIS-LR-12-SB-1-2 4/28/2010 1-2 ft	LRIS-LR-12 LRIS-LR-12-SB-4-5 4/28/2010 4-5 ft	LRIS-LR-14 LRIS-LR-14-SB-1-2 4/28/2010 1-2 ft	LRIS-LR-14 LRIS-LR-14-SB-4-5 4/28/2010 4-5 ft
Phthalates (µg/kg)										
Dimethyl phthalate	NV	NV	NV	NV	8.2 U	7.4 U	8.5 U	7.7 U	7.4 U	8.6 U
Diethyl phthalate	NV	NV	NV	NV	8.2 U	7.4 U	8.5 U	7.7 U	7.4 U	8.6 U
Di-n-butyl phthalate	380	NV	NV	NV	16 U	15 U	17 U	15 U	15 U	17 U
Butylbenzyl phthalate	NV	NV	NV	NV	14 U	7.4 U	8.5 U	7.7 U	7.4 U	8.6 U
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	120 U	110 U	130 U	120 U	110 U	130 U
Di-n-octyl phthalate	39	NV	NV	NV	16 U	15 U	17 U	15 U	15 U	17 U
Miscellaneous Extractables (µg/kg)										
Benzyl alcohol	NV	NV	NV	NV	5.3 J	6.7 J	8.5 U	7.7 U	4.5 J	8.6
Benzoic acid	2,900	NV	NV	NV	120 J	160 J	210 UJ	96 J	190 UJ	210 UJ
Dibenzofuran	200	NV	NV	NV	12	6.6 J	27	3 J	2.4 J	8.6 U
Hexachlorobutadiene	NV	NV	NV	NV	4.1 U	3.7 U	4.2 U	3.9 U	3.7 U	4.3 U
N-Nitrosodiphenylamine	NV	NV	NV	NV	4.1 U	3.7 U	4.2 U	3.9 U	3.7 U	4.3 U
Dioxins (ng/kg)										
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	**79**	NV	**9.7**	NV	NV	NV
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	290	NV	47	NV	NV	NV
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	19000 J	NV	3500 J	NV	NV	NV
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	200	NV	48	NV	NV	NV
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	3200 J	NV	300	NV	NV	NV
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	15	NV	3.6	NV	NV	NV
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	22	NV	7.6	NV	NV	NV
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	**38**	NV	2 J	NV	NV	NV
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	14 U	NV	3.5	NV	NV	NV
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	150	NV	13	NV	NV	NV
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	3 U	NV	0.32 U	NV	NV	NV
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	95	NV	4.4	NV	NV	NV
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	7.4	NV	1.8 J	NV	NV	NV
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	7.2 U	NV	1 J	NV	NV	NV
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	5.7 U	NV	1.5 J	NV	NV	NV
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	**8.6 U**	NV	**1.9 J**	NV	NV	NV
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	3.7	NV	1.1	NV	NV	NV
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	**4 U**	NV	0.28 U	NV	NV	NV
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	680	NV	160	NV	NV	NV
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	6,400	NV	620	NV	NV	NV
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	410	NV	120	NV	NV	NV
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	1,300	NV	100	NV	NV	NV
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	69	NV	22	NV	NV	NV
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	220	NV	13	NV	NV	NV
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	24	NV	7.6	NV	NV	NV
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	96	NV	4.7	NV	NV	NV

Table 3-19
Lake River Subsurface Sediment Screening Results
Former PWT Site RI/FS

NOTES:

Bold indicates values that exceed screening criteria; if values were non-detects ("U" or "UJ"), 1/2 the reported concentration was compared with screening criteria. Estimated values were compared with the screening criteria.

Total HPAH (high PAH) is the total of fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzofluoranthenes, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene.

Total LPAH (low PAH) is the total of naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, and 2-methylnaphthalene.

Total PAH includes the following PAHs: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, 2-methylnaphthalene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, total benzofluoranthenes, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene.

DEQ = Oregon Department of Environmental Quality.

ft = foot/feet.

J = Estimated value. Reported concentration used in dioxin TEQ and Total PAH calculations calculations.

mg/kg = milligrams per kilogram.

µg/kg = micrograms per kilogram.

ng/kg = nanograms per kilogram.

NV = no value.

TEQ = toxicity equivalent.

U = Not detected. 1/2 the reported concentration used in dioxin TEQ and Total PAH calculations.

UJ = Not detected. The reported value is estimated. 1/2 the reported concentration used in dioxin TEQ and Total PAH calculations.

[a] Avocet 2011 freshwater sediment benthic screening criteria.

[b] McDonald et al. (2000) probable effect concentration values developed for predicting sediment toxicity.

[c] Values represent the default value protective of bird, freshwater fish, and mammal populations (DEQ 2007).

[d] Pentachlorophenol value based on DEQ (2007) human fish consumption screening level value; dioxin TEQ based on natural background; see Appendix K for derivation.

[e] Represents criteria for 4-methylphenol.

Table 3-20
Carty Lake Sediment Screening Results
Former PWT Site RI/FS

Location ID	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-BKG-04	LRIS-CL-01	LRIS-CL-01	LRIS-CL-02	LRIS-CL-02	LRIS-CL-02
Sample ID					LRIS-BKG-04-SS	LRIS-CL-01-SS	LRIS-CL-01-SB-1-2	LRIS-CL-02-SS	LRIS-CL-02-SB-1-2	LRIS-CL-02-SB-2-3
Sample Date					4/16/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	09/01/2011
Sample Depth					0-10 cm	0-10 cm	1-2 ft	0-10 cm	1-2 ft	2-3 ft
Phenols (µg/kg)										
Phenol	120	NV	NV	NV	NV	9 U	NV	7.1 J	43 U	NV
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	NV	9 U	NV	25 U	43 U	NV
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	NV	18 U	NV	6.4 J	7.6 J	NV
2,4-Dimethylphenol	NV	NV	NV	NV	NV	9 U	NV	25 U	43 U	NV
Pentachlorophenol	1,200	NV	310	250	13 U	23	NV	**880**	**270 J**	NV
Metals (mg/kg)										
Arsenic	14	33	NV	NV	NV	8.3	NV	**48**	**15**	NV
Cadmium	2.1	4.98	NV	NV	NV	0.68 J	NV	0.96 J	0.75	NV
Chromium	72	111	NV	NV	NV	28	NV	**86**	34	NV
Copper	400	149	NV	NV	NV	29	NV	75	32	NV
Lead	360	128	NV	NV	NV	29	NV	42	18	NV
Mercury	0.66	1.06	NV	NV	NV	0.053	NV	0.084	0.027 J	NV
Nickel	26	48.6	NV	NV	NV	17	NV	21	20	NV
Silver	0.58	NV	NV	NV	NV	0.12 J	NV	0.16 J	0.12 J	NV
Zinc	3,200	459	NV	NV	NV	130 J	NV	220 J	110	NV
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)										
Total PAH	17,000	22,800	NV	NV	NV	62.8	NV	840	342	NV
Total LPAH	NV	NV	NV	NV	NV	8.8	NV	132	57.3	NV
Naphthalene	NV	561	NV	NV	NV	0.83 J	NV	5.5	3.7 J	NV
Acenaphthylene	NV	NV	NV	NV	NV	0.8 J	NV	16	4.7 J	NV
Acenaphthene	NV	NV	NV	NV	NV	0.49 J	NV	2 J	8.7 U	NV
Fluorene	NV	536	NV	NV	NV	1.8 U	NV	3.9 J	8.7 U	NV
Phenanthrene	NV	1,170	NV	NV	NV	3.8	NV	23	14	NV
Anthracene	NV	845	NV	NV	NV	1.6 J	NV	80	25	NV
2-Methylnaphthalene	NV	NV	NV	NV	NV	0.35 J	NV	1.7 J	1.2 J	NV
Total HPAH	NV	NV	NV	NV	NV	54.0	NV	708	284	NV
Fluoranthene	NV	2,230	NV	NV	NV	7.8	NV	58	27	NV
Pyrene	NV	1,520	NV	NV	NV	8.6	NV	53	27	NV
Benzo(a)anthracene	NV	1,050	NV	NV	NV	3.8	NV	25	9.8 J	NV
Chrysene	NV	1,290	NV	NV	NV	6.8	NV	180	54	NV
Benzofluoranthene, Total	NV	NV	NV	NV	NV	11	NV	170	77	NV
Benzo(a)pyrene	NV	1,450	NV	NV	NV	5.8	NV	24	17	NV
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	NV	4.1	NV	94	32	NV
Dibenzo(a,h)anthracene	NV	NV	NV	NV	NV	0.51 J	NV	25	17 U	NV
Benzo(g,h,i)perylene	NV	NV	NV	NV	NV	5.6	NV	79	32 J	NV
Chlorinated Hydrocarbons (µg/kg)										
1,4-Dichlorobenzene	NV	NV	NV	NV	NV	4.5 U	NV	13.0 U	22.0 U	NV
1,2-Dichlorobenzene	NV	NV	NV	NV	NV	4.5 U	NV	13.0 U	22.0 U	NV
1,2,4-Trichlorobenzene	NV	NV	NV	NV	NV	4.5 U	NV	13.0 U	22.0 U	NV
Hexachlorobenzene	NV	NV	NV	NV	NV	4.5 U	NV	13.0 U	22.0 U	NV

Table 3-20
Carty Lake Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-BKG-04 LRIS-BKG-04-SS 4/16/2010 0-10 cm	LRIS-CL-01 LRIS-CL-01-SS 4/15/2010 0-10 cm	LRIS-CL-01 LRIS-CL-01-SB-1-2 4/15/2010 1-2 ft	LRIS-CL-02 LRIS-CL-02-SS 4/15/2010 0-10 cm	LRIS-CL-02 LRIS-CL-02-SB-1-2 4/15/2010 1-2 ft	LRIS-CL-02 LRIS-CL-02-SB-2-3 09/01/2011 2-3 ft
Phthalates (µg/kg)										
Dimethyl phthalate	NV	NV	NV	NV	NV	9 U	NV	25 U	43 U	NV
Diethyl phthalate	NV	NV	NV	NV	NV	2.8 J	NV	25 U	8.9 J	NV
Di-n-butyl phthalate	380	NV	NV	NV	NV	3.8 J	NV	51 U	87 U	NV
Butylbenzyl phthalate	NV	NV	NV	NV	NV	9 U	NV	25 U	43 U	NV
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	NV	14 J	NV	54 J	47 J	NV
Di-n-octyl phthalate	39	NV	NV	NV	NV	18 U	NV	31 J	**87 U**	NV
Miscellaneous Extractables (µg/kg)										
Benzyl alcohol	NV	NV	NV	NV	NV	9 U	NV	25 U	43 U	NV
Benzoic acid	2,900	NV	NV	NV	NV	62 J	NV	220 J	1100 U	NV
Dibenzofuran	200	NV	NV	NV	NV	0.24 J	NV	3.8 J	43 U	NV
Hexachlorobutadiene	NV	NV	NV	NV	NV	4.5 U	NV	13 U	22 U	NV
N-Nitrosodiphenylamine	NV	NV	NV	NV	NV	4.5 U	NV	7.9 J	22 U	NV
Total Petroleum Hydrocarbons (mg/kg)										
Diesel #2 Range	340	NV	NV	NV	NV	NV	NV	25 J	NV	NV
Motor Oil Range	3,600	NV	NV	NV	NV	NV	NV	140	NV	NV
Dioxins (ng/kg)										
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	**18**	**140**	**5.5**	**1400**	**130**	**2.5**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	44	590	25	2800 J	330	3.5 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	3,000	38,000	1,700	220000 J	32000 J	280
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	41	480	18	6200 J	420	6.2
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	510	4,600	190	63000 J	4600 J	39
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	2.9	27	1 U	430	23	2.7
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	6.9	91	2.7 J	**1,000**	71	0.93 UJ
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	7.4	**41**	1.7 J	**450**	**40**	0.42 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	5.2	31	1.2 J	**510**	31	0.44 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	27	250	7.5	350	250	2.3 J
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	0.5 U	2.1 J	0.52 J	67 J	3.4 J	0.49 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	22	71	2 J	**810 J**	56	4.6 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	3.4	21	1.1 U	**320**	25	0.8 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	3.2	13	0.63 J	**140 J**	11	1.7 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	2.4	24	0.78 J	**360**	19	0.44 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	**3**	**39**	**1.7 J**	**390 J**	**30**	0.81 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	1.4	9.4	0.56 J	**120**	13	0.64 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	0.23	**1.4**	0.14 U	**12 U**	**0.56 U**	0.66 U
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	99	1,400	52	21,000	1,300	16
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	1,100	8,400	340	120,000 J	8,500	77
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	97	1,100	42	21,000	1,400	14
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	250	1,000	37	14,000	1,100	15
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	44	300	13	5,000	310	3
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	32	69	4.7	840	58	1.7 U
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	19	45	4.1 U	440	41	3.9 J
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	8.2	30	4.9	75	8.8	8.6 J

Table 3-20
Carty Lake Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-CL-03 LRIS-CL-03-SS 4/15/2010 0-10 cm	LRIS-CL-03 LRIS-CL-03-SB-1-2 4/15/2010 1-2 ft	LRIS-CL-04 LRIS-CL-04-SS 4/15/2010 0-10 cm	LRIS-CL-04 LRIS-CL-04-SB-1-2 4/15/2010 1-2 ft	LRIS-CL-05 LRIS-CL-05-SS 4/15/2010 0-10 cm	LRIS-CL-05 LRIS-CL-05-SB-1-2 4/15/2010 1-2 ft
Phenols (µg/kg)										
Phenol	120	NV	NV	NV	2.3 J	NV	22	7.8 U	8.9 U	NV
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	10 U	NV	14 U	7.8 U	8.9 U	NV
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	3.5 J	NV	110	2.1 J	4.7 J	NV
2,4-Dimethylphenol	NV	NV	NV	NV	10 U	NV	14 U	7.8 U	8.9 U	NV
Pentachlorophenol	1,200	NV	310	250	11	NV	210	11	8.9	NV
Metals (mg/kg)										
Arsenic	14	33	NV	NV	6.9	NV	10	3.7	4.3	NV
Cadmium	2.1	4.98	NV	NV	0.82 J	NV	0.65 J	0.52	0.45 J	NV
Chromium	72	111	NV	NV	27	NV	31	31	23	NV
Copper	400	149	NV	NV	28	NV	34	27	20	NV
Lead	360	128	NV	NV	24	NV	23	13	11	NV
Mercury	0.66	1.06	NV	NV	0.058	NV	0.05	0.038 J	0.036	NV
Nickel	26	48.6	NV	NV	18	NV	18	20	17	NV
Silver	0.58	NV	NV	NV	0.12 J	NV	0.098 J	0.11 J	0.074 J	NV
Zinc	3,200	459	NV	NV	120 J	NV	110 J	78	68 J	NV
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)										
Total PAH	17,000	22,800	NV	NV	62.0	NV	226	20.7	179	NV
Total LPAH	NV	NV	NV	NV	6.7	NV	40.2	5.9	33.3	NV
Naphthalene	NV	561	NV	NV	0.54 J	NV	5.5	1.5 J	2.5	NV
Acenaphthylene	NV	NV	NV	NV	0.54 J	NV	3.3	0.36 J	0.6 J	NV
Acenaphthene	NV	NV	NV	NV	0.53 J	NV	2.9 U	0.52 J	1.6 J	NV
Fluorene	NV	536	NV	NV	2 U	NV	2.9 U	1.6 U	3.5	NV
Phenanthrene	NV	1,170	NV	NV	2.7	NV	12	1.7	17	NV
Anthracene	NV	845	NV	NV	0.97 J	NV	15	0.6 J	7.5	NV
2-Methylnaphthalene	NV	NV	NV	NV	0.44 J	NV	1.5 J	0.43 J	0.64 J	NV
Total HPAH	NV	NV	NV	NV	55.3	NV	186	14.7	146	NV
Fluoranthene	NV	2,230	NV	NV	7.8	NV	28	3.2	33	NV
Pyrene	NV	1,520	NV	NV	8.6	NV	22	2.3	28	NV
Benzo(a)anthracene	NV	1,050	NV	NV	4.4	NV	11	0.69 J	18	NV
Chrysene	NV	1,290	NV	NV	5	NV	30	2.1 U	16	NV
Benzofluoranthene, Total	NV	NV	NV	NV	10	NV	45	2.3 J	21	NV
Benzo(a)pyrene	NV	1,450	NV	NV	7	NV	14	2.3 U	14	NV
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	4.9	NV	15	3.1 U	6.6	NV
Dibenzo(a,h)anthracene	NV	NV	NV	NV	4 U	NV	5.8 U	3.1 U	3.6 U	NV
Benzo(g,h,i)perylene	NV	NV	NV	NV	5.6	NV	18	1.9 U	7.4	NV
Chlorinated Hydrocarbons (µg/kg)										
1,4-Dichlorobenzene	NV	NV	NV	NV	5.0 U	NV	7.2 U	3.9 U	4.5 U	NV
1,2-Dichlorobenzene	NV	NV	NV	NV	5.0 U	NV	7.2 U	3.9 U	4.5 U	NV
1,2,4-Trichlorobenzene	NV	NV	NV	NV	5.0 U	NV	7.2 U	3.9 U	4.5 U	NV
Hexachlorobenzene	NV	NV	NV	NV	5.0 U	NV	7.2 U	3.9 U	4.5 U	NV

Table 3-20
Carty Lake Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-CL-03 LRIS-CL-03-SS 4/15/2010 0-10 cm	LRIS-CL-03 LRIS-CL-03-SB-1-2 4/15/2010 1-2 ft	LRIS-CL-04 LRIS-CL-04-SS 4/15/2010 0-10 cm	LRIS-CL-04 LRIS-CL-04-SB-1-2 4/15/2010 1-2 ft	LRIS-CL-05 LRIS-CL-05-SS 4/15/2010 0-10 cm	LRIS-CL-05 LRIS-CL-05-SB-1-2 4/15/2010 1-2 ft
Phthalates (µg/kg)										
Dimethyl phthalate	NV	NV	NV	NV	10 U	NV	14 U	7.8 U	8.9 U	NV
Diethyl phthalate	NV	NV	NV	NV	1.9 J	NV	3.7 J	2.7 J	2.4 J	NV
Di-n-butyl phthalate	380	NV	NV	NV	3.5 J	NV	6.9 J	4.6 J	3.5 J	NV
Butylbenzyl phthalate	NV	NV	NV	NV	10 U	NV	14 U	8.6 U	8.9 U	NV
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	14 J	NV	220 U	7.2 J	17 J	NV
Di-n-octyl phthalate	39	NV	NV	NV	6 J	NV	29 U	16 U	18 U	NV
Miscellaneous Extractables (µg/kg)										
Benzyl alcohol	NV	NV	NV	NV	4.9 J	NV	14 U	1.5 J	8.9 U	NV
Benzoic acid	2,900	NV	NV	NV	73 J	NV	220 J	190 U	80 J	NV
Dibenzofuran	200	NV	NV	NV	10 U	NV	14 U	7.8 U	1.7 J	NV
Hexachlorobutadiene	NV	NV	NV	NV	5 U	NV	7.2 U	3.9 U	4.5 U	NV
N-Nitrosodiphenylamine	NV	NV	NV	NV	5 U	NV	7.2 U	3.9 U	4.5 U	NV
Total Petroleum Hydrocarbons (mg/kg)										
Diesel #2 Range	340	NV	NV	NV	NV	NV	67 U	NV	NV	NV
Motor Oil Range	3,600	NV	NV	NV	NV	NV	130 U	NV	NV	NV
Dioxins (ng/kg)										
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	**24**	1.1	**300**	**2.1**	1.8	0.74
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	91	3.7 J	790 J	5.5 J	5.3 J	0.99 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	4800 J	490	64000 J	510	400	37
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	83	2.9 J	1100 J	6.8	5.3	0.61 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	800	24	12000 J	78	62	5
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	3.9 J	0.41 U	48 U	0.39 U	0.46 U	0.19 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	12	0.57 U	**170**	1.4 J	0.81 J	0.24 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	8.1	0.61 J	**77 J**	0.58 J	0.78 J	0.16 J
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	5.2	0.44 U	82 J	0.54 J	0.47 U	0.14 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	43	1.2 J	**540**	3.8	3.3	0.35 J
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	0.44 J	0.5 U	24 U	0.29 U	0.28 U	0.18 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	16	0.91 J	140 J	1.4 J	1.6 J	3.1 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	3 J	0.5 U	42 J	0.45 J	0.39 U	0.17 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	3.1 J	0.32 U	**22 J**	0.23 U	0.32 U	0.091 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	4.5	0.38 U	65 J	0.24 U	0.35 J	0.12 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	**4.5**	0.57 U	**50 J**	0.41 U	0.31 U	0.14 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	1.8	0.2 J	18	0.49 J	0.33 U	0.47 J
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	0.29 U	0.13 U	**7.1 U**	0.081 U	0.12 U	0.61 U
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	230	6.7	3300	20	13	1.4 U
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	1,500	49	2,2000 J	150	130	10
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	190	5.1	2,900	21	12	1.1 U
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	240	9.8	2,300	19	25	2.1
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	46	1.2	760	4.9	4.4	0.38 U
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	27	0.55	180	1.5	2.8	0.091 U
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	13	3.8	43	1.7	1.9	0.67 U
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	6.7	5.2	18	0.99	0.98	0.18

Table 3-20
Carty Lake Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-CL-06 LRIS-CL-06-SS 4/16/2010 0-10 cm	LRIS-CL-06 LRIS-CL-06-SB-1-2 4/15/2010 1-2 ft	LRIS-CL-07 LRIS-CL-07-SS 4/16/2010 0-10 cm	LRIS-CL-07 LRIS-CL-07-SB-1-2 4/15/2010 1-2 ft	LRIS-CL-08 LRIS-CL-08-SS 09/01/2011 0-10 cm	LRIS-CL-09 LRIS-CL-09-SS 09/01/2011 0-10 cm
Phenols (µg/kg)										
Phenol	120	NV	NV	NV	12 U	NV	9.5 U	NV	NV	NV
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	12 U	NV	9.5 U	NV	NV	NV
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	40	NV	1.8 J	NV	NV	NV
2,4-Dimethylphenol	NV	NV	NV	NV	12 U	NV	9.5 U	NV	NV	NV
Pentachlorophenol	1,200	NV	310	250	15	NV	9.5 U	NV	NV	NV
Metals (mg/kg)										
Arsenic	14	33	NV	NV	5.5	NV	5.2	NV	NV	NV
Cadmium	2.1	4.98	NV	NV	0.46 J	NV	0.33 J	NV	NV	NV
Chromium	72	111	NV	NV	19	NV	17	NV	NV	NV
Copper	400	149	NV	NV	21	NV	16	NV	NV	NV
Lead	360	128	NV	NV	14	NV	10	NV	NV	NV
Mercury	0.66	1.06	NV	NV	0.027 J	NV	0.028 J	NV	NV	NV
Nickel	26	48.6	NV	NV	14	NV	12	NV	NV	NV
Silver	0.58	NV	NV	NV	0.067 J	NV	0.051 J	NV	NV	NV
Zinc	3,200	459	NV	NV	66 J	NV	56 J	NV	NV	NV
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)										
Total PAH	17,000	22,800	NV	NV	180	NV	115	NV	NV	NV
Total LPAH	NV	NV	NV	NV	27.2	NV	22.8	NV	NV	NV
Naphthalene	NV	561	NV	NV	2.2 J	NV	1.1 J	NV	NV	NV
Acenaphthylene	NV	NV	NV	NV	1.1 J	NV	1.4 J	NV	NV	NV
Acenaphthene	NV	NV	NV	NV	2.3 J	NV	2.2	NV	NV	NV
Fluorene	NV	536	NV	NV	3.8	NV	3.4	NV	NV	NV
Phenanthrene	NV	1,170	NV	NV	11	NV	9	NV	NV	NV
Anthracene	NV	845	NV	NV	5.5	NV	4.7	NV	NV	NV
2-Methylnaphthalene	NV	NV	NV	NV	2.5 U	NV	1.9 U	NV	NV	NV
Total HPAH	NV	NV	NV	NV	153	NV	92	NV	NV	NV
Fluoranthene	NV	2,230	NV	NV	28	NV	17	NV	NV	NV
Pyrene	NV	1,520	NV	NV	25	NV	17	NV	NV	NV
Benzo(a)anthracene	NV	1,050	NV	NV	22	NV	7.7	NV	NV	NV
Chrysene	NV	1,290	NV	NV	15	NV	12	NV	NV	NV
Benzofluoranthene, Total	NV	NV	NV	NV	29	NV	20	NV	NV	NV
Benzo(a)pyrene	NV	1,450	NV	NV	13	NV	5.2	NV	NV	NV
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	9.5	NV	6	NV	NV	NV
Dibenzo(a,h)anthracene	NV	NV	NV	NV	5 U	NV	3.8 U	NV	NV	NV
Benzo(g,h,i)perylene	NV	NV	NV	NV	8.9	NV	5.2	NV	NV	NV
Chlorinated Hydrocarbons (µg/kg)										
1,4-Dichlorobenzene	NV	NV	NV	NV	6.2 U	NV	4.7 U	NV	NV	NV
1,2-Dichlorobenzene	NV	NV	NV	NV	6.2 U	NV	4.7 U	NV	NV	NV
1,2,4-Trichlorobenzene	NV	NV	NV	NV	6.2 U	NV	4.7 U	NV	NV	NV
Hexachlorobenzene	NV	NV	NV	NV	6.2 U	NV	4.7 U	NV	NV	NV

Table 3-20
Carty Lake Sediment Screening Results
Former PWT Site RI/FS

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-CL-06 LRIS-CL-06-SS 4/16/2010 0-10 cm	LRIS-CL-06 LRIS-CL-06-SB-1-2 4/15/2010 1-2 ft	LRIS-CL-07 LRIS-CL-07-SS 4/16/2010 0-10 cm	LRIS-CL-07 LRIS-CL-07-SB-1-2 4/15/2010 1-2 ft	LRIS-CL-08 LRIS-CL-08-SS 09/01/2011 0-10 cm	LRIS-CL-09 LRIS-CL-09-SS 09/01/2011 0-10 cm
Phthalates (µg/kg)										
Dimethyl phthalate	NV	NV	NV	NV	12 U	NV	9.5 U	NV	NV	NV
Diethyl phthalate	NV	NV	NV	NV	12 U	NV	2.2 J	NV	NV	NV
Di-n-butyl phthalate	380	NV	NV	NV	6.7 J	NV	19 U	NV	NV	NV
Butylbenzyl phthalate	NV	NV	NV	NV	12 U	NV	9.5 U	NV	NV	NV
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	20 J	NV	24 J	NV	NV	NV
Di-n-octyl phthalate	39	NV	NV	NV	25 U	NV	3.2 J	NV	NV	NV
Miscellaneous Extractables (µg/kg)										
Benzyl alcohol	NV	NV	NV	NV	12 U	NV	9.5 U	NV	NV	NV
Benzoic acid	2,900	NV	NV	NV	120 J	NV	85 J	NV	NV	NV
Dibenzofuran	200	NV	NV	NV	12 U	NV	2.3 J	NV	NV	NV
Hexachlorobutadiene	NV	NV	NV	NV	6.2 U	NV	4.7 U	NV	NV	NV
N-Nitrosodiphenylamine	NV	NV	NV	NV	6.2 U	NV	4.7 U	NV	NV	NV
Total Petroleum Hydrocarbons (mg/kg)										
Diesel #2 Range	340	NV	NV	NV	NV	NV	NV	NV	NV	NV
Motor Oil Range	3,600	NV	NV	NV	NV	NV	NV	NV	NV	NV
Dioxins (ng/kg)										
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	**22**	0.31	**32**	0.65	**27**	**54**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	54 J	0.43 U	110 J	2 U	66	140
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	5000 J	43	8700 J	130	4800 J	11000 J
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	51 J	0.49 U	100 J	1.9 J	60	130
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	780 J	6.4	1300 J	19	840	2000
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	4.4 U	0.11 U	5	0.54 U	3 J	5.1 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	6.8	0.067 U	10	0.31 J	8.9	16
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	8.5	0.13 J	8.3	0.22 U	12	22
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	5.6	0.064 U	7	0.16 U	7.5	13
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	34	0.4 J	55	1 J	41	76
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	1.4 U	0.069 U	1.6 U	0.15 U	0.54 J	0.81 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	17 J	0.27 J	17 J	0.52 U	30	53
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	3 J	0.17 U	4.1	0.16 U	4.3 UJ	6.7 UJ
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	3.3 J	0.13 U	3.1 J	0.24 U	5.2	8.6
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	2.9 U	0.061 U	5.2	0.16 U	4.1 J	8
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	**2.9 J**	0.19 U	**3.9 J**	0.2 U	**4 UJ**	**6.3 UJ**
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	1.4	0.28 U	2.1	0.11 U	3	2.9
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	0.38 U	0.057 U	0.27 U	0.093 U	0.44 J	**0.65 J**
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	130	1 U	300	5.1	150	300
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	1,700 J	14	2,500 J	36	1800	4100
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	110	1.1	230	4.3	140	250
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	270	3.6	290	5.7	410	780
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	47	0.19 U	65	0.67	52	80
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	35	0.13 U	28	0.24 U	43	70
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	13	0.28 U	11	0.11 U	21	28
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	5.2	0.27	4.4	0.13	8.4	14

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-CL-10 LRIS-CL-10-SS 09/01/2011 0-10 cm	LRIS-CL-11 LRIS-CL-11-SS 09/01/2011 0-10 cm	LRIS-CL-12 LRIS-CL-12-SS 09/01/2011 0-10 cm	LRIS-CL-13 LRIS-CL-13-SS 09/01/2011 0-10 cm	LRIS-CL-14 LRIS-CL-14-SS 09/01/2011 0-10 cm	LRIS-CL-15 LRIS-CL-15-SS 09/01/2011 0-10 cm
Phenols (µg/kg)										
Phenol	120	NV	NV	NV	NV	NV	NV	NV	NV	NV
2-Methylphenol (o-Cresol)	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	260[e]	NV	NV	NV	NV	NV	NV	NV	NV	NV
2,4-Dimethylphenol	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Pentachlorophenol	1,200	NV	310	250	NV	NV	NV	NV	NV	NV
Metals (mg/kg)										
Arsenic	14	33	NV	NV	NV	NV	NV	NV	NV	NV
Cadmium	2.1	4.98	NV	NV	NV	NV	NV	NV	NV	NV
Chromium	72	111	NV	NV	NV	NV	NV	NV	NV	NV
Copper	400	149	NV	NV	NV	NV	NV	NV	NV	NV
Lead	360	128	NV	NV	NV	NV	NV	NV	NV	NV
Mercury	0.66	1.06	NV	NV	NV	NV	NV	NV	NV	NV
Nickel	26	48.6	NV	NV	NV	NV	NV	NV	NV	NV
Silver	0.58	NV	NV	NV	NV	NV	NV	NV	NV	NV
Zinc	3,200	459	NV	NV	NV	NV	NV	NV	NV	NV
Polycyclic Aromatic Hydrocarbons (PAH) (µg/kg)										
Total PAH	17,000	22,800	NV	NV	NV	NV	NV	NV	NV	NV
Total LPAH	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Naphthalene	NV	561	NV	NV	NV	NV	NV	NV	NV	NV
Acenaphthylene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Acenaphthene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Fluorene	NV	536	NV	NV	NV	NV	NV	NV	NV	NV
Phenanthrene	NV	1,170	NV	NV	NV	NV	NV	NV	NV	NV
Anthracene	NV	845	NV	NV	NV	NV	NV	NV	NV	NV
2-Methylnaphthalene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Total HPAH	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Fluoranthene	NV	2,230	NV	NV	NV	NV	NV	NV	NV	NV
Pyrene	NV	1,520	NV	NV	NV	NV	NV	NV	NV	NV
Benzo(a)anthracene	NV	1,050	NV	NV	NV	NV	NV	NV	NV	NV
Chrysene	NV	1,290	NV	NV	NV	NV	NV	NV	NV	NV
Benzofluoranthene, Total	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Benzo(a)pyrene	NV	1,450	NV	NV	NV	NV	NV	NV	NV	NV
Indeno(1,2,3-c,d)pyrene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Dibenzo(a,h)anthracene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Benzo(g,h,i)perylene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Chlorinated Hydrocarbons (µg/kg)										
1,4-Dichlorobenzene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
1,2-Dichlorobenzene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
1,2,4-Trichlorobenzene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Hexachlorobenzene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV

Location ID Sample ID Sample Date Sample Depth	Benthic Freshwater Criteria[a]	Probable Effect Concentration[b]	Ecological Screening Level Value[c]	Human Bioaccumulation Screening Criteria[d]	LRIS-CL-10 LRIS-CL-10-SS 09/01/2011 0-10 cm	LRIS-CL-11 LRIS-CL-11-SS 09/01/2011 0-10 cm	LRIS-CL-12 LRIS-CL-12-SS 09/01/2011 0-10 cm	LRIS-CL-13 LRIS-CL-13-SS 09/01/2011 0-10 cm	LRIS-CL-14 LRIS-CL-14-SS 09/01/2011 0-10 cm	LRIS-CL-15 LRIS-CL-15-SS 09/01/2011 0-10 cm
Phthalates (µg/kg)										
Dimethyl phthalate	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Diethyl phthalate	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Di-n-butyl phthalate	380	NV	NV	NV	NV	NV	NV	NV	NV	NV
Butylbenzyl phthalate	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Bis(2-ethylhexyl) phthalate	500	NV	NV	NV	NV	NV	NV	NV	NV	NV
Di-n-octyl phthalate	39	NV	NV	NV	NV	NV	NV	NV	NV	NV
Miscellaneous Extractables (µg/kg)										
Benzyl alcohol	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Benzoic acid	2,900	NV	NV	NV	NV	NV	NV	NV	NV	NV
Dibenzofuran	200	NV	NV	NV	NV	NV	NV	NV	NV	NV
Hexachlorobutadiene	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
N-Nitrosodiphenylamine	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Total Petroleum Hydrocarbons (mg/kg)										
Diesel #2 Range	340	NV	NV	NV	NV	NV	NV	NV	NV	NV
Motor Oil Range	3,600	NV	NV	NV	NV	NV	NV	NV	NV	NV
Dioxins (ng/kg)										
Total Dioxin TEQ (Mammal)	NV	NV	NV	2	**15**	**27**	**20**	1.9	**26**	**25**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	NV	NV	3600000	NV	45	64	51	7.2	65	67
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	NV	NV	3600000	NV	2500	3400	2800	330	3400	3500
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	35	50	41	5.3	51	51
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	110000	NV	400	620	490	53	620	620
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	NV	NV	43000	NV	1.9 U	4 J	3 U	0.85 UJ	3.7 U	3.4 J
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	5.3	8.5	6.9	0.99 UJ	8.1	8.6
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	34	NV	7.2	13	9.5	0.62 J	13	13
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	5	8.2	6.3	0.5 U	7.4	7.3
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	26	46	32	2.7 J	43	39
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	0.39 J	0.47 J	0.51 J	U	0.41 J	0.42 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	420	NV	16	28	21	2.6 UJ	28	25
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	95	NV	2.7 UJ	5.3	4.1 UJ	0.24 U	4.4 UJ	4.8 UJ
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	17	NV	3.3 J	6.7	5.2	0.35 J	6.2	6.1
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	NV	NV	170	NV	3.1 J	4.9 J	4 J	0.41 J	4.8 J	5.6 J
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	NV	NV	1.1	NV	**2.4 UJ**	**5 UJ**	**4 UJ**	0.35 J	**4.3 UJ**	**4.5 UJ**
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	NV	NV	30	NV	0.81 U	2.2	1.8	0.32 U	2.3	2.6 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	0.56	NV	0.15 U	0.53 J	0.4 U	0.38 UJ	0.46 J	**0.57 J**
Total Heptachlorodibenzofuran (HpCDF)	NV	NV	NV	NV	83	130	99	12	130	130
Total Heptachlorodibenzo-p-dioxin (HpCDD)	NV	NV	NV	NV	830	1300	1000	110	1300	1300
Total Hexachlorodibenzofuran (HxCDF)	NV	NV	NV	NV	85	140	110	9.6	130	140
Total Hexachlorodibenzo-p-dioxin (HxCDD)	NV	NV	NV	NV	210	370	270	24	340	350
Total Pentachlorodibenzofuran (PeCDF)	NV	NV	NV	NV	29	58	44	3.9	50	55
Total Pentachlorodibenzo-p-dioxin (PeCDD)	NV	NV	NV	NV	30	59	46	3.8	52	61
Total Tetrachlorodibenzofuran (TCDF)	NV	NV	NV	NV	11	24	20	1.7 J	24	29
Total Tetrachlorodibenzo-p-dioxin (TCDD)	NV	NV	NV	NV	4.5	13	9.3	3 J	13	13

NOTES:

Bold indicates values that exceed screening criteria; if values were non-detects ("U" or "UJ"), 1/2 the reported concentration was compared with screening criteria. Estimated values were compared with the screening criteria.

Total HPAH (high PAH) is the total of fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzofluoranthenes, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene.

Total LPAH (low PAH) is the total of naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, and 2-methylnaphthalene.

Total PAH includes the following PAHs: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, 2-methylnaphthalene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, total benzofluoranthenes, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene.

cm = centimeter(s).

DEQ = Oregon Department of Environmental Quality.

ft = feet.

J = Estimated value. Reported concentration used in dioxin TEQ and Total PAH calculations calculations.

mg/kg = milligrams per kilogram.

µg/kg = micrograms per kilogram.

ng/kg = nanograms per kilogram.

NV = no value.

TEQ = toxicity equivalent.

U = Not detected. 1/2 the reported concentration used in dioxin TEQ and Total PAH calculations.

UJ = Not detected. The reported value is estimated. 1/2 the reported concentration used in dioxin TEQ and Total PAH calculations.

[a] Avocet 2011 freshwater sediment benthic screening criteria.

[b] McDonald et al. (2000) probable effect concentration values developed for predicting sediment toxicity.

[c] Values represent the default value protective of bird, freshwater fish, and mammal populations (DEQ 2007).

[d] Pentachlorophenol value based on DEQ (2007) human fish consumption screening level value; dioxin TEQ based on natural background; see Appendix K for derivation.

[e] Represents criteria for 4-methylphenol.

Table 4-1
Interim Action Soil Removal Volumes
Former PWT Site RI/FS

Location	Cell	Final Dimension (feet)			Cubic Feet of Soil	Cubic Yards of Soil
		Length	Width	Depth		
Removed Off Site						
Concrete Pond	Cell 2	--	--	--	153,900	5,700
SS-30	Cell 4	11.5	12	1	138	5.1
SS-4B	Cell 4	19	32.5	2.5	1543.75	57.2
SS-7	Cell 3	22	11	1.5	363	13.4
MW-9S	Cell 3	22	20.5	1.5	676.5	25.1
SPY-01A	Cell 3	33	20	2.5	1650	61.1
SPY-01B	Cell 3	20	20	6	2400	88.9
Placed in Cell 1						
Dry PCP	Cell 1	--	--	--	2160	80
DS-N/B-228	Cell 2	40	40	2.5 to 4	10260	380
DS-S	Cell 2	25	40	2.5	2500	92
B-208	Cell 3	40	50	4	8000	300
B-220	Cell 3	20	20	4	1600	60
T-4	Cell 4	9.5	11	1.5	157	6
T-5	Cell 4	10	10	1.5	150	6

Table 5-1
Groundwater Fate and Transport Assumptions and Results
Former PWT Site RI/FS

Modeling Parameters												Modeling Results		
Plume Concentration (mg/L)	Hydraulic Conductivity (cm/sec)	Plume Width (feet)	Water Bearing Zone Thickness (feet)	Half Life (years)	Model Run A FOC	Model Run B FOC	Partition Coefficient[a] (L/kg)	Distance to Respective Water Body (feet)	Distance to Assumed Discharge Point (feet)	Distance to Middle of Respective Water Body (feet)	Modeling Time (Years)	At Riverbank (mg/L)	Assumed Discharge Point (mg/L)	Regulatory Criteria (mg/L)
Lake River—Cells 1 and 2 Plume														
Pentachlorophenol—MW-57D														
4.096	1.01E-03/5.36E-05	600	60	22	1.80E-03	1.40E-02	590	155	257	358	30	1.885	< 0.001	0.00027[b]
Tetrachloroethene—MW-57D														
0.089	1.01E-03/5.36E-05	400	60	0.79	1.80E-03	1.40E-02	270	155	257	358	30	0.088	< 0.001	0.00069[b]
Benzene—MW-57D														
0.031	1.01E-03/5.36E-05	600	60	0.05	1.80E-03	1.40E-02	62	155	266	358	30	0.031	<0.001	0.0008[c]
Benzene—MW-55S														
0.035	5.36E-05	300	20	0.05	1.40E-02	1.40E-02	62	62	155	247	30	0.003	<0.001	0.0008[c]
Arsenic—MW-57S														
0.036	5.36E-05	1,000	20	NA	1.40E-02	1.40E-02	29	155	257	358	30	0.025	<0.001	0.005[d]
Arsenic—MW-4														
0.034	5.36E-05	1,000	20	NA	1.40E-02	1.40E-02	29	61	145	229	30	0.024	0.003	0.005[d]
Arsenic—MW-55S														
0.035	5.36E-05	1,000	20	NA	1.40E-02	1.40E-02	29	62	155	247	30	0.024	0.002	0.005[d]
Dibenzofuran—MW-55S														
0.052	5.36E-05	300	20	35	1.40E-02	1.40E-02	4,200	62	155	247	30	<0.01	NA	0.024[b]
Bis (2-ethylhexyl) phthalate—MW-55S														
0.00122	5.36E-05	300	20	NA	1.40E-02	1.40E-02	110,000	62	155	247	30	<0.001	NA	0.0012[b]
Chromium—MW-55S														
0.012	5.36E-05	300	20	9	1.40E-02	1.40E-02	1.1	62	155	247	30	0.009	0.002	0.011[b]
Lake River—Cell 3 Plume														
Pentachlorophenol—MW-45D														
0.073	1.01E-03/5.36E-05	150	20	22	1.80E-03	1.40E-02	590	70	158	245	30	0.072	< 0.001	0.00027[b]
Tetrachloroethene—MW-47D														
0.015	1.01E-03/5.36E-05	600	20	0.79	1.80E-03	1.40E-02	270	100	175	250	30	0.015	< 0.001	0.00069[b]
Arsenic—MW-46S														
0.033	5.36E-05	300	20	NA	1.80E-03	1.40E-02	29	50	143	235	30	0.027	0.002	0.005[d]
Carty Lake—Cells 1 and 2 Plume														
Pentachlorophenol—RMW-2D														
0.003	9.91E-04/3.48E-04	200	40	22	1.80E-03	3.45E-02	590	145	195	1164	30	0.002	< 0.001	0.00027[b]
Arsenic—USDFW-3														
0.013	3.48E-04	200	20	NA	3.45E-02	3.45E-02	29	127	177	1224	30	<0.001	NA	0.005[d]
Bis (2-ethylhexyl) phthalate—USDFW-1														
0.00111	3.48E-04	200	20	35	3.45E-02	3.45E-02	110,000	300	350	1555	30	<0.001	NA	0.0012[b]
Chromium—USDFW-1														
0.013	3.48E-04	200	20	9	3.45E-02	3.45E-02	1.1	300	350	1555	30	<0.001	NA	0.011[b]

NOTES:

Model Run A and B refer to the two model runs necessary to complete the modeling.

Regulatory criteria are based on most stringent available surface water[b] or groundwater[c] criteria. Pentachlorophenol, tetrachloroethene, arsenic, dibenzofuran, bis(2-ethylhexyl) phthalate, and chromium are based on U.S. Environmental Protection Agency water quality criteria for consumption of organisms and water. However, the Washington State Department of Ecology lists the background concentration of arsenic[d] in groundwater at 0.005 mg/L.

Constants used in the modeling are:

– Hydraulic gradient of 0.018.

– Soil bulk density of 1.6 kilograms per liter.

– Effective porosity of 0.3.

< 0.001 = Model does not calculate numbers less than 0.0005 mg/L.

cm/sec = centimeter(s) per second.

FOC = fraction of organic carbon.

L/kg = liters per kilogram.

mg/L = milligrams per liter.

NA = not applicable.

[a] The distribution coefficient was used for arsenic.

[b] Most stringent available surface water criteria.

[c] Most stringent available groundwater criteria.

[d] Background concentration of arsenic.

Table 6-1
Summary of LRIS Cleanup Levels
Former PWT Site RI/FS

Indicator Hazardous Substances	Soil Cleanup Level (mg/kg)	Basis	Groundwater Cleanup Level (µg/L)	Basis
Metals				
Arsenic	5.81	a	5	f
Barium	102	b	NA	d
Chromium	67	b	48	g
Copper	217	b	NA	d
Zinc	360	b	NA	d
Chlorinated Phenolics				
Pentachlorophenol	4.5/8.3	b/c	0.73	g
2,3,4,6-Tetrachlorophenol	NA	d	480	g
2,4,5-Trichlorophenol	NA	d	800	g
2,4,6-Trichlorophenol	NA	d	4	g
Carcinogenic PAHs				
cPAH TEQ	0.14	c	0.012	g
Noncarcinogenic PAHs				
Acenaphthene	4800	c	960	g
Anthracene	NA	d	4800	g
Fluoranthene	3200	c	640	g
Fluorene	3200	c	640	g
2-Methylnaphthalene	320	c	32	g
Naphthalene	1600	c	160	g
Pyrene	2400	c	480	g
SVOCs				
BEHP	NA	d	6.3	g
Carbazole	NA	d	4.4	g
Dibenzofuran	160	c	32	g
VOCs				
Acetone	NA	d	800	g
Benzene	NA	d	0.8	g
Chloromethane	NA	d	5.2	h
Dichlorodifluoromethane	NA	d	9.9	h
cis-1,2-Dichloroethene	NA	d	80	g
Ethylbenzene	NA	d	800	g
Hexachlorobutadiene	NA	d	0.56	g
Naphthalene	1,600	c	160	g
Styrene	33	c	1.5	g
1,1,2,2-Tetrachloroethane	5	c	0.22	g
1,1,2-Trichloroethane	NA	d	0.77	g
TCE	NA	d	0.42	h
1,2,3-Trichloropropane	NA	d	0.0063	g
1,2,4-Trimethylbenzene	4000	c	24	h

Table 6-1
Summary of LRIS Cleanup Levels
Former PWT Site RI/FS

Indicator Hazardous Substances	Soil Cleanup Level (mg/kg)	Basis	Groundwater Cleanup Level (µg/L)	Basis
1,3,5-Trimethylbenzene	NA	d	25	h
Vinyl chloride	NA	d	0.029	g
m,p-Xylene	NA	d	310	h
o-Xylene	NA	d	440	h
Toluene	NA	d	640	g
Isopropylbenzene	NA	d	NA	d
Methylene chloride	NA	d	NA	d
Tetrachloroethene	NA	d	0.081	g
Petroleum Hydrocarbons				
GRO	30	e	NA	d
DRO/RRO	2,000	e	500	f
Dioxin TEQ	0.000011	c	NA	d

NOTES:

Source: exported from CLARC database (Ecology, 2011).

a = Washington State Department of Ecology Publication No. 94-115, Natural Background Soil Metals Concentrations in Washington State, Clark County.

b = MTCA Ecological Indicator Concentration for protection of wildlife (Table 749-3).

BEHP = bis(2-ethylhexyl) phthalate.

c = MTCA Method B, direct contact (ingestion only), unrestricted land use.

CLARC = Cleanup levels and risk calculation

cPAH TEQ = carcinogenic PAH toxicity equivalent.

d = not an indicator hazardous substance in specified media.

Dioxin TEQ = chlorinated dibenzo-p-dioxins and dibenzofurans toxicity equivalent.

DRO = diesel-range organics.

e = MTCA Method A Industrial/Unrestricted Land Use Table Value.

f = MTCA Method A groundwater cleanup level.

MCLw = Washington State maximum contaminant level goal.

g = MTCA Method B groundwater cleanup level.

GRO = gasoline-range organics.

h = MTCA Method B groundwater screening level for vapor intrusion pathway; values used if MTCA Method A or B groundwater cleanup levels were unavailable during remedial investigation or interim action activities.

mg/kg = milligrams per kilogram.

MTCA = Model Toxics Control Act.

µg/L = micrograms per liter.

PAH = polycyclic aromatic hydrocarbon.

NA = not applicable.

RRO = residual-range organics.

TCE = trichloroethene.

SVOC = semivolatile organic compound.

VOC = volatile organic compound.

Table 6-2
Summary of Preliminary Port-Owned Properties Cleanup Levels
Former PWT Site RI/FS

CULs	MTCA Method B CUL	Site-Specific Terrestrial Ecological Screening Value[a]	Preliminary Human Health CUL	Preliminary Ecological CUL
Dioxins (ng/kg)				
Dioxin TEQ	1.1E+01	NA	1.1E+01	NA
Dioxin (p-dibenzo dioxin) TEQ[a]	NA	9.8E+00	NA	9.8E+00
Furan TEQ[a]	NA	1.14E+01	NA	1.14E+01

NOTES:

CUL = cleanup level.

MTCA = Model Toxics Control Act.

NA = not applicable.

ng/kg = nanograms per kilogram.

TEQ = toxicity equivalent.

[a] Ecological CULs are derived separately for dioxin congeners and for furan congeners, as determined in coordination with Washington State Department of Ecology (see Appendix B for derivation of TEQs).

Table 6-3
Summary of Preliminary Lake River Cleanup Levels
Former PWT Site RI/FS

CULs	Lake River Sediment Direct Ingestion and Contact CUL	Lake River Human Fish Consumption CUL	Lake River Fish CUL (Freshwater)	Lake River Bird CUL	Lake River Mammal CUL	Lower Columbia River Dioxin Background	Lake River Dioxin PQL CUL	Selected Human Health CUL	Selected Ecological CUL
Dioxins (ng/kg)									
TEQ	1.38E+02	1.4E-02	NA	NA	NA	2E+00	5E+00	5E+00	NA
2,3,7,8-TCDD	NA	NA	1.4E+00	4.5E+00	1.8E+00	NA	NA	NA	1.4E+00
1,2,3,7,8-PeCDD	NA	NA	4.3E+01	1.3E+02	5.4E+01	NA	NA	NA	4.3E+01
1,2,3,4,7,8-HxCDD	NA	NA	8.6E+01	2.7E+03	5.4E+02	NA	NA	NA	8.6E+01
1,2,3,6,7,8-HxCDD	NA	NA	4.3E+03	1.3E+04	5.4E+02	NA	NA	NA	5.4E+02
1,2,3,7,8,9-HxCDD	NA	NA	4.3E+03	1.3E+03	5.4E+02	NA	NA	NA	5.4E+02
1,2,3,4,6,7,8-HpCDD	NA	NA	1.1E+06	3.4E+06	1.4E+05	NA	NA	NA	1.4E+05
OCDD	NA	NA	1.1E+07	3.4E+07	4.6E+06	NA	NA	NA	4.6E+06
2,3,7,8-TCDF	NA	NA	2.4E+02	3.8E+01	1.5E+02	NA	NA	NA	3.8E+01
1,2,3,7,8-PeCDF	NA	NA	2.4E+02	3.8E+02	5.1E+02	NA	NA	NA	2.4E+02
2,3,4,7,8-PeCDF	NA	NA	2.9E+00	4.5E+00	6.0E+00	NA	NA	NA	2.9E+00
1,2,3,4,7,8-HxCDF	NA	NA	4.3E+02	1.3E+03	5.4E+02	NA	NA	NA	4.3E+02
1,2,3,6,7,8-HxCDF	NA	NA	4.3E+02	1.3E+03	5.4E+02	NA	NA	NA	4.3E+02
1,2,3,7,8,9-HxCDF	NA	NA	4.3E+02	1.3E+03	5.4E+02	NA	NA	NA	4.3E+02
2,3,4,6,7,8-HxCDF	NA	NA	4.3E+02	1.3E+03	5.4E+02	NA	NA	NA	4.3E+02
1,2,3,4,6,7,8-HpCDF	NA	NA	1.1E+05	3.4E+05	1.4E+05	NA	NA	NA	1.1E+05
1,2,3,4,7,8,9-HpCDF	NA	NA	1.1E+05	3.4E+05	1.4E+05	NA	NA	NA	1.1E+05
OCDF	NA	NA	1.1E+07	3.4E+07	4.6E+06	NA	NA	NA	4.6E+06

NOTES:

Risk-based CULs are based on standard, default assumptions commonly used and in rule, when available. Limited site-specific assumptions, where applicable, are integrated into CUL models, although models developed do no represent refined site-specific risk analyses.

Salmon, Mink, and Heron were receptors for fish, mammal, and bird models, respectively.

CUL = cleanup level.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

NA = not applicable.

ng/kg = nanograms per kilogram.

OCDD = octachloro dibenzo-p-dioxin.

OCDF = octachloro dibenzofuran.

PeCDD = pentachloro dibenzo-p-dioxin.

PeCDF = pentachloro dibenzofuran.

PQL = practical quantitation limit.

TCDD = tetrachloro dibenzo-p-dioxin.

TCDF = tetrachloro dibenzofuran.

TEQ = toxicity equivalent.

Table 6-4
Lake River Cleanup Level Screening
Former PWT Site RI/FS

Sample ID	Sample Depth	Dioxin TEQ	1,2,3,4,6,7,8,9-OCDF	1,2,3,4,6,7,8,9-OCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDD	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDD
Human Health CUL		5	NV	NV	NV	NV	NV	NV	NV	NV	NV
Ecological CUL		NV	4600000	4600000	110000	140000	110000	430	86	430	540
LRIS-LR-01-SS	0-10 cm	**37**	470 J	13000 J	190 J	1400 J	13	14	5.8	7.5	70
LRIS-LR-02-SS	0-10 cm	3.3	38	1000	16	100	1 J	1.5 J	0.86 J	0.75 J	4.9
LRIS-LR-04-SS	0-10 cm	1.6	13 J	420 J	6.2 J	45 J	0.59 U	0.72 U	0.46 U	0.46 U	2 J
LRIS-LR-05-SS	0-10 cm	**30**	300 J	9700 J	140 J	1100 J	9.9	21	3.4 J	6.2	45
LRIS-LR-07-SS	0-10 cm	1.4	21	360	8.1	40	0.58 U	0.93 J	0.29 U	0.5 U	1.9 J
LRIS-LR-08-SS	0-10 cm	**220**	640 J	120000 J	770 J	8700 J	47	190	14	55	240
LRIS-LR-09-SS	0-10 cm	**580**	250	2100	180 J	5400 J	140	45	**730 J**	31	**720**
LRIS-LR-10-SS	0-10 cm	**57**	180 J	15000 J	150 J	1600 J	10	27	11	10	69
LRIS-LR-11-SS	0-10 cm	2.5	26	900	12	89	0.67 U	2.1 J	1.1 J	0.79 J	3.8 U
LRIS-LR-12-SS	0-10 cm	**61**	180 J	18000 J	160 J	2000 J	9.5	25	20	9.9	80
LRIS-LR-13-SS	0-10 cm	**16**	210	7900 J	56	540	3.3 J	6.6	3.5 J	2.8 J	28
LRIS-LR-14-SS	0-10 cm	**13**	92 J	4600 J	71 J	510 J	4.5	8.2	3.1 J	3.7	17
LRIS-LR-15-SS	0-10 cm	**1.2**	19	370	0.19 U	44	0.28 U	0.51 U	0.42 U	0.49 J	2.1 U
LRIS-LR-16-SS	0-10 cm	**14**	170 J	5500 J	60 J	600 J	3.7 J	4.4	2.8 J	2.4 J	22
LRIS-LR-17-SS	0-10 cm	4.3	55	1100	32	190	2.1 U	0.2 U	0.47 U	1.1 J	9.4
LRIS-LR-18-SS	0-10 cm	1.7	14	270	4.8 U	30	0.49 J	0.37 U	0.66 U	0.36 U	2 J
LRIS-LR-19-SS	0-10 cm	**110**	3500 J	40000 J	780 J	4800 J	54 J	49 J	17 J	20 J	180
LRIS-LR-20-SS	0-10 cm	**260**	2600 J	92000 J	1000 J	11000 J	61	99	36	40	520
LRIS-LR-21-SS	0-10 cm	0.51	3.9 J	96 J	1.7 U	13 J	0.21 U	0.23 J	0.15 U	0.089 U	0.62 J
LRIS-LR-23-SS	0-10 cm	0.59	5.6 J	120 J	2.5 J	14 J	0.17 U	0.34 U	0.17 U	0.62 J	0.58 J
LRIS-LR-24-SS	0-10 cm	**170**	570 J	70000 J	700 J	5600 J	44	210	26	55	220
LRIS-LR-25-SS	0-10 cm	**260**	980 J	68000 J	680 J	7800 J	43	100	53	38	320
LRIS-LR-27-SS	0-10 cm	0.93	14 J	170 J	4.2 J	23 J	0.52 U	0.51 J	0.26 J	0.46 U	0.98 J
LRIS-LR-28-SS	0-10 cm	0.84	3.9 J	260 J	3.3 J	30 J	0.19 U	0.23 U	0.22 J	0.3 J	1.3 J
LRIS-LR-01-SB-1-2	1-2 ft	**6.4**	27	2,200	27	210	2.2 J	4.7	1.5 U	2.7 J	8.8
LRIS-LR-05-SB-1-2	1-2 ft	**17**	120	8800 J	55	600	3.3	6.1	3.5	4.5	30
LRIS-LR-08-SB-1-2	1-2 ft	**910**	1400 J	260000 J	4100 J	30000 J	200	**1300**	70	380	**1200**
LRIS-LR-08-SB-3-4	3-4 ft	**6.9**	18 J	1300 J	31 J	140 J	1.6 J	12	1.4 J	3.4 J	6.2
LRIS-LR-09-SB-1-2	1-2 ft	1.5	20	460	8.3	49	0.77 J	0.72 J	0.4 U	0.43 U	2.1 J
LRIS-LR-09-SB-4-5	4-5 ft	3.1	19	800	12	84	2 J	0.35 U	0.96 U	1.3 J	5.4
LRIS-LR-10-SB-1-2	1-2 ft	**79**	290	19000 J	200	3200 J	15	22	38	14 U	150
LRIS-LR-12-SB-1-2	1-2 ft	**9.7**	47	3500 J	48	300	3.6	7.6	2 J	3.5	13

Table 6-4
Lake River Cleanup Level Screening
Former PWT Site RI/FS

Sample ID	Sample Depth	1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDD	1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDD	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDF	2,3,7,8-TCDD
Human Health CUL		NV	NV	NV	NV	NV	NV	NV	NV
Ecological CUL		430	540	240	43	430	2.9	38	1.4
LRIS-LR-01-SS	0-10 cm	0.94 J	13 J	5.2	2.8 J	6.5	**5.9 J**	2.4	0.28 U
LRIS-LR-02-SS	0-10 cm	0.09 J	1.8 J	0.41 U	0.41 J	0.49 J	0.66 J	0.7 J	0.12 U
LRIS-LR-04-SS	0-10 cm	0.4 U	1 U	0.38 U	0.68 UJ	0.36 U	0.45 U	0.81	0.19 U
LRIS-LR-05-SS	0-10 cm	0.68 J	10 J	5.2	2.5 J	4.7	**7.7 J**	2.5	0.44 J
LRIS-LR-07-SS	0-10 cm	0.17 U	0.68 U	0.42 U	0.41 U	0.22 J	0.55 U	0.45 U	0.19 U
LRIS-LR-08-SS	0-10 cm	4	45 J	30	8.5 J	39	**56 J**	7.4	0.59 J
LRIS-LR-09-SS	0-10 cm	16	**1800**	6.1	**180**	5.3	0.87 U	0.38 U	**5.2**
LRIS-LR-10-SS	0-10 cm	0.75 J	51 J	5.7	11 J	11	**9.7 J**	2.9	**2.3**
LRIS-LR-11-SS	0-10 cm	0.24 U	1.9 U	0.4 U	0.37 U	0.59 J	0.46 U	0.57 U	0.24 U
LRIS-LR-12-SS	0-10 cm	1.4 J	41 J	4.6	13 J	5.7	**5.8 J**	1.2	0.83
LRIS-LR-13-SS	0-10 cm	0.27 U	8.1	1.4 J	1.9 J	1.6 J	1.9 J	0.97 J	0.45 U
LRIS-LR-14-SS	0-10 cm	0.75 J	4.1 J	1.9 J	1.1 J	2.7 J	2 J	0.84	0.22 U
LRIS-LR-15-SS	0-10 cm	0.27 U	1 U	0.38 U	0.36 U	0.31 U	0.45 U	0.58 U	0.2 U
LRIS-LR-16-SS	0-10 cm	0.59 J	5 J	1.5 J	1.3 U	1.9 J	1.6 J	1.2	0.3 U
LRIS-LR-17-SS	0-10 cm	0.2 U	1.8 J	0.32 U	0.32 U	0.98 J	0.39 U	0.41 J	0.14 U
LRIS-LR-18-SS	0-10 cm	0.28 U	1.2 U	0.83 U	0.75 U	0.29 U	0.96 U	0.87	0.54 U
LRIS-LR-19-SS	0-10 cm	2.4 U	27 J	6.1 U	3.5 J	17 J	**9.3 J**	3.5 U	1.2 U
LRIS-LR-20-SS	0-10 cm	3.9 J	81 J	35	14 J	39	**36 J**	15	1.2 U
LRIS-LR-21-SS	0-10 cm	0.094 U	0.23 U	0.15 U	0.24 UJ	0.079 U	0.16 U	0.15 U	0.14 U
LRIS-LR-23-SS	0-10 cm	0.26 U	0.47 J	0.14 U	0.15 UJ	0.24 U	0.15 U	0.3 J	0.084 U
LRIS-LR-24-SS	0-10 cm	4.8 J	48 J	28	8.9 J	30	**58 J**	7.5	1.1 J
LRIS-LR-25-SS	0-10 cm	3.7 J	120 J	24	**58 J**	27	**31 J**	10	**15**
LRIS-LR-27-SS	0-10 cm	0.24 U	0.46 J	0.24 U	0.26 UJ	0.2 U	0.28 U	0.58 J	0.21 U
LRIS-LR-28-SS	0-10 cm	0.22 U	0.35 J	0.15 U	0.17 UJ	0.22 J	0.17 U	0.25 U	0.085 U
LRIS-LR-01-SB-1-2	1-2 ft	0.2 J	4.4	1.5 J	0.75 U	1.2 J	1.6 U	1.7	0.54 U
LRIS-LR-05-SB-1-2	1-2 ft	0.45 J	7.3 J	2.5 J	1 J	2.1 J	2.3 J	1.5	0.36 J
LRIS-LR-08-SB-1-2	1-2 ft	48 J	120 J	200	15 J	190	**410 J**	**93**	**3.9 J**
LRIS-LR-08-SB-3-4	3-4 ft	0.63 U	1.5 J	1 J	0.53 UJ	2.2 J	1.8 J	1.6	1.1
LRIS-LR-09-SB-1-2	1-2 ft	0.16 U	0.68 J	0.26 U	0.29 U	0.25 J	0.34 J	0.56 U	0.18 U
LRIS-LR-09-SB-4-5	4-5 ft	0.38 U	2 U	0.93 U	0.79 U	0.31 J	1.1 U	0.93	0.6 U
LRIS-LR-10-SB-1-2	1-2 ft	3 U	95	7.4	7.2 U	5.7 U	**8.6 U**	3.7	**4 U**
LRIS-LR-12-SB-1-2	1-2 ft	0.32 U	4.4	1.8 J	1 J	1.5 J	1.9 J	1.1	0.28 U

NOTES:

Bold indicates values that exceed CULs; if values were non-detects ("U" or "UJ"), half the reported concentration was compared with CULs. Estimated values were compared with the screening criteria.

cm = centimeter(s).
ft = feet.
HpCDD = heptachlorodibenzo-p-dioxin.
HpCDF = heptachlorodibenzofuran.
HxCDF = hexachlorodibenzofuran.
J = estimated value.
ng/kg = nanograms per kilogram.
NV = no value.
OCDD = octachlorodibenzo-p-dioxin.
OCDF = octachlorodibenzofuran.
PeCDD = pentachlorodibenzo-p-dioxin.
PeCDF = pentachlorodibenzofuran.
TCDD = tetrachlorodibenzo-p-dioxin.
TCDF = tetrachlorodibenzofuran.
TEQ = Toxicity equivalent.
U = Compound analyzed, but not detected above detection limit. Half the value used in calculations.
UJ = Compound analyzed, but not detected above estimated detection limit. Half the value used in calculations.

Table 6-5
Summary of Preliminary Carty Lake Cleanup Levels
Former PWT Site RI/FS

CULs	Carty Lake Direct Ingestion and Contact CUL[a]	Carty Lake Fish CUL (Freshwater)	Carty Lake Bird CUL	Carty Lake Mammal CUL	Lower Columbia River Dioxin Background	Carty Lake Dioxin PQL CUL	Selected Human Health CUL	Selected Ecological CUL
Dioxins (ng/kg)								
TEQ	6.6E+04	NA	NA	NA	2E+00	5E+00	5E+00	NA
2,3,7,8-TCDD	NA	3.3E+00	1.0E+01	4.1E+00	NA	NA	NA	3.3E+00
1,2,3,7,8-PeCDD	NA	9.8E+01	3.0E+02	1.2E+02	NA	NA	NA	9.8E+01
1,2,3,4,7,8-HxCDD	NA	2.0E+02	6.1E+03	1.2E+03	NA	NA	NA	2.0E+02
1,2,3,6,7,8-HxCDD	NA	9.8E+03	3.0E+04	1.2E+03	NA	NA	NA	1.2E+03
1,2,3,7,8,9-HxCDD	NA	9.8E+03	3.0E+03	1.2E+03	NA	NA	NA	1.2E+03
1,2,3,4,6,7,8-HpCDD	NA	2.5E+06	7.7E+06	3.1E+05	NA	NA	NA	3.1E+05
OCDD	NA	2.5E+07	7.7E+07	1.0E+07	NA	NA	NA	1.0E+07
2,3,7,8-TCDF	NA	5.5E+02	8.6E+01	3.4E+02	NA	NA	NA	8.6E+01
1,2,3,7,8-PeCDF	NA	5.5E+02	8.6E+02	1.1E+03	NA	NA	NA	5.5E+02
2,3,4,7,8-PeCDF	NA	6.5E+00	1.0E+01	1.4E+01	NA	NA	NA	6.5E+00
1,2,3,4,7,8-HxCDF	NA	9.8E+02	3.0E+03	1.2E+03	NA	NA	NA	9.8E+02
1,2,3,6,7,8-HxCDF	NA	9.8E+02	3.0E+03	1.2E+03	NA	NA	NA	9.8E+02
1,2,3,7,8,9-HxCDF	NA	9.8E+02	3.0E+03	1.2E+03	NA	NA	NA	9.8E+02
2,3,4,6,7,8-HxCDF	NA	9.8E+02	3.0E+03	1.2E+03	NA	NA	NA	9.8E+02
1,2,3,4,6,7,8-HpCDF	NA	2.5E+05	7.7E+05	3.1E+05	NA	NA	NA	2.5E+05
1,2,3,4,7,8,9-HpCDF	NA	2.5E+05	7.7E+05	3.1E+05	NA	NA	NA	2.5E+05
OCDF	NA	2.5E+07	7.7E+07	1.0E+07	NA	NA	NA	1.0E+07

Table 6-5
Summary of Preliminary Carty Lake Cleanup Levels
Former PWT Site RI/FS

NOTES:

Risk-based CULs are based on standard, default assumptions commonly used and in rule, when available. Limited site-specific assumptions, where applicable, are integrated into CUL models, although models developed do no represent refined site-specific risk analyses.

Salmon, mink, and heron were receptors for fish, mammal, and bird models, respectively.

CUL = cleanup level.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

NA = not applicable.

ng/kg = nanograms per kilogram.

OCDD = octachloro dibenzo-p-dioxin.

OCDF = octachloro dibenzofuran.

PeCDD = pentachloro dibenzo-p-dioxin.

PeCDF = pentachloro dibenzofuran.

PQL = practical quantitation limit.

REL = Remediation level

TCDF = tetrachloro dibenzofuran.

TEQ = toxicity equivalent.

[a] Based on restoration worker scenario; see text for details.

Table 6-6
Carty Lake Cleanup Level Screening
Former PWT Site RI/FS

Sample ID	Sample Depth	Dioxin TEQ	1,2,3,4,6,7,8,9-OCDF	1,2,3,4,6,7,8,9-OCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDD	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDD	1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDD	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDF	2,3,7,8-TCDD
Human Health CUL		5	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Ecological CUL		NV	10000000	10000000	250000	310000	250000	980	200	980	1200	980	1200	550	98	980	6.5	86	3.3
LRIS-BKG-04-SS	0-10 cm	**18**	44	3,000	41	510	2.9	6.9	7.4	5.2	27	0.5 U	22	3.4	3.2	2.4	3	1.4	0.23
LRIS-CL-01-SS	0-10 cm	**140**	590	38,000	480	4,600	27	91	41	31	250	2.1 J	71	21	13	24	**39**	9.4	1.4
LRIS-CL-02-SS	0-10 cm	**1400**	2800 J	220000 J	6200 J	63000 J	430	**1,000**	**450**	510	350	67 J	810 J	320	**140 J**	360	**390 J**	**120**	**12 U**
LRIS-CL-03-SS	0-10 cm	**24**	91	4800 J	83	800	3.9 J	12	8.1	5.2	43	0.44 J	16	3 J	3.1 J	4.5	4.5	1.8	0.29 U
LRIS-CL-04-SS	0-10 cm	**300**	790 J	64000 J	1100 J	12000 J	48 U	170	77 J	82 J	540	24 U	140 J	42 J	22 J	65 J	**50 J**	18	**7.1 U**
LRIS-CL-05-SS	0-10 cm	1.8	5.3 J	400	5.3	62	0.46 U	0.81 J	0.78 J	0.47 U	3.3	0.28 U	1.6 J	0.39 U	0.32 U	0.35 J	0.31 U	0.33 U	0.12 U
LRIS-CL-06-SS	0-10 cm	**22**	54 J	5000 J	51 J	780 J	4.4 U	6.8	8.5	5.6	34	1.4 U	17 J	3 J	3.3 J	2.9 U	2.9 J	1.4	0.38 U
LRIS-CL-07-SS	0-10 cm	**32**	110 J	8700 J	100 J	1300 J	5	10	8.3	7	55	1.6 U	17 J	4.1	3.1 J	5.2	3.9 J	2.1	0.27 U
LRIS-CL-08-SS	0-10 cm	**27**	66	4800 J	60	840	3 J	8.9	12	7.5	41	0.54 J	30	4.3 UJ	5.2	4.1 J	4 UJ	3	0.44 J
LRIS-CL-09-SS	0-10 cm	**54**	140	11000 J	130	2000	5.1 U	16	22	13	76	0.81 U	53	6.7 UJ	8.6	8	6.3 UJ	2.9	0.65 J
LRIS-CL-10-SS	0-10 cm	**15**	45	2500	35	400	1.9 U	5.3	7.2	5	26	0.39 J	16	2.7 UJ	3.3 J	3.1 J	2.4 UJ	0.81 U	0.15 U
LRIS-CL-11-SS	0-10 cm	**27**	64	3400	50	620	4 J	8.5	13	8.2	46	0.47 J	28	5.3	6.7	4.9 J	5 UJ	2.2	0.53 J
LRIS-CL-12-SS	0-10 cm	**20**	51	2800	41	490	3 U	6.9	9.5	6.3	32	0.51 J	21	4.1 UJ	5.2	4 J	4 UJ	1.8	0.4 U
LRIS-CL-13-SS	0-10 cm	1.9	7.2	330	5.3	53	0.85 UJ	0.99 UJ	0.62 J	0.5 U	2.7 J	U	2.6 UJ	0.24 U	0.35 J	0.41 J	0.35 J	0.32 U	0.38 UJ
LRIS-CL-14-SS	0-10 cm	**26**	65	3400	51	620	3.7 U	8.1	13	7.4	43	0.41 J	28	4.4 UJ	6.2	4.8 J	4.3 UJ	2.3	0.46 J
LRIS-CL-15-SS	0-10 cm	**25**	67	3500	51	620	3.4 J	8.6	13	7.3	39	0.42 U	25	4.8 UJ	6.1	5.6 J	4.5 UJ	2.6 U	0.57 J
LRIS-CL-01-SB-1-2	1-2 ft	**5.5**	25	1,700	18	190	1 U	2.7 J	1.7 J	1.2 J	7.5	0.52 J	2 J	1.1 U	0.63 J	0.78 J	1.7 J	0.56 J	0.14 U
LRIS-CL-02-SB-1-2	1-2 ft	**130**	330	32000 J	420	4600 J	23	71	40	31	250	3.4 J	56	25	11	19	**30**	13	0.56 U
LRIS-CL-03-SB-1-2	1-2 ft	1.1	3.7 J	490	2.9 J	24	0.41 U	0.57 U	0.61 J	0.44 U	1.2 J	0.5 U	0.91 J	0.5 U	0.32 U	0.38 U	0.57 U	0.2 J	0.13 U
LRIS-CL-04-SB-1-2	1-2 ft	2.1	5.5 J	510	6.8	78	0.39 U	1.4 J	0.58 J	0.54 J	3.8	0.29 U	1.4 J	0.45 J	0.23 U	0.24 U	0.41 U	0.49 J	0.081 U
LRIS-CL-05-SB-1-2	1-2 ft	0.74	0.99 U	37	0.61 U	5	0.19 U	0.24 U	0.16 J	0.14 U	0.35 J	0.18 J	3.1 U	0.17 U	0.091 U	0.12 U	0.14 U	0.47 J	0.61 U
LRIS-CL-06-SB-1-2	1-2 ft	0.31	0.43 U	43	0.49 U	6.4	0.11 U	0.067 U	0.13 J	0.064 U	0.4 J	0.069 U	0.27 J	0.17 U	0.13 U	0.061 U	0.19 U	0.28 U	0.057 U
LRIS-CL-07-SB-1-2	1-2 ft	0.65	2 U	130	1.9 J	19	0.54 U	0.31 J	0.22 U	0.16 U	1 J	0.15 U	0.52 U	0.16 U	0.24 U	0.16 U	0.2 U	0.11 U	0.093 U
LRIS-CL-02-SB-2-3	2-3 ft	2.5	3.5 U	280	6.2	39	2.7	0.93 UJ	0.42 U	0.44 U	2.3 J	0.49 U	4.6 U	0.8 U	1.7 U	0.44 U	0.81 U	0.64 U	0.66 U

NOTES:

Bold indicates values that exceed CULs; if values were non-detects ("U" or "UJ"), half the reported concentration was compared with CULs. Estimated values were compared with the screening criteria.

cm = centimeter(s).

ft = feet.

HpCDD = heptachlorodibenzo-p-dioxin.

HpCDF = heptachlorodibenzofuran.

HxCDF = hexachlorodibenzofuran.

J = Estimated value.

ng/kg = nanograms per kilogram.

NV = no value.

OCDD = octachlorodibenzo-p-dioxin.

OCDF = octachlorodibenzofuran.

PeCDD = pentachlorodibenzo-p-dioxin.

PeCDF = pentachlorodibenzofuran.

TCDD = tetrachlorodibenzo-p-dioxin.

TCDF = tetrachlorodibenzofuran.

TEQ = toxicity equivalent.

U = Compound analyzed, but not detected above detection limit. Half the value used in calculations.

UJ = Compound analyzed, but not detected above estimated detection limit. Half the value used in calculations.

Table 7-1
Capping Sections
Former PWT Site RI/FS

Type of Use	Typical Section
Landscaping/green space	
<2 feet soil	Geotextile as demarcation; no landscaping; impermeable surface required (e.g., pavement, impermeable liner to prevent infiltration, buildings)
2 to 3 feet soil	Geotextile as demarcation layer; ground cover as outlined in the TEE (MFA, 2010a), gravel surfaces, or additional as approved by Ecology, any grasses
3 to 6 feet soil	Geotextile as demarcation layer; shrubs or trees as outlined in TEE (MFA, 2010a), gravel surfaces, or additional as approved by Ecology, any grasses
>6 feet soil	No geotextile and no vegetation planting restrictions
Parking	Impermeable surface (min. thickness 3 inches) with clean subbase as necessary for construction
Building/structure	Slab-on-grade (min. thickness 3 inches) with clean subbase as necessary for construction
Sidewalk/pathway	Impermeable surface (min. thickness 3 inches) with clean subbase as necessary for construction or gravel surface with minimum 2 feet clean fill

Table 8-1
Disproportionate Cost Analysis—Port-Owned Properties
Former PWT Site RI/FS

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Management of Short-term Risks	Technical and Admin. Implementability	Addresses Public Concerns	Sum	Total cost
1	Institutional Controls ▪ Deed restrictions, fence, and signs.	2	2	2	5	2	2	15	$53,000
2	Engineered Cap ▪ Gravel cap on Railroad Avenue property ▪ Site prep and regrading ▪ Post implementation cap monitoring	4	4	4	5	4	5	26	$184,000
3	Sampling and Removal ▪ Additional sampling of the property prior to final design ▪ Removal of soil to ecological CULs ▪ Placement of crushed rock for operational surface	5	5	5	2	3	4	24	$297,000

NOTES:

Criteria Scoring:

1—Does not satisfy the criterion.

2—Marginally satisfies the criterion.

3—Partially satisfies the criterion.

4—Mostly satisfies the criterion.

5—Completely satisfies the criterion.

CUL = cleanup level.

Table 9-1
Disproportionate Cost Analysis—Lake River
Former PWT Site RI/FS

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Mgmt of Short-term Risks	Technical and Admin. Implementability	Addresses Public Concerns	Sum	Total cost	Cost Effectiveness
1	Monitored Natural Recovery: ▪ Bank stabilization; ▪ Natural attenuation in the form of sedimentation; ▪ Multiple sampling events; ▪ Long-term monitoring plan; and ▪ Institutional controls.	2	2	2	5	2	5	18	$679,000	5
2	Enhanced Monitored Natural Recovery: ▪ Bank stabilization; ▪ Placement of a sand layer to enhance natural attenuation; ▪ Long-term monitoring plan; and ▪ Institutional controls.	3	3	3	4	2	5	20	$2,815,000	3
3	Engineered Cap: ▪ Bank stabilization; ▪ Placement of an engineered sand cap; ▪ Placement of a protective armor layer; ▪ Implementation of long-term monitoring and maintenance; and ▪ Institutional controls.	4	4	4	3	3	5	23	$7,718,000	2

Table 9-1
Disproportionate Cost Analysis—Lake River
Former PWT Site RI/FS

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Mgmt of Short-term Risks	Technical and Admin. Implementability	Addresses Public Concerns	Sum	Total cost	Cost Effectiveness
4	Dredging and ENR: ▪ Removal of impacted sediment through mechanical dredging; ▪ Existing in-water structure removal; ▪ Bank stabilization; and ▪ Placement of an ENR layer.	4	5	5	3	4	5	26	$9,492,000	2

NOTES:

Criteria Scoring:

1—Does not satisfy the criterion.

2—Marginally satisfies the criterion.

3—Partially satisfies the criterion.

4—Mostly satisfies the criterion.

5—Completely satisfies the criterion.

ENR = enhanced natural recovery.

Table 10-1
Disproportionate Cost Analysis—Carty Lake
Former PWT Site RI/FS

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Mgmt of Short-term Risks	Technical and Admin. Implementability	Addresses Public Concerns	Sum	Total cost	Cost Effectiveness
1	Monitored Natural Recovery: ▪ Natural attenuation; ▪ Multiple sampling events; ▪ Long-term monitoring plan; and ▪ Institutional controls to protect receptors.	2	1	2	5	2	3	15	$280,500	5
2	Focused Dredge and Limited Residuals Cap: ▪ Dredging the highly impacted southern area of Carty Lake; ▪ Placement of residuals cap layer over the dredged area; ▪ Post-remedy monitoring; and ▪ Institutional controls to protect receptors.	3	3	3	4	5	5	23	$1,633,000	4
3	Focused Dredge and Expanded Residuals Cap: ▪ Dredging the highly impacted southern area of Carty Lake and marginally impacted sediment; ▪ Placement of residuals cap layer over the dredged area; ▪ Post-remedy monitoring; and ▪ Institutional controls to protect receptors.	3	3	3	3	4	5	21	$2,308,000	3

Table 10-1
Disproportionate Cost Analysis—Carty Lake
Former PWT Site RI/FS

Alternative	Remedial Action	Protectiveness	Permanence	Long-term Effectiveness	Mgmt of Short-term Risks	Technical and Admin. Implementability	Addresses Public Concerns	Sum	Total cost	Cost Effectiveness
4	Focused Dredge and Full Residuals Cap: ▪ Dredging the highly impacted southern area; ▪ Placement of sediment cap layer over the entire lake; ▪ Implementation of long-term monitoring and maintenance; and ▪ Institutional controls to protect receptors.	4	4	4	2	3	5	22	$7,340,000	1

NOTES:

Criteria Scoring:

1—Does not satisfy the criterion.

2—Marginally satisfies the criterion.

3—Partially satisfies the criterion.

4—Mostly satisfies the criterion.

5—Completely satisfies the criterion.

FIGURES

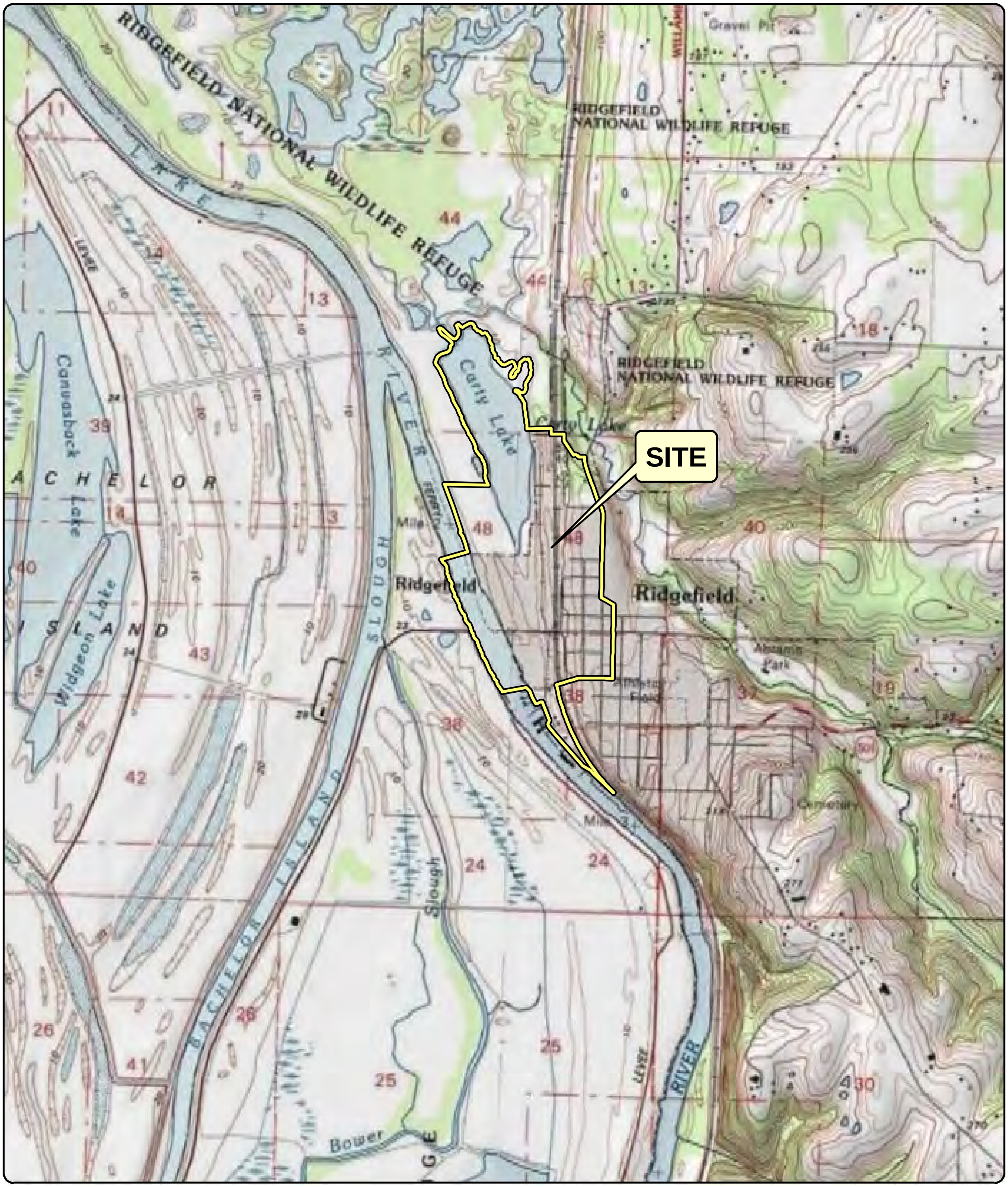
Path: X:\9003.01 Port of Ridgefield\20\Figures\CAP\Fig1-1_Site Location.mxd

Print Date: 6/28/2013

Approved By: J. King

Produced By: D. Coe/ W. Coffey

Project: 9003.01.20



Source: Topographic Quadrangle obtained from ArcGIS Online
Services/NGS-USGS TOPO/US Geological Survey (1999)
7.5-minute topographic quadrangle: Ridgefield
Address: Lake River Industrial Site
111 W. Division Street, Ridgefield, WA 98642
Section: 24 Township: 4N Range: 1W Of Willamette Meridian

Legend

▭ Former Pacific Wood Treating Site

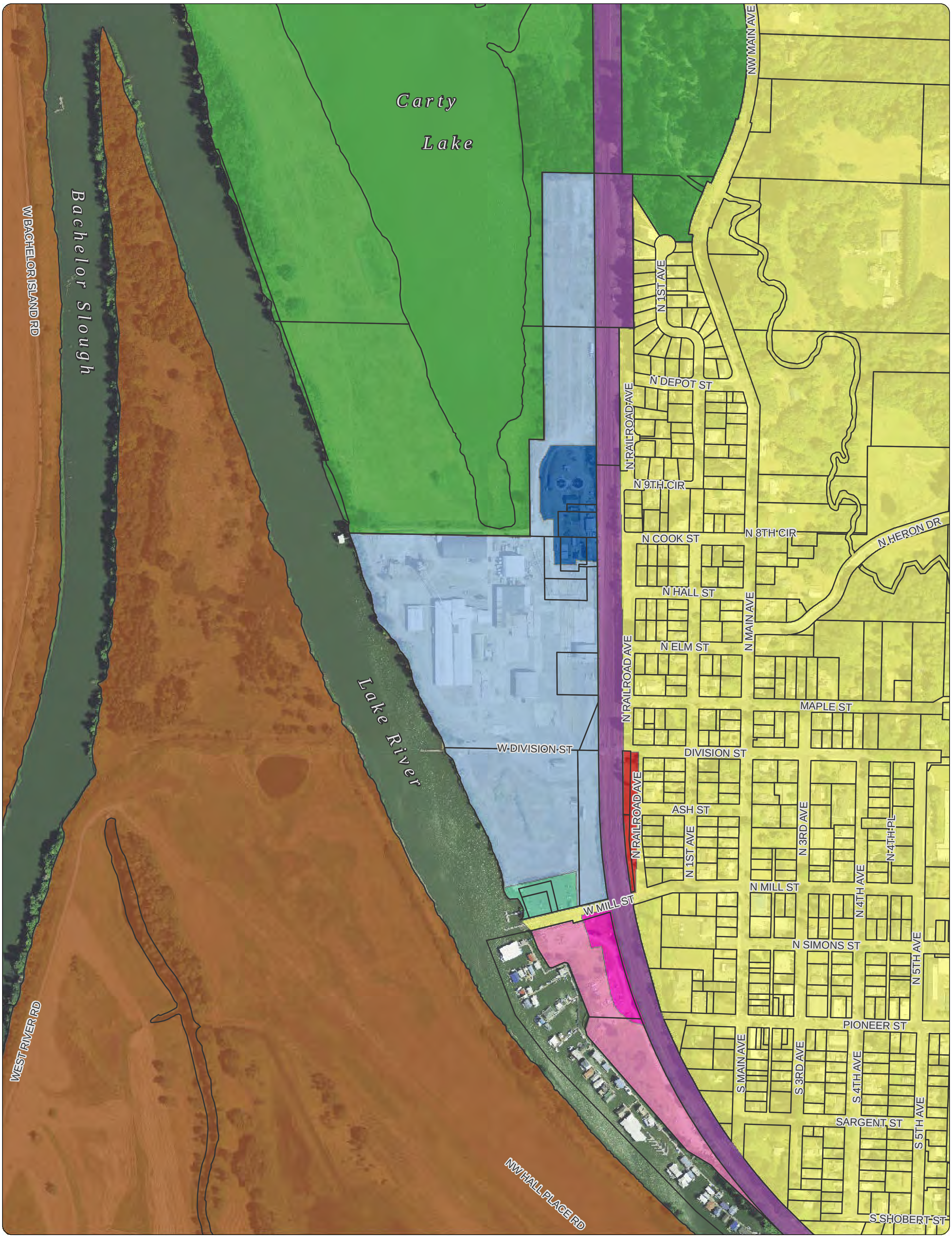
Figure 1-1
Site Location

Former PWT Site RI/FS
Ridgefield, Washington

0 1,000 2,000
Feet

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig1-2_Site Vicinity.mxd



Source: Aerial photograph obtained from Clark County (2007).

Notes:
1. LRIS = Lake River Industrial Site
2. RNWR = Ridgefield National Wildlife Refuge.
3. WWTP = Wastewater treatment plant
4. Port = Port of Ridgefield
5. BNSF = Burlington Northern Santa Fe

Legend

- 🟦 LRIS; Port-Owned
- 🟪 Proposed Overpass Property
- 🟥 Port Railroad Avenue Property
- 🟩 Port Marina Property
- 🟦 City of Ridgefield WWTP
- 🟪 McCuddy's Marina Property
- 🟨 Off-Property Uplands
- 🟩 RNWR-Carty Unit
- 🟫 RNWR-River S Unit
- 🟪 BNSF Railroad Property
- ☐ Clark County Tax Lots (2010)

Figure 1-2
Site Vicinity

Former PWT Site RI/FS
Ridgefield, Washington

0 225 450
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Print Date: 6/28/2013
Approved By: M. Novak
Produced By: J. Schane
Project: 9003.01.49

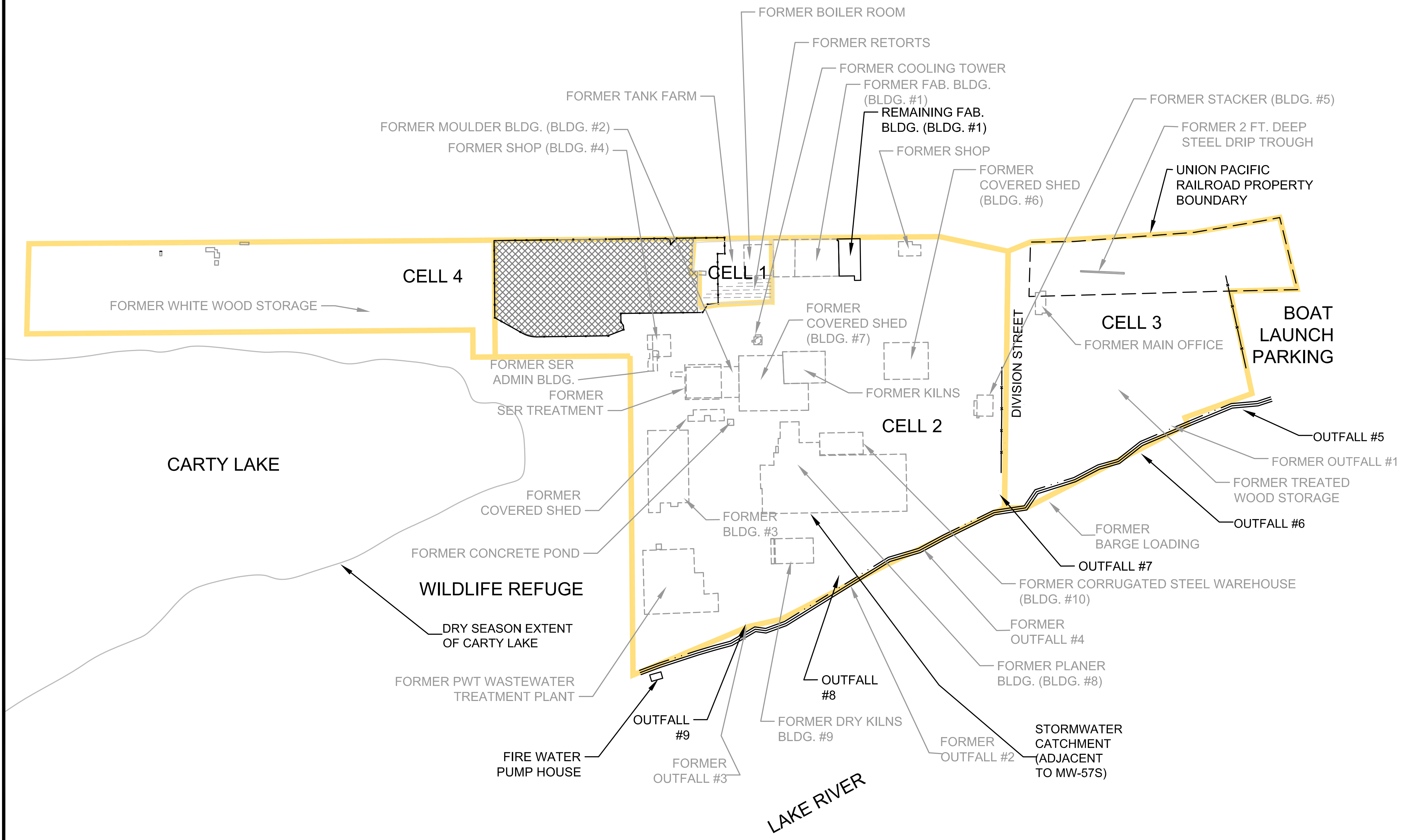


Figure 2-1
LRIS Former and Current Site Features

Former PWT Site RI/FS
Ridgefield, Washington

LEGEND:

▨ CITY OF RIDGEFIELD WASTEWATER TREATMENT PLANT

— — — UNION PACIFIC PROPERTY BOUNDARY

CELL BOUNDARY

CURRENT FEATURES

—×—×— FENCE LINE

- - - - FORMER PWT FEATURES

—·—·— ORDINARY HIGH WATER

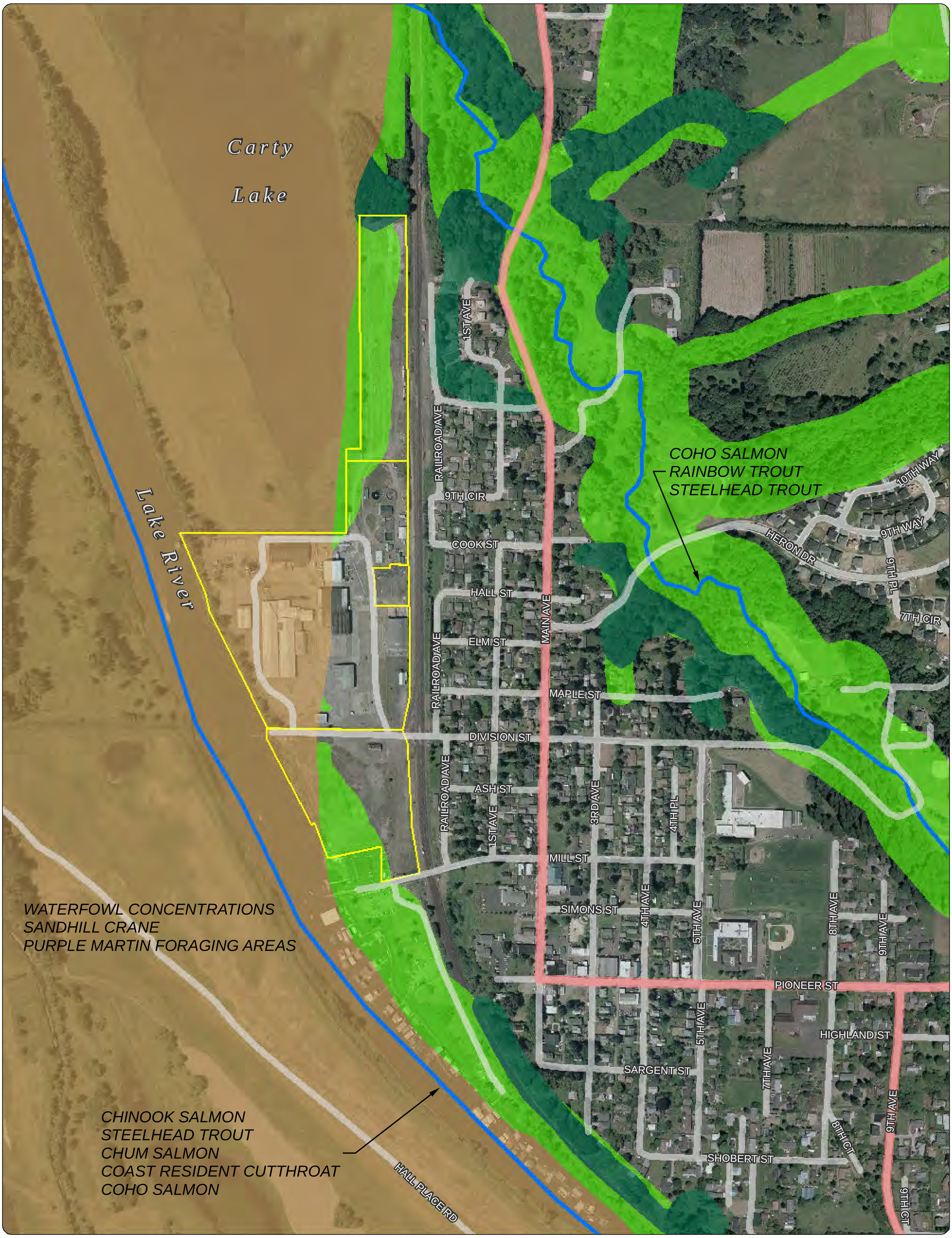
NOTE:
LRIS - LAKE RIVER INDUSTRIAL SITE

MAUL FOSTER ALONGI

PLOTTED ON: 2013-01-16 9:26 AM PLOTTED BY: Lia Ovelar FILENAME: G:\9003.01 Port of Ridgefield\49_RI-FS\Fig2-1_Site Features-historic 2012 REV.dwg

Layout: 1 Project: 9003.01.49 Drawn By: J. Fisher Approved By: A. Hughes

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-2_Upland Off-Property Setting.mxd



Source: Aerial photograph (2007) obtained from ArcGIS Online.

Habitat and Species Information obtained from Clark County GIS and the Washington Department of Fish and Wildlife.

Note: Waterfowl concentrations refers to the higher number of waterfowl present in the area.

Legend

Habitat and Species Priority Areas

- 🟩 Non-Riparian Habitat Conservation Area
- 🟩 Riparian Habitat Conservation Area
- 🟫 Species (Other)
- 〰 Fish Migration Pathways
- ▬ Major Roads
- ▬ Roads
- ☐ Port of Ridgefield Cell Boundaries

0 240 480
Feet

Figure 2-2
Upland Off-Property Setting

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Print Date: 11/14/2012
Approved By: H. Brunelle
Produced By: J. Schane
Project: 9003.01.39

Source: Aerial photograph and shaded relief obtained from ESRI, Inc. ArcGIS Online.

Notes:
1. Wetlands Delineation obtained from the U.S. Fish and Wildlife Service, National Wetlands Inventory.
2. COE = Army Corps of Engineers
3. Dredge project boundary is approximate and was digitized from COE project map number LK-1-26, January 20, 1970.

Legend

🟩 Freshwater Emergent Wetland
🟩 Freshwater Forested/Shrub Wetland
🟦 Freshwater Pond
🟦 Lake
🟦 River
🟫 Other
〰 COE Dredge Project (1970)
☐ POR Cell Boundaries

Figure 2-3
Lake River and Carty Lake Setting

Former PWT Site RI/FS
Ridgefield, Washington

0 0.5 1
Miles

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

File: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-3 Lake River and Carty Lake Setting.mxd
Print Date: 12/18/2012
Approved By: M. Novak
Produced By: J. Schane
Project: 9003.01.40

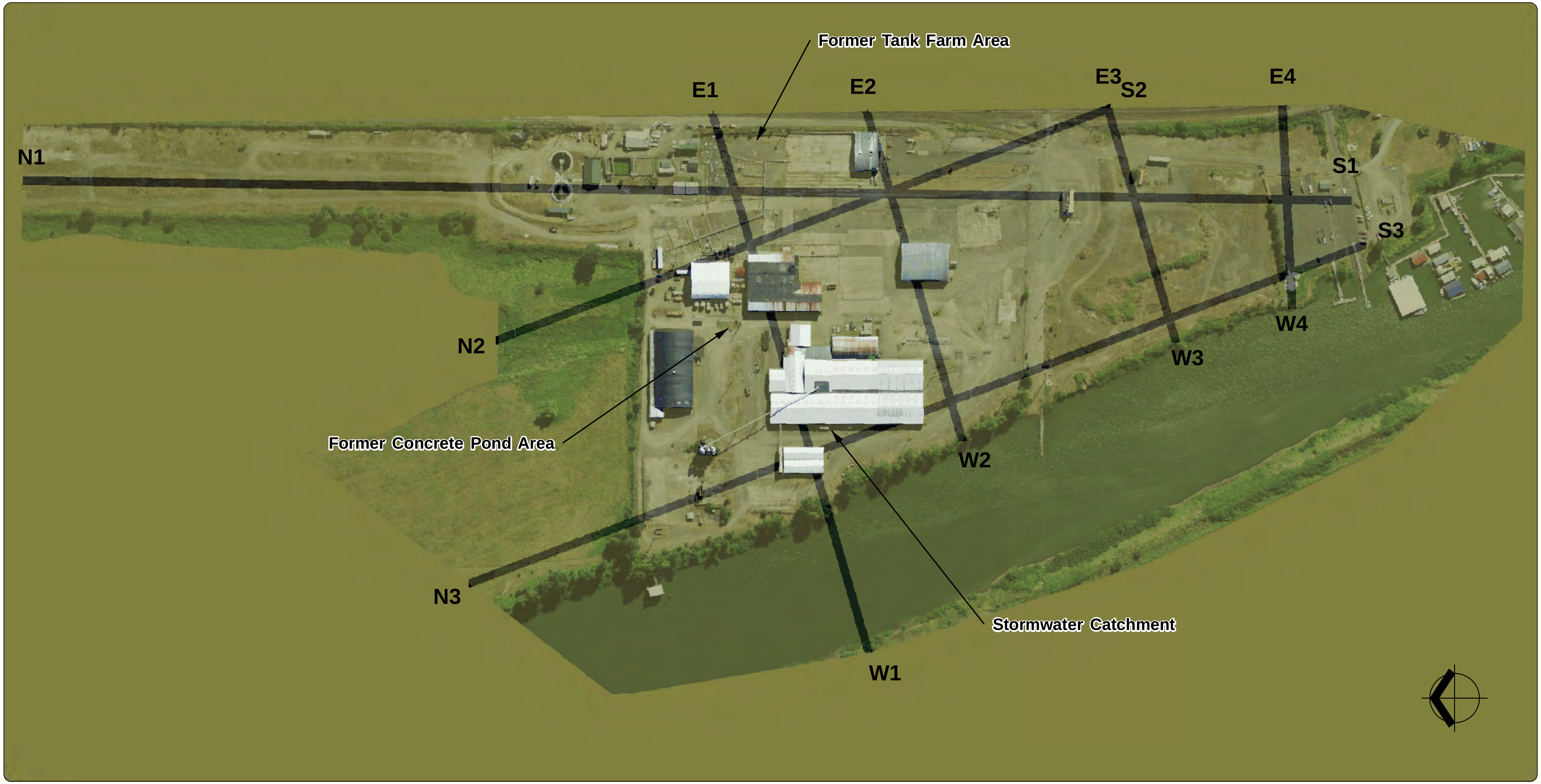
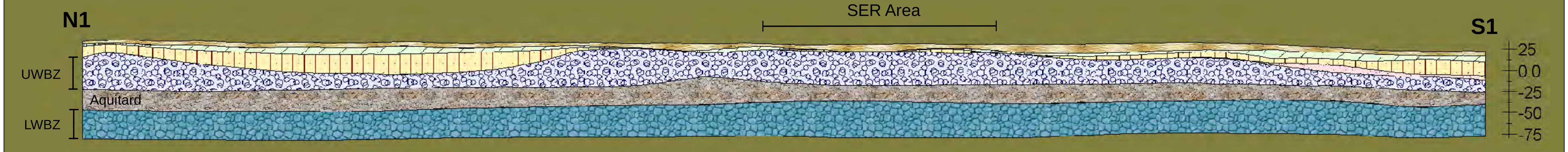


Figure 2-4
Geologic Cross Section Locations
Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-4_Geologic Cross Section Locations.mxd
Print Date: 3/13/2012
Approved By: A. Hughes
Produced By: J. Schane/B. Fauth
Project: 9003.01.49



Notes:
1. UWBZ = upper-water bearing zone
2. LWBZ = lower-water bearing zone

▨	Fill	
🟩	Carty Lake Sediments	Young Alluvium
🟦	Lake River	Young Alluvium
▨	Clay-Silt	Young Alluvium
▨	Sandy Silt	Young Alluvium
▨	Sand	Young Alluvium
▨	Sandy Gravel	Older Alluvium
▨	Silty Gravel (Aquitard)	Troutdale Formation
▨	Silt	Troutdale Formation
▨	Gravel	Troutdale Formation
▨	Clay	Troutdale Formation
▨	Columbia River Basalt Group	

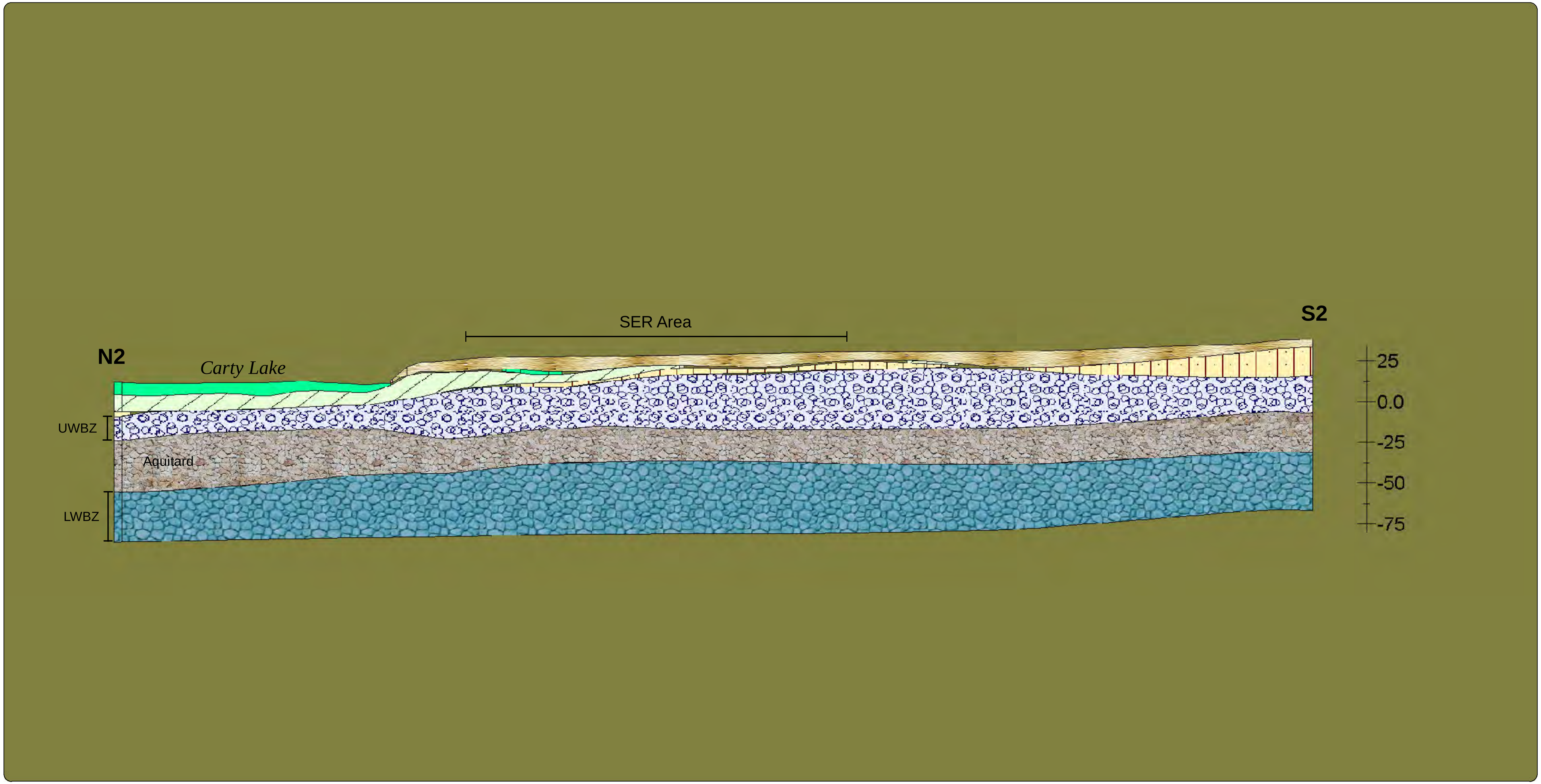
Figure 2-5
Generalized Cross Section
North 1 - South 1

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Project: 9003.01.49 Produced By: jschane Approved By: A. Hughes Print Date: 3/13/2012 Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-5_Generalized Cross Section North 1 - South 1.mxd

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-6_Generalized Cross Section North 2 - South 2.mxd
Print Date: 3/13/2012
Approved By: A. Hughes
Produced By: jschane
Project: 9003.01.49



Notes:
1. UWBZ = upper-water bearing zone
2. LWBZ = lower-water bearing zone

- Fill
- Carty Lake Sediments
- Lake River
- Clay-Silt
- Sandy Silt
- Sand
- Sandy Gravel
- Silty Gravel (Aquitard)
- Silt
- Gravel
- Clay
- Columbia River Basalt Group

Carty Lake Sediments – Sand: Young Alluvium
Sandy Gravel: Older Alluvium
Silty Gravel (Aquitard) – Clay: Troutdale Formation

Figure 2-6
Generalized Cross Section
North 2 - South 2

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

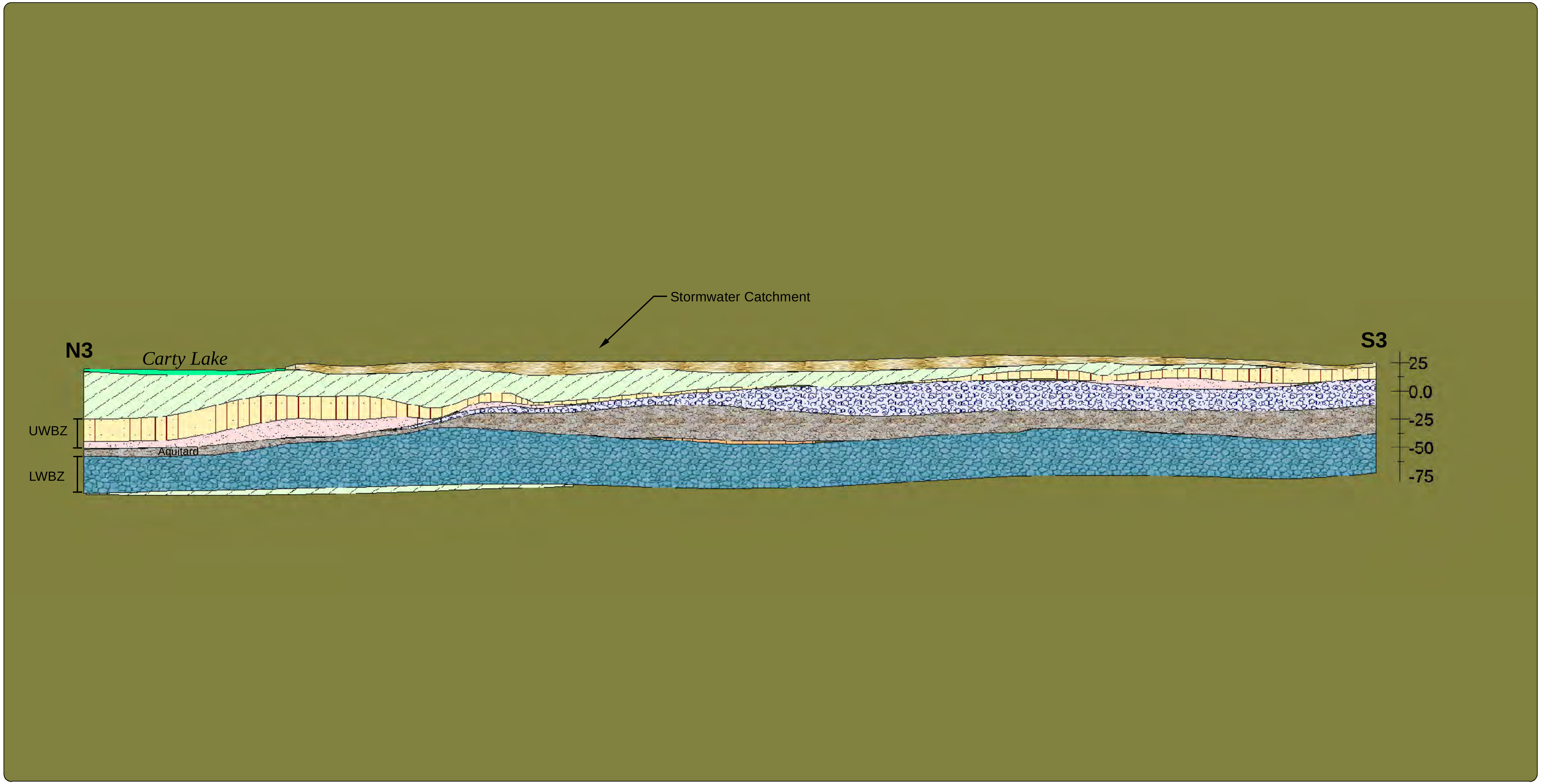
Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-7_Generalized Cross Section North 3 - South 3.mxd

Print Date: 3/13/2012

Approved By: A. Hughes

Produced By: jschane

Project: 9003.01.49



Notes:
1. UWBZ = upper water-bearing zone
2. LWBZ = lower water-bearing zone

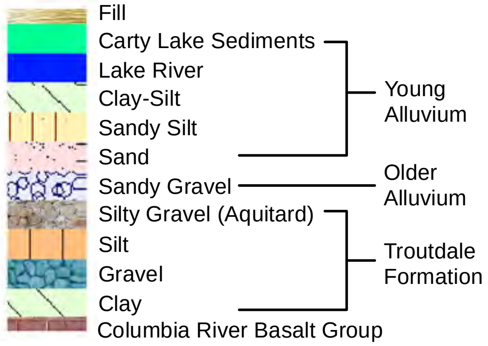


Figure 2-7
Generalized Cross Section
North 3 - South 3

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

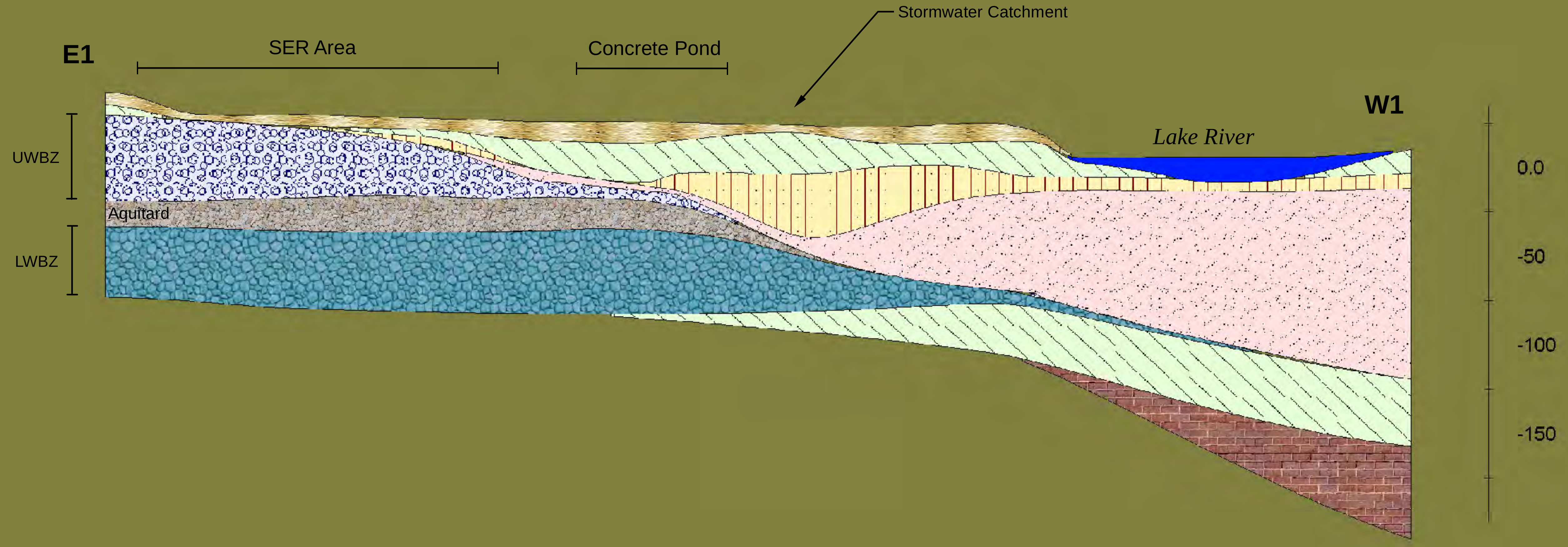
Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-8_Generalized Cross Section East 1 - West 1.mxd

Print Date: 3/13/2012

Approved By: A. Hughes

Produced By: jschane

Project: 9003.01.49



Notes:
1. UWBZ = upper water-bearing zone
2. LWBZ = lower water-bearing zone

- Fill
- Carty Lake Sediments
- Lake River
- Clay-Silt
- Sandy Silt
- Sand
- Sandy Gravel
- Silty Gravel (Aquitard)
- Silt
- Gravel
- Clay
- Columbia River Basalt Group

Young Alluvium: Carty Lake Sediments – Sand

Older Alluvium: Sandy Gravel

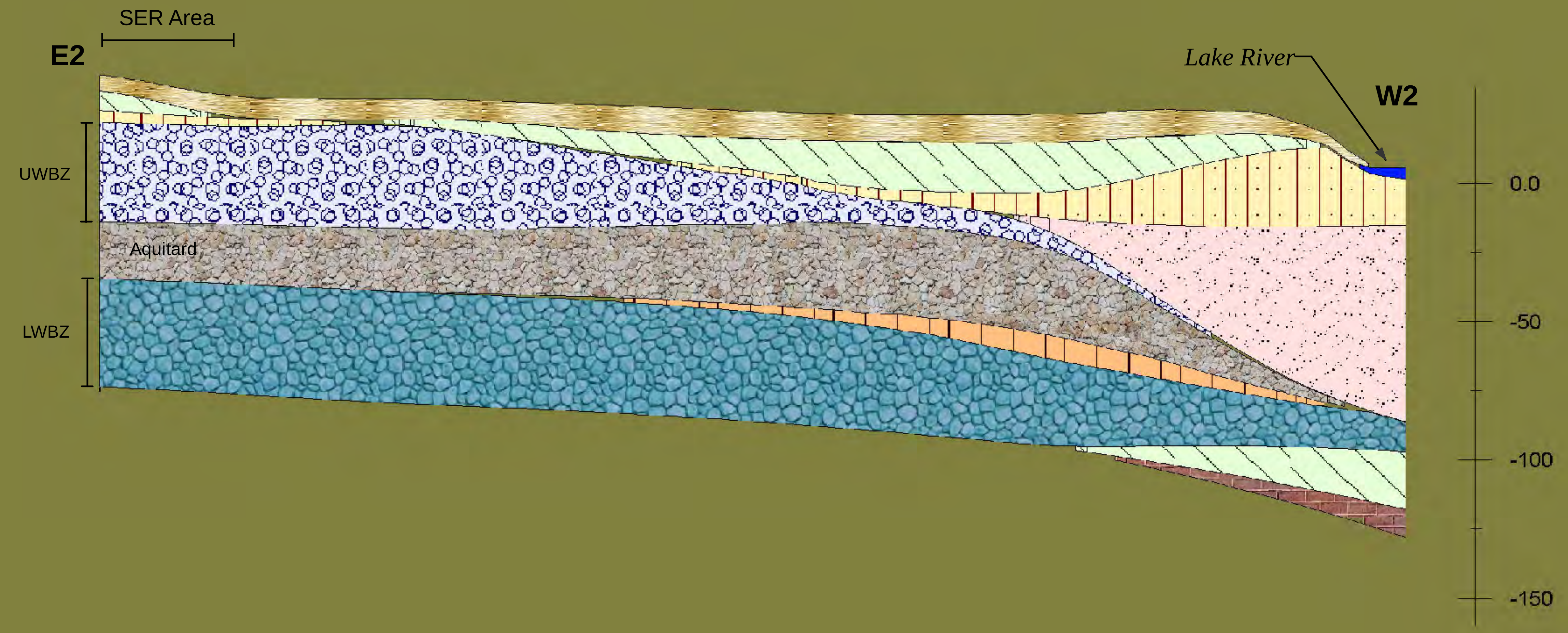
Troutdale Formation: Silty Gravel (Aquitard) – Clay

Figure 2-8
Generalized Cross Section
East 1 - West 1

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-9_Generalized Cross Section East 2 - West 2.mxd
Print Date: 3/13/2012
Approved By: A. Hughes
Produced By: jschane
Project: 9003.01.49



Notes:
1. UWBZ = upper water-bearing zone
2. LWBZ = lower water-bearing zone

▨	Fill	
🟩	Carty Lake Sediments	Young Alluvium
🟦	Lake River	Young Alluvium
▨	Clay-Silt	Young Alluvium
▨	Sandy Silt	Young Alluvium
▨	Sand	Young Alluvium
▨	Sandy Gravel	Older Alluvium
▨	Silty Gravel (Aquitard)	Troutdale Formation
▨	Silt	Troutdale Formation
▨	Gravel	Troutdale Formation
▨	Clay	Troutdale Formation
▨	Columbia River Basalt Group	

Figure 2-9
Generalized Cross Section
East 2 - West 2

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

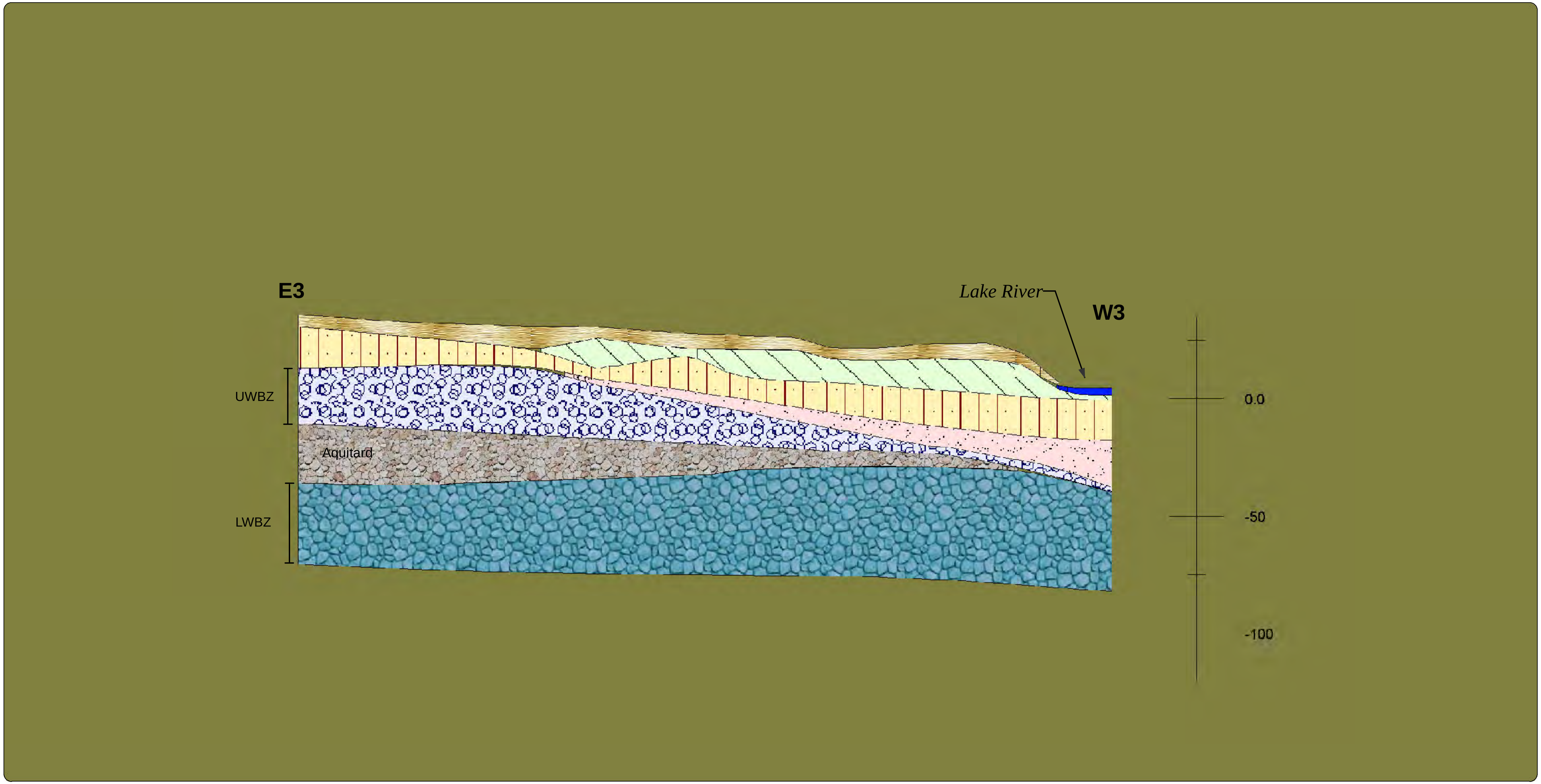
Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-10_Generalized Cross Section East 3 - West 3.mxd

Print Date: 3/13/2012

Approved By: A. Hughes

Produced By: jschane

Project: 9003.01.49



Notes:
1. UWBZ = upper water-bearing zone
2. LWBZ = lower water-bearing zone

- Fill
- Carty Lake Sediments
- Lake River
- Clay-Silt
- Sandy Silt
- Sand
- Sandy Gravel
- Silty Gravel (Aquitard)
- Silt
- Gravel
- Clay
- Columbia River Basalt Group

Young Alluvium

Older Alluvium

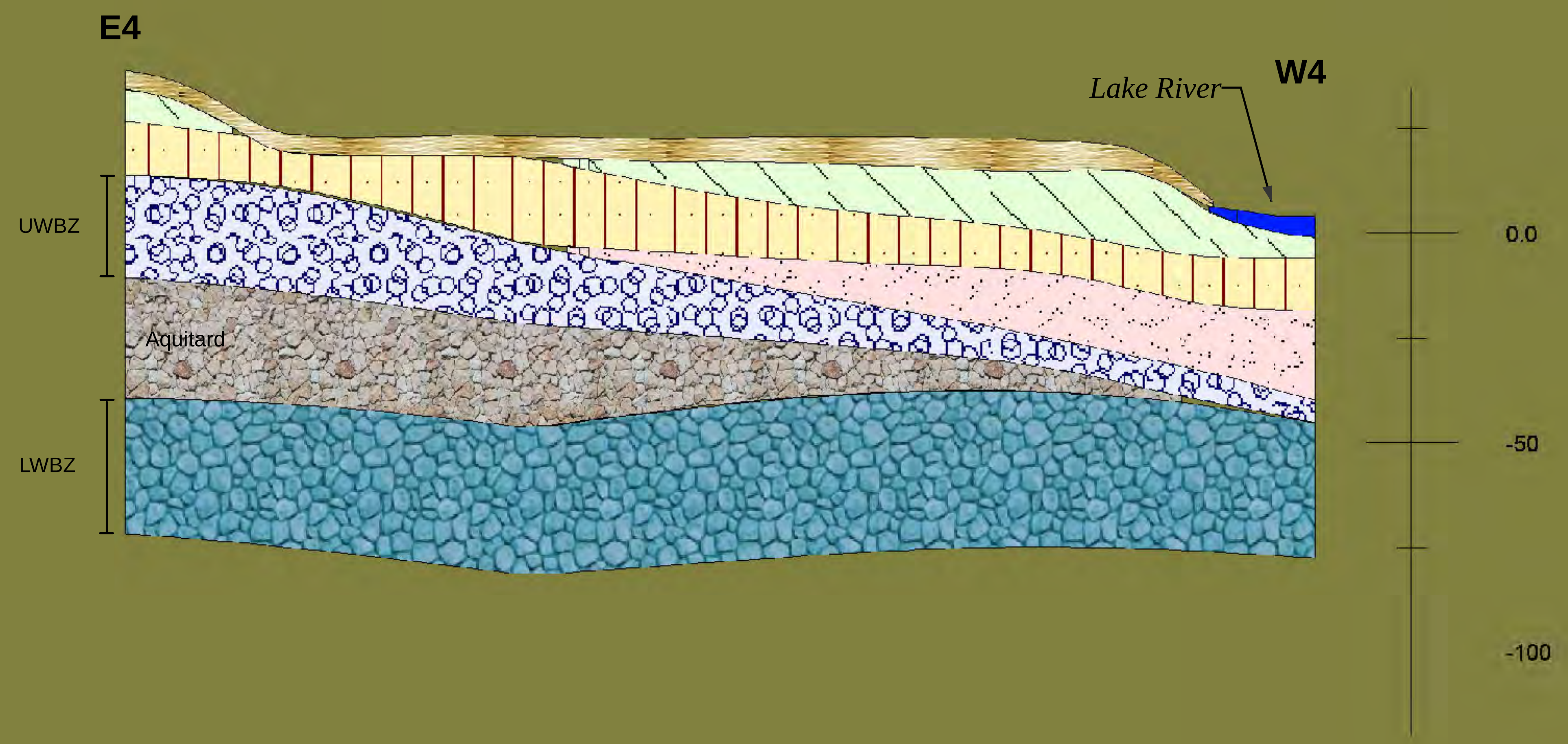
Troutdale Formation

Figure 2-10
Generalized Cross Section
East 3 - West 3

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-11_Generalized Cross Section East 4 - West 4.mxd
Print Date: 3/13/2012
Approved By: A. Hughes
Produced By: jschane
Project: 9003.01.49



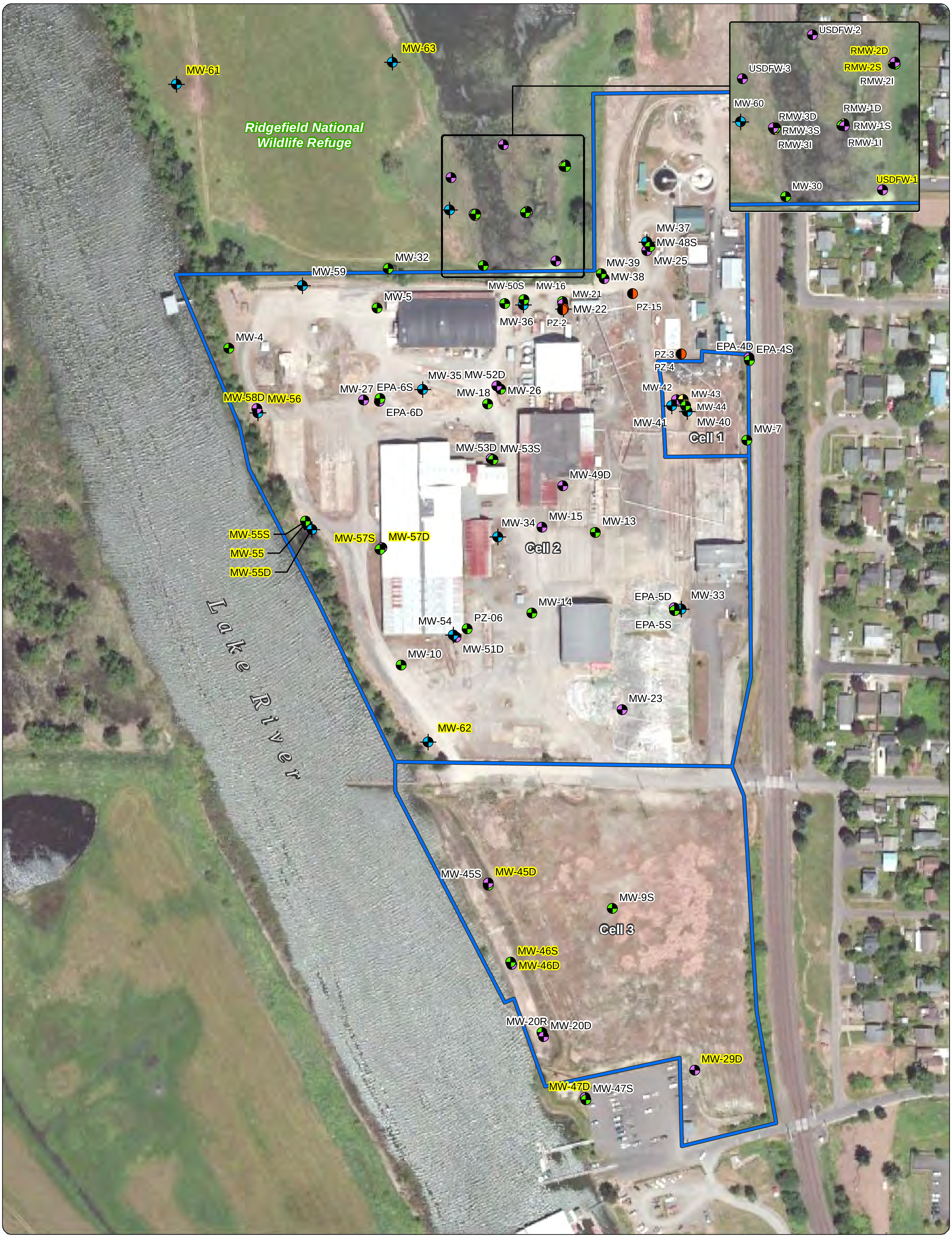
Notes:
1. UWBZ = upper water-bearing zone
2. LWBZ = lower water-bearing zone

Unit	
Fill	
Carty Lake Sediments	Young Alluvium
Lake River	Young Alluvium
Clay-Silt	Young Alluvium
Sandy Silt	Young Alluvium
Sand	Young Alluvium
Sandy Gravel	Older Alluvium
Silty Gravel (Aquitard)	Troutdale Formation
Silt	Troutdale Formation
Gravel	Troutdale Formation
Clay	Troutdale Formation
Columbia River Basalt Group	

Figure 2-11
Generalized Cross Section
East 4 - West 4

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Notes:
1. Wells with white highlight have been or will be decommissioned.
2. Wells with yellow highlight will remain for compliance monitoring.

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Legend

● Piezometer

Monitoring Wells

● Shallow Upper Water-Bearing Zone
● Intermediate Upper Water-Bearing Zone
● Deep Upper Water-Bearing Zone
● Lower Water-Bearing Zone
▭ Cell Boundaries

0 100 200
Feet

Figure 2-12
Monitoring Wells and Piezometer Locations

Former PWT Site RI/FS
Ridgefield, Washington

Path: X:\9003.01 Port of Ridgefield\9\Projects\POR RIFS Feb 2012\Fig2-12_Monitoring Well and Piezometer Locations.mxd
Print Date: 3/26/2013
Approved By: A. Hughes
Produced By: J. Schane
Project: 9003.01.28/04

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-13_Estimated Potentiometric Surface for the Shallow UWBZ, August 2011.mxd

Print Date: 3/13/2012

Approved By: A. Hughes

Produced By: A. Padilla

Project: 9003.01.36/05

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Legend

◆ River Gauge

▲ Staff Gauge

● Shallow UWBZ Monitoring Well

Equipotential Line (Contour Interval - 1.0 Foot)

12.04 Water Level Elevation in Feet (National Geodetic Vertical Datum [NGVD])

➡ Flow Direction

Notes:
1. The shallow Upper Water-Bearing Zone (UWBZ) potentiometric surface was constructed using monitoring wells screened between 15 feet NGVD and -5 feet NGVD.
2. Water level elevations from MW-16 and MW-17 were not used to construct the estimated potentiometric surface because they are completed above the UWBZ and are influenced by perched water.
3. Water level elevations from MW-7 were not used to construct the estimated potentiometric surface. MW-7 has been damaged by heat from the steam-enhanced remediation system and the water level is not consistent with past monitoring.

Figure 2-13
Estimated Potentiometric Surface for the Shallow UWBZ, August 2011

Former PWT Site RI/FS
Ridgefield, Washington

0 100 200
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-14_Estimated Potentiometric Surface for the Deep UWBZ, August 2011.mxd

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Legend

♦	River Gauge
▲	Staff Gauge
●	Deep UWBZ Monitoring Well
⌒	Equipotential Line (Contour Interval - 1.0 Foot)
7.48	Water Level Elevation in Feet (National Geodetic Vertical Datum [NGVD])
NM	Not Measured
➜	Flow Direction

Figure 2-14
Estimated Potentiometric Surface for the Deep UWBZ, August 2011

Former PWT Site RI/FS
Ridgefield, Washington

Notes:
1. The deep Upper Water-Bearing Zone (UWBZ) potentiometric surface was constructed using monitoring wells screened between -5 feet NGVD and -20 feet NGVD.
2. The water level elevation for MW-25 was not used to construct the estimated potentiometric surface because it was completed in the aquitard.

0 100 200
Feet

Print Date: 3/13/2012

Approved By: A. Hughes

Produced By: A. Padilla

Project: 9003.01.36/05

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-15_Estimated Potentiometric Surface for the LWBZ, August 2011.mxd

Source: Aerial photograph (2007) obtained from Clark County GIS Department.

Legend

⊕	LWBZ Monitoring Well
♦	River Gauge
▲	Staff Gauge
⌒	Equipotential Line (Contour Interval - 1.0 Foot)
6.51	Water Level Elevation in Feet (National Geodetic Vertical Datum [NGVD])
➡	Flow Direction

Figure 2-15
Estimated Potentiometric Surface for the LWBZ, August 2011

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Notes:
1. The Lower Water-Bearing Zone (LWBZ) potentiometric surface was constructed using monitoring wells screened between -30 feet NGVD and -84 feet NGVD.
2. MW-41 and MW-54 were not used in the interpolation.

0 100 200
Feet

Project: 9003.01.36/05 Produced By: A. Padilla Approved By: A. Hughes Print Date: 3/13/2012

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-16_Historical Stormwater System.mxd

Print Date: 12/3/2012

Approved By: A. Hughes

Produced By: Hines

Project: 9003.01.49

Source: Aerial photograph obtained from ESRI,
Inc. ArcGIS Online/Bing Maps.

Note:
Outfall 3 is the location of non-stormwater discharges (boiler blowdown and treated groundwater under Permit No. WA0041025).

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Legend

- ◪ Sluice Gate
- ▼ Outfall
- ● Roof Drain
- S Sump
- M Manhole
- ▤ Catch Basin
- ⁄ Inactive/Abandoned Catch Basin
- — Trench Drain
- — Storm Line
- — POTW Culvert
- — POTW Discharge
- ▬ Lake & River
- ▭ Buildings
- ■ Impervious
- ▨ Concrete
- ▢ Stormwater Basin

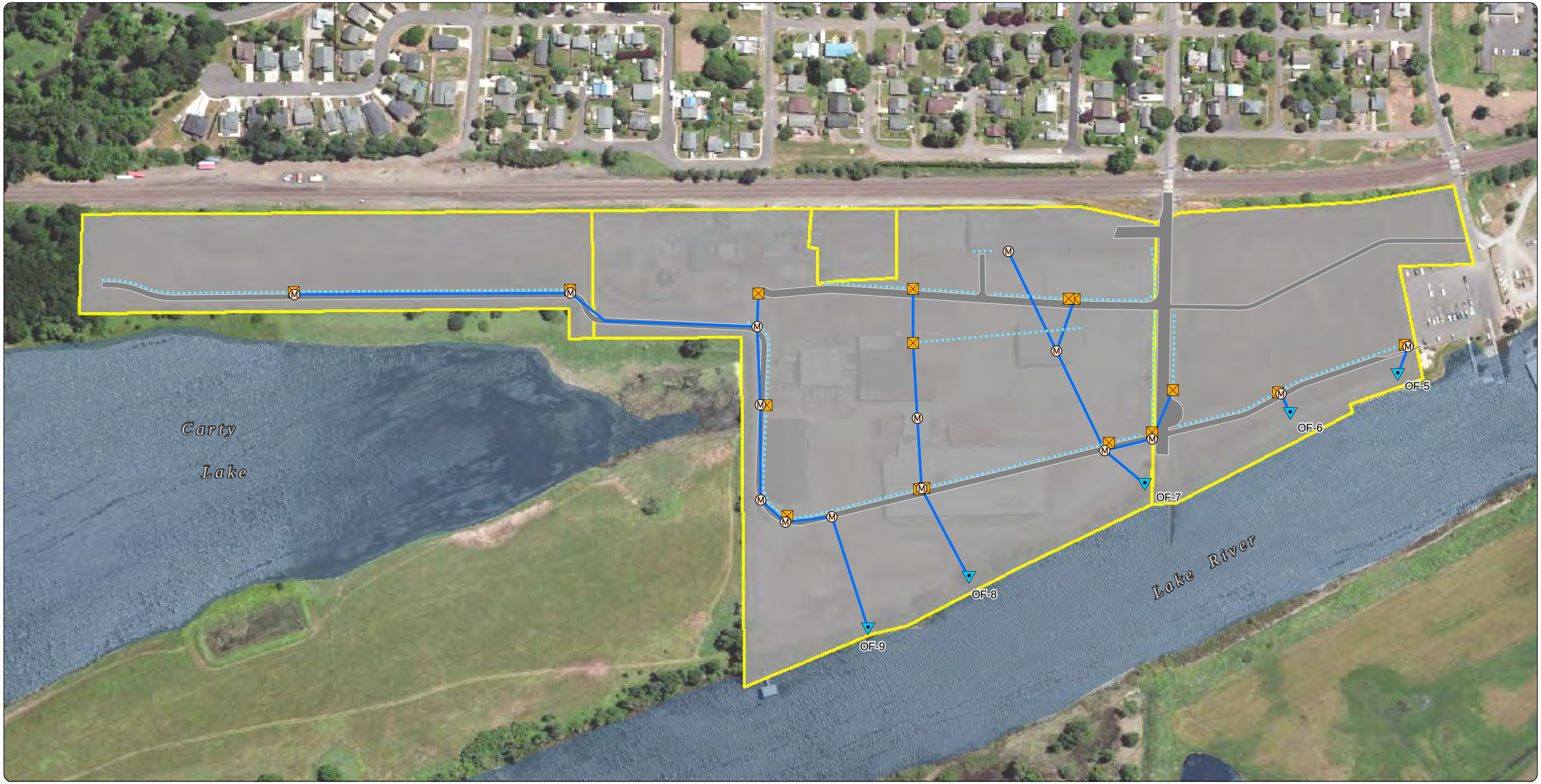
Figure 2-16
Historical Stormwater System

Former PWT Site RI/FS
Ridgefield, Washington

0 125 250
Feet

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-17_Current Stormwater System.mxd

Print Date: 3/13/2013 Approved By: A. Hughes Produced By: jschane Project: 9003.01.49



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Legend

- Ⓜ Manhole
- ☒ Catch Basin
- ▼ Outfall
- ······ Ditch
- ── Stormline
- ▇ Roads
- ▨ Lake & River
- ☐ Cell Boundaries

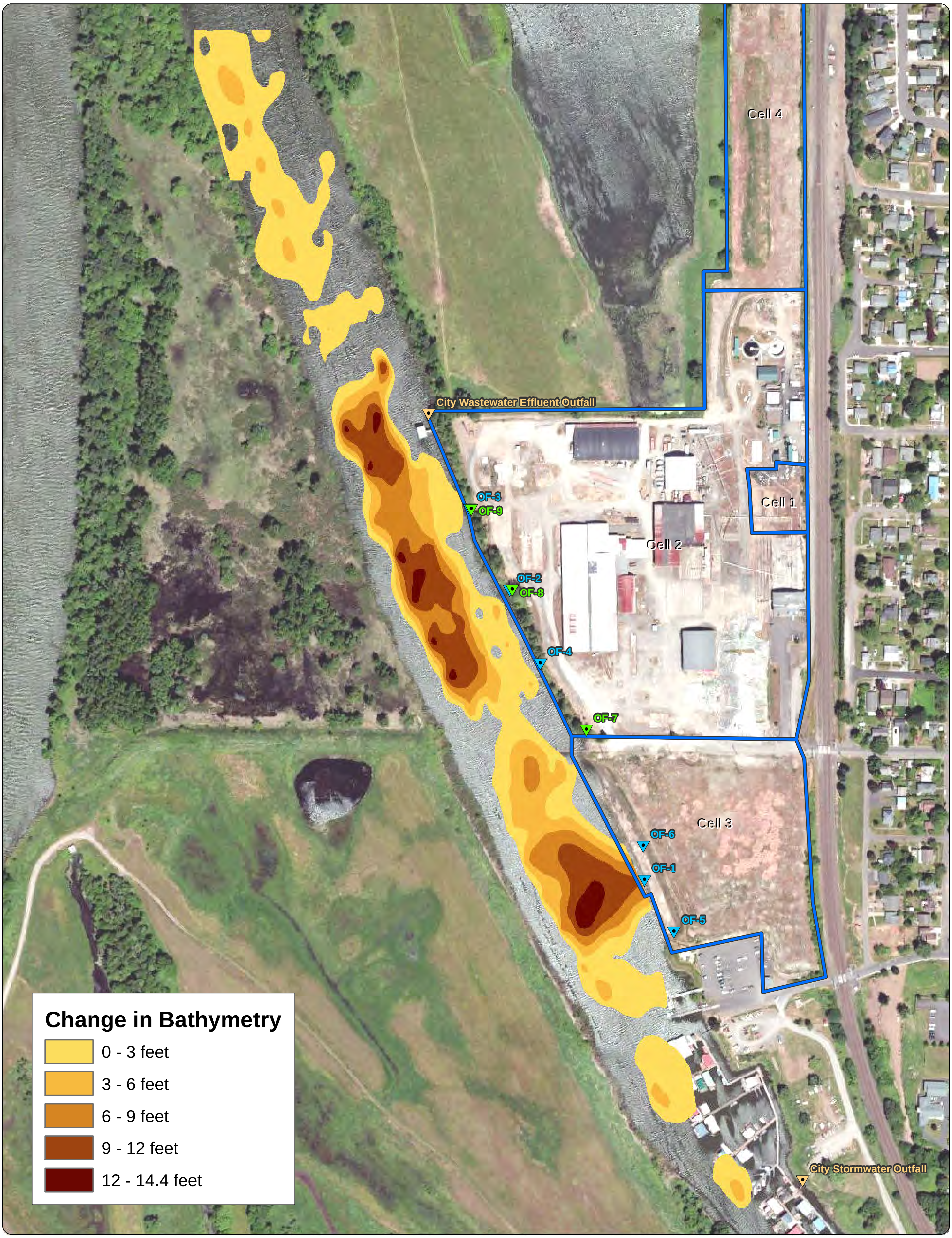
0 125 250
Feet

Figure 2-17
Current Stormwater System

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-18_Estimated Sediment Deposition Since 1970_Lake River.mxd



Notes:
1. Sediment deposition estimated by comparing 1970 soundings with 2010 soundings; the representation shown can only be considered as indicating the general conditions existing at the time.
2. Bathymetric surveys from 1970 and 2010 obtained from the COE (Army Corps of Engineers).
3. Bathymetric surfaces created using the ArcGIS 10 Spatial Analyst extension spline method.

Legend

▼ Private Outfalls
▼ City of Ridgefield Outfalls
▼ Historical Outfalls
▭ Cell Boundaries

Figure 2-18
Estimated Sediment Deposition Since 1970 - Lake River

Former PWT Site RI/FS
Ridgefield, Washington

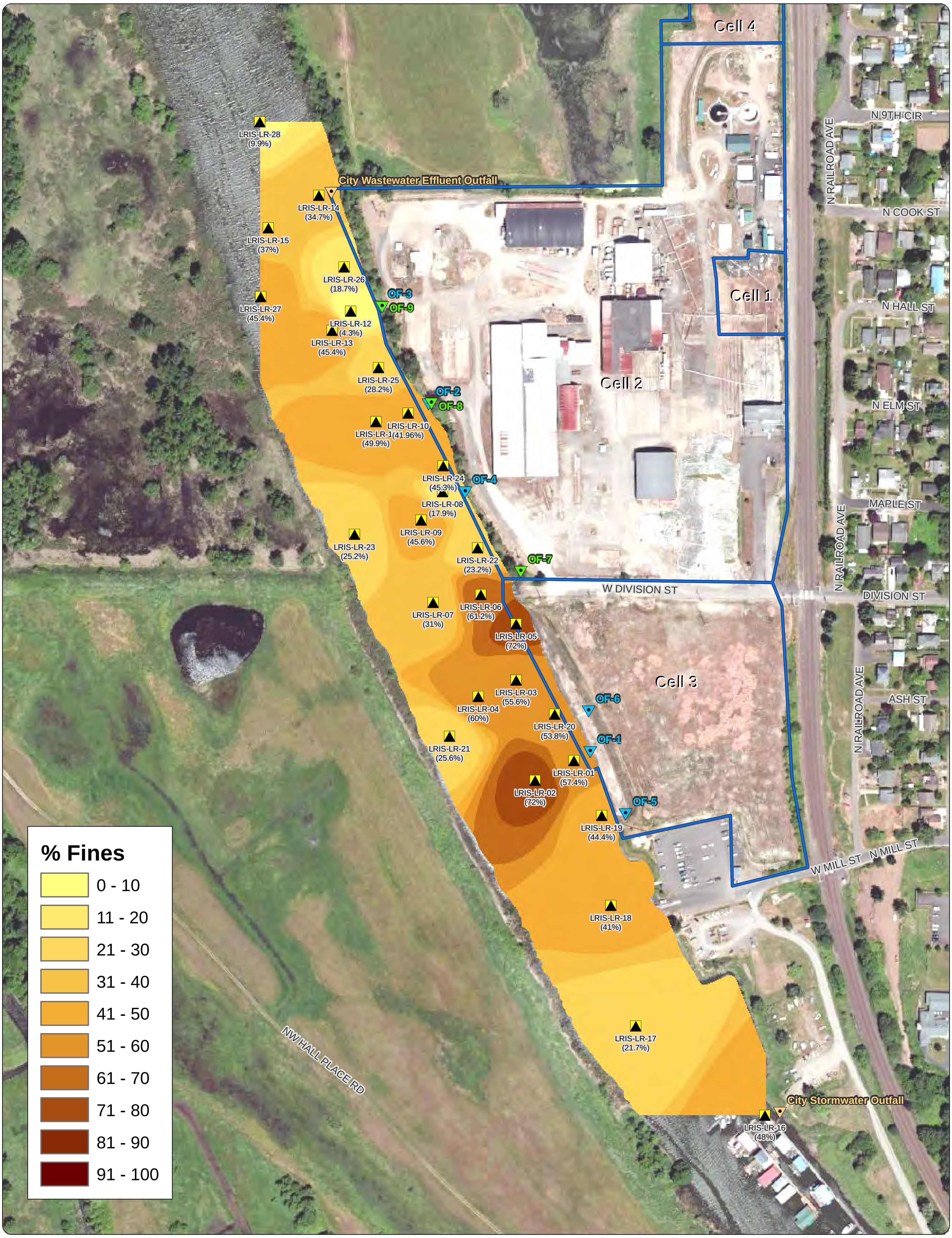
0 140 280
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Project: 9003.01.49 Produced By: J. Schane Approved By: M. Novak Print Date: 12/17/2012

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-19_Lake River Percent Fines.mxd



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Notes:
1. Percent fines is percent of clay and silt.
2. Percent fines sampling depth is 0-10 cm.
3. Contours created using ArcGIS 10 Spatial Analyst inverse distance weighted (IDW) interpolation method.
4. IDW parameters: Power of 6, 12 Points

Legend

- ▲ Sediment Sample Locations
- ▼ Private Outfalls
- ▼ City of Ridgefield Outfalls
- ▼ Historical Outfalls
- ▭ Cell Boundaries

Figure 2-19
Lake River Percent Fines

Former PWT Site RI/FS
Ridgefield, Washington

0 125 250
Feet

Print Date: 12/18/2012

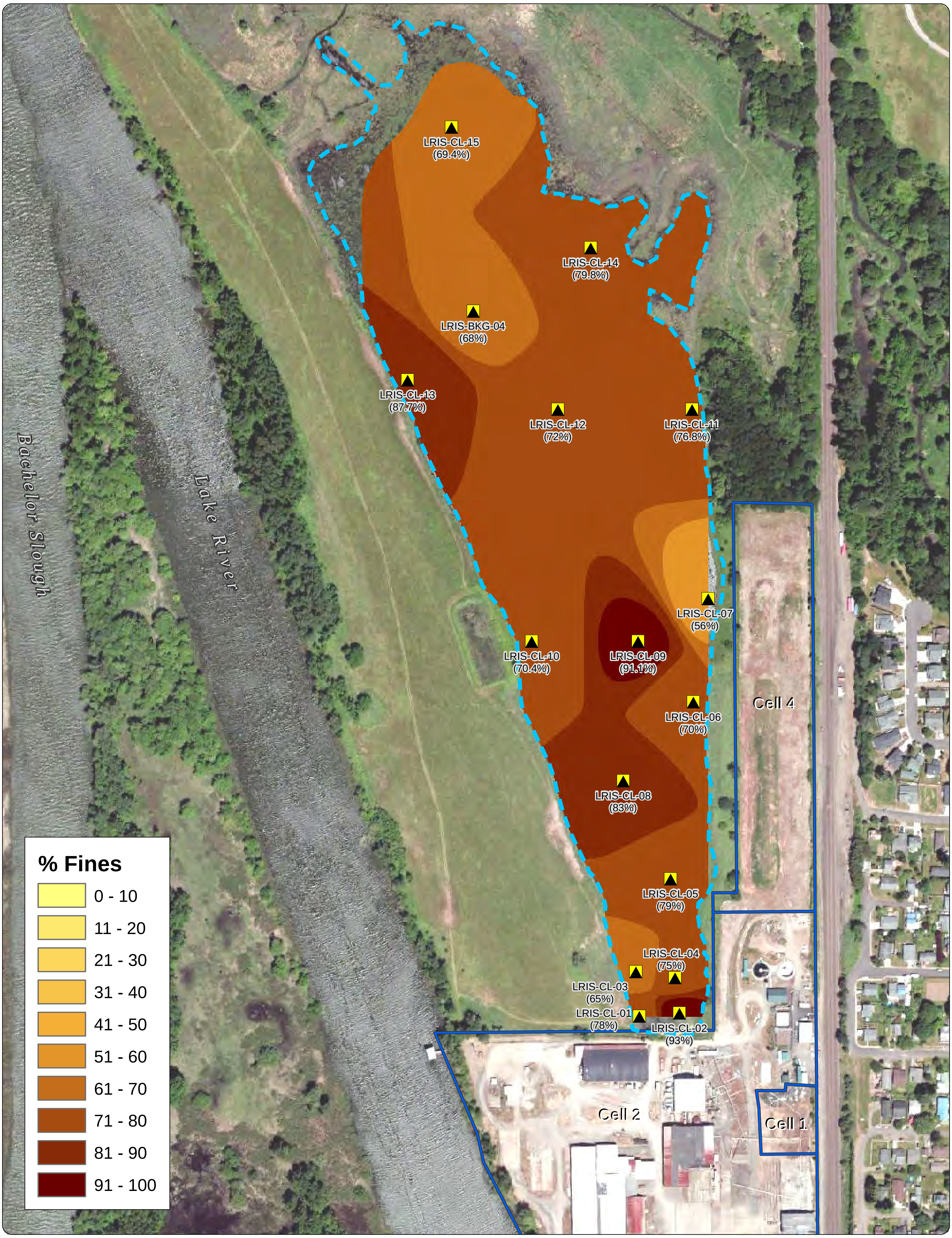
Approved By: M. Novak

Produced By: J. Schane

Project: 9003.01.49

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-20_Carty Lake Percent Fines.mxd



Print Date: 12/18/2012

Approved By: M. Novak

Produced By: J. Schane

Project: 9003.01.40/05

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Notes:
1. Percent fines is percent of clay and silt.
2. Percent fines sampling depth is 0-10 cm.
3. Contours created using ArcGIS 10 Spatial Analyst inverse distance weighted (IDW) interpolation method.
4. IDW parameters: Power of 6, 12 Points

MAULFOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

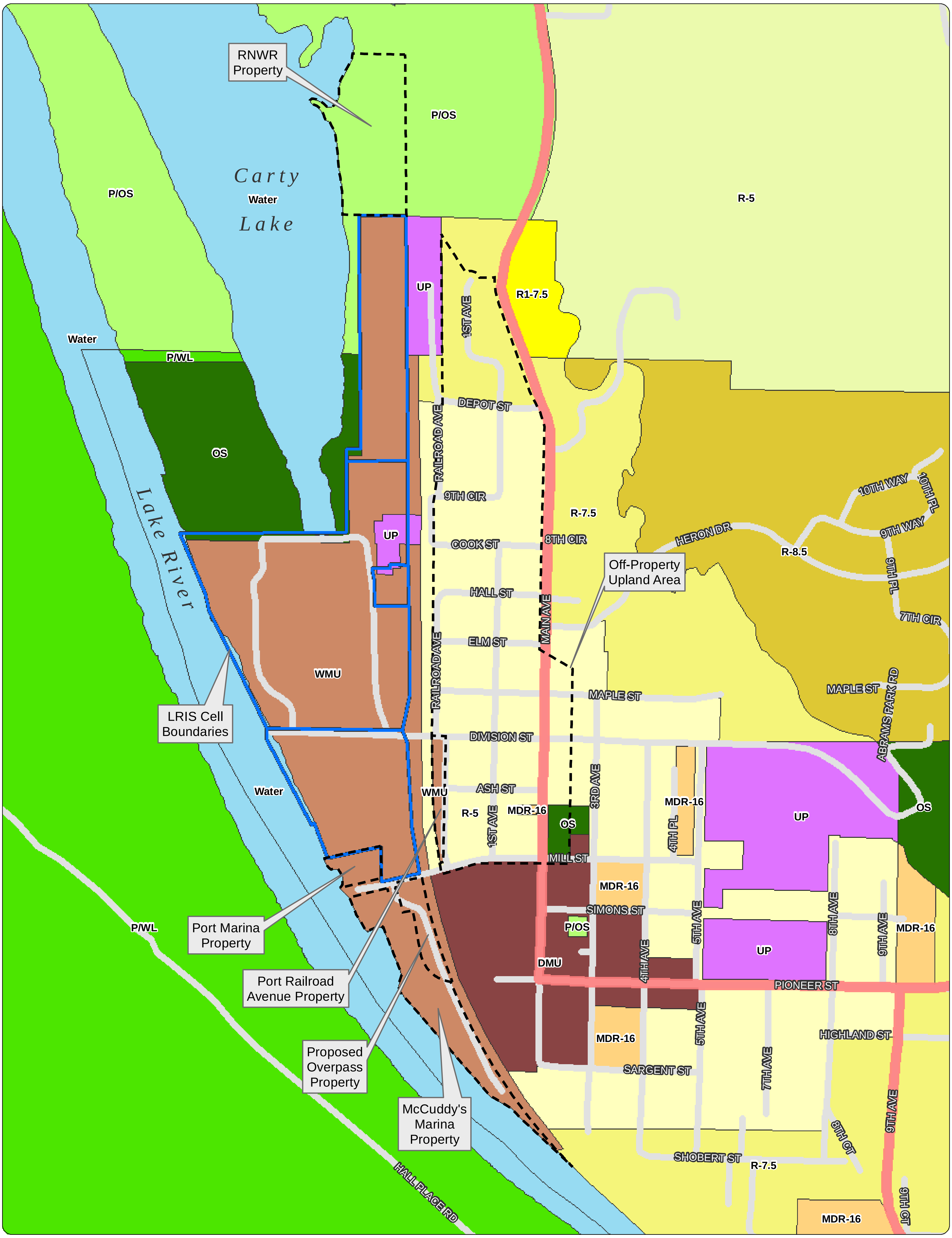
Legend
▲ Sediment Sample Location
Carty Lake
Cell Boundaries

Figure 2-20
Carty Lake Percent Fines

Former PWT Site RI/FS
Ridgefield, Washington

0 150 300
Feet

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig2-21_Zoning Designations.mxd



Source: Zoning and Roads data obtained from Clark County GIS (2010).

Legend

Zoning

- Low-Density Residential-5 (R-5)
- Low-Density Residential (R-7.5)
- Low-Density Residential-8.5 (R-8.5)
- Medium-Density Residential (MDR-16)
- R1-7.5
- Rural-5 (R-5)
- Urban Public (UP)
- Downtown Mixed Use (DMU)
- Waterfront Mixed Use (WMU)
- Open Space (OS)
- Parks/Open Space (P/OS)
- Parks/Wildlife Refuge (P/WL)
- Water
- Major Roads
- Roads
- Port of Ridgefield Cell Boundaries

Figure 2-21
Zoning Designations

Former PWT Site RI/FS
Ridgefield, Washington

0 240 480
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Print Date: 5/31/2013
Approved By: H. Brunelle
Produced By: J. Schane
Project: 9003.01.39

Figure 3-1
Extent of Nonaqueous-Phase Liquid in Concrete Pond Area

Former PWT Site RI/FS
Ridgefield, Washington

NAPL Observed (October 1999)

- 🟧 5-10 feet bgs
- 🟨 10-15 feet bgs
- 🟩 15-20 feet bgs
- 🟦 20-25 feet bgs
- ( ) 25-30 feet bgs

Notes:
1. bgs = below ground surface

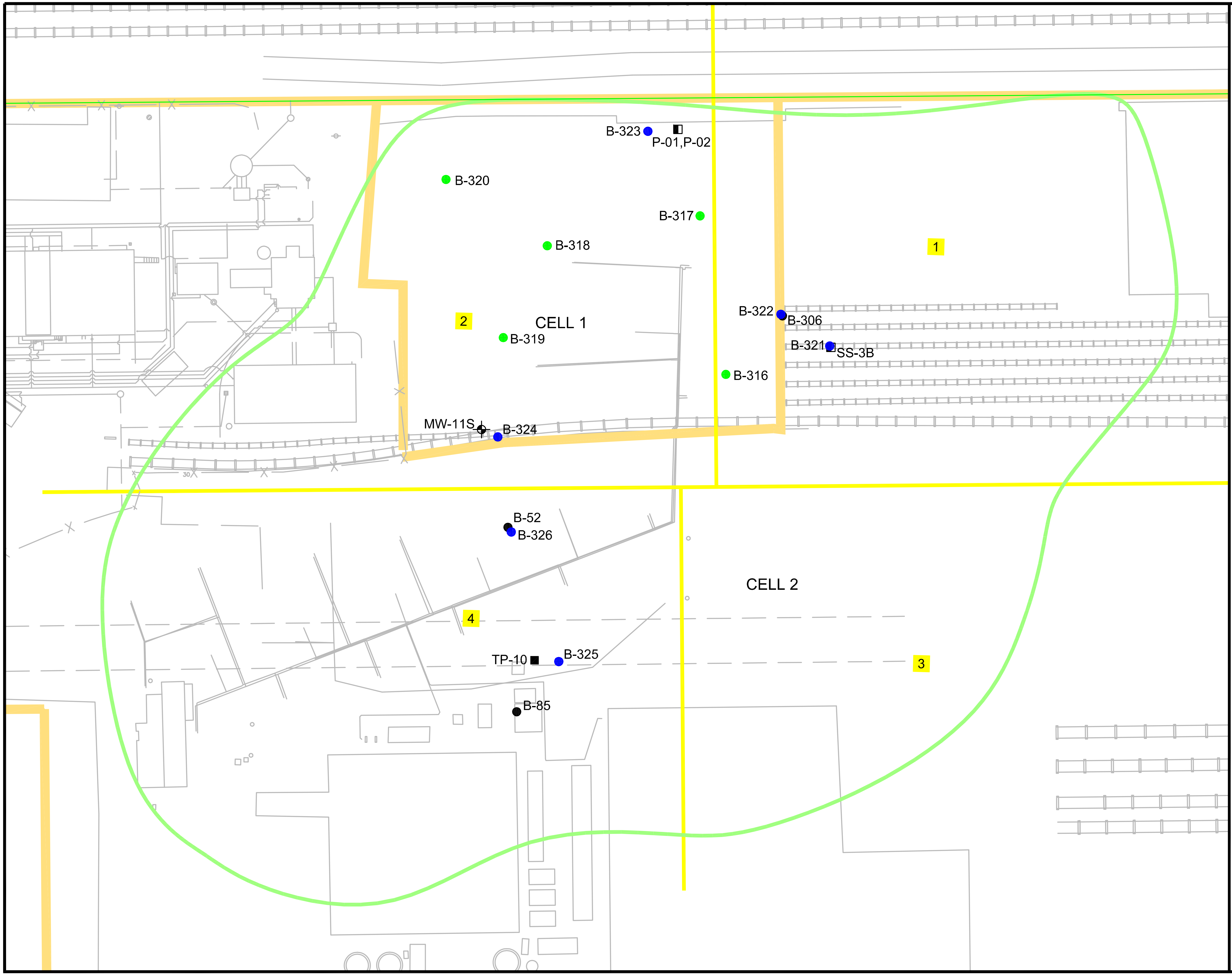
Source: Aerial photograph obtained from ESRI Inc. ArcGIS Online/Bing Maps.

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Project: 9003.01.36 /05 Produced By: J. Schane Approved By: A. Hughes Print Date: 12/18/2012
Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-1_Extent of Nonaqueous Phase Liquid in Concrete Pond Area.mxd

Figure 3-2
November 2011 SER Soil Investigation Locations

Former PWT Site RI/FS
Ridgefield, Washington



LEGEND:

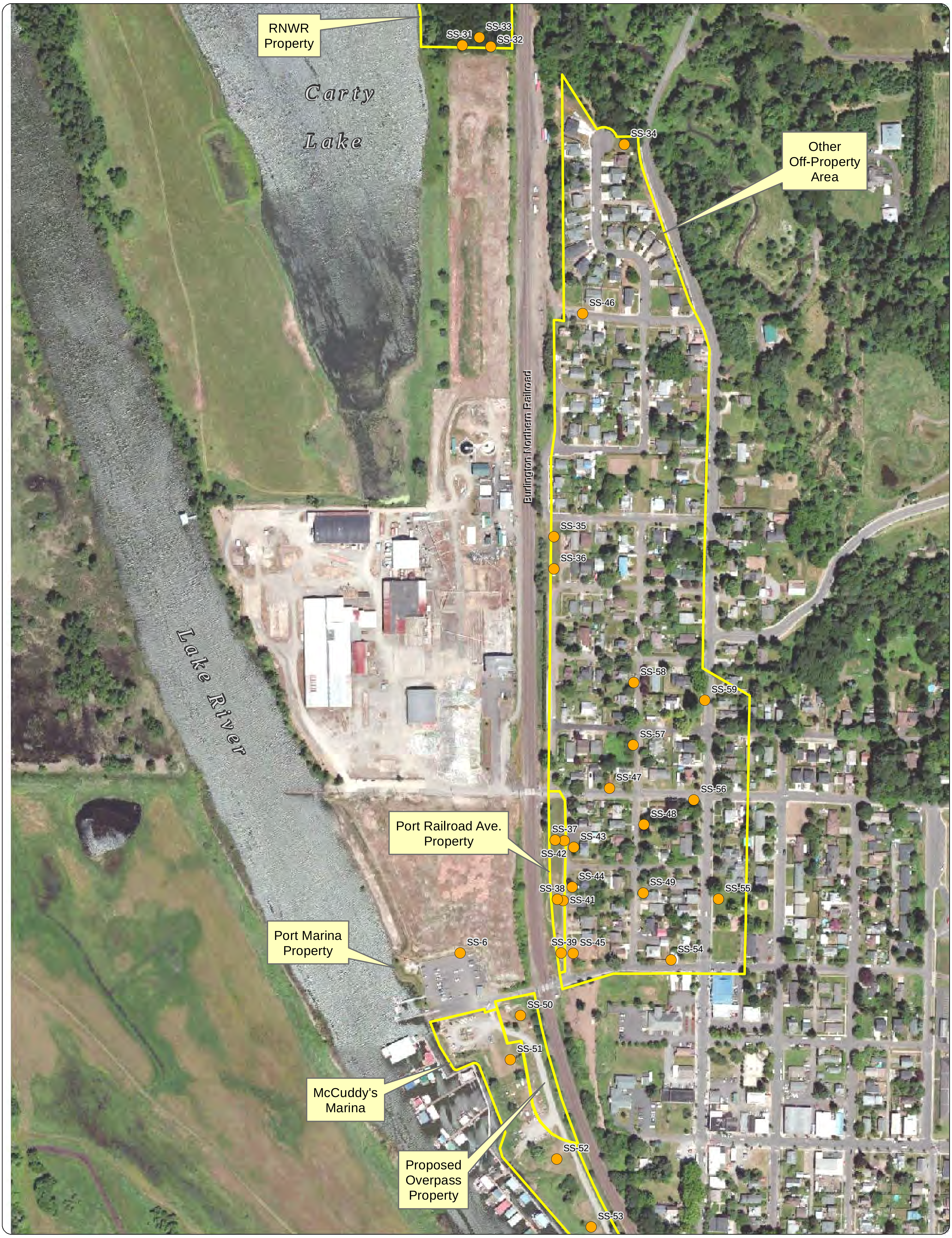
🟢	2011 SOIL BORINGS-COMPOSITE SAMPLES
●	PREVIOUS SOIL BORINGS
🔵	2011 SOIL BORINGS-DISCRETE SAMPLES
◧	SURFACE SOIL SAMPLE
⌖	MONITORING WELL
■	TEST PIT
1	SER AREA
🟨	SER AREA BOUNDARY
🟩	APPROXIMATE EXTENT OF SER TREATMENT AREA
🟧	CELL BOUNDARY

NOTE:

SER - STEAM-ENHANCED REMEDIATION

MAUL FOSTER ALONG

Layout: 1 Project: 9003.01.49 Drawn By: J. Fisher Approved By: A. Hughes



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Figure 3-3
Off-Property
Surface Soil Sample Locations

Former PWT Site RI/FS
Ridgefield, Washington

Legend

● Soil Sample Location
▭ Off-Property Area Designations
▭ Tax Lots

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-3_Off-Property Surface Soil Sample Locations.mxd

Print Date: 5/31/2013 Approved By: M. Novak Produced By: J. Schane Project: 9003.01.39/01

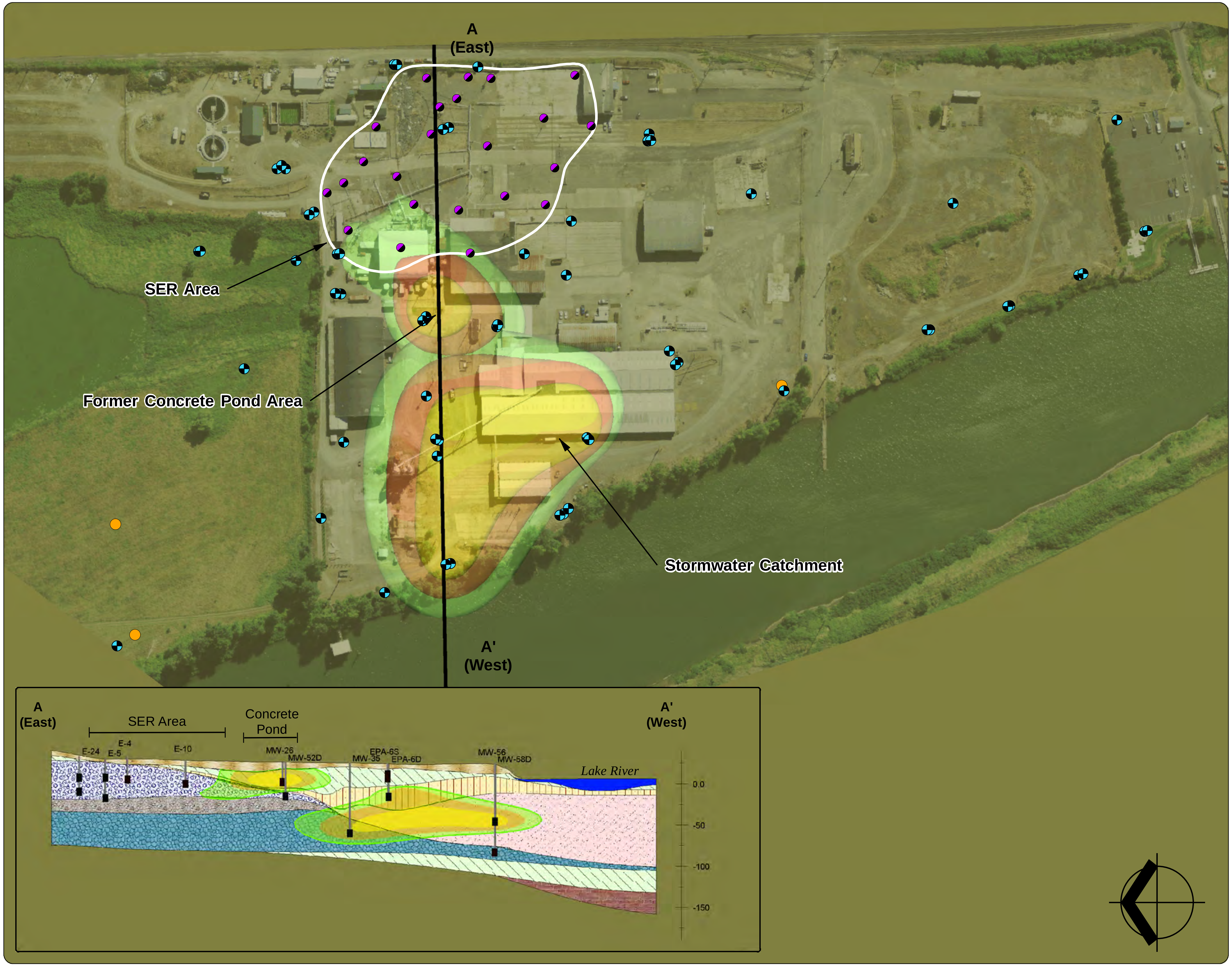


Figure 3-4
Distribution of Benzene in Groundwater

Former PWT Site RI/FS
Ridgefield, Washington

Legend

- ⊕ Monitoring Well
- ● Soil Boring
- ● Extraction Well

Concentration Levels

- 🟩 > 0.8 ug/L MTCA B CUL
- 🟧 > 2.4 ug/L MTCA B Vapor Migration Screening Level
- 🟨 > 8 ug/L

Fill
Carty Lake Sediments
Lake River
Clay-Silt
Sandy Silt
Sand
Young Alluvium
Sandy Gravel
Older Alluvium
Silty Gravel (Aquitard)
Silt
Gravel
Clay
Troutdale Formation
Columbia River Basalt Group

▮ Sample Interval

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and the kriging used to create this figure.
5. Data was collected in August 2011 (monitoring wells) and December 2011 (SER Area).
6. Reference Drawing 1 for well ID's.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-4_Distribution of Benzene in Groundwater.mxd
Print Date: 3/13/2013
Approved By: A. Hughes
Produced By: J. Schane
Project: 9003.01.36 /05

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-5_Distribution of Tetrachloroethene in Groundwater (A).mxd

Print Date: 1/8/2013 Approved By: A. Hughes Produced By: J. Schane Project: 9003.01.36 /05

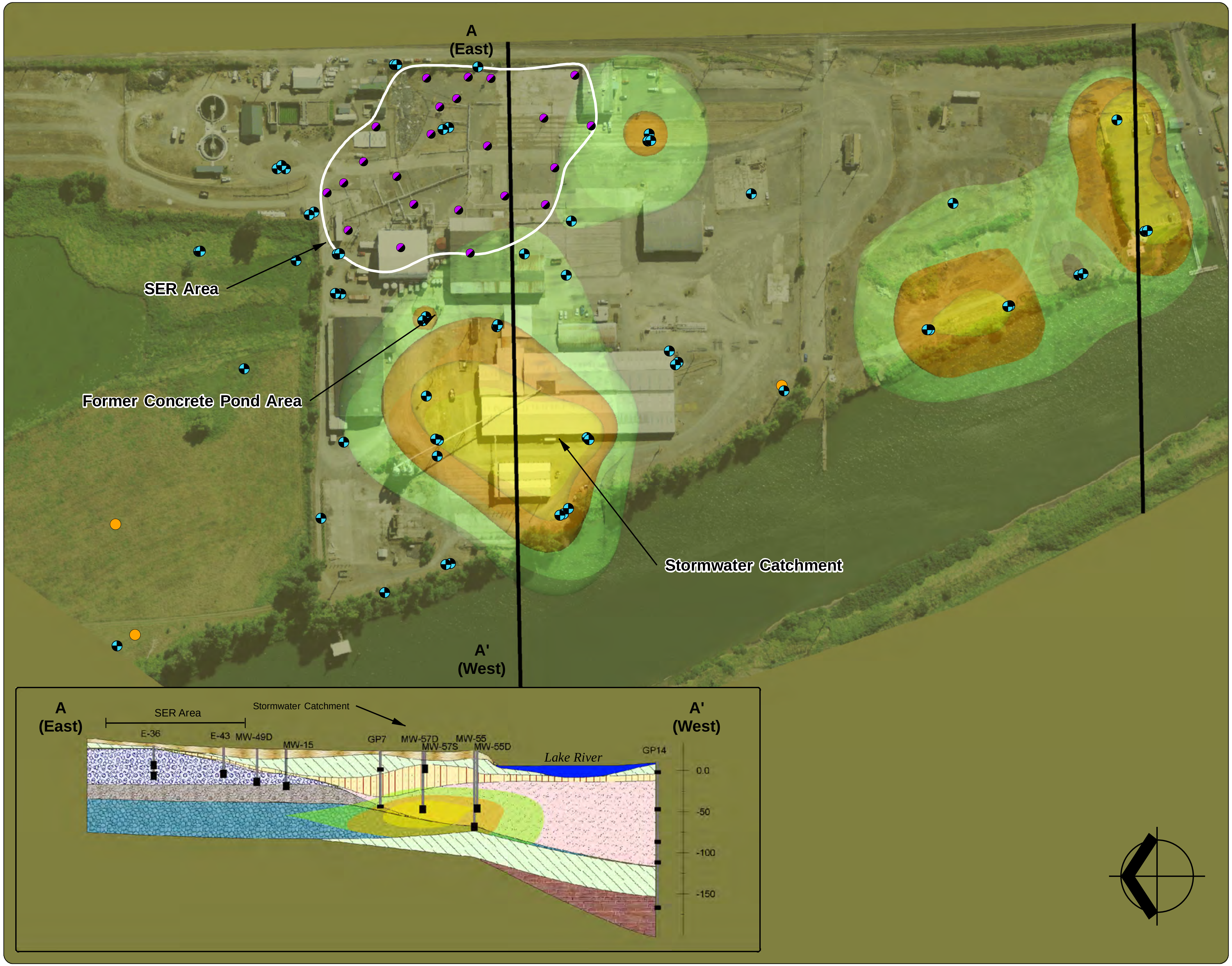


Figure 3-5
Distribution of Tetrachloroethene in Groundwater (A)

Former PWT Site RI/FS
Ridgefield, Washington

Legend

- Monitoring Well
- ● Soil Boring
- ● Extraction Well

Concentration Levels

- 🟩 > 0.081 ug/L MTCA B CUL
- 🟧 > 1 ug/L MTCA B Vapor Migration Screening Level
- 🟨 > 10 ug/L

- Fill
- Carty Lake Sediments — Young Alluvium
- Lake River — Young Alluvium
- Clay-Silt — Young Alluvium
- Sandy Silt — Young Alluvium
- Sand — Young Alluvium
- Sandy Gravel — Older Alluvium
- Silty Gravel (Aquitard) — Troutdale Formation
- Silt — Troutdale Formation
- Gravel — Troutdale Formation
- Clay — Troutdale Formation
- Columbia River Basalt Group

Sample Interval

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and the kriging used to create this figure.
5. Data was collected in August 2011 (monitoring wells) and December 2011 (SER Area).
6. Reference Drawing 1 for well ID's.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

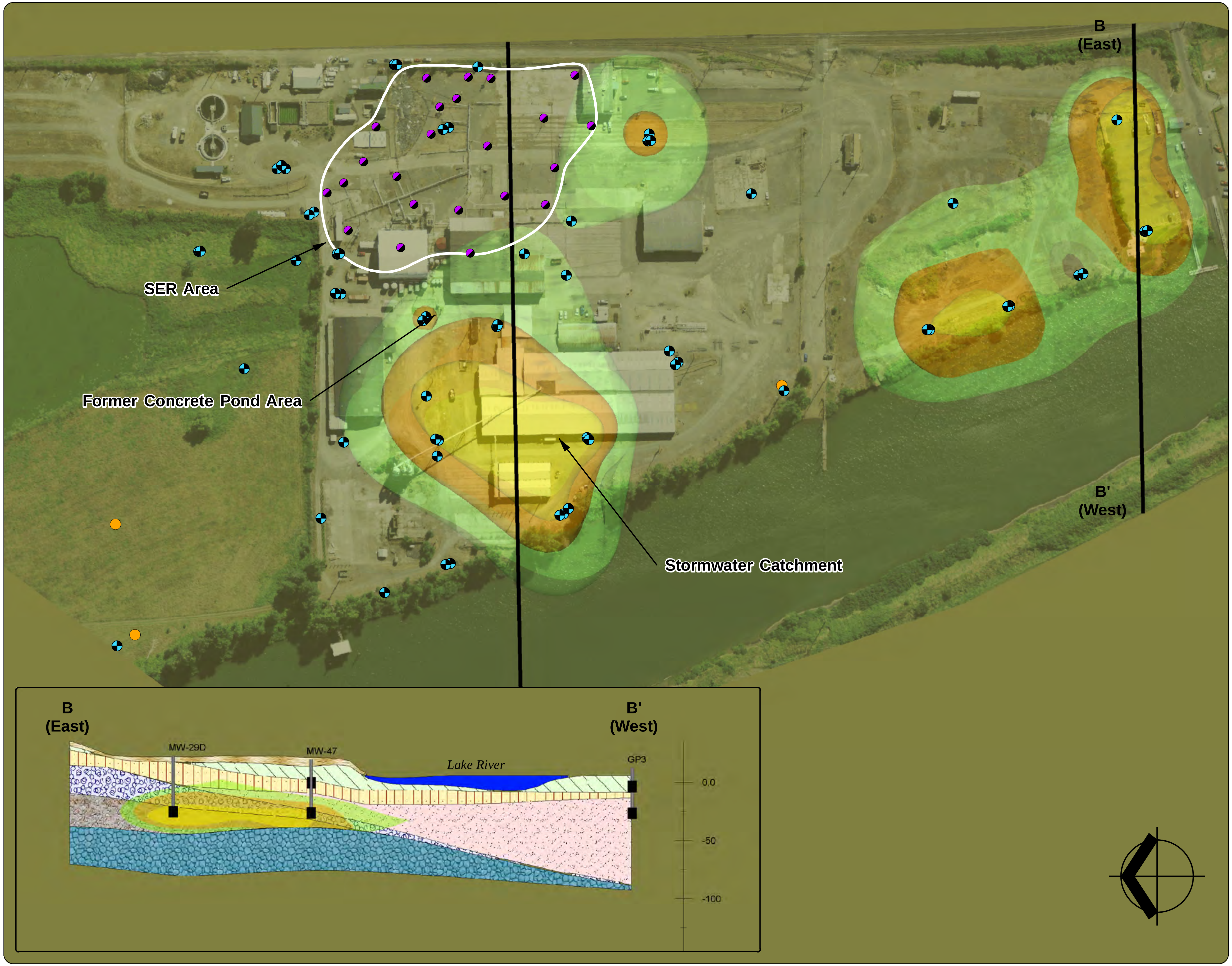


Figure 3-6
Distribution of Tetrachloroethene in Groundwater (B)

Former PWT Site RI/FS
Ridgefield, Washington

Legend

- ● Monitoring Well
- ● Soil Boring
- ● Extraction Well

Concentration Levels

- 🟩 > 0.081 ug/L MTCA B CUL
- 🟧 > 1 ug/L MTCA B Vapor Migration Screening Level
- 🟨 > 10 ug/L

Fill	
Carty Lake Sediments Lake River Clay-Silt Sandy Silt Sand	Young Alluvium
Sandy Gravel	Older Alluvium
Silty Gravel (Aquitard) Silt Gravel Clay	Troutdale Formation
Columbia River Basalt Group	

▮ Sample Interval

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and the kriging used to create this figure.
5. Data was collected in August 2011 (monitoring wells) and December 2011 (SER Area).
6. Reference Drawing 1 for well ID's.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-6_Distribution of Tetrachloroethene in Groundwater (B).mxd

Project: 9003.01.36 /05 Produced By: J. Schane Approved By: A. Hughes Print Date: 1/8/2013

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-7_Distribution of Naphthalene in Groundwater (A).mxd

Print Date: 1/8/2013

Approved By: A. Hughes

Produced By: J. Schane

Project: 9003.01.36 /05

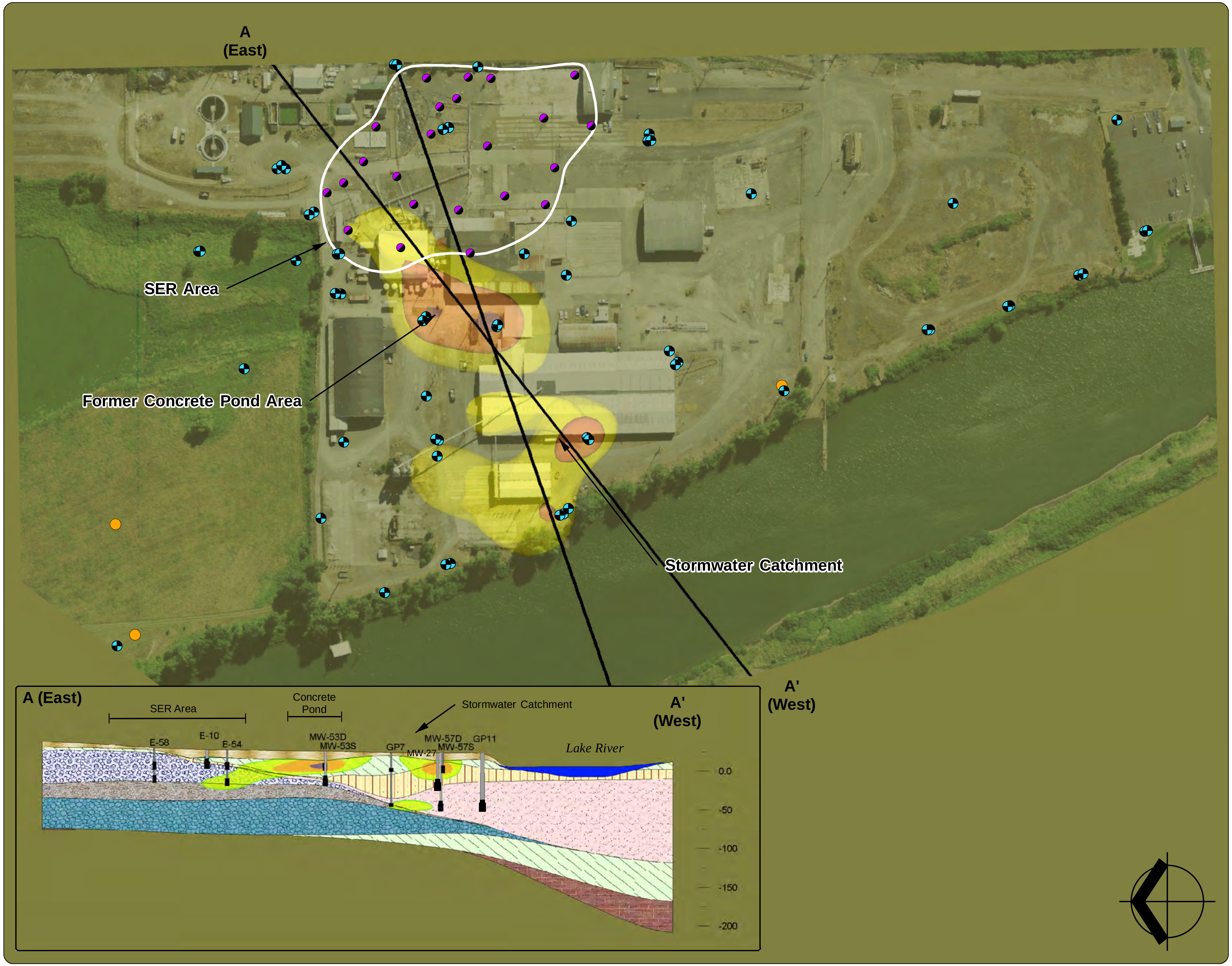


Figure 3-7
Distribution of Naphthalene in Groundwater (A)

Former PWT Site RI/FS
Ridgefield, Washington

Legend

- ● Monitoring Well
- ● Soil Boring
- ● Extraction Well

Concentration Levels

- 🟨 > 160 ug/L MTCA B CUL
- 🟧 > 170 ug/L MTCA B Vapor Migration Screening Level
- 🟪 > 1,600 ug/L

- Fill
- Carty Lake Sediments
- Lake River
- Clay-Silt
- Sandy Silt
- Sand
- Sandy Gravel
- Silty Gravel (Aquitard)
- Silt
- Gravel
- Clay
- Columbia River Basalt Group

Young Alluvium (Carty Lake Sediments through Sand)

Older Alluvium (Sandy Gravel)

Troutdale Formation (Silty Gravel (Aquitard) through Clay)

▮ Sample Interval

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and the kriging used to create this figure.
5. Although the kriging used to create this figure shows potential discharge to Lake River, numerical modeling indicates that naphthalene does not discharge to surface water above CULs.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-8_Distribution of Naphthalene in Groundwater (B).mxd
Print Date: 1/8/2013
Approved By: A. Hughes
Produced By: J. Schane
Project: 9003.01.36 /05

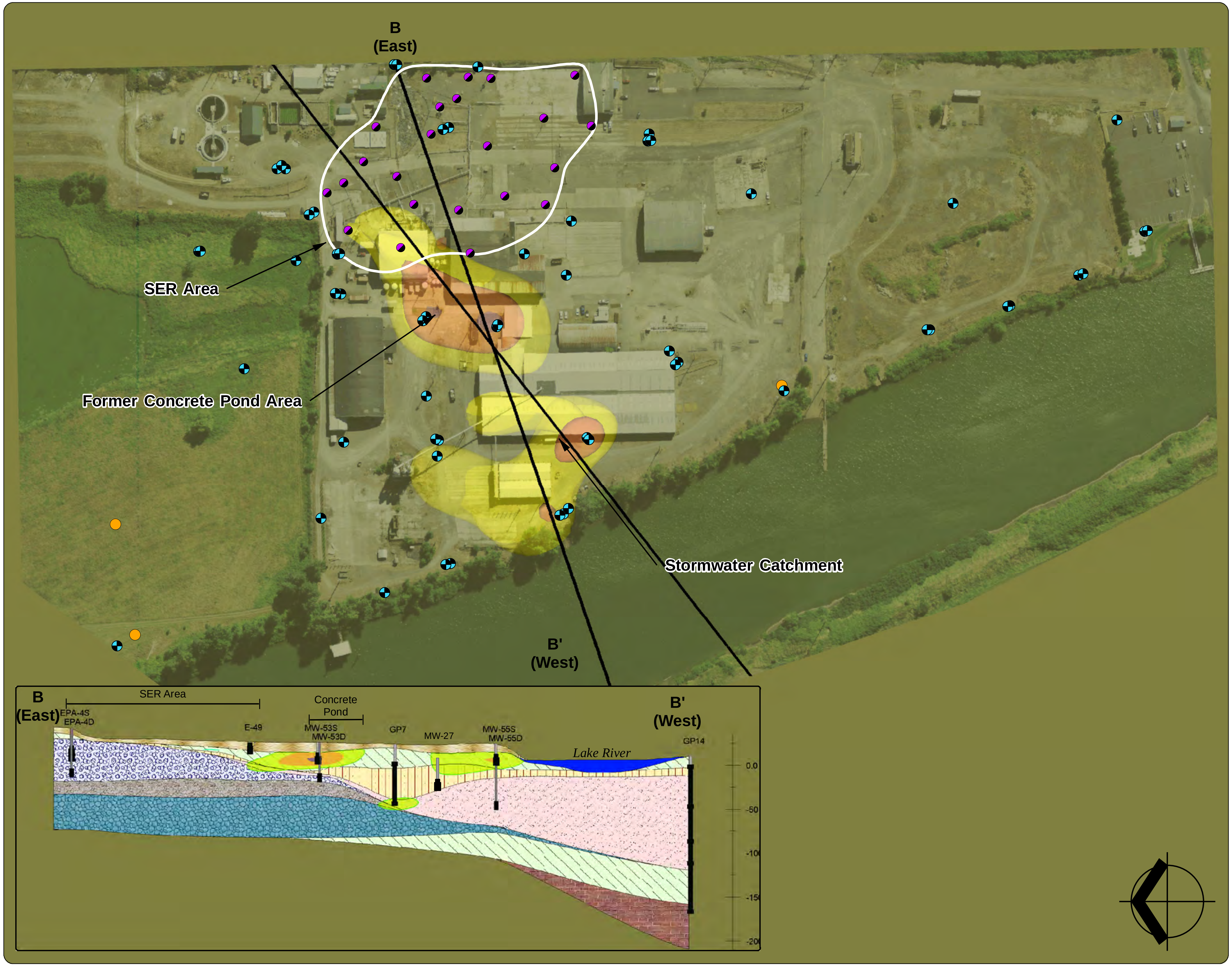


Figure 3-8
Distribution of Naphthalene in Groundwater (B)

Former PWT Site RI/FS
Ridgefield, Washington

Legend

- ● Monitoring Well
- ● Soil Boring
- ● Extraction Well

Concentration Levels

- 🟨 > 160 ug/L MTCA B CUL
- 🟧 > 170 ug/L MTCA B Vapor Migration Screening Level
- 🟪 > 1,600 ug/L

- ▨ Fill
- 🟩 Carty Lake Sediments
- 🟦 Lake River
- ▨ Clay-Silt
- ▨ Sandy Silt
- ▨ Sand
- ▨ Sandy Gravel
- ▨ Silty Gravel (Aquitard)
- 🟧 Silt
- ▨ Gravel
- ▨ Clay
- ▨ Columbia River Basalt Group

Young Alluvium (Carty Lake Sediments through Sand)

Older Alluvium (Sandy Gravel)

Troutdale Formation (Silty Gravel (Aquitard) through Clay)

▮ Sample Interval

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and the kriging used to create this figure.
5. Although the kriging used to create this figure shows potential discharge to Lake River, numerical modeling indicates that naphthalene does not discharge to surface water above CULs.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

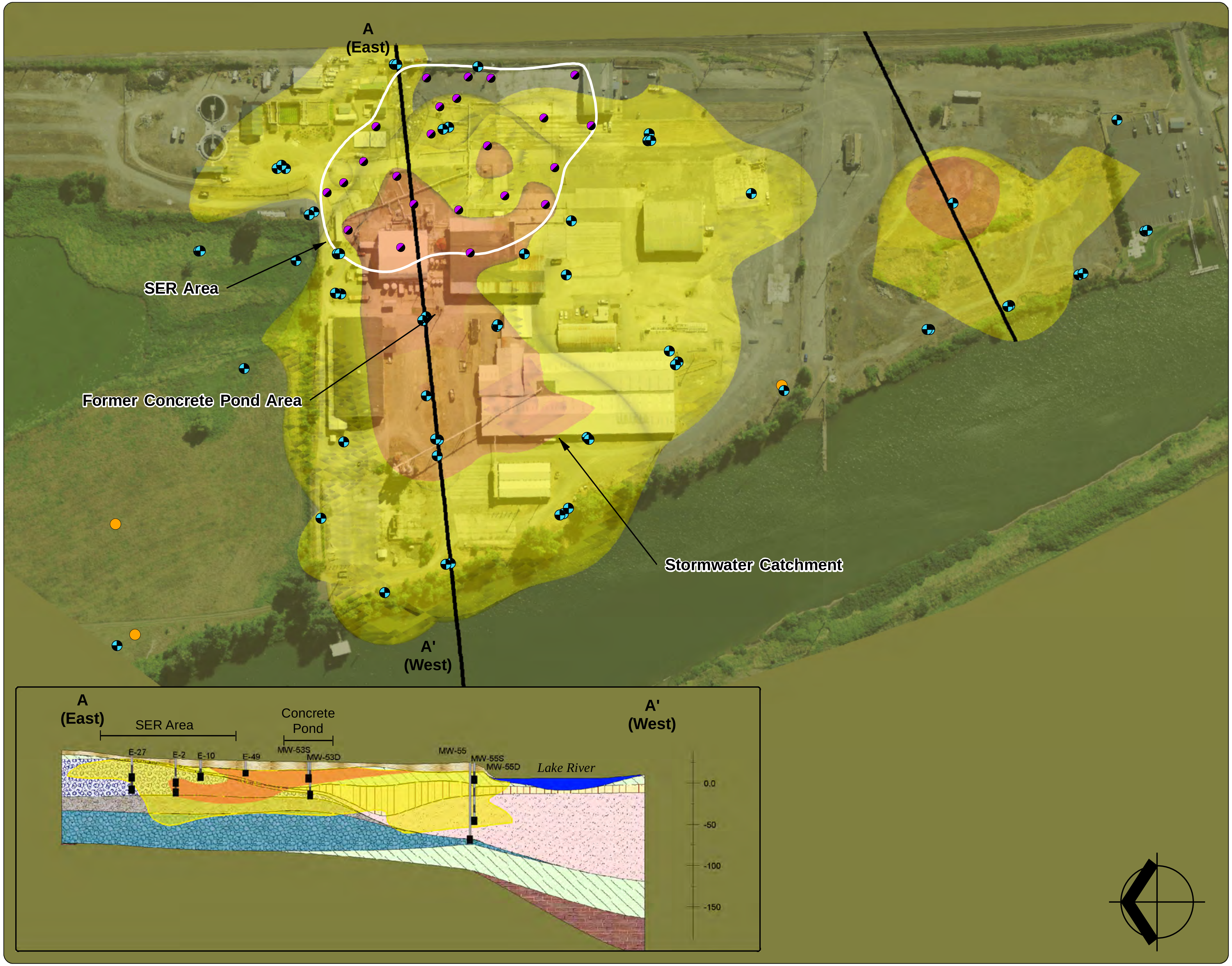


Figure 3-9
Distribution of Arsenic in Groundwater (A)

Former PWT Site RI/FS
Ridgefield, Washington

Legend

● Monitoring Well
● Soil Boring
● Extraction Well

Concentration Levels

🟨 > 5 ug/L MTCA A CUL
🟧 > 50 ug/L

Fill
Carty Lake Sediments
Lake River
Clay-Silt
Sandy Silt
Sand
— Young Alluvium

Sandy Gravel — Older Alluvium

Silty Gravel (Aquitard)
Silt
Gravel
Clay
— Troutdale Formation

Columbia Basalt

▮ Sample Interval

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and the kriging used to create this figure.
5. Although the kriging used to create this figure shows potential discharge to Lake River, numerical modeling indicates that arsenic does not discharge to surface water above CULs.
6. Data was collected in August 2011 (monitoring wells) and December 2011 (SER Area).
7. Reference Drawing 1 for well ID's.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\Projects\POR RIFS Feb 2012\Fig3-9_Distribution of Arsenic in Groundwater (A).mxd
Print Date: 1/8/2013
Approved By: A. Hughes
Produced By: Hines
Project: 9003.01.36.02

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-10_Distribution of Arsenic in Groundwater (B).mxd

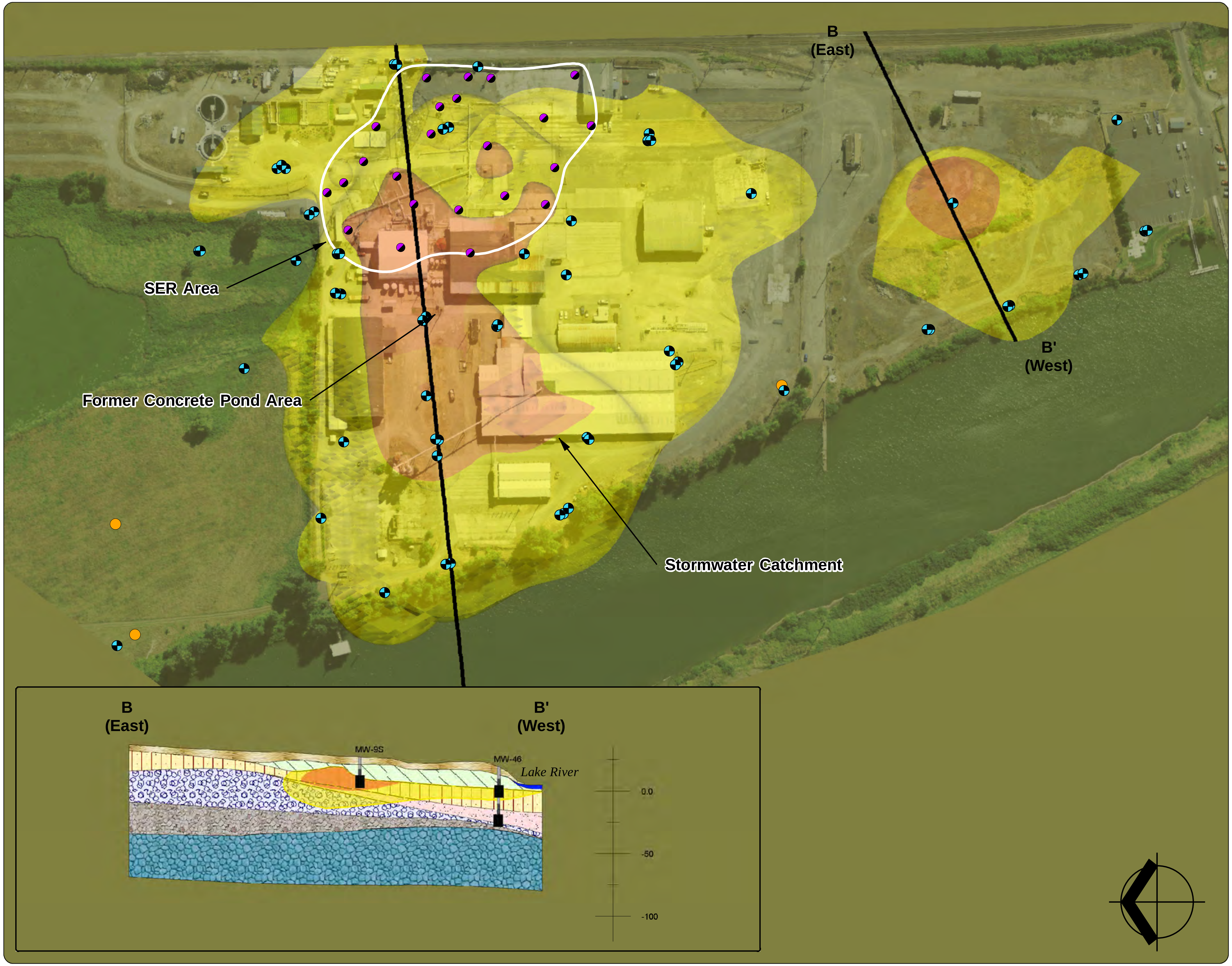


Figure 3-10 Distribution of Arsenic in Groundwater (B)

Former PWT Site RI/FS
Ridgefield, Washington

Legend

- ● Monitoring Well
- ● Soil Boring
- ● Extraction Well

Concentration Levels

- 🟨 > 5 ug/L MTCA A CUL
- 🟧 > 50 ug/L

▨	Fill	
🟩	Carty Lake Sediments	Young Alluvium
🟦	Lake River	Young Alluvium
▨	Clay-Silt	Young Alluvium
▨	Sandy Silt	Young Alluvium
▨	Sand	Young Alluvium
▨	Sandy Gravel	Older Alluvium
▨	Silty Gravel (Aquitard)	Troutdale Formation
▨	Silt	Troutdale Formation
▨	Gravel	Troutdale Formation
▨	Clay	Troutdale Formation
▨	Columbia Basalt	

■ Sample Interval

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and the kriging used to create this figure.
5. Although the kriging used to create this figure shows potential discharge to Lake River, numerical modeling indicates that arsenic does not discharge to surface water above CULs.
6. Data was collected in August 2011 (monitoring wells) and December 2011 (SER Area).
7. Reference Drawing 1 for well ID's.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Print Date: 1/8/2013
Approved By: A. Hughes
Produced By: Hines
Project: 9003.01.36 /02

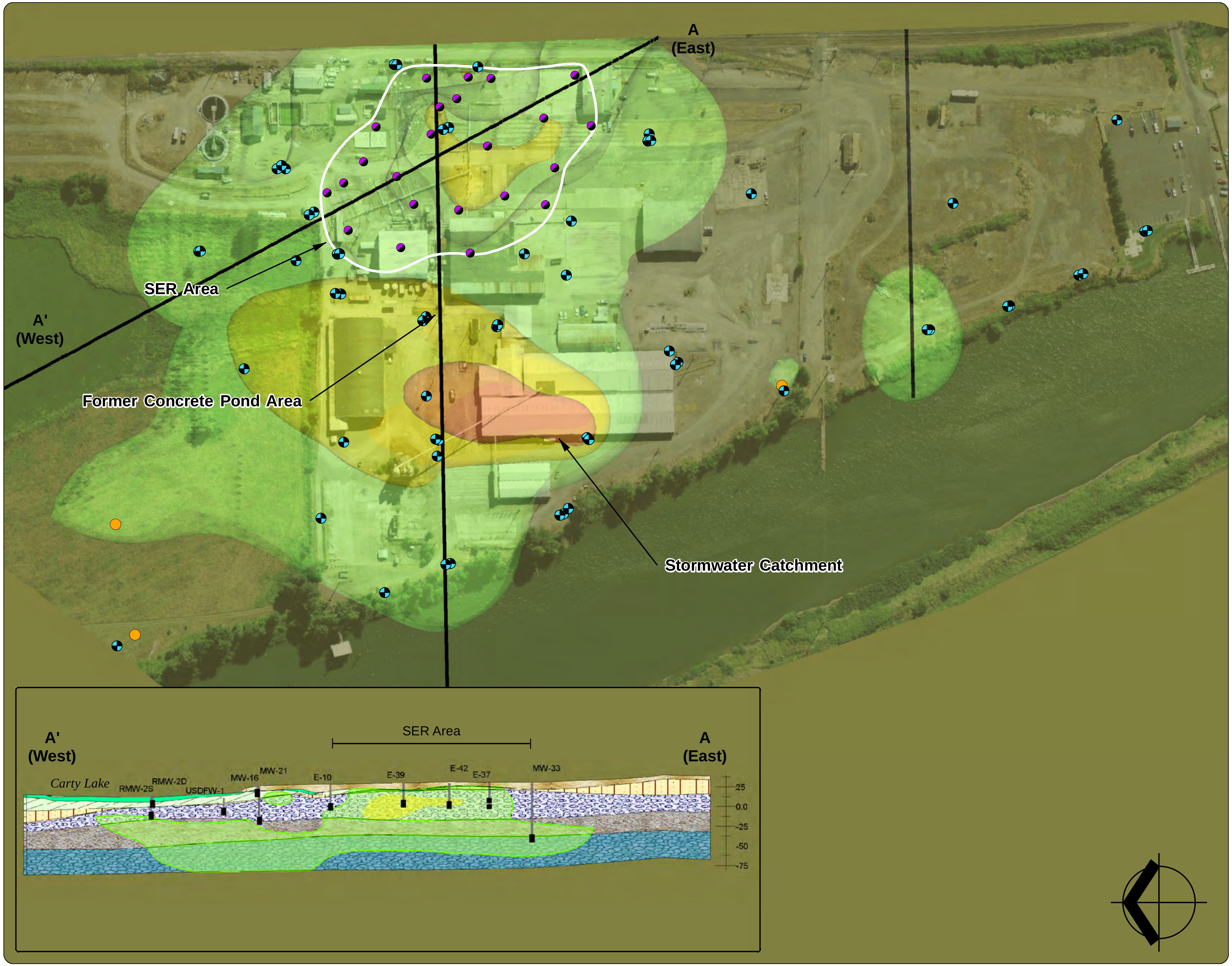


Figure 3-11
Distribution of Pentachlorophenol in Groundwater (A)

Former PWT Site RI/FS
Ridgefield, Washington

Legend

- ● Monitoring Well
- ● Soil Boring
- ● Extraction Well

Concentration Levels

- 🟩 > 0.73 ug/L MTCA B CUL
- 🟨 > 73 ug/L
- 🟧 > 730 ug/L

- Fill
- Carty Lake Sediments
- Lake River
- Clay-Silt
- Sandy Silt
- Sand
- Sandy Gravel
- Silty Gravel (Aquitard)
- Silt
- Gravel
- Clay
- Columbia River Basalt Group

Young Alluvium
Older Alluvium
Troutdale Formation

▮ Sample Interval

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and the kriging used to create this figure.
5. Data was collected in August 2011 (monitoring wells) and December 2011 (SER Area).
6. Reference Drawing 1 for well ID's.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Project: 9003.01.36 /05
Produced By: J. Schane
Approved By: A. Hughes
Print Date: 1/8/2013
Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-11_Distribution of Pentachlorophenol in Groundwater (A).mxd

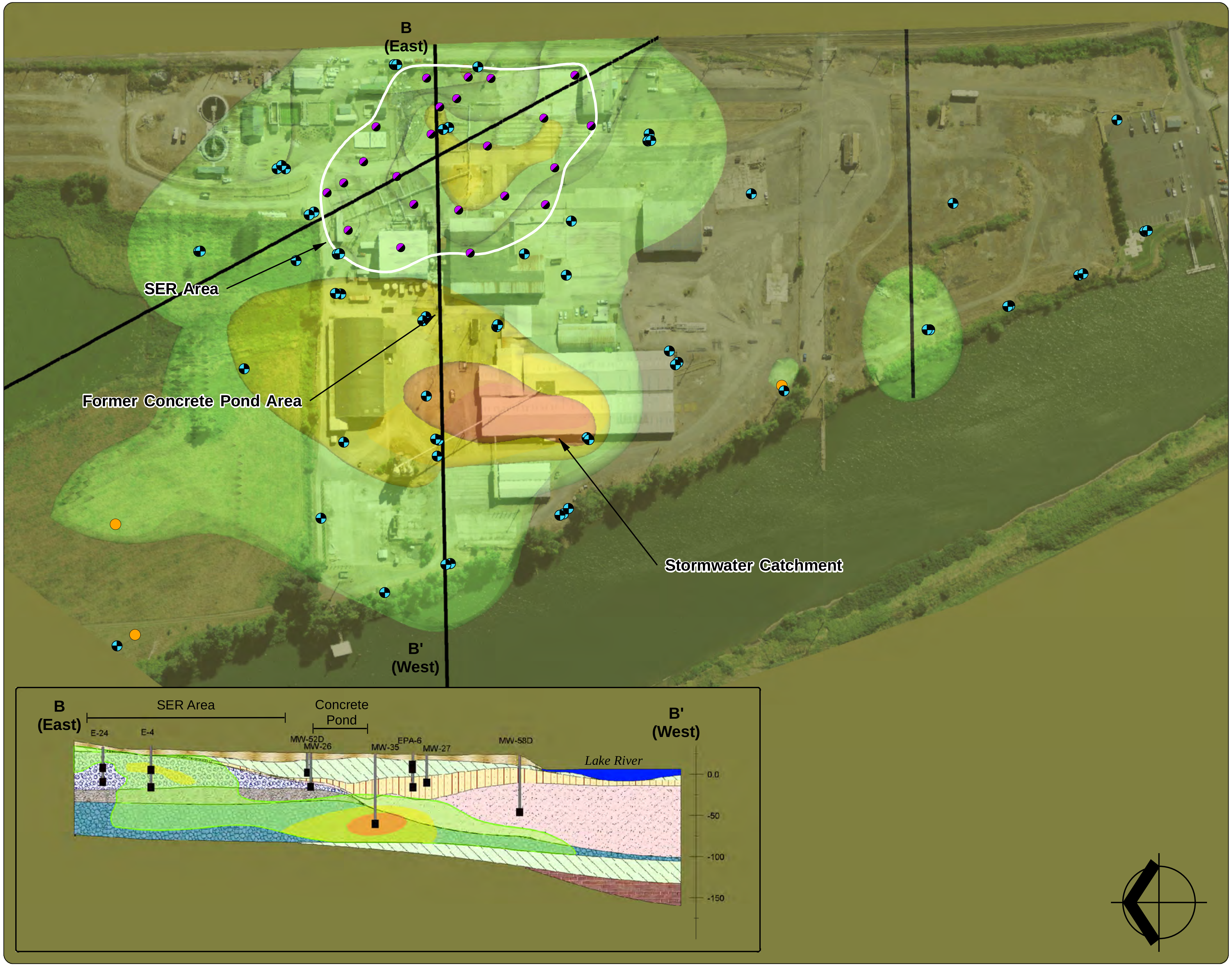


Figure 3-12
Distribution of Pentachlorophenol in Groundwater (B)

Former PWT Site RI/FS
Ridgefield, Washington

Legend

- ● Monitoring Well
- ● Soil Boring
- ● Extraction Well

Concentration Levels

- 🟩 > 0.73 ug/L MTCA B CUL
- 🟨 > 73 ug/L
- 🟧 > 730 ug/L

- Fill
- Carty Lake Sediments
- Lake River
- Clay-Silt
- Sandy Silt
- Sand
- Sandy Gravel
- Silty Gravel (Aquitard)
- Silt
- Gravel
- Clay
- Columbia River Basalt Group

Young Alluvium (Carty Lake Sediments – Sand)

Older Alluvium (Sandy Gravel)

Troutdale Formation (Silty Gravel (Aquitard) – Clay)

▮ Sample Interval

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and the kriging used to create this figure.
5. Data was collected in August 2011 (monitoring wells) and December 2011 (SER Area).
6. Reference Drawing 1 for well ID's.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-12_Distribution of Pentachlorophenol in Groundwater (B).mxd

Print Date: 1/8/2013

Approved By: A. Hughes

Produced By: J. Schane

Project: 9003.01.36 /05

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-13_Distribution of Pentachlorophenol in Groundwater (C).mxd

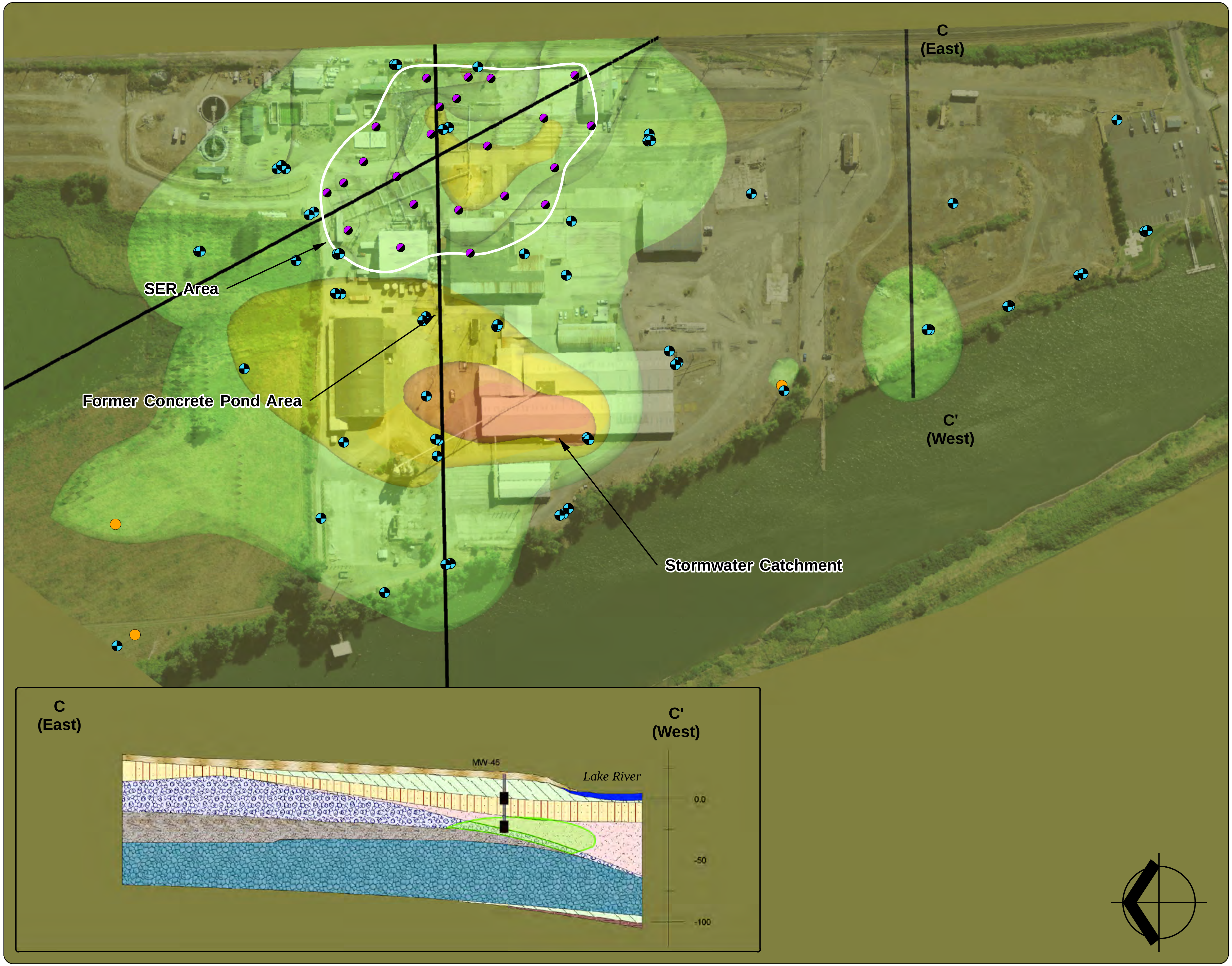


Figure 3-13 Distribution of Pentachlorophenol in Groundwater (C)

Former PWT Site RI/FS
Ridgefield, Washington

Legend

● Monitoring Well
● Soil Boring
● Extraction Well

Concentration Levels

🟩 > 0.73 ug/L MTCA B CUL
🟨 > 73 ug/L
🟧 > 730 ug/L

▨ Fill
▨ Carty Lake Sediments
▨ Lake River
▨ Clay-Silt
▨ Sandy Silt
▨ Sand
Young Alluvium
▨ Sandy Gravel
Older Alluvium
▨ Silty Gravel (Aquitard)
▨ Silt
▨ Gravel
▨ Clay
Troutdale Formation
▨ Columbia River Basalt Group

Sample Interval

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and the kriging used to create this figure.
5. Data was collected in August 2011 (monitoring wells) and December 2011 (SER Area).
6. Reference Drawing 1 for well ID's.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Project: 9003.01.36 /05 Produced By: J. Schane Approved By: A. Hughes Print Date: 1/8/2013

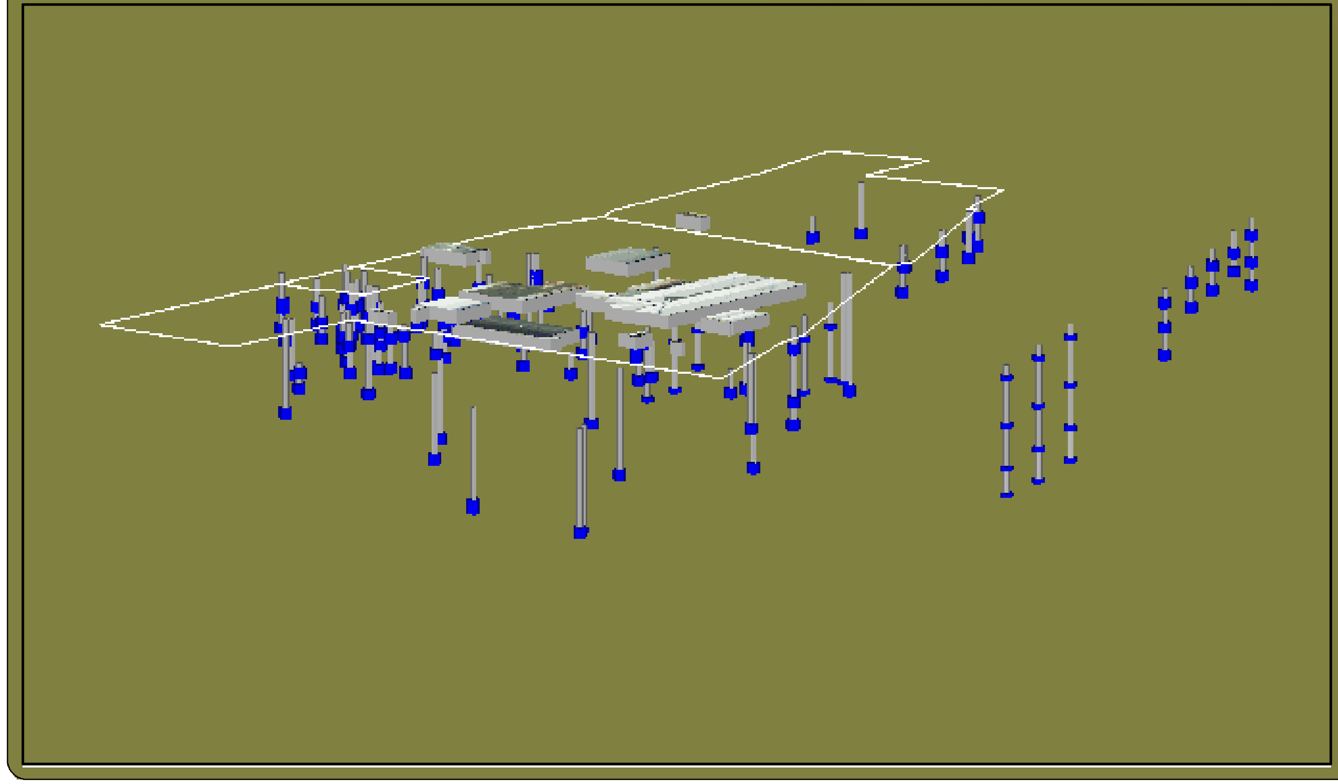


Figure 3-14
Groundwater Modeling Locations

Former PWT Site RI/FS
Ridgefield, Washington

Legend

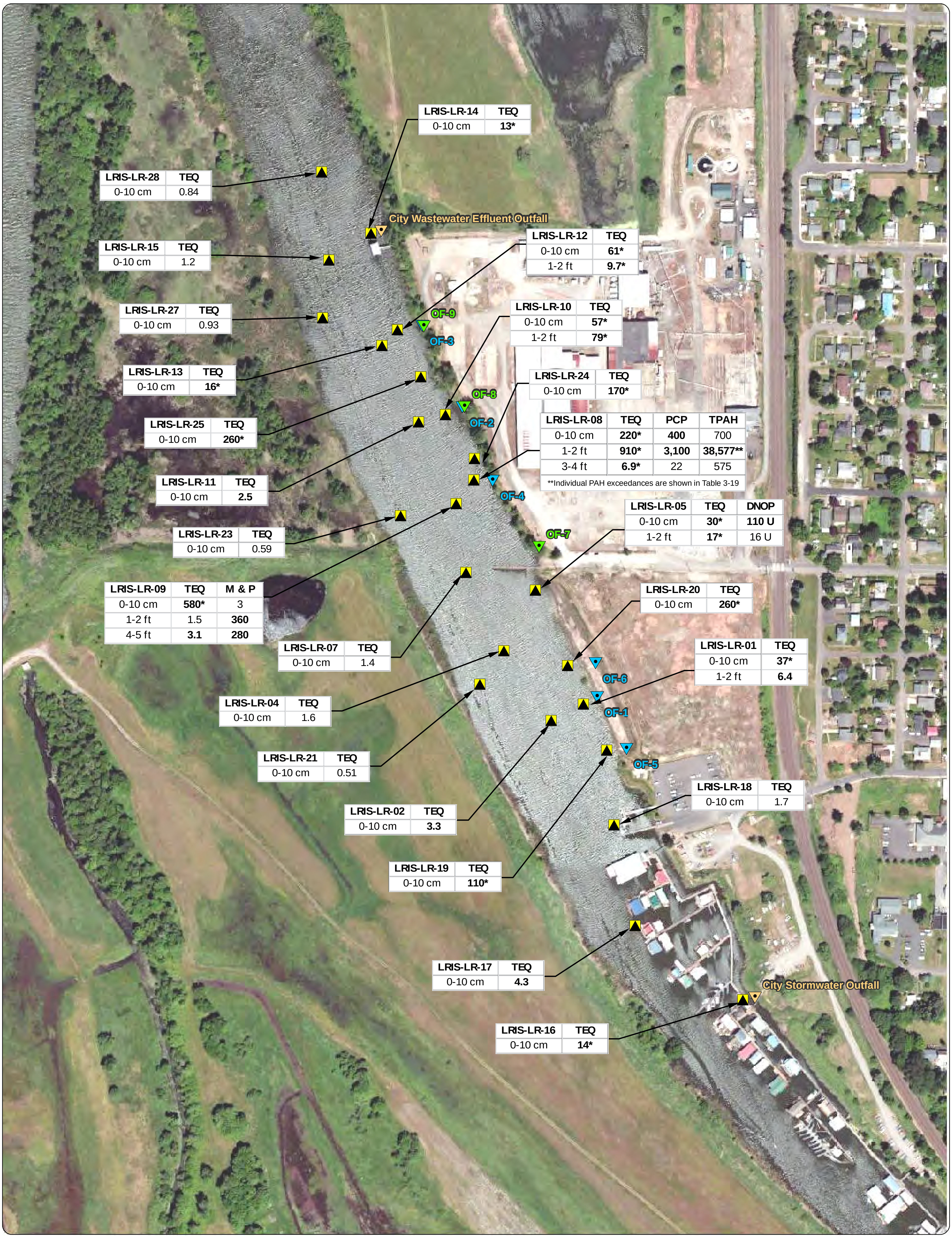
- ◉ Groundwater Sample Locations
- ▮ Sample Intervals

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-14_Groundwater Modeling Locations.mxd

Project: 9003.01.49 Produced By: A. Padilla Approved By: A. Hughes Print Date: 3/13/2013



LRIS-LR-14	TEQ
0-10 cm	**13***

LRIS-LR-28	TEQ
0-10 cm	0.84

LRIS-LR-12	TEQ
0-10 cm	**61***
1-2 ft	**9.7***

LRIS-LR-15	TEQ
0-10 cm	1.2

LRIS-LR-10	TEQ
0-10 cm	**57***
1-2 ft	**79***

LRIS-LR-27	TEQ
0-10 cm	0.93

LRIS-LR-13	TEQ
0-10 cm	**16***

LRIS-LR-24	TEQ
0-10 cm	**170***

LRIS-LR-08	TEQ	PCP	TPAH
0-10 cm	**220***	**400**	700
1-2 ft	**910***	**3,100**	**38,577****
3-4 ft	**6.9***	22	575

**Individual PAH exceedances are shown in Table 3-19

LRIS-LR-25	TEQ
0-10 cm	**260***

LRIS-LR-11	TEQ
0-10 cm	**2.5**

LRIS-LR-05	TEQ	DNOP
0-10 cm	**30***	**110 U**
1-2 ft	**17***	16 U

LRIS-LR-23	TEQ
0-10 cm	0.59

LRIS-LR-09	TEQ	M & P
0-10 cm	**580***	3
1-2 ft	1.5	**360**
4-5 ft	**3.1**	**280**

LRIS-LR-20	TEQ
0-10 cm	**260***

LRIS-LR-07	TEQ
0-10 cm	1.4

LRIS-LR-01	TEQ
0-10 cm	**37***
1-2 ft	**6.4**

LRIS-LR-04	TEQ
0-10 cm	1.6

LRIS-LR-21	TEQ
0-10 cm	0.51

LRIS-LR-18	TEQ
0-10 cm	1.7

LRIS-LR-02	TEQ
0-10 cm	**3.3**

LRIS-LR-19	TEQ
0-10 cm	**110***

LRIS-LR-17	TEQ
0-10 cm	**4.3**

LRIS-LR-16	TEQ
0-10 cm	**14***

Notes:
1. TEQ = Toxicity Equivalent (ng/kg).
2. **Bold** value exceeds screening criteria
3. DNOP = Di-n-octyl phthalate (µg/kg)
4. PCP = Pentachlorophenol (µg/kg)
5. TPAH = Total PAH (µg/kg)
6. ng/kg = nanograms per kilogram
7. µg/kg = micrograms per kilogram
8. M & P = 3-Methylphenol & 4-Methylphenol / m&p-cresol (µg/kg) (Data were compared to 4-methylphenol [p-cresol] screening criteria)
9. * Indicates dioxin congener exceedance of ecological screening criteria. Values are available in Tables 3-18 and 3-19.

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Figure 3-15
Lake River Screening Criteria Exceedances in Surface and Subsurface Sediment

Former PWT Site
Ridgefield, Washington

Legend

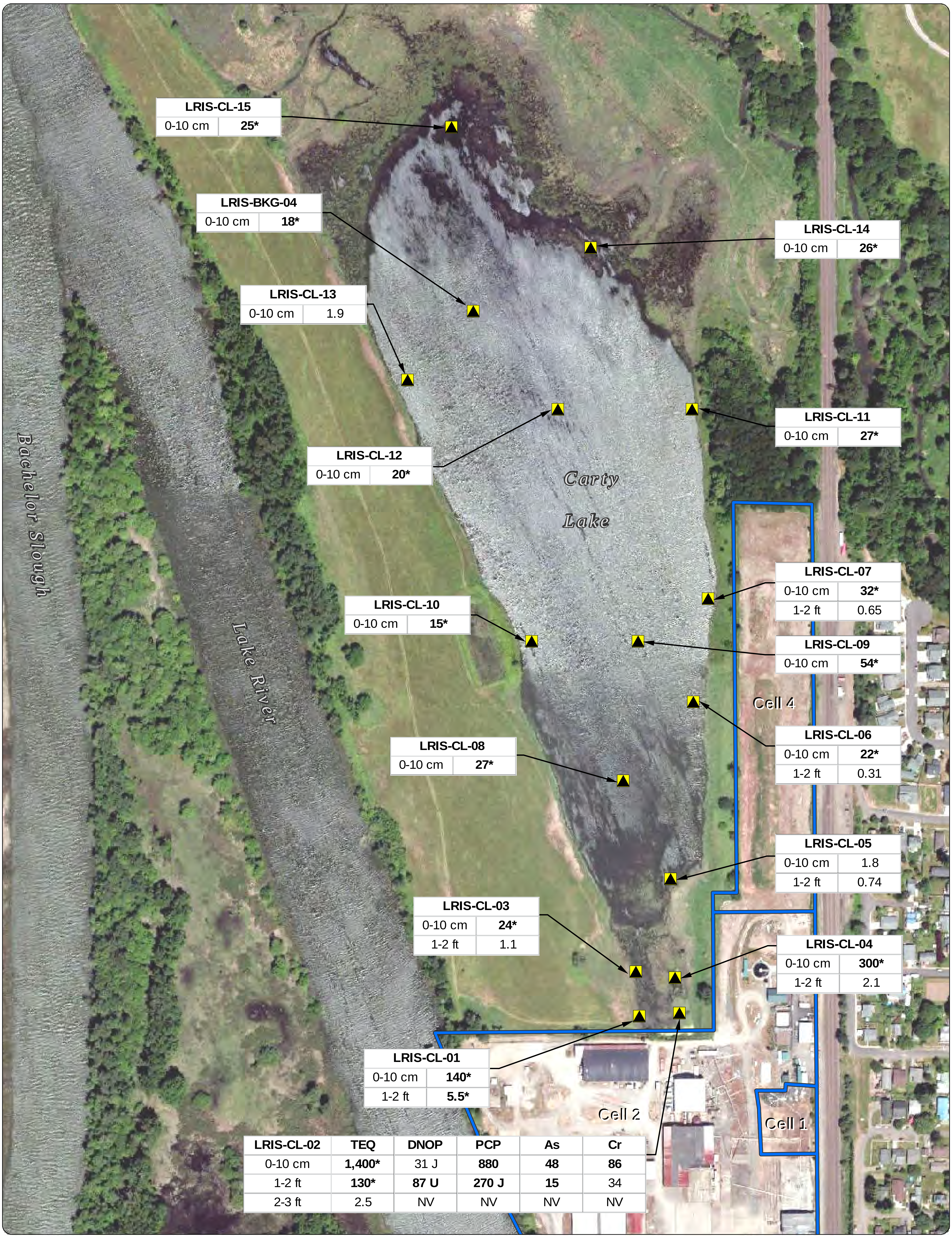
▲ Sediment Sample Locations
▼ City of Ridgefield Outfalls
▼ Historical Outfalls

0 150 300
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-15_Lake River Screening Criteria Exceedances in Surface and Subsurface Sediment.mxd
Print Date: 1/23/2013
Approved By: M. Novak
Produced By: Hines/Schane
Project: 9003.01.40/05

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig3-16_Carty Lake Screening Criteria Exceedances in Surface and Subsurface Sediment.mxd
Print Date: 1/23/2013
Approved By: M. Novak
Produced By: J. Schane
Project: 9003.01.40/05



LRIS-CL-02	TEQ	DNOP	PCP	As	Cr
0-10 cm	**1,400***	31 J	**880**	**48**	**86**
1-2 ft	**130***	**87 U**	**270 J**	**15**	34
2-3 ft	2.5	NV	NV	NV	NV

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Notes:

1. **Bold** value exceeds screening criteria
2. TEQ = Toxicity Equivalent
3. Unless otherwise specified, values represent dioxin TEQ.
4. * Indicates dioxin congener exceedance of ecological screening criteria. Values are available in Table 3-20.
5. DNOP = Di-n-octyl phthalate
6. PCP = Pentachlorophenol
7. As = Arsenic
8. Cr = Chromium
9. TEQ measured in ng/kg (nanograms per kilogram)
   DNOP and PCP in ug/kg (micrograms per kilogram)
   As and Cr in mg/kg (milligrams per kilogram)

Figure 3-16
Carty Lake Screening Criteria Exceedances in Surface and Subsurface Sediment

Former PWT Site RI/FS
Ridgefield, Washington

Legend

▲ Sediment Sample Location
▢ Cell Boundaries

0 150 300
Feet

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

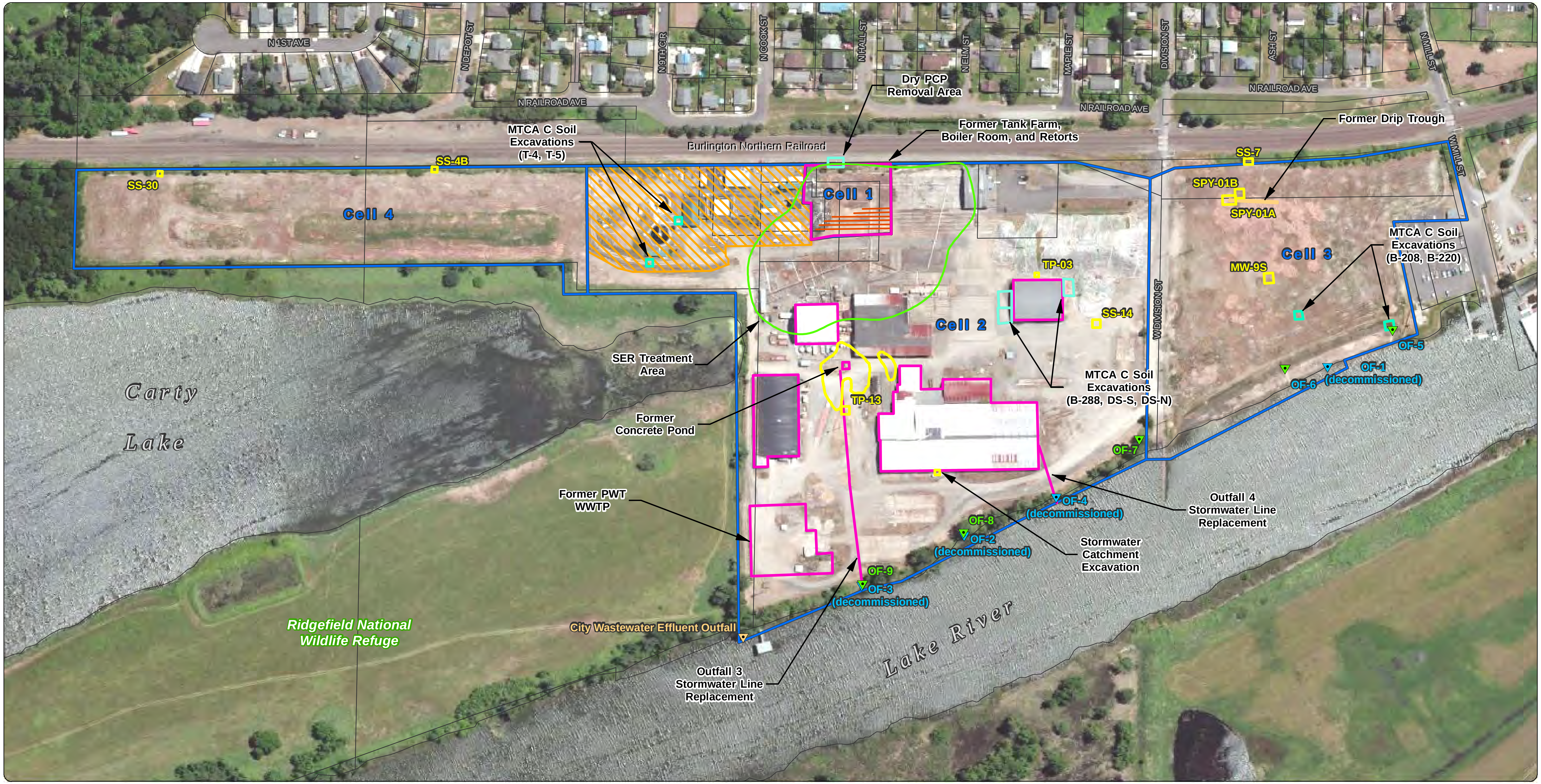
Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-1_Completed Interim Actions.mxd

Print Date: 12/18/2012

Approved By: A. Hughes

Produced By: J. Schane

Project: 9003.01.49



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Notes:
1. MTCA = Model Toxics Control Act
2. WWTP = Wastewater Treatment Plant

Legend

Structures Removed (Cells 1 and 2)	▼ New Outfalls (2012)
MTCA C Soil CUL exceedances excavated and moved to Cell 1	▼ Private Outfalls
MTCA C Soil CUL exceedances excavated and disposed of off-site	▼ City of Ridgefield Outfalls
Retorts (removed)	▨ City of Ridgefield WWTP
Steam-Enhanced Remediation (SER) Area	Cell Boundaries
	Tax Lots

Figure 4-1
Completed Interim Actions

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

0 125 250
Feet

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-2_Cells 1 & 2 Interim Actions.mxd

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. SER = Steam-Enhanced Remediation
4. WWTP = Wastewater Treatment Plant

Legend

- ▭ MTCA C Soil CUL exceedances excavated and disposed of off-site
- ⊕ Monitoring Well
- ▨ Cap (2-foot Thickness)
- ▨ Cap (3-foot Thickness)
- ▭ Buildings to Be Demolished
- ▭ SER System
- ▨ City of Ridgefield WWTP
- ▭ Cell Boundaries

Figure 4-2
Cells 1 and 2 Interim Actions

Former PWT Site RI/FS
Ridgefield, Washington

0 100 200
Feet

Print Date: 04-12-2011
Approved By: J. King
Produced By: J. Schane
Project: 9003.01.47

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

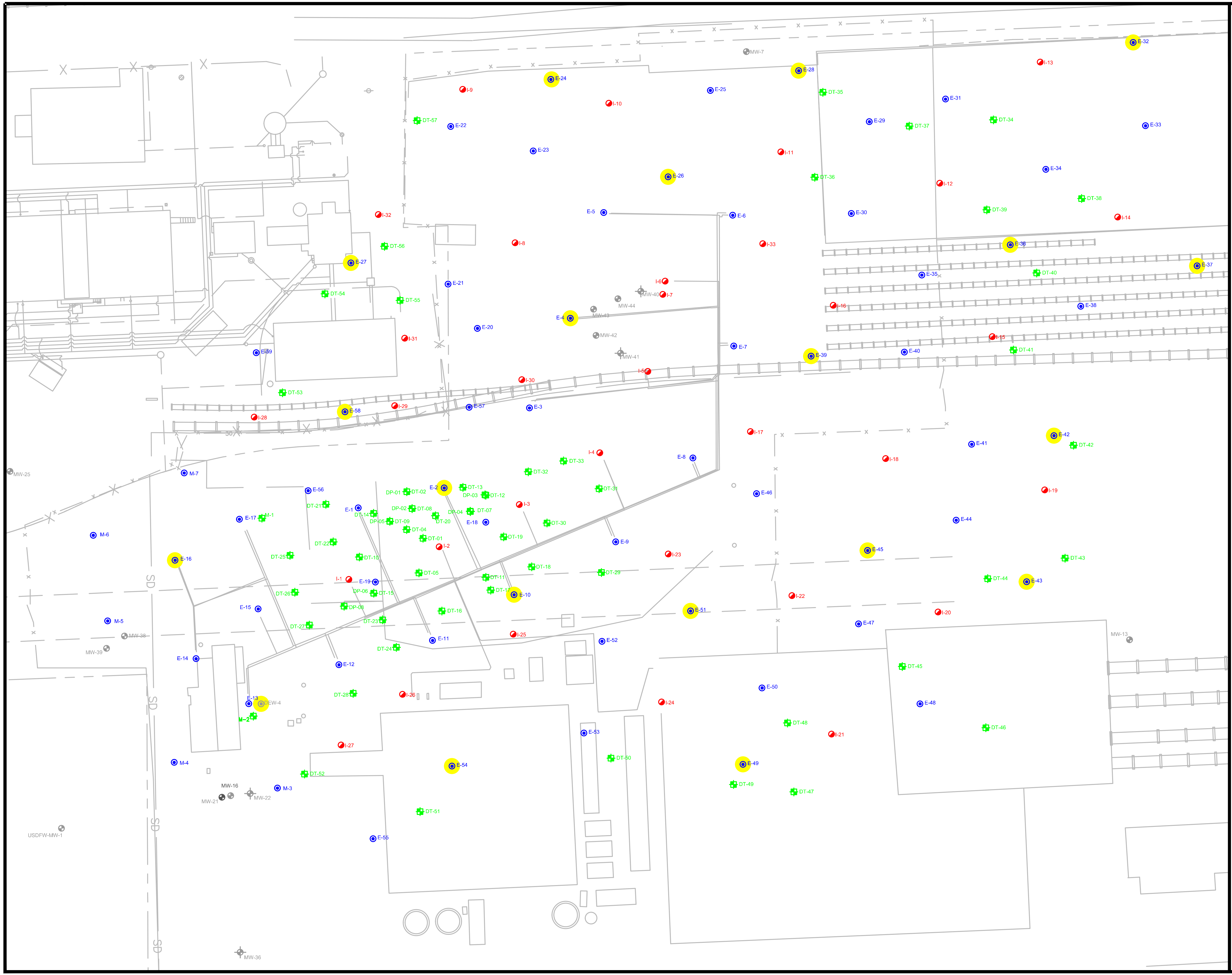


Figure 4-3
SER Wellfield

Former PWT Site RI/FS
Ridgefield, Washington

LEGEND:

●	INJECTION WELL
◉	EXTRACTION WELL
✚	TEMPERATURE AND PRESSURE MONITORING POINT (DIGITAMS AND DIGITPAMS)
⌖	DEEP MONITORING WELL
●	SHALLOW MONITORING WELL
●	EXTRACTION WELL MONITORING POINTS

NOTE:

SER - STEAM-ENHANCED REMEDIATION

N

0 50 100

FEET

MAUL FOSTER ALONGI

Layout: 1 Project: 9003.01.49 Drawn By: J. Fisher Approved By: A. Hughes

Figure 4-4
Extent of Nonaqueous-Phase Liquid (NAPL) in SER Area

Former PWT Site RI/FS
Ridgefield, Washington

Legend

2002 NAPL Extent

2010 NAPL Observations

- ● No NAPL Observed (in extraction and monitoring wells)
- ● NAPL/Water Mix of Emulsion
- ● NAPL Observed

Pre-Polish Stage NAPL Extent – 2011

- ● Extent of NAPL
- ● Extent of Emulsion

Cell Boundary

2002 Extent of NAPL = 113,591 sq ft.
2010 Extent of NAPL = 8,192 sq ft.

Source: Aerial photograph obtained from Clark County GIS (August 2007)

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-4_Extent of Nonaqueous Phase Liquid in SER Area.mxd

Print Date: 3/13/2012

Approved By: A. Hughes

Produced By: J. Schane

Project: 9003.01.36 /05

Figure 4-5
Pentachlorophenol at L0 SER Influent
Former PWT Site RI/FS

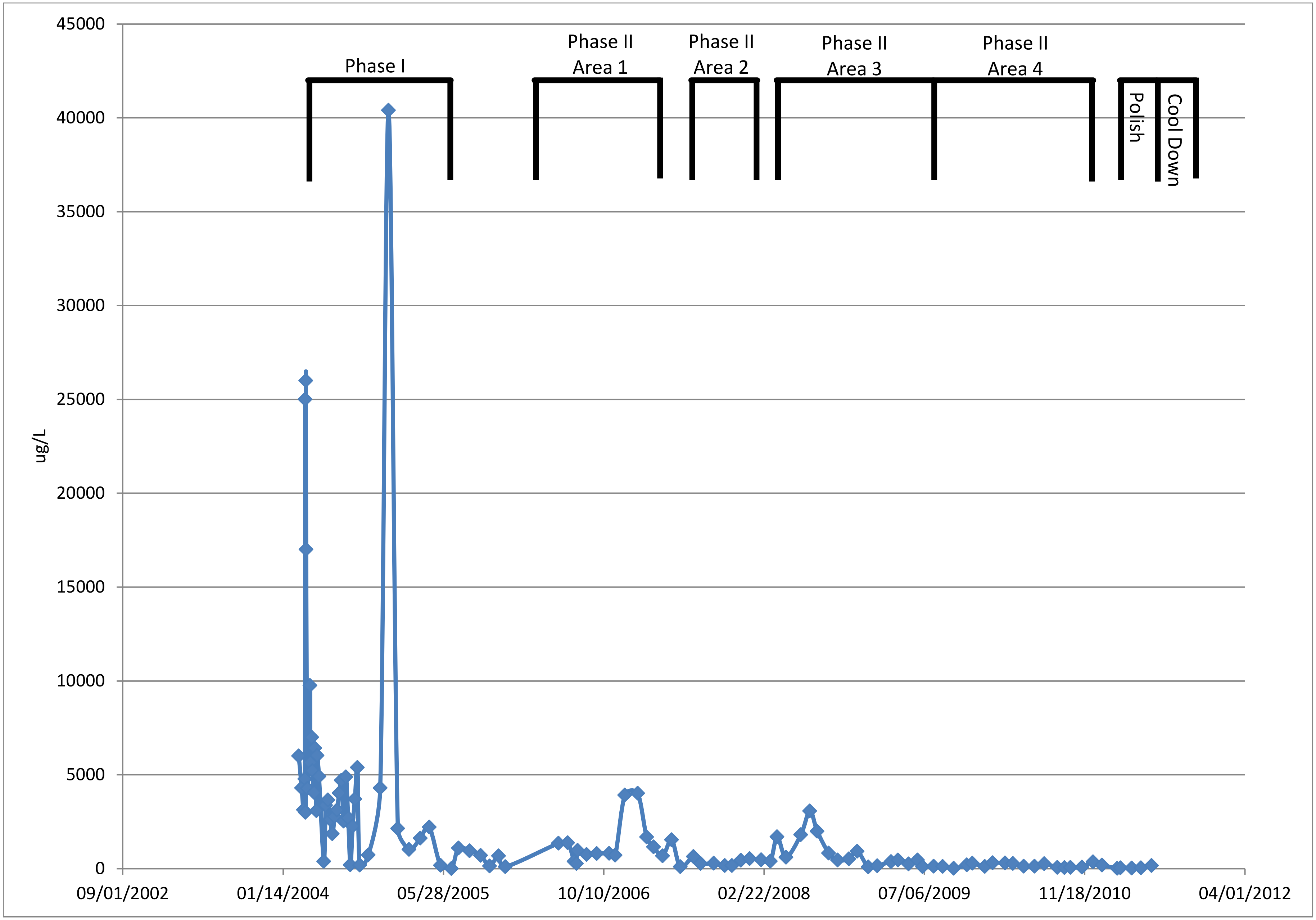


Figure 4-6
Naphthalene at L0 SER Influent
Former PWT Site RI/FS

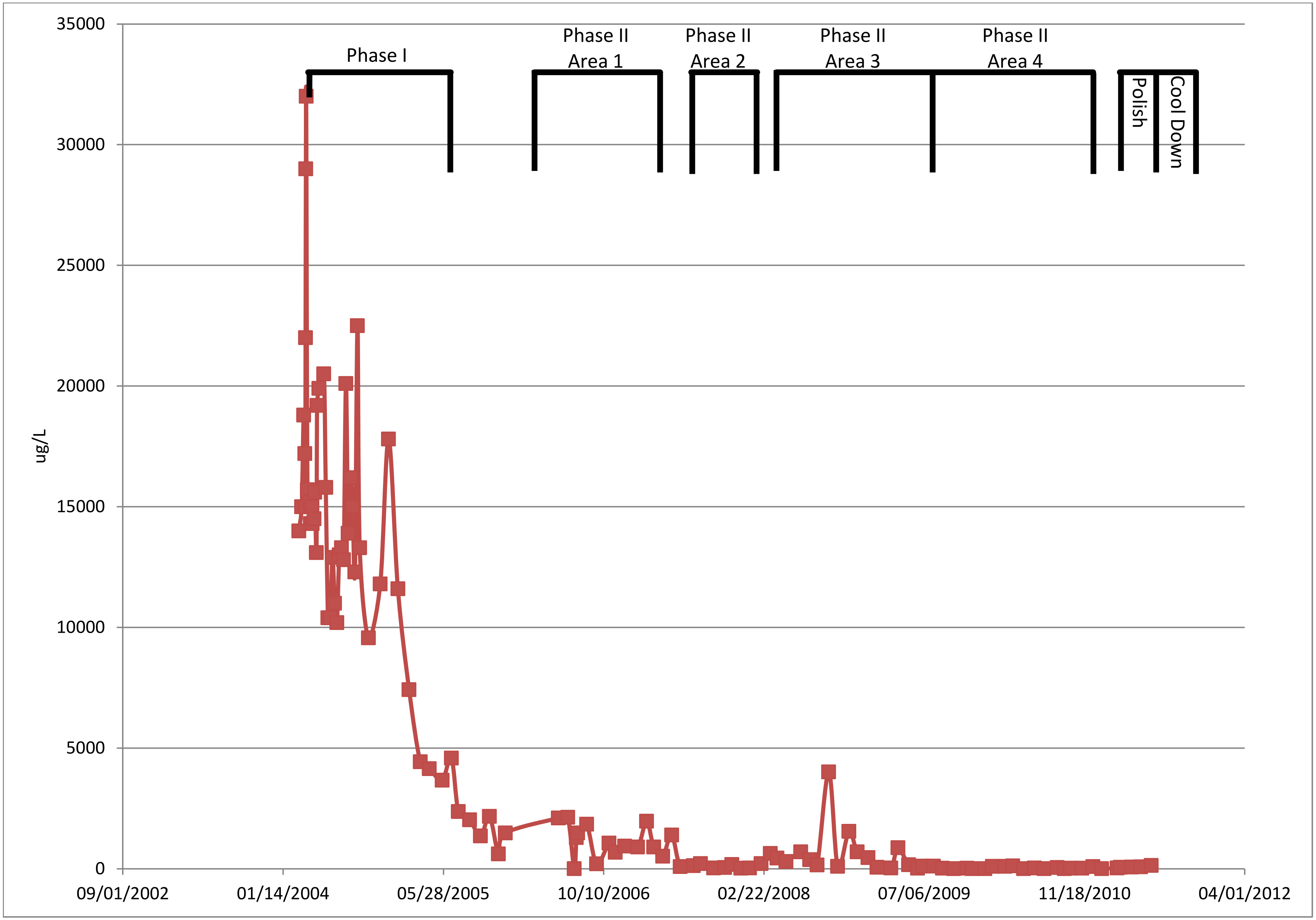


Figure 4-7
Benzene at L0 SER Influent
Former PWT Site RI/FS

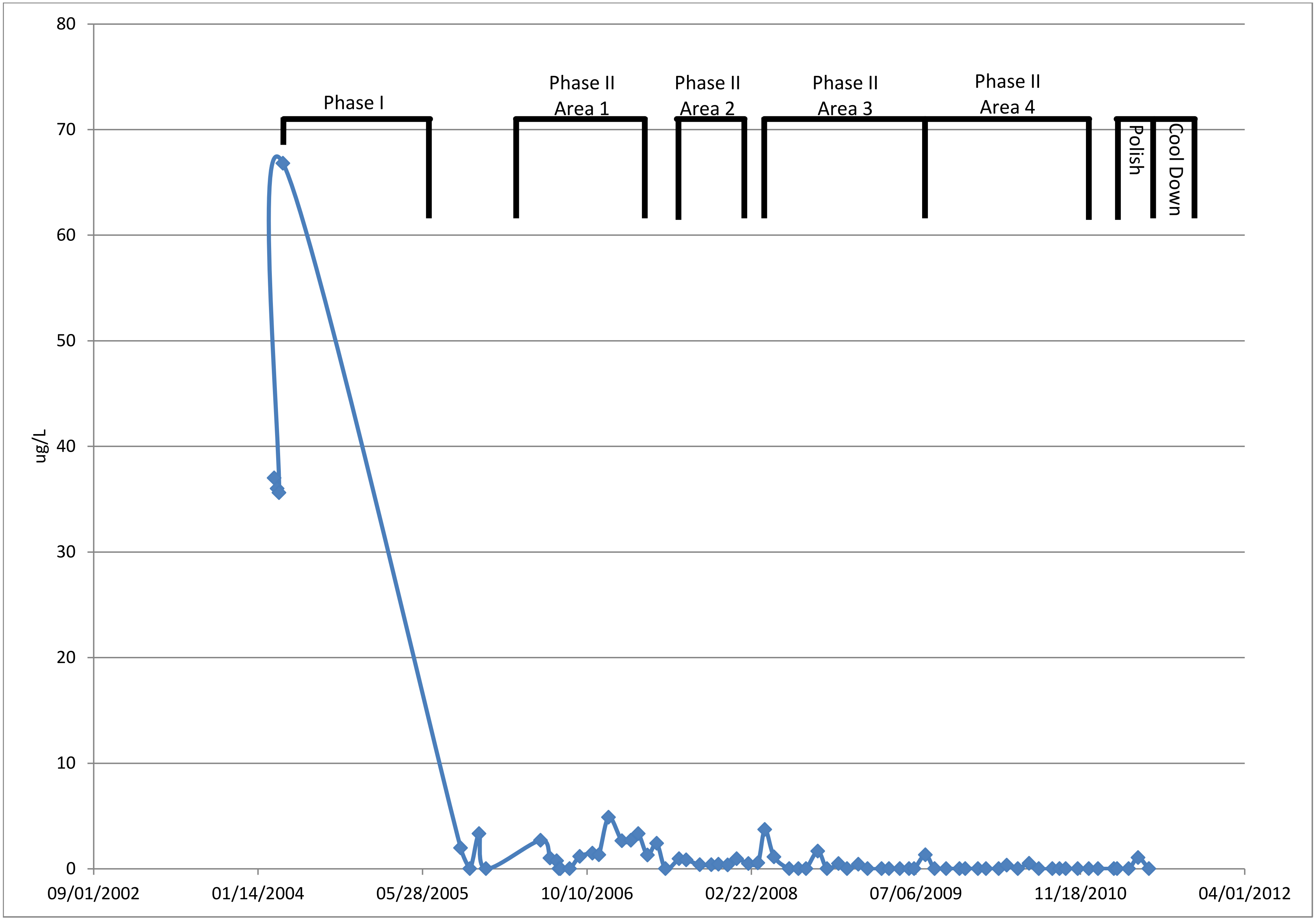
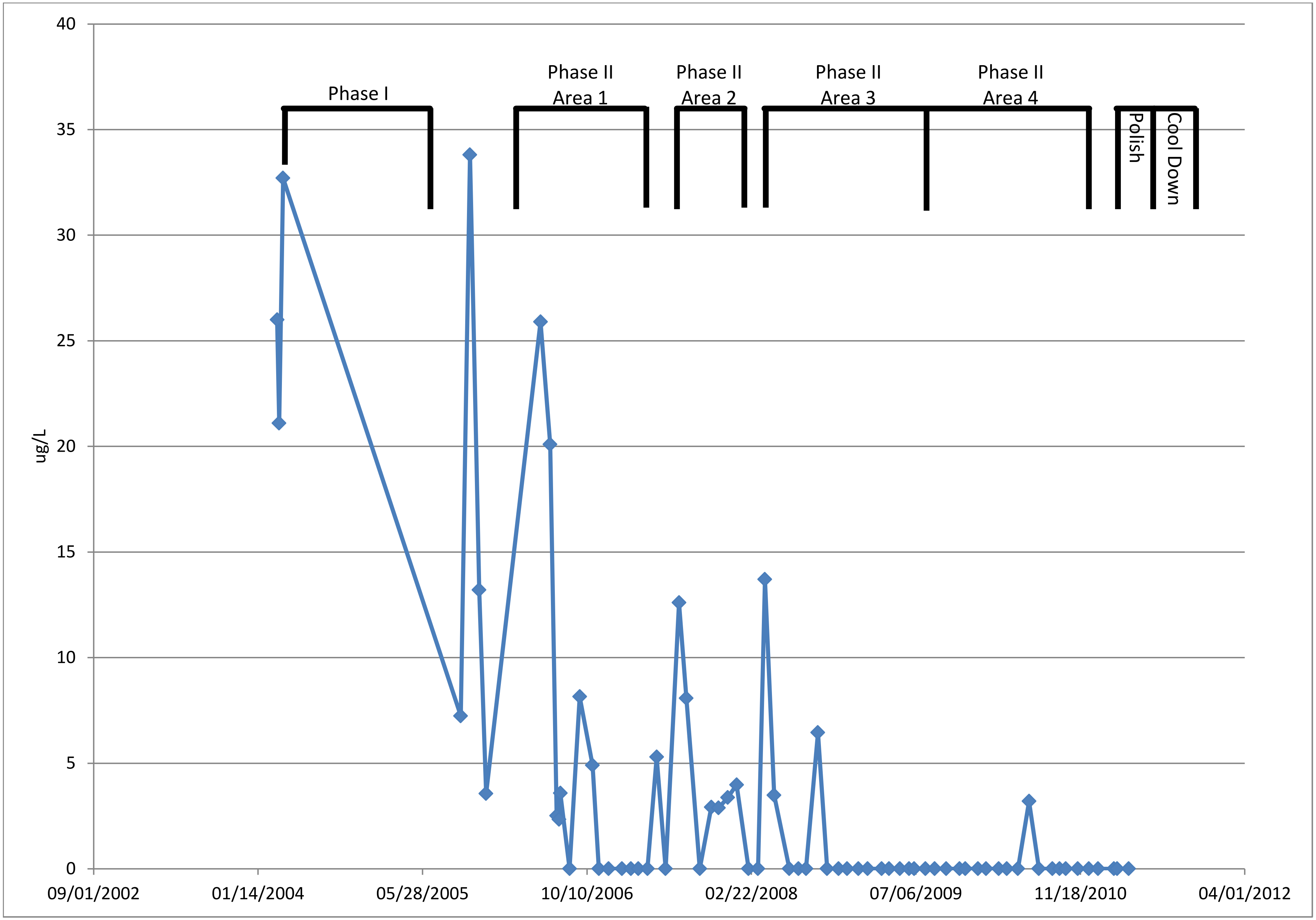


Figure 4-8
Tetrachloroethene at L0 SER Influent
Former PWT Site RI/FS



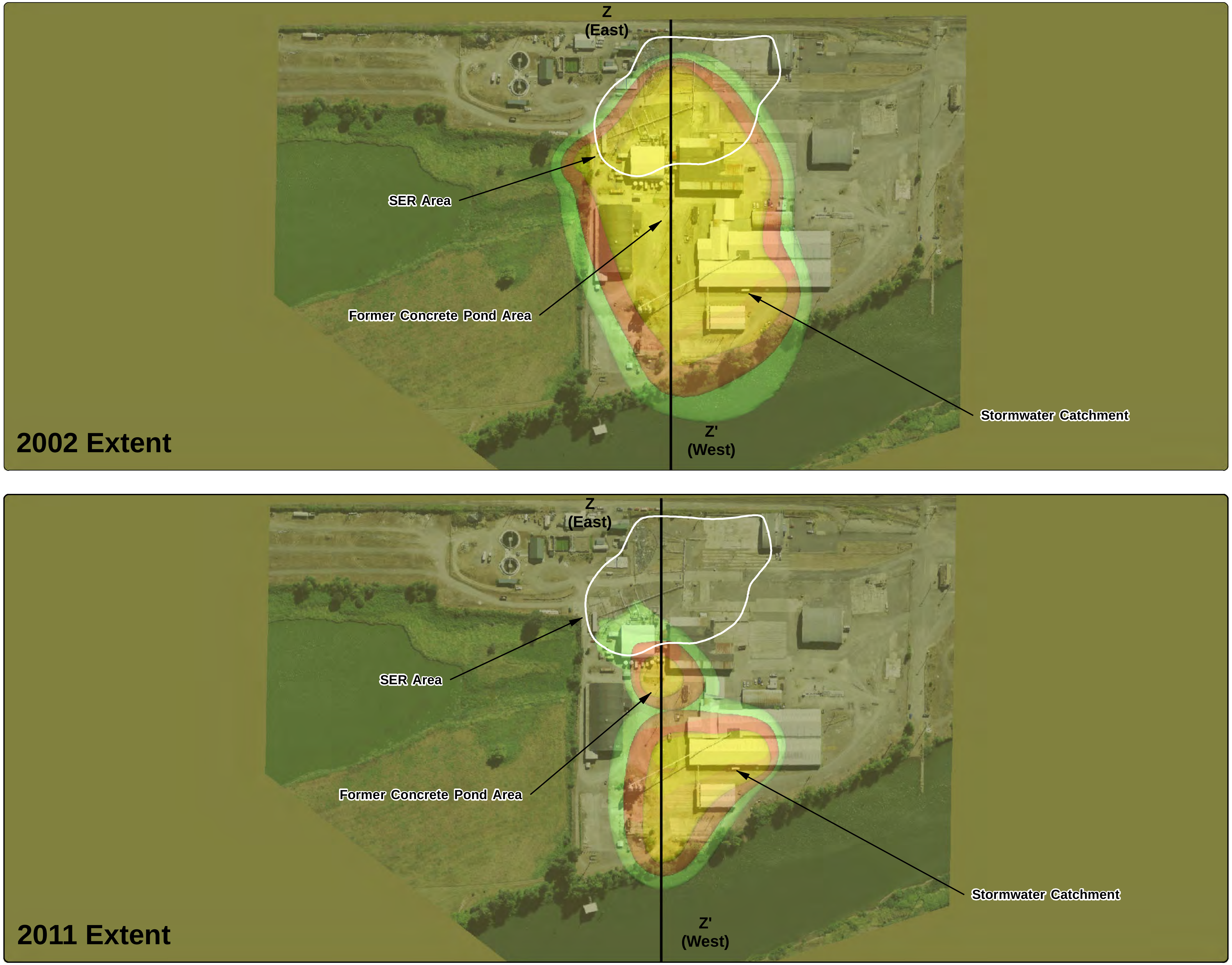


Figure 4-9
Benzene in Groundwater
Plan View

Former PWT Site RI/FS
Ridgefield, Washington

Concentration Levels

🟩 > 0.8 ug/L MTCA B CUL

🟧 > 2.4 ug/L MTCA B Groundwater Vapor Migration Screening Level

🟨 > 8 ug/L

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and kriging used to create this figure.

Source: Aerial photograph obtained from Clark County GIS Department

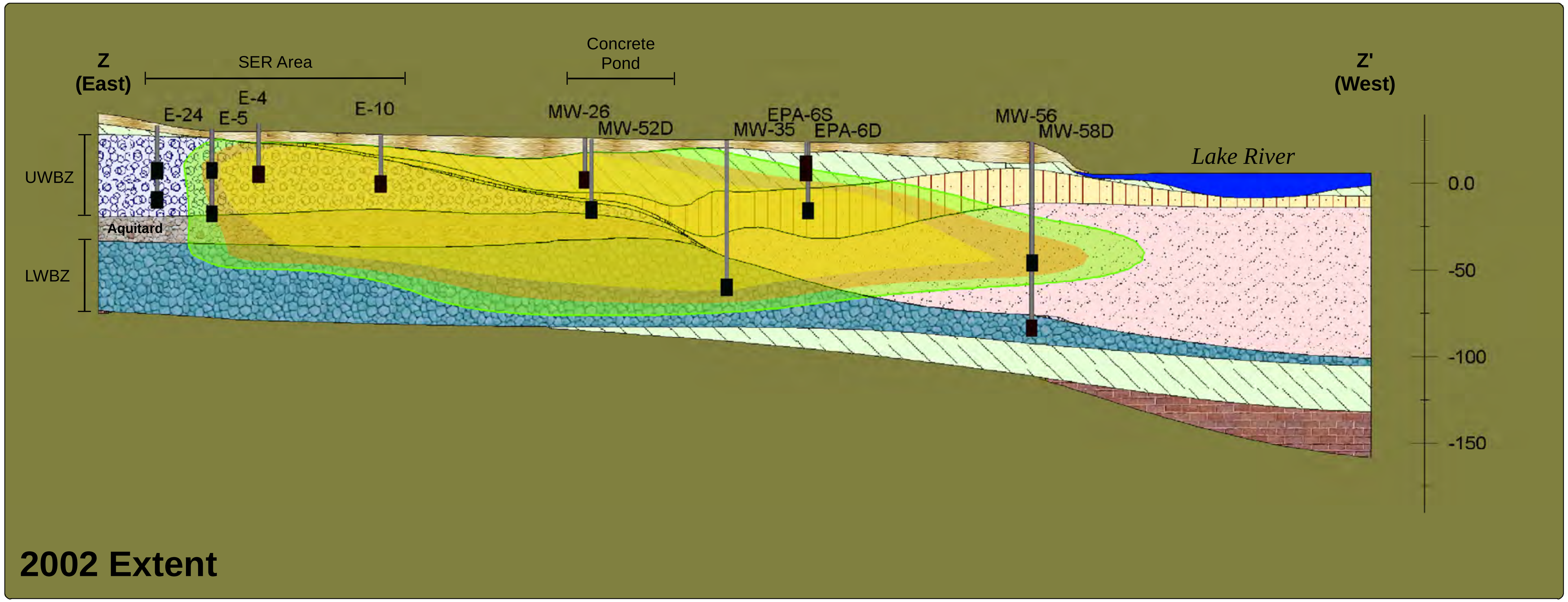
MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-9_Benzene in Groundwater - Plan View.mxd

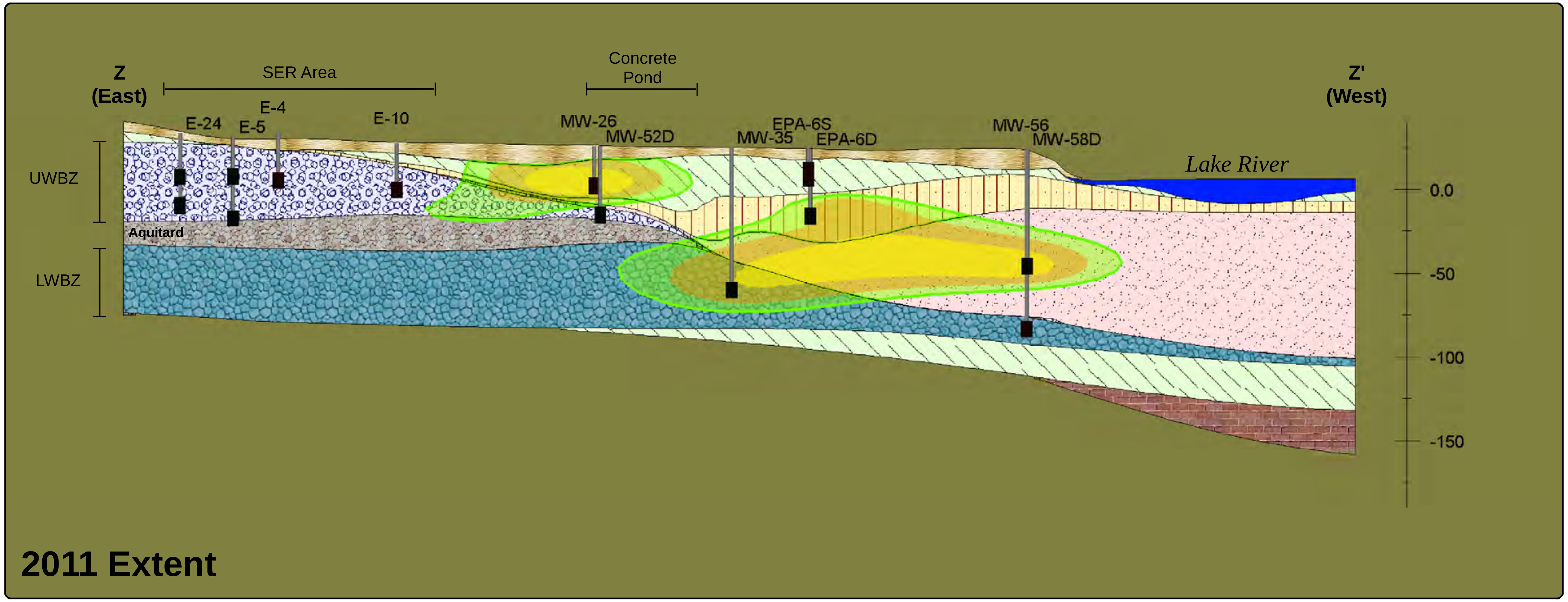
Project: 9003.01.49 Produced By: Padilla Approved By: A. Hughes Print Date: 3/13/2012

Figure 4-10
Benzene in Groundwater Cross Sections

Former PWT Site RI/FS
Ridgefield, Washington



2002 Extent



2011 Extent

Fill
Carty Lake Sediments
Lake River
Clay-Silt
Sandy Silt
Sand — Young Alluvium
Sandy Gravel — Older Alluvium
Silty Gravel (Aquitard)
Silt
Gravel
Clay — Troutdale Formation
Columbia River Basalt Group

Sample Interval

Concentration Levels

🟩 > 0.8 ug/L MTCA B CUL

🟧 > 2.4 ug/L MTCA B Groundwater Vapor Migration Screening level

🟨 > 8 ug/L

Notes:
1. UWBZ = upper water-bearing zone
2. LWBZ = lower water-bearing zone
3. MTCA = Model Toxics Control Act
4. CUL = cleanup level
5. ug/L = micrograms per liter
6. See Section 3 of the text for an explanation of the data and kriging used to create this figure.

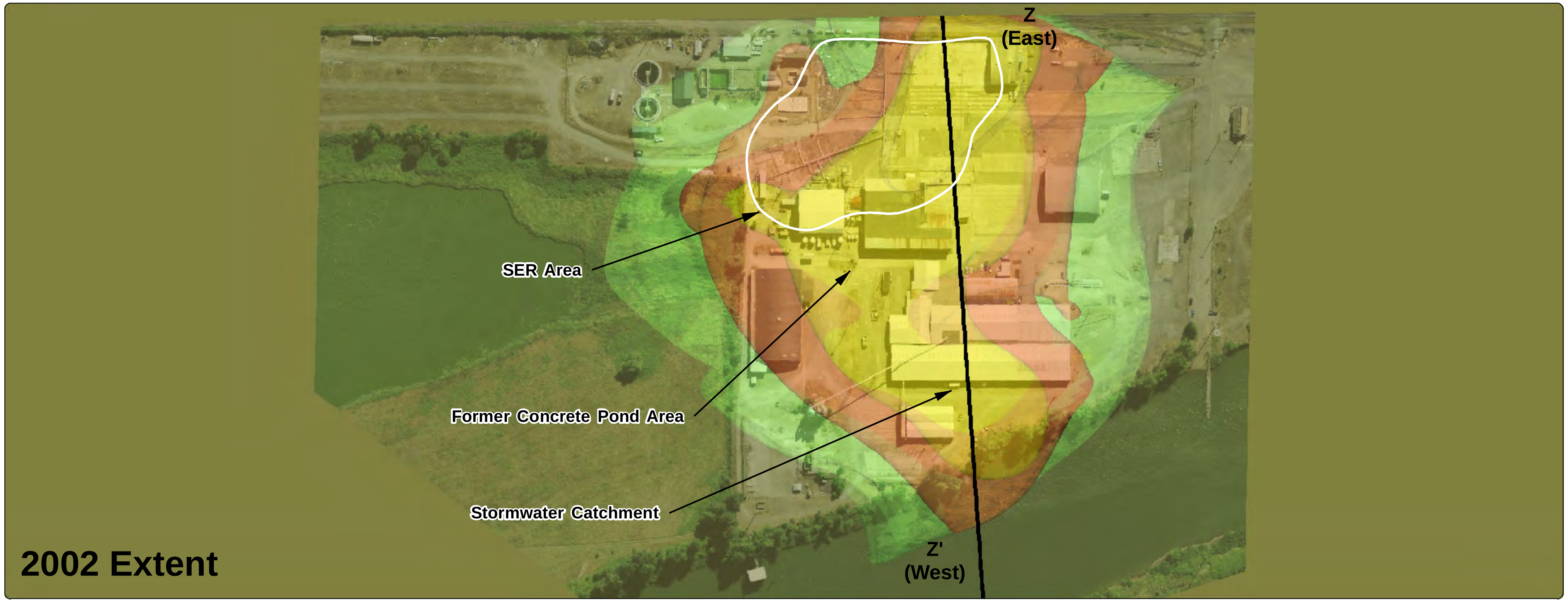
MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-10_Benzene in Groundwater - Cross Sections.mxd

Print Date: 3/13/2012
Approved By: A. Hughes
Produced By: Padilla
Project: 9003.01.49

Figure 4-11
Tetrachloroethene in Groundwater Plan View

Former PWT Site RI/FS
Ridgefield, Washington



Concentration Levels

🟩 > 0.081 ug/L MTCA B CUL

🟧 > 1 ug/L MTCA B Groundwater Vapor Migration Screening Level

🟨 > 10 ug/L

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and kriging used to create this figure.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-11_Tetrachloroethene in Groundwater - Plan View.mxd

Print Date: 3/13/2012

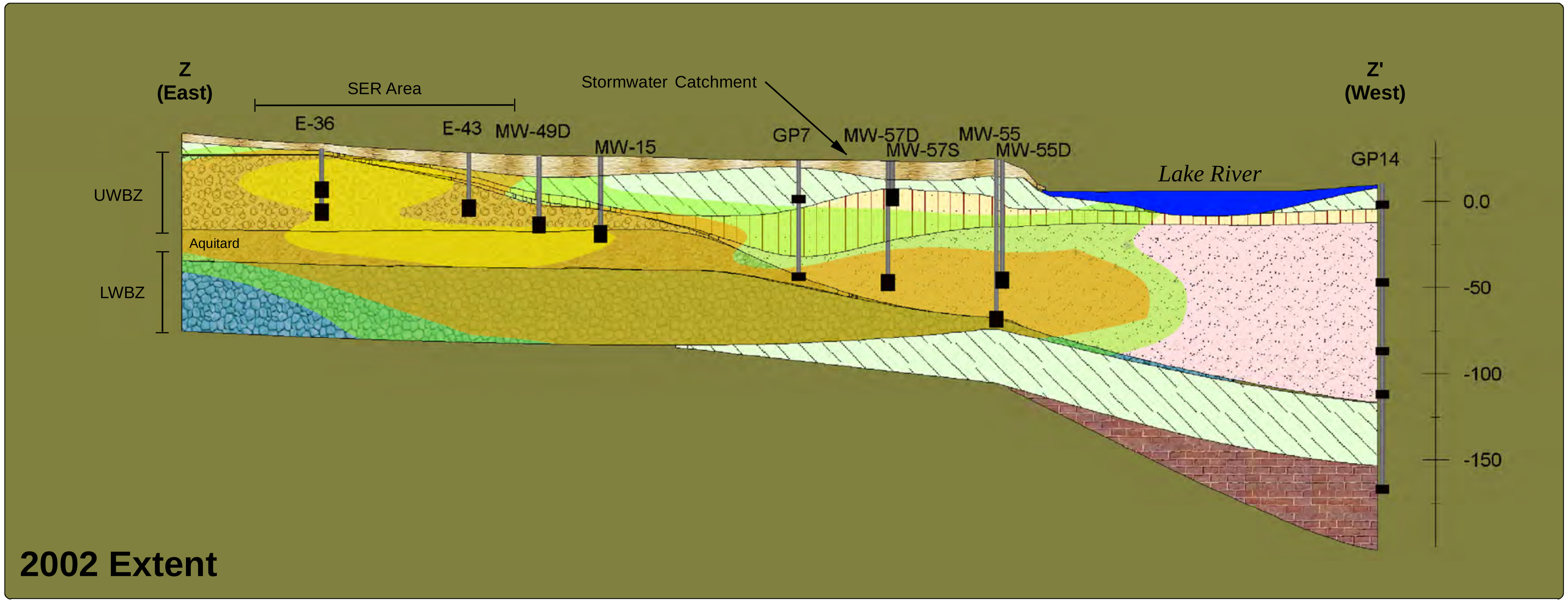
Approved By: A. Hughes

Produced By: Padilla

Project: 9003.01.49

Figure 4-12
Tetrachloroethene in Groundwater Cross Sections

Former PWT Site RI/FS
Ridgefield, Washington



2002 Extent

- ▨ Fill
- 🟩 Carty Lake Sediments
- 🟦 Lake River
- ▨ Clay-Silt
- ▥ Sandy Silt
- ▨ Sand

Young Alluvium

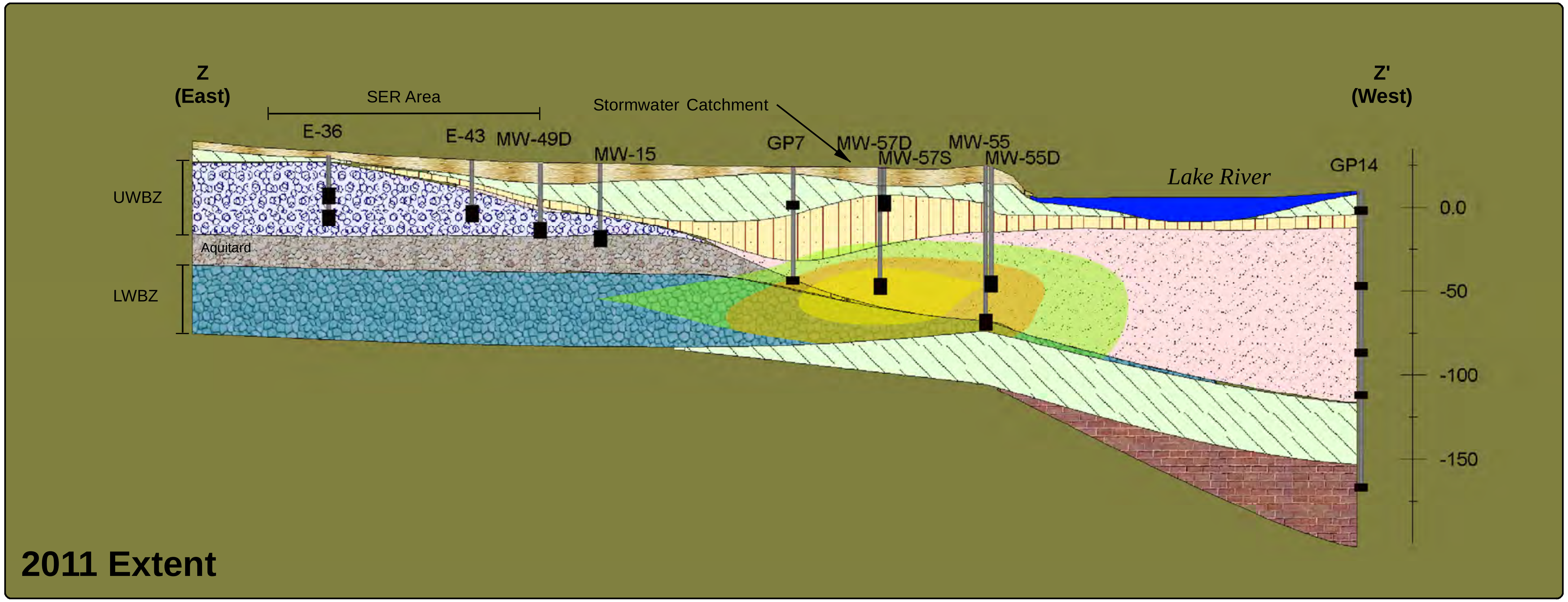
- ▨ Sandy Gravel

Older Alluvium

- ▨ Silty Gravel (Aquitard)
- 🟧 Silt
- ▨ Gravel
- ▨ Clay

Troutdale Formation

- ▨ Columbia River Basalt Group
- ▮ Sample Interval



2011 Extent

Concentration Levels

- 🟩 > 0.081 ug/L MTCA B CUL
- 🟧 > 1 ug/L MTCA B Groundwater Vapor Migration Screening Level
- 🟨 > 10 ug/L

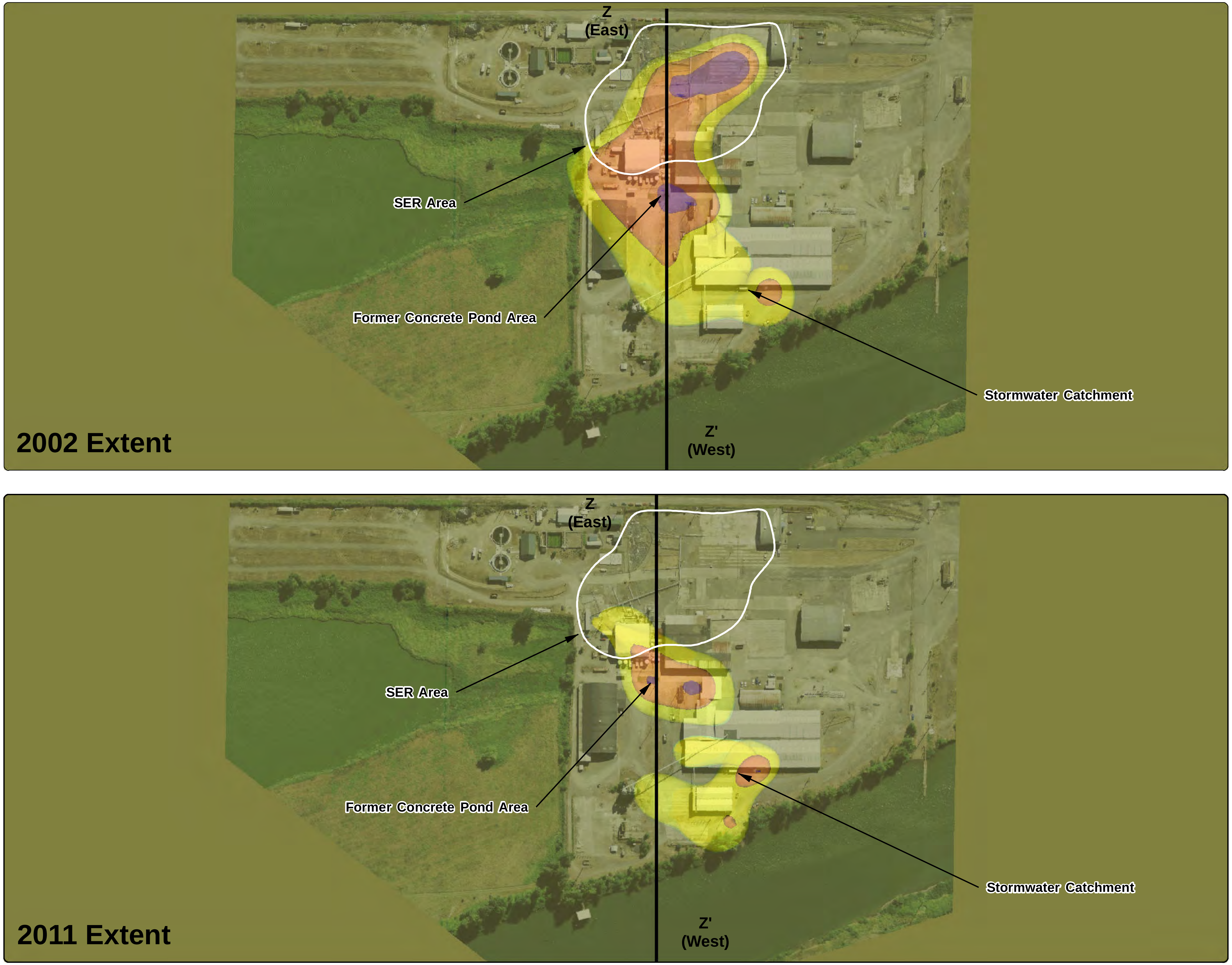
Notes:
1. UWBZ = upper water-bearing zone
2. LWBZ = lower water-bearing zone
3. MTCA = Model Toxics Control Act
4. CUL = cleanup level
5. ug/L = micrograms per liter
6. See Section 3 of the text for an explanation of the data and kriging used to create this figure.

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-12_Tetrachloroethene in Groundwater - Cross Sections.mxd
Project: 9003.01.49 Produced By: Padilla Approved By: A. Hughes Print Date: 3/13/2012

Figure 4-13
Naphthalene in Groundwater Plan View

Former PWT Site RI/FS
Ridgefield, Washington



Concentration Levels

🟨	> 160 ug/L MTCA B CUL
🟧	> 170 ug/L MTCA B Groundwater Vapor Migration Screening Level
🟪	> 1,600 ug/L

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and kriging used to create this figure.

Source: Aerial photograph obtained from Clark County GIS Department

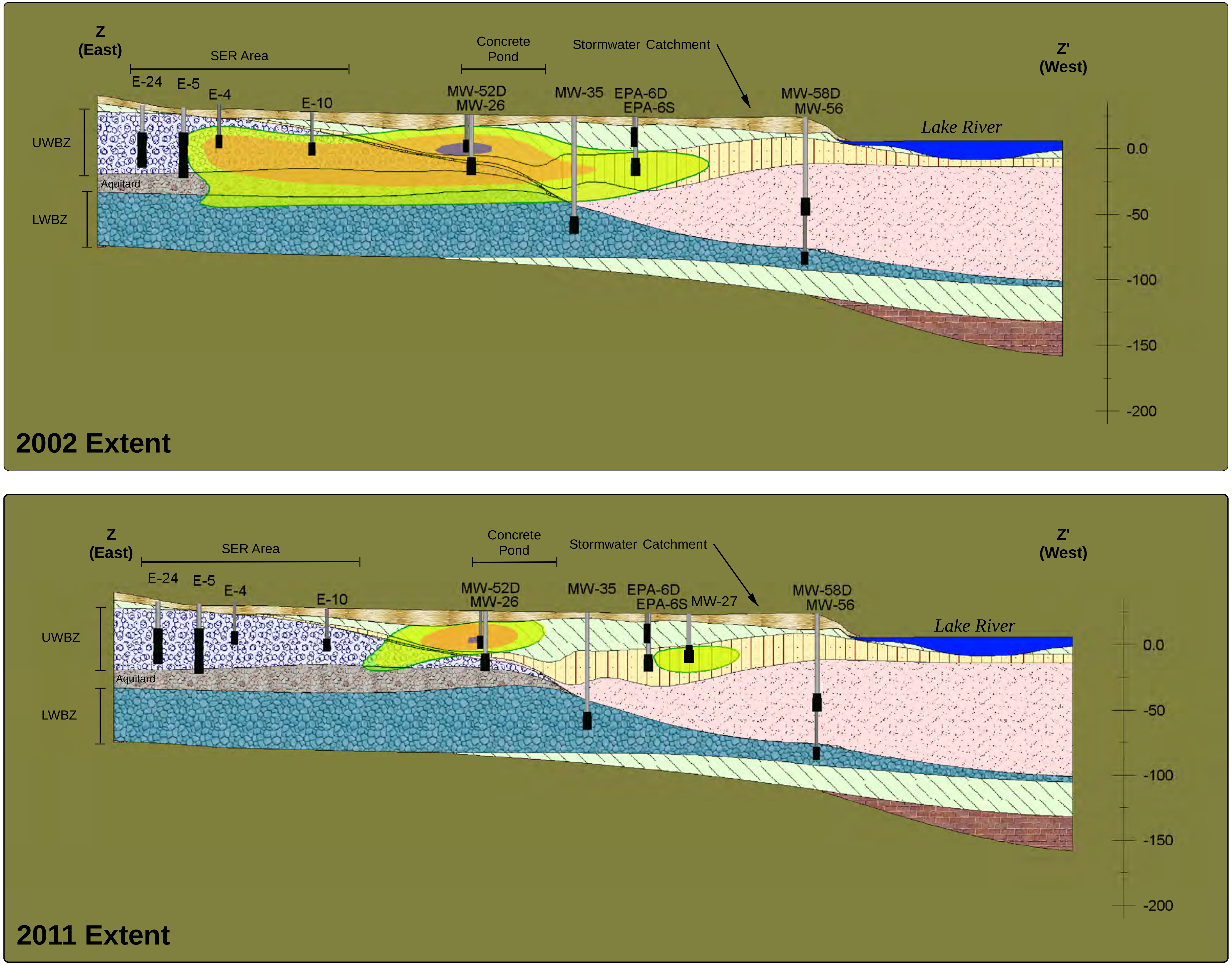
MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-13_Naphthalene in Groundwater - Plan View.mxd
Print Date: 3/13/2012
Approved By: A. Hughes
Produced By: Padilla
Project: 9003.01.49

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-14_Naphthalene in Groundwater - Cross Sections.mxd
Print Date: 3/13/2012
Approved By: A. Hughes
Produced By: Padilla
Project: 9003.01.49

Figure 4-14
Naphthalene in Groundwater Cross Sections

Former PWT Site RI/FS
Ridgefield, Washington



- ▨ Fill
- 🟩 Carty Lake Sediments
- 🟦 Lake River
- ▨ Clay-Silt
- ▨ Sandy Silt
- ▨ Sand
- ▨ Sandy Gravel
- ▨ Silty Gravel (Aquitard)
- ▨ Silt
- ▨ Gravel
- ▨ Clay
- ▨ Columbia River Basalt Group

Young Alluvium (Carty Lake Sediments, Lake River, Clay-Silt, Sandy Silt, Sand)
Older Alluvium (Sandy Gravel)
Troutdale Formation (Silty Gravel (Aquitard), Silt, Gravel, Clay)

▮ Sample Interval

Concentration Levels

🟨 > 160 ug/L MTCA B CUL

🟧 > 170 ug/L MTCA B Groundwater Vapor Migration Screening Level

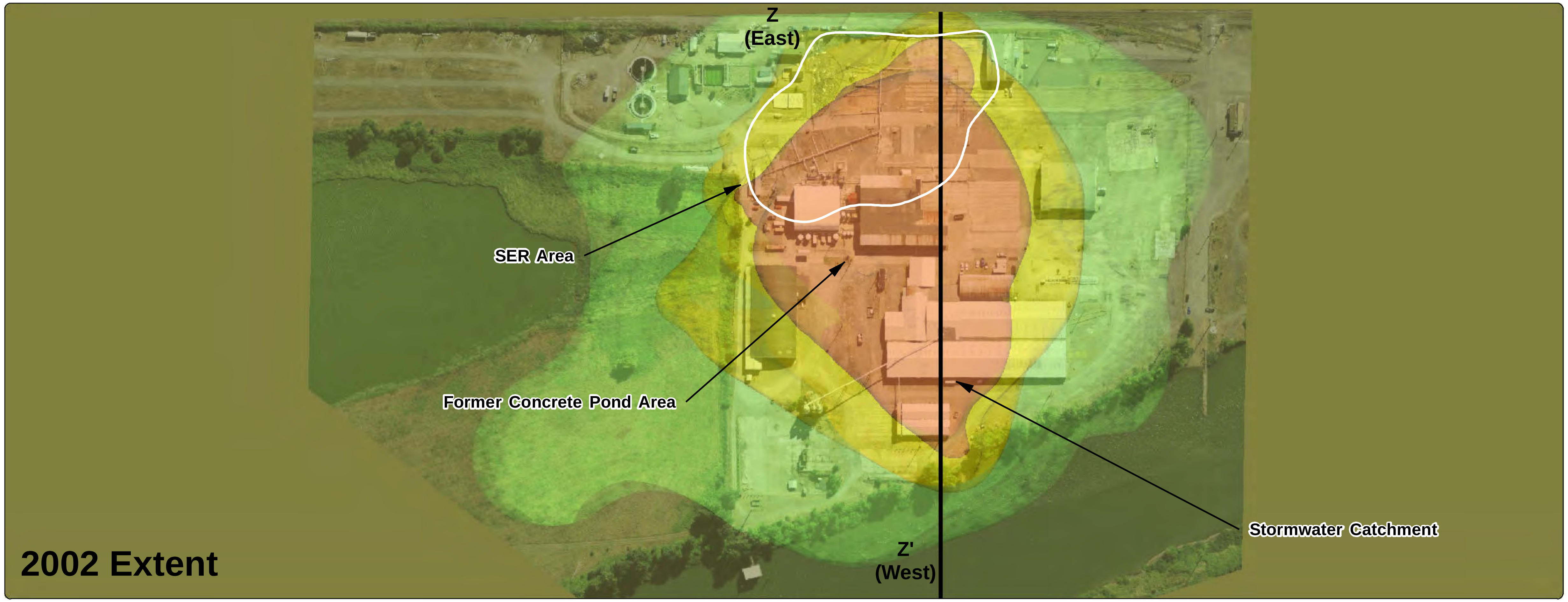
🟪 > 1,600 ug/L

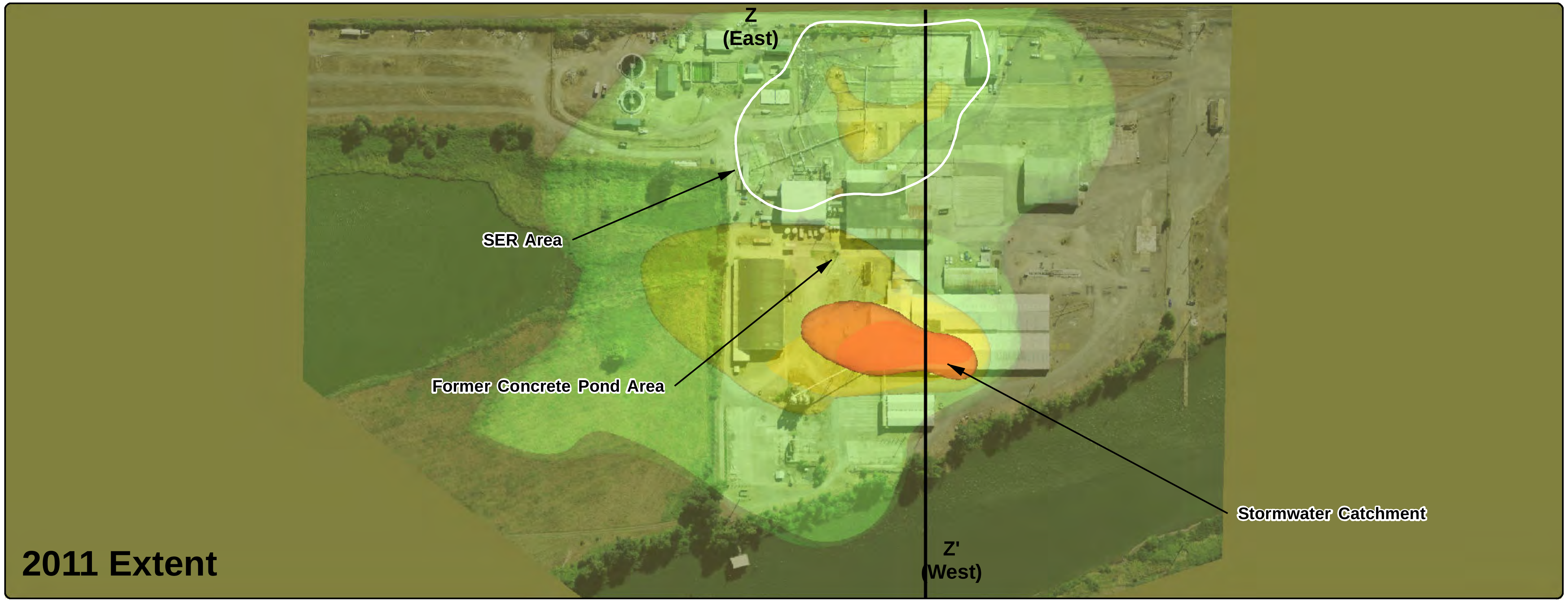
Notes:
1. UWBZ = upper water-bearing zone
2. LWBZ = lower water-bearing zone
3. MTCA = Model Toxics Control Act
4. CUL = cleanup level
5. ug/L = micrograms per liter
6. See Section 3 of the text for an explanation of the data and kriging used to create this figure.

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Figure 4-15
Pentachlorophenol in Groundwater
Plan View

Former PWT Site RI/FS
Ridgefield, Washington





Concentration Levels

🟩	> 0.73 ug/L MTCA B CUL
🟨	> 73 ug/L
🟧	> 730 ug/L

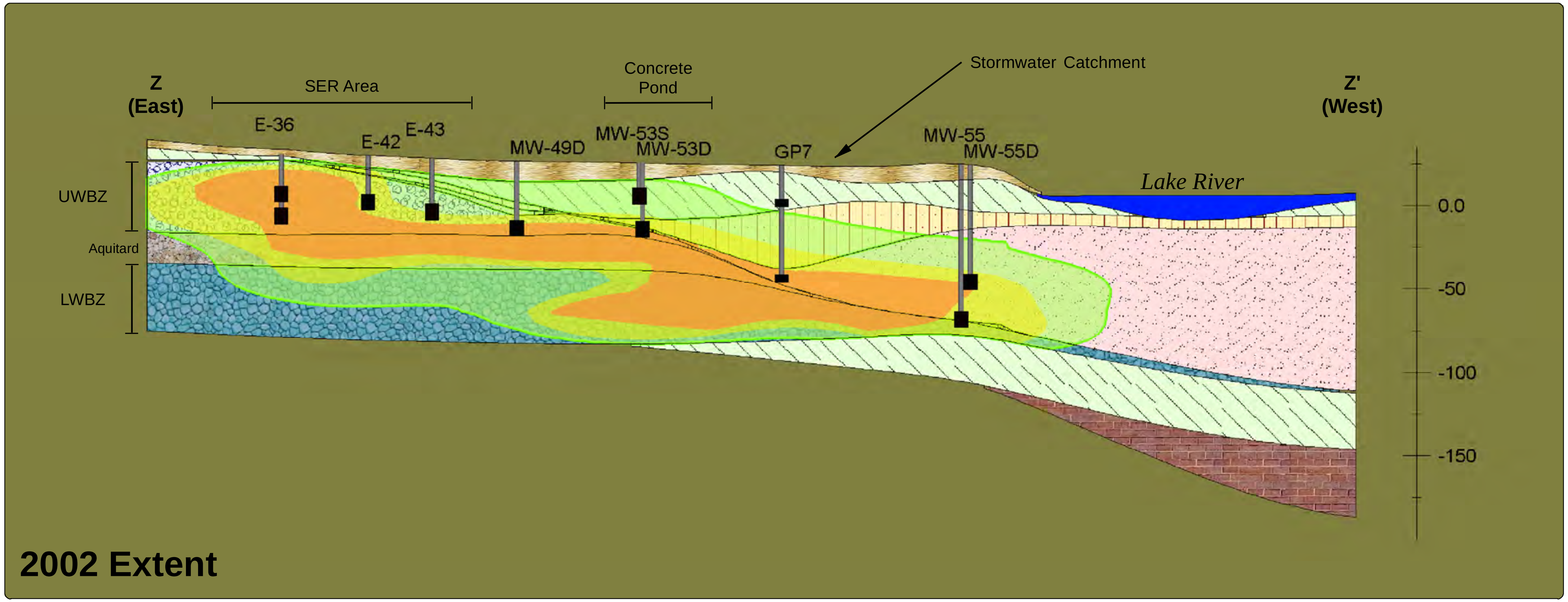
Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and kriging used to create this figure.

Source: Aerial photograph obtained from Clark County GIS Department

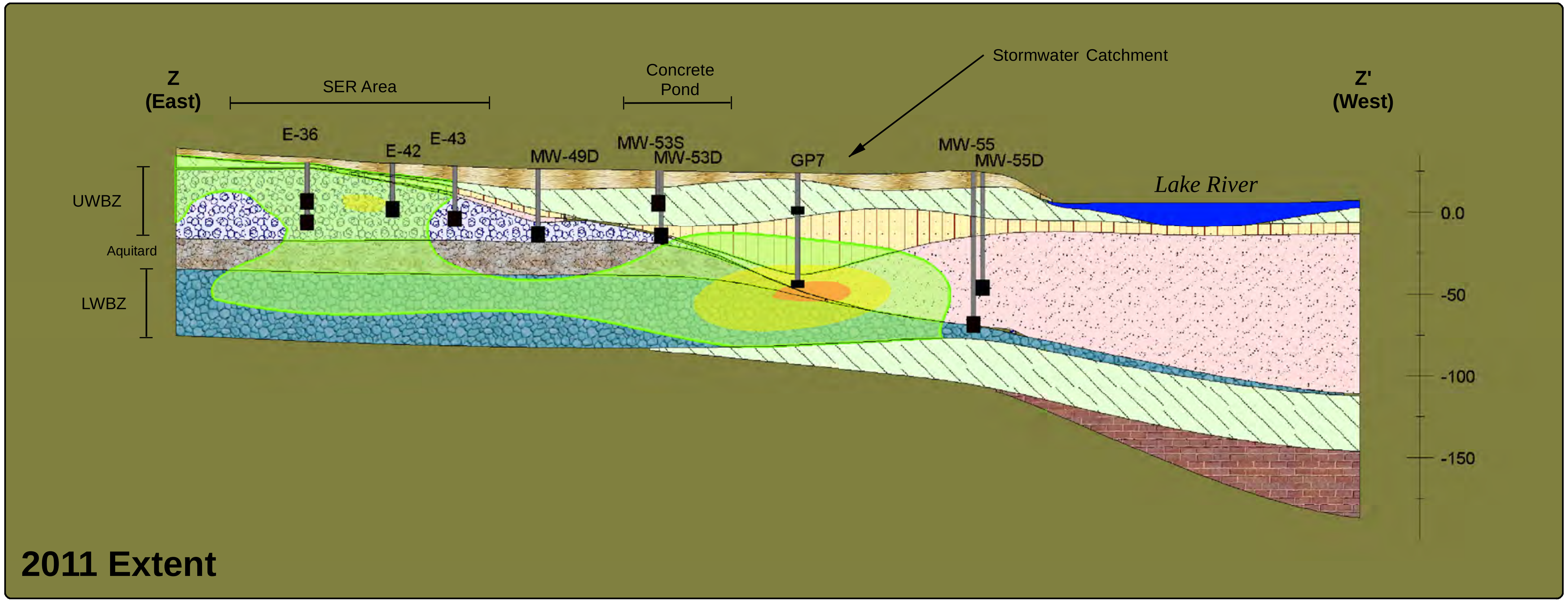
MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-15_Pentachlorphenol in Groundwater - Plan View.mxd

Print Date: 3/13/2012
Approved By: A. Hughes
Produced By: Padilla
Project: 9003.01.49



2002 Extent



2011 Extent

Figure 4-16
Pentachlorophenol in Groundwater Cross Sections

Former PWT Site RI/FS
Ridgefield, Washington

- Fill
- Carty Lake Sediments
- Lake River
- Clay-Silt
- Sandy Silt
- Sand
- Sandy Gravel
- Silty Gravel (Aquitard)
- Silt
- Gravel
- Clay
- Columbia River Basalt Group
- Sample Interval

Young Alluvium
Older Alluvium
Troutdale Formation

Concentration Levels

- 🟩 > 0.73 ug/L MTCA B CUL
- 🟨 > 73 ug/L
- 🟧 > 730 ug/L

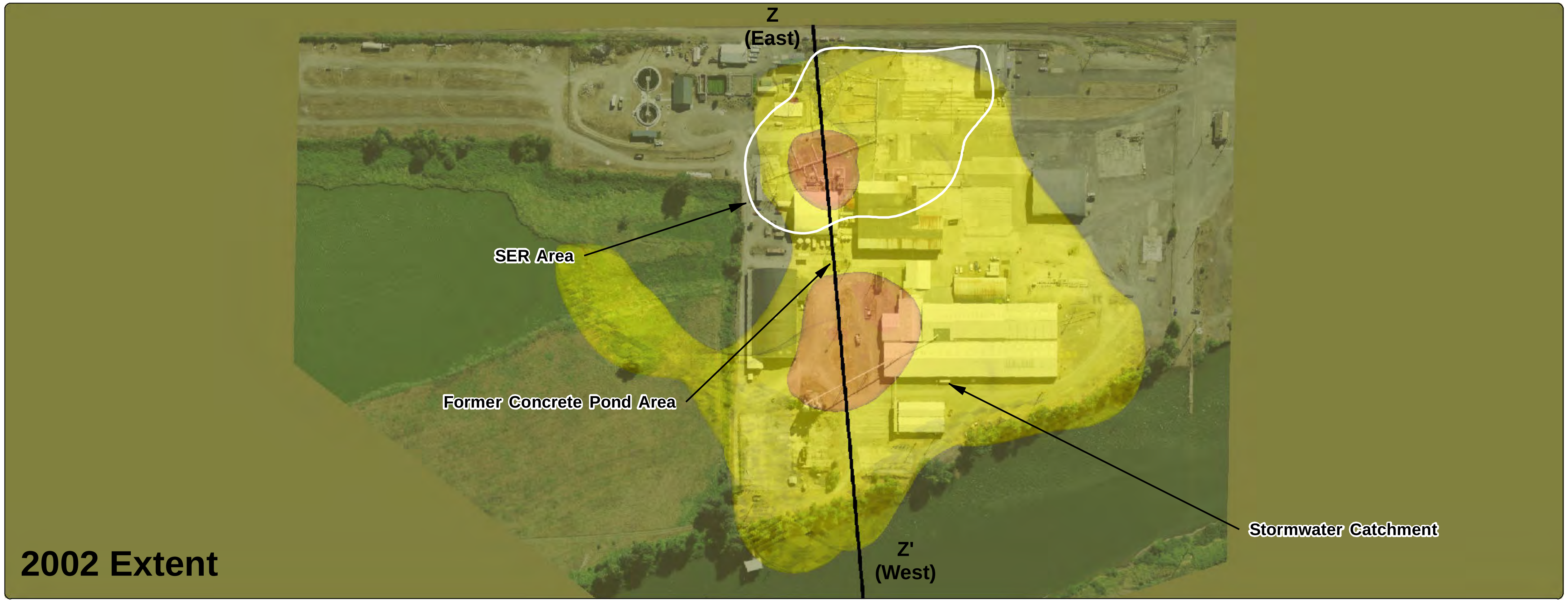
Notes:
1. UWBZ = upper water-bearing zone
2. LWBZ = lower water-bearing zone
3. MTCA = Model Toxics Control Act
4. CUL = cleanup level
5. ug/L = micrograms per liter
6. See Section 3 of the text for an explanation of the data and kriging used to create this figure.

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-16_Pentachlorophenol in Groundwater - Cross Sections.mxd
Print Date: 3/13/2012
Approved By: A. Hughes
Produced By: Padilla
Project: 9003.01.49

Figure 4-17
Arsenic in Groundwater Plan View

Former PWT Site RI/FS
Ridgefield, Washington



Concentration Levels

🟨	> 5 ug/L MTCA A CUL
🟧	> 50 ug/L

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ug/L = micrograms per liter
4. See Section 3 of the text for an explanation of the data and kriging used to create this figure.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-17_Arsenic in Groundwater - Plan View.mxd

Print Date: 2/29/2012

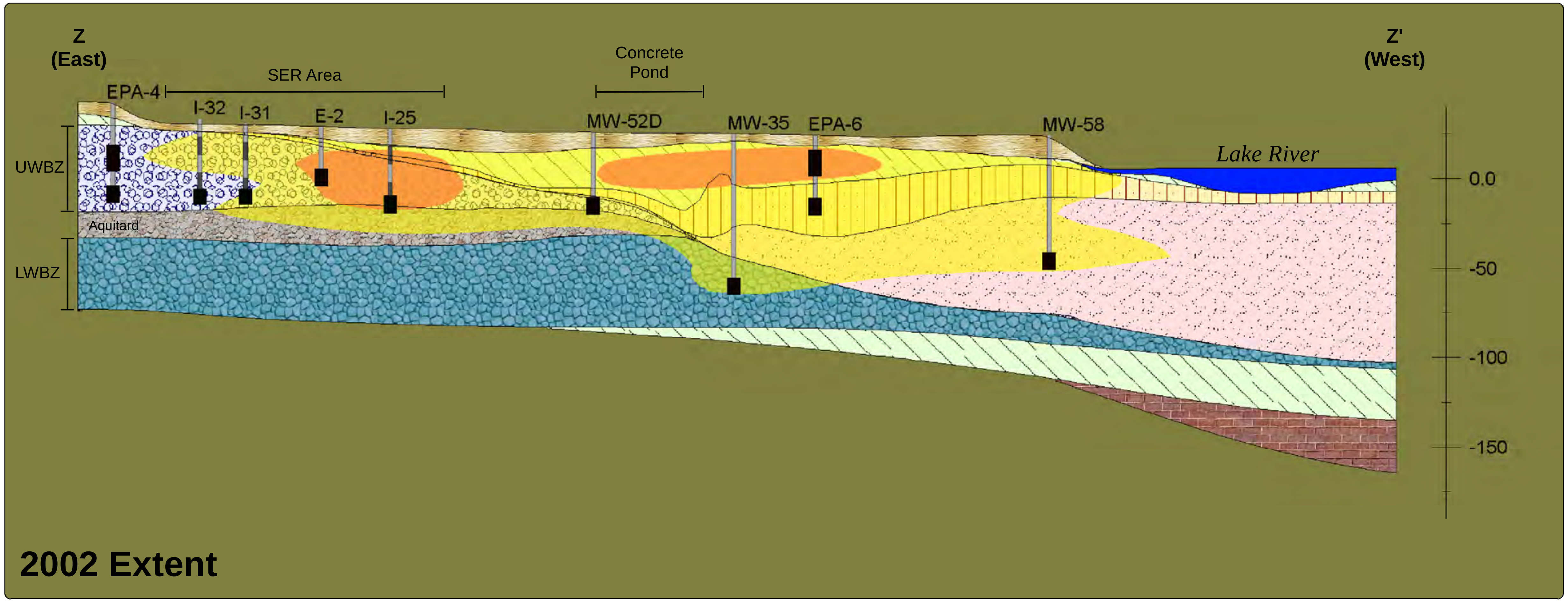
Approved By: A. Hughes

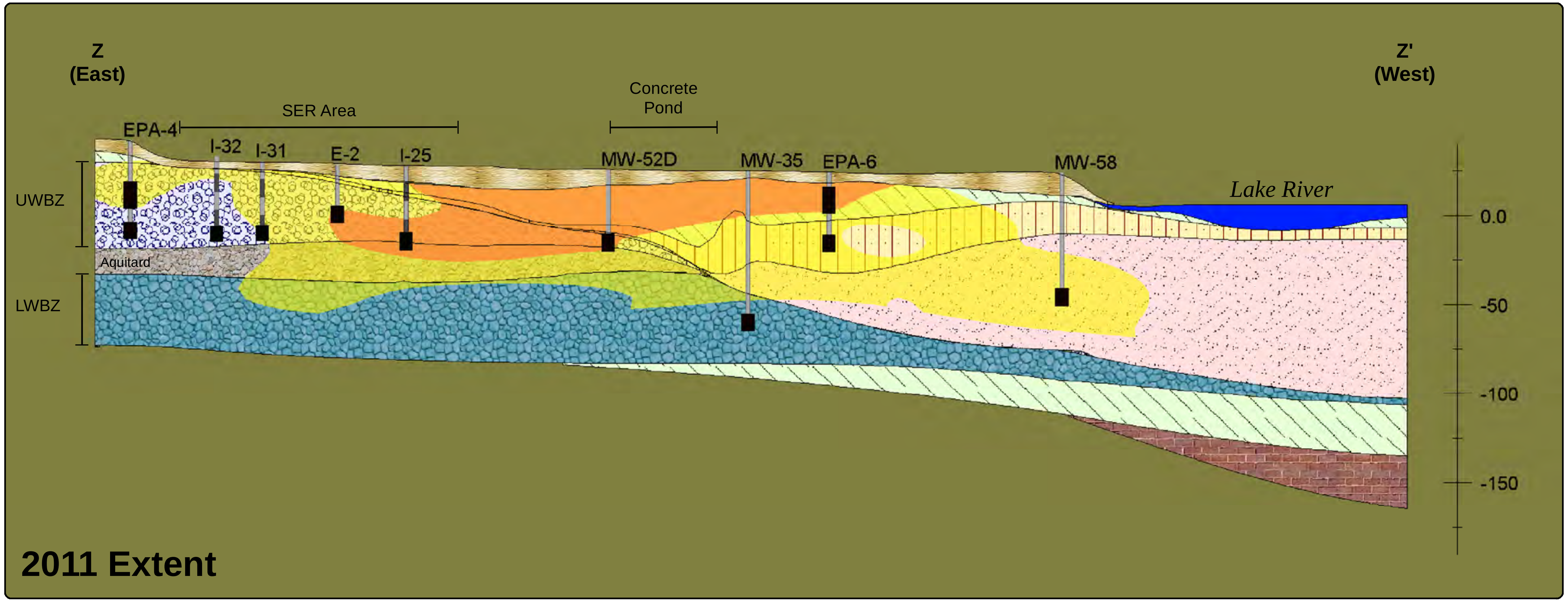
Produced By: Padilla

Project: 9003.01.49

Figure 4-18
Arsenic in Groundwater Cross Sections

Former PWT Site RI/FS
Ridgefield, Washington





Unit	
Fill	
Carty Lake Sediments	Young Alluvium
Lake River	
Clay-Silt	
Sandy Silt	
Sand	
Sandy Gravel	Older Alluvium
Silty Gravel (Aquitard)	Troutdale Formation
Silt	
Gravel	
Clay	
Columbia River Basalt Group	

■ Sample Interval

Concentration Levels

🟨 > 5 ug/L MTCA A CUL

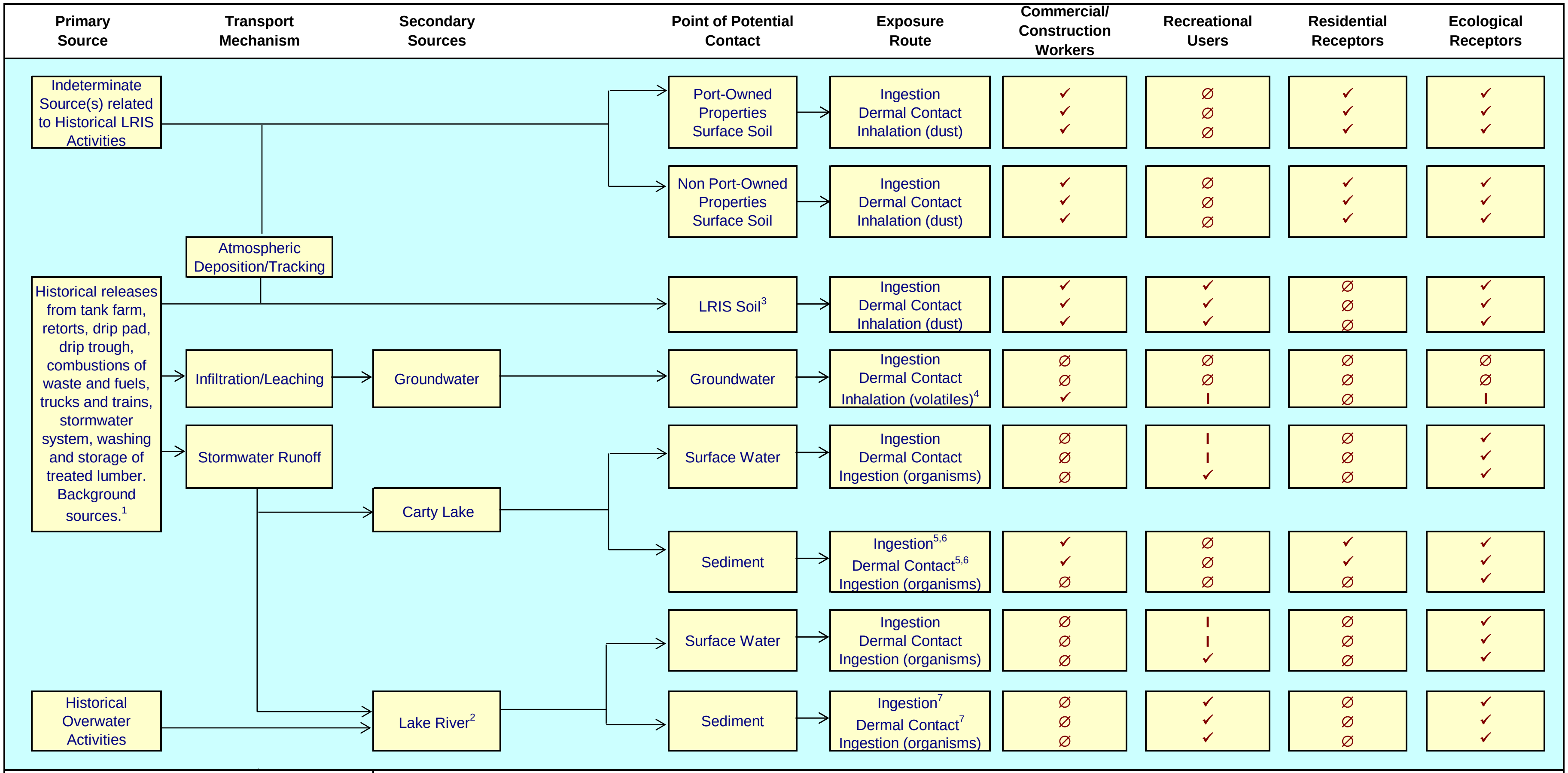
🟧 > 50 ug/L

Notes:
1. UWBZ = upper water-bearing zone
2. LWBZ = lower water-bearing zone
3. MTCA = Model Toxics Control Act
4. CUL = cleanup level
5. ug/L = micrograms per liter
6. See Section 3 of the text for an explanation of the data and kriging used to create this figure.
7. Although the kriging used to create this figure shows potential discharge to Lake River, numerical modeling indicates that arsenic does not discharge to surface water above CULs.

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig4-18_Arsenic in Groundwater - Cross Sections.mxd
Print Date: 3/13/2012
Approved By: A. Hughes
Produced By: Padilla
Project: 9003.01.49

Figure 5-1
Conceptual Site Model of Potentially Complete Pathways
Former PWT Site RI/FS



Point of Potential Contact	Exposure Route	Commercial/ Construction Workers	Recreational Users	Residential Receptors	Ecological Receptors
Port-Owned Properties Surface Soil	Ingestion Dermal Contact Inhalation (dust)	✓ ✓ ✓	∅ ∅ ∅	✓ ✓ ✓	✓ ✓ ✓
Non Port-Owned Properties Surface Soil	Ingestion Dermal Contact Inhalation (dust)	✓ ✓ ✓	∅ ∅ ∅	✓ ✓ ✓	✓ ✓ ✓
LRIS Soil[3]	Ingestion Dermal Contact Inhalation (dust)	✓ ✓ ✓	✓ ✓ ✓	∅ ∅ ∅	✓ ✓ ✓
Groundwater	Ingestion Dermal Contact Inhalation (volatiles)[4]	∅ ∅ ✓	∅ ∅ I	∅ ∅ ∅	∅ ∅ I
Surface Water	Ingestion Dermal Contact Ingestion (organisms)	∅ ∅ ∅	I I ✓	∅ ∅ ∅	✓ ✓ ✓
Sediment	Ingestion[5,6] Dermal Contact[5,6] Ingestion (organisms)	✓ ✓ ∅	∅ ∅ ∅	✓ ✓ ∅	✓ ✓ ✓
Surface Water	Ingestion Dermal Contact Ingestion (organisms)	∅ ∅ ∅	I I ✓	∅ ∅ ∅	✓ ✓ ✓
Sediment	Ingestion[7] Dermal Contact[7] Ingestion (organisms)	∅ ∅ ∅	✓ ✓ ✓	∅ ∅ ∅	✓ ✓ ✓

Notes:

Primary pathway →
Potentially Complete exposure route ✓
Incomplete exposure route ∅
Insignificant exposure route I

Notes:

1) Background sources include vehicle emissions, back-yard trash burning, structure fires, and stormwater runoff.
2) Stormwater and groundwater pathways are potentially complete for Lake River only; stormwater and groundwater pathways to Carty Lake are incomplete.
3) Soil defined as 0 to 15 feet below ground surface (bgs) for commercial/construction workers and recreational users. Soil defined as 0 to 6 feet bgs for ecological receptors.
4) Potentially complete pathing in cells 1 and 2 only, see text for additional information.
5) In Carty Lake, sediment may be contacted and incidentally ingested by potential future restoration workers.
6) In Carty Lake, sediment may be contacted and incidentally ingested by tribal members during potential future
7) Hypothetical pathway evaluated as a precaution, no significant recreational use on LRIS shore.
wapato harvest; included in residential receptors.

Notes:
1. MTCA = Model Toxics Control Act
2. TEQ = Toxicity Equivalent
3. CUL = Cleanup Level
4. ng/kg = nanograms per kilogram

Legend

Soil Sample Location

●	Below MTCA Method B CUL (11 ng/kg Dioxin TEQ)
●	Above MTCA Method B CUL (11 ng/kg Dioxin TEQ)
▭	Off Property Areas
▭	Tax Lots

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

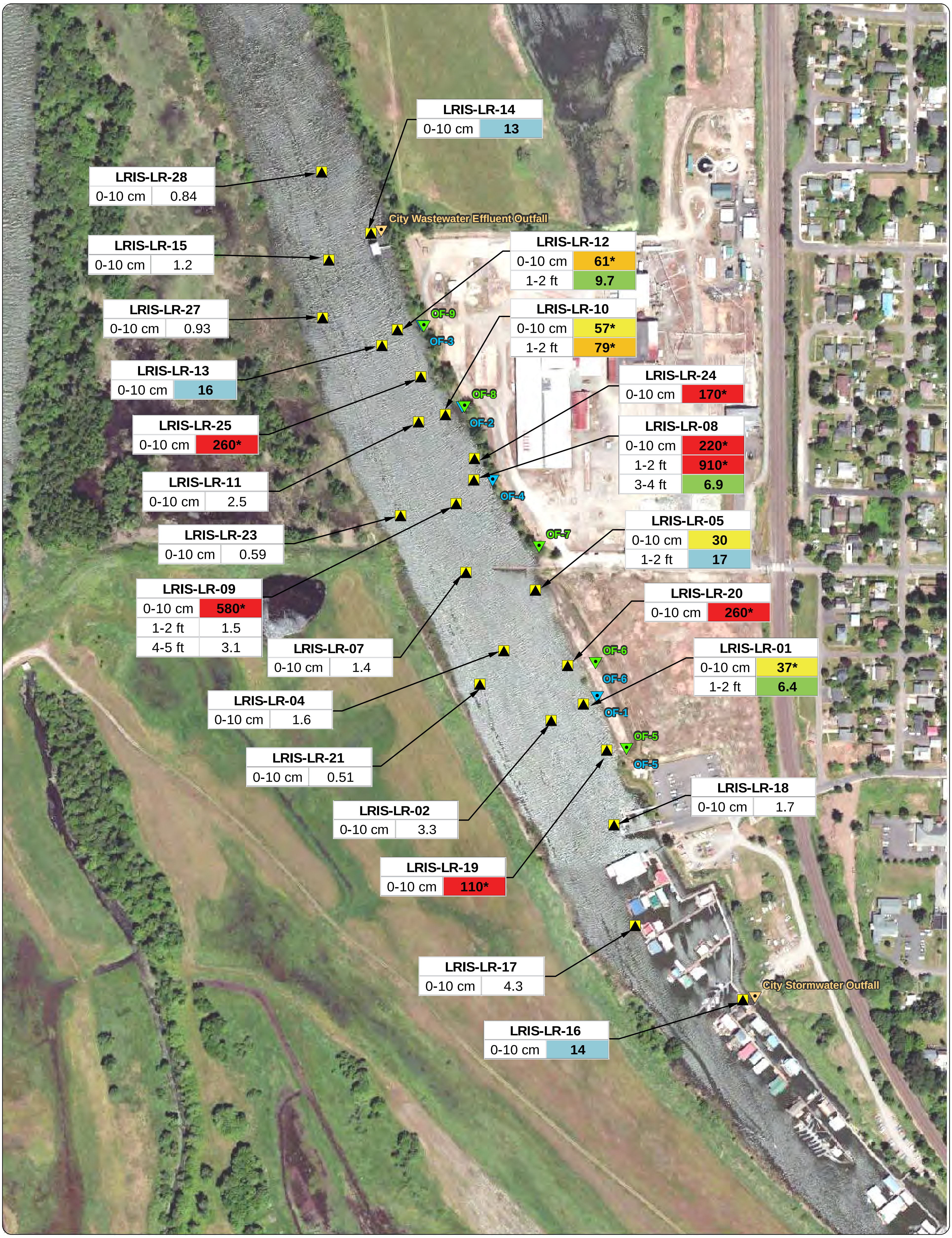
Figure 6-1
Port-Owned Properties Soil Dioxin TEQ Cleanup Level Exceedances

Former PWT Site RI/FS
Ridgefield, Washington

0 100 200
Feet

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig6-1_Port-Owned Properties Soil Dioxin TEQ CUL Exceedances.mxd
Print Date: 5/31/2013
Approved By: M. Novak
Produced By: J. Schane
Project: 9003.01.39/01



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Notes:
1. **Bold** value exceeds cleanup level
2. TEQ = Toxicity Equivalent
3. ng/kg = nanograms per kilogram
4. * indicates Dioxin congener ecological CUL exceedance (see Table 6-4).

Legend

▼	Private Outfalls	☐	0 - 5 ng/kg Dioxin TEQ
▼	City of Ridgefield Outfalls	🟩	5 - 10 ng/kg Dioxin TEQ
▼	Historical Outfalls	🟦	10 - 30 ng/kg Dioxin TEQ
▲	Existing Sediment Sample Locations	🟨	30 - 60 ng/kg Dioxin TEQ
		🟧	60 - 100 ng/kg Dioxin TEQ
		🟥	> 100 ng/kg Dioxin TEQ

Figure 6-2
Lake River Dioxin TEQ Cleanup Level Exceedances in Sediment

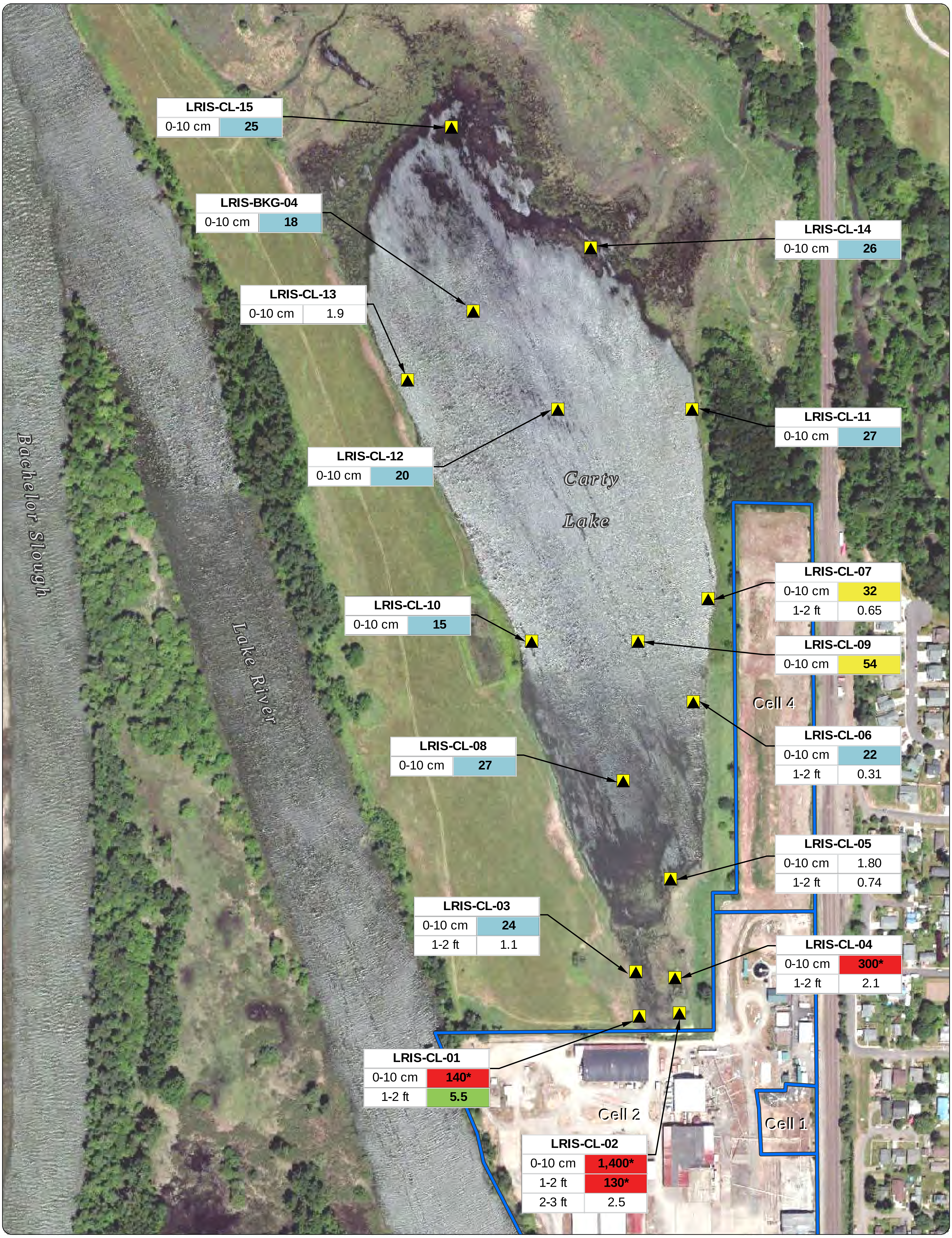
Former PWT Site
Ridgefield, Washington RI/FS

0 150 300
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig6-2_Lake River Dioxin TEQ Cleanup Level Exceedances in Sediment.mxd
Print Date: 3/26/2013
Approved By: M. Novak
Produced By: Hines/Schane
Project: 9003.01.40/05

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig6-3_Carty Lake Dioxin TEQ Cleanup Level Exceedances in Sediment.mxd



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Notes:
1. **Bold** value exceeds cleanup level
2. TEQ = Toxicity Equivalent
3. ng/kg = nanograms per kilogram
4. * indicates Dioxin congener ecological CUL exceedance (see Table 6-6).

Legend

▲ Sediment Sample Location
▭ Cell Boundaries
⬜ 0 - 5 ng/kg Dioxin TEQ
🟩 5 - 10 ng/kg Dioxin TEQ
🟦 10 - 30 ng/kg Dioxin TEQ
🟨 30 - 60 ng/kg Dioxin TEQ
🟧 60 - 100 ng/kg Dioxin TEQ
🟥 > 100 ng/kg Dioxin TEQ

Figure 6-3
Carty Lake Dioxin TEQ Cleanup Level Exceedances in Sediment

Former PWT Site RI/FS
Ridgefield, Washington

0 150 300
Feet

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Print Date: 12/18/2012
Approved By: M. Novak
Produced By: J. Schane
Project: 9003.01.40/05

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig8-1_Port-Owned Properties Remedial Scenario_Estimated Extent of Soil Cap.mxd

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Note: CUL = Cleanup Level

Legend

▨ Proposed 2' Soil Cap

Soil Sample Location

● Below Ecological CUL

● Above Ecological CUL

▭ Off Property Areas

▭ Tax Lots

Figure 8-1
Port-Owned Properties Remedial Scenario Estimated Extent of Soil Cap

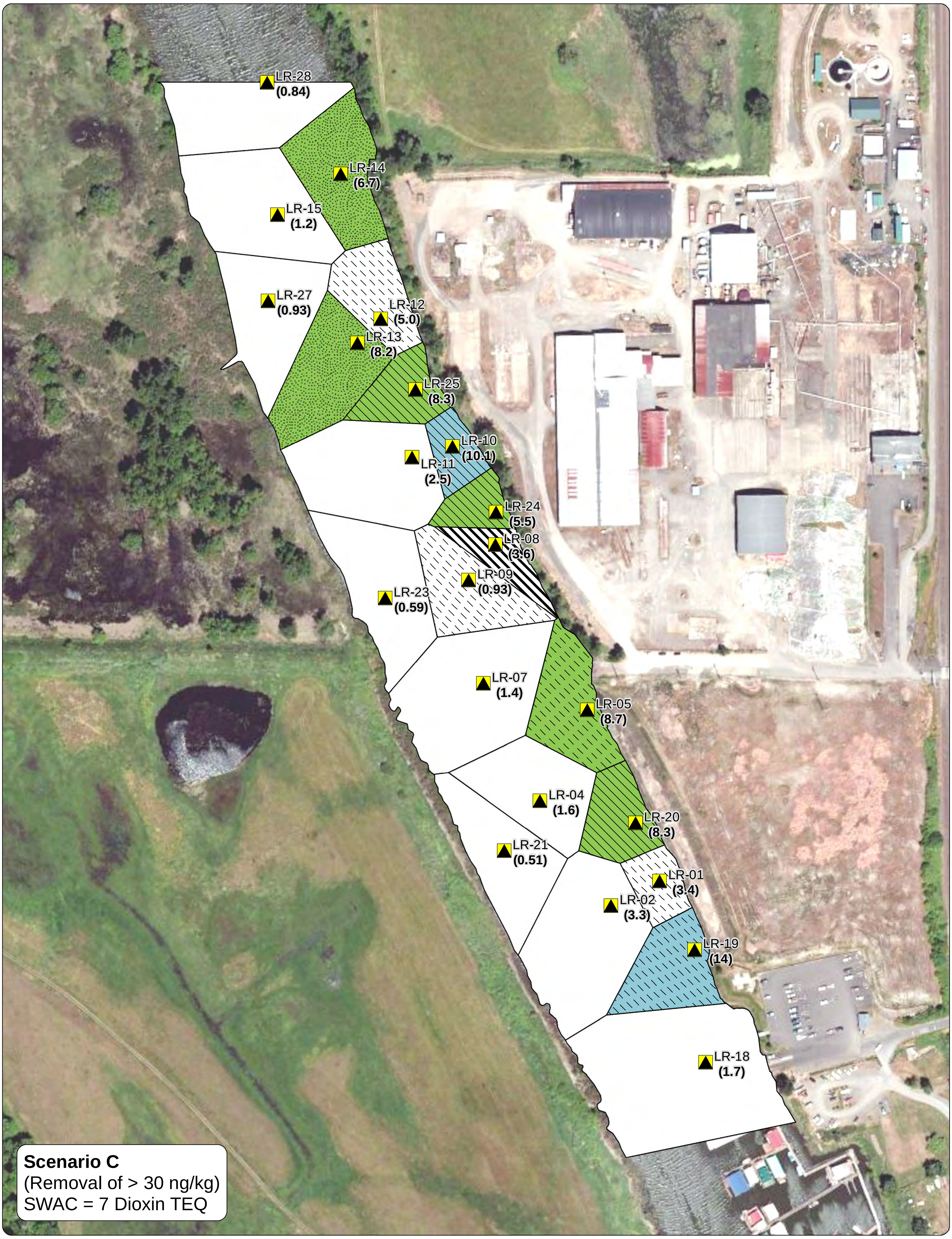
Former PWT Site RI/FS
Ridgefield, Washington

0 100 200
Feet

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Print Date: 6/7/2013 Approved By: M. Novak Produced By: J. Schane Project: 9003.01.39/01

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig9-1_Lake River Remedial Scenario Estimated Extent of Dredging and ENR and Post-Remedy Conditions.mxd



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Notes:
1. TEQ = toxicity equivalent
2. ng/kg = nanograms per kilogram
3. ENR = enhanced natural recovery
4. SWAC = surface weighted average concentration

Legend

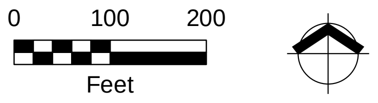
▲ Surface Sediment Sample
(Post-Dredge/ENR Concentration ng/kg)

Dredge Depth
- ▨ 2 feet
- ▨ 3 feet
- ▨ 4 feet
- ░ ENR Only

Post-Dredge/ENR
- ⬜ 0.3 - 5 Dioxin TEQ
- 🟩 5 - 10 Dioxin TEQ
- 🟦 10 - 30 Dioxin TEQ

Figure 9-1
Lake River Remedial Scenario Estimated Extent of Dredging and ENR and Post-Remedy Conditions

Former PWT Site RI/FS
Ridgefield, Washington

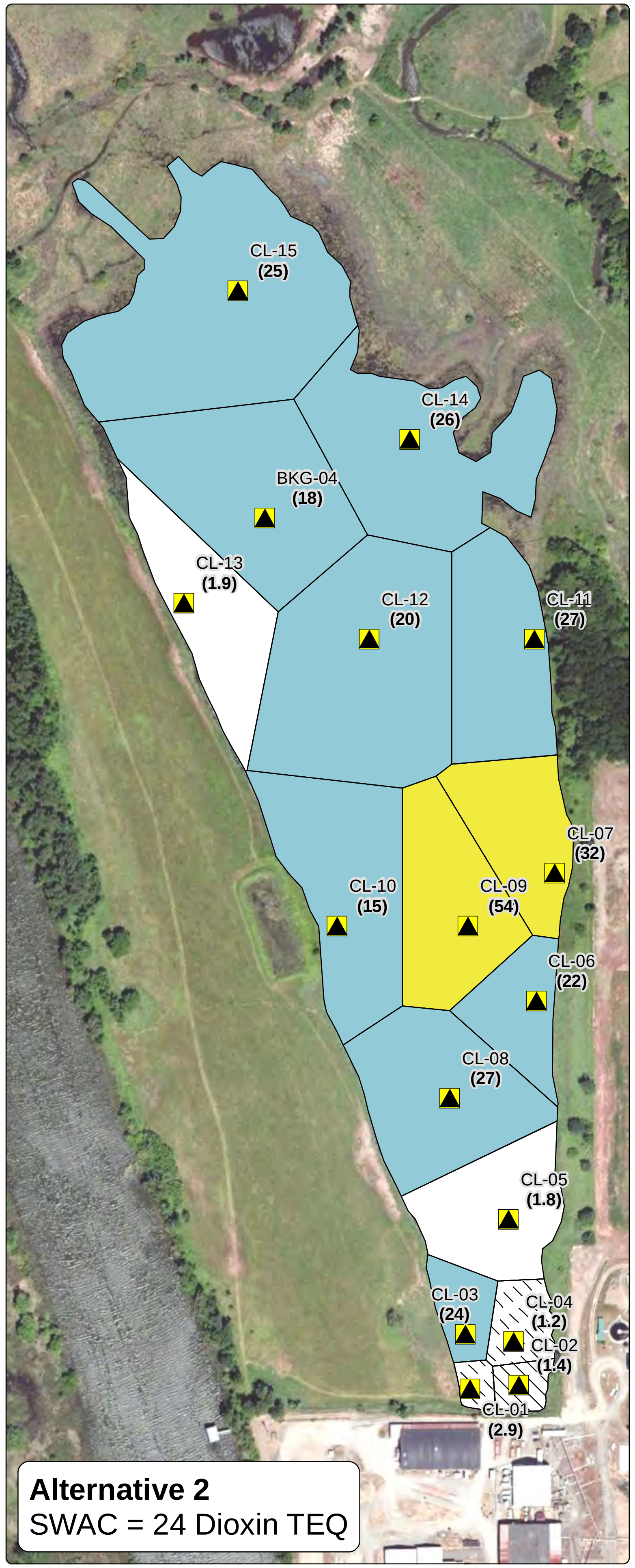


MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

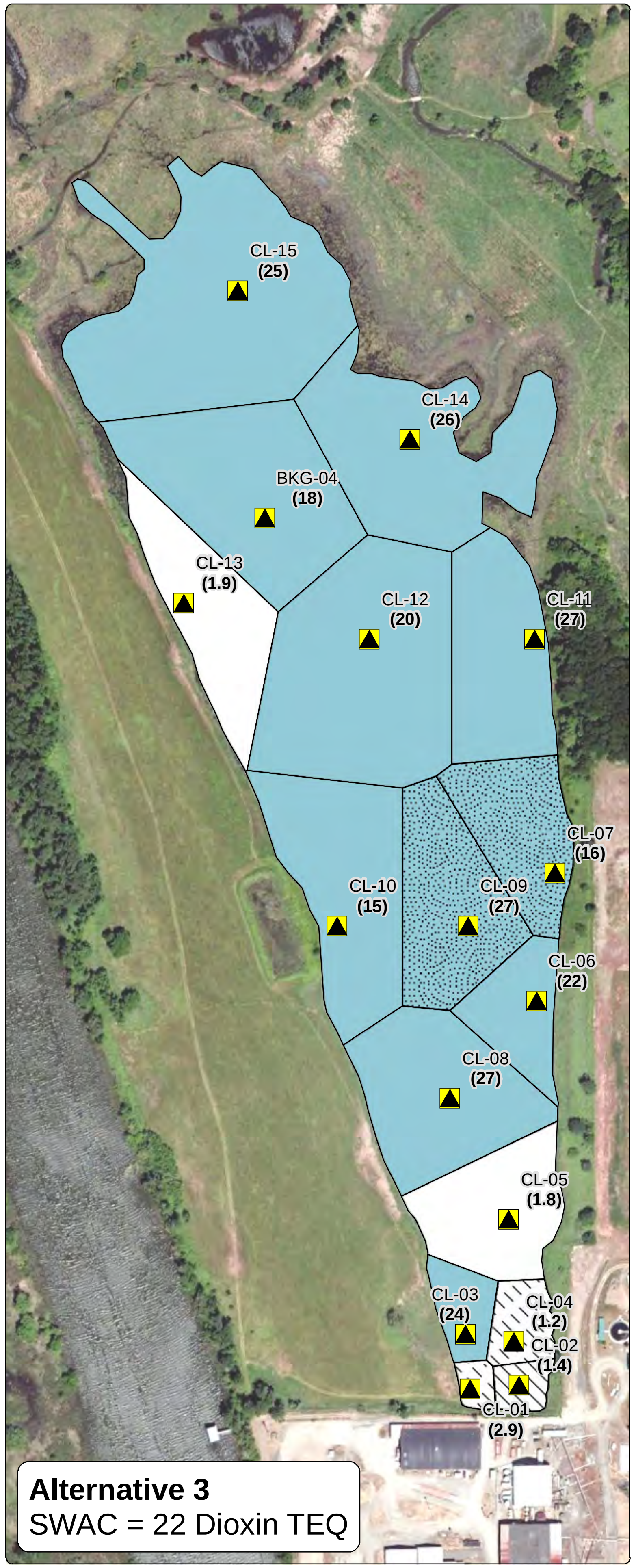
Print Date: 12/18/2012
Approved By: M. Novak
Produced By: jschane
Project: 9003.01.49

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\Fig10-1_Carty Lake Remedial Alternatives Estimated Extent of Dredging and ENR and Post-Remedy Conditions.mxd

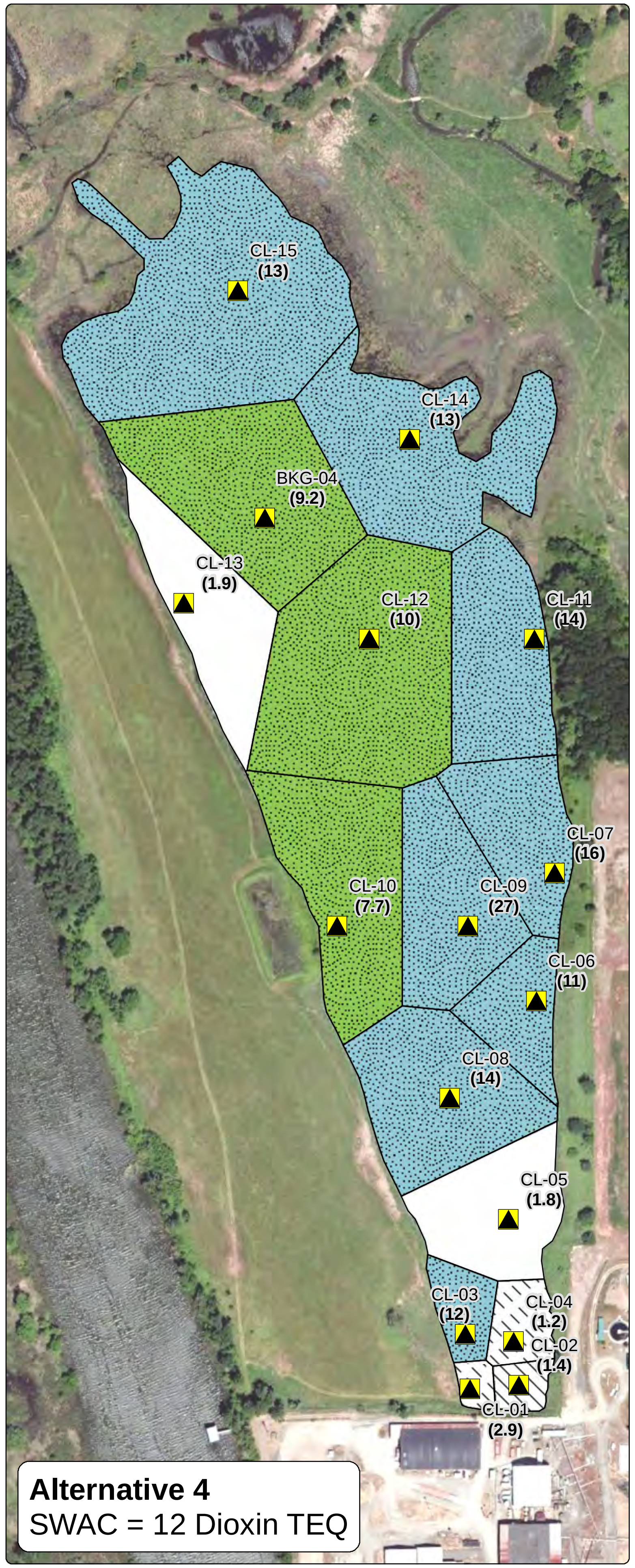
Print Date: 12/18/2012 Approved By: P. Wiescher Produced By: jschane Project: 9003.01.49



Alternative 2
SWAC = 24 Dioxin TEQ



Alternative 3
SWAC = 22 Dioxin TEQ



Alternative 4
SWAC = 12 Dioxin TEQ

Figure 10-1
Carty Lake Remedial Alternatives Estimated Extent of Dredging and ENR and Post-Remedy Conditions

Former PWT Site RI/FS
Ridgefield, Washington

Legend

▲ Surface Sediment Sample **(Post-Dredge/ENR Concentration ng/kg)**

Dredge Depth

▨ 2 feet
▨ 3 feet
⠿ ENR Only

Post Dredge/ENR

⬜ 0.3 - 5 Dioxin TEQ
🟩 5 - 10 Dioxin TEQ
🟦 10 - 30 Dioxin TEQ
🟨 30 - 60 Dioxin TEQ

Notes:
1. TEQ = toxicity equivalent
2. ng/kg = nanograms per kilogram
3. ENR = enhanced natural recovery
4. SWAC = surface weighted average concentration

0 200 400
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

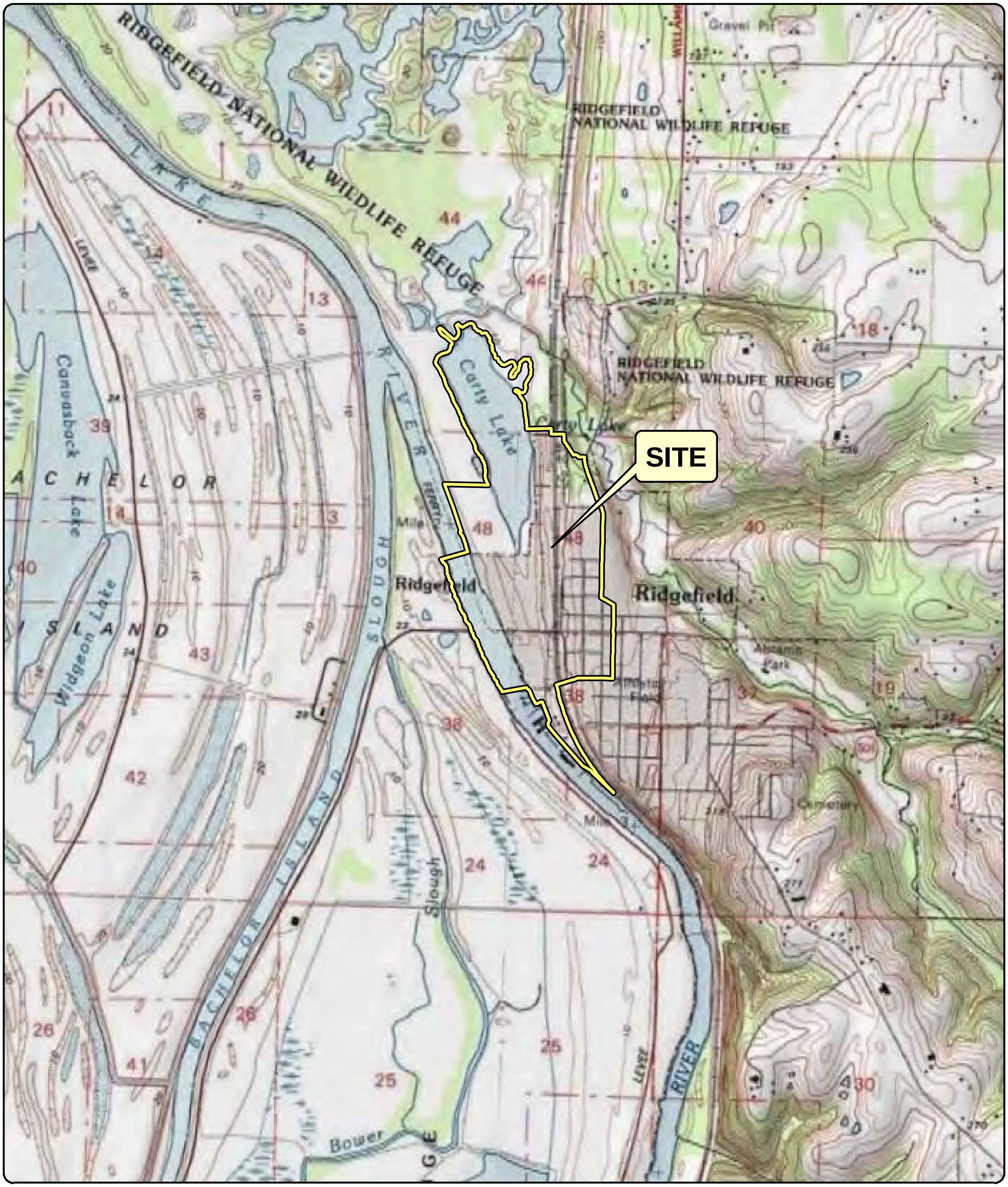
Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\FigES-1_Site Location.mxd

Print Date: 6/4/2013

Approved By: J. King

Produced By: D. Coe/ W. Coffey

Project: 9003.01.20



Source: Topographic Quadrangle obtained from ArcGIS Online Services/NGS-USGS TOPO/US Geological Survey (1999)
7.5-minute topographic quadrangle: Ridgefield
Address: Lake River Industrial Site
111 W. Division Street, Ridgefield, WA 98642
Section: 24 Township: 4N Range: 1W Of Willamette Meridian

Legend

▭ Former Pacific Wood Treating Site

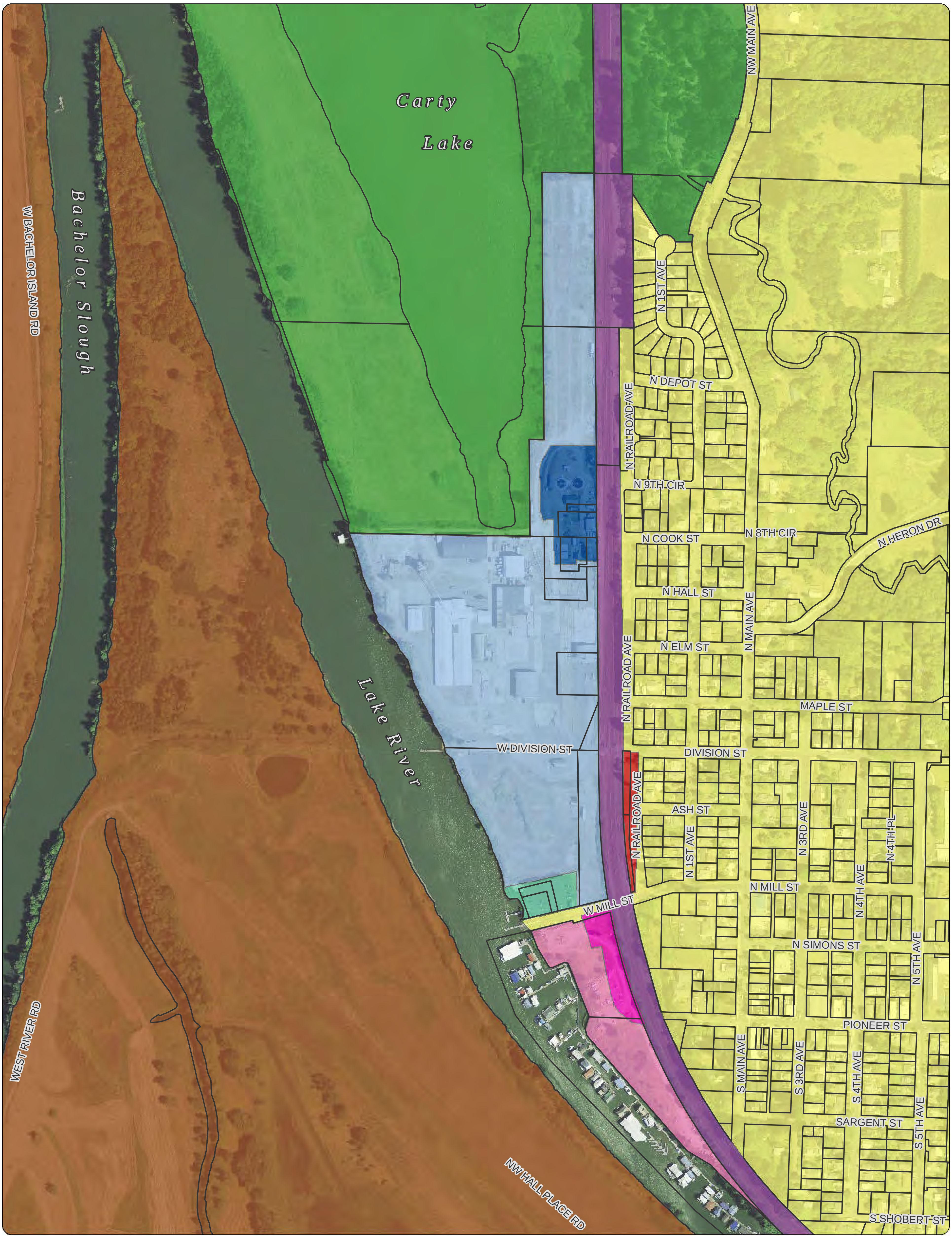
Figure ES-1
Site Location

Former PWT Site RI/FS
Ridgefield, Washington

0 1,000 2,000
Feet

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\FigES-2_Site Vicinity.mxd



Source: Aerial photograph obtained from Clark County (2007).

Notes:
1. LRIS = Lake River Industrial Site
2. RNWR = Ridgefield National Wildlife Refuge.
3. WWTP = Wastewater treatment plant
4. Port = Port of Ridgefield
5. BNSF = Burlington Northern Santa Fe

Legend

🟦 LRIS; Port-Owned
🟪 Proposed Overpass Property
🟥 Port Railroad Avenue Property
🟩 Port Marina Property
🟦 City of Ridgefield WWTP
🟪 McCuddy's Marina Property
🟨 Off-Property Uplands
🟩 RNWR-Carty Unit
🟫 RNWR-River S Unit
🟪 BNSF Railroad Property
☐ Clark County Tax Lots (2010)

Figure ES-2
Site Vicinity

Former PWT Site RI/FS
Ridgefield, Washington

0 225 450
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Print Date: 6/28/2013
Approved By: M. Novak
Produced By: J. Schane
Project: 9003.01.49

DRAWING

Drawing 1 - Sample Locations

Former PWT Site RI/FS
Ridgefield, Washington

MAUL FOSTER ALONGI

APPENDIX A

CERTIFICATION OF CLEAN CLOSURE FOR THE STEAM-ENHANCED REMEDIATION SYSTEM

From: Rankine, Craig (ECY) <cran461@ECY.WA.GOV>
Sent: Tuesday, February 19, 2013 4:34 PM
To: Alan Hughes
Subject: FW: SER Closure certification

As discussed.
Craig

From: Rankine, Craig (ECY)
Sent: Wednesday, October 17, 2012 9:29 AM
To: Steve Taylor
Cc: Laurie Olin
Subject: SER Closure certification

Steve,
Thank you for the Certification of Clean Closure for the SER in the letter dated October 16, 2012.
Ecology considers the SER officially closed with this certification.
Craig

Craig Rankine, RG, LHG
Dept. of Ecology, Toxics Cleanup Program
Vancouver Field Office
2108 Grand Blvd, Vancouver, 98661
(360) 690-4795

MAUL FOSTER ALONGI
400 East Mill Plain Blvd., Suite 400 | Vancouver, WA 98660 | 360 694 2691 | www.maulfoster.com

October 16, 2012
Project No. 9003.01.20

Craig D. Rankine, Project Manager
Washington State Department of Ecology
Vancouver Field Office
2108 Grand Blvd, MS: S-70
Vancouver, WA 98661-4622

Re: Certification of Clean Closure for the Steam Enhanced Remediation System at the Port of Ridgefield, Lake River Industrial Site
Agreed Order No. 01TCPSR-3119

Dear Craig:

On behalf of the Port of Ridgefield (the Port), Maul Foster and Alongi, Inc. (MFA) has prepared this Certification of Clean Closure for the Port's steam enhanced remediation (SER) system.

On June 20, 2012, the Port submitted the *Final Closure Plan – Port of Ridgefield Steam Enhanced Remediation System* (Final Closure Plan). This letter is intended to satisfy section 3.9 of the Final Closure Plan that requires an independent qualified registered professional engineer familiar with SER operation to certify clean closure.

The SER system was utilized from March 2004 until June 2011 to remediate soil and groundwater impacts resulting from wood treating operations at the former Pacific Wood Treating Site. Port personnel decommissioned and cleaned the SER system between October 2011 and May 2012.

CERTIFICATION STATEMENT

It is my professional opinion that the SER system has been closed in accordance with the Final Closure Plan. This opinion is based on my familiarity with SER operation developed over the last 12 years, observations during closure, a review of closure records, and discussions with Port staff.

Sincerely,

Maul Foster & Alongi, Inc.

34036
EXPIRES: 3/30/14

Steven P. Taylor, PE
Principal Engineer

MANAGEMENT STATEMENT

As a manager at the Port of Ridgefield, I have reviewed the Final Closure Plan, and the Certification of Closure and believe that the SER system has been closed in accordance with the Final Closure Plan.

Brent Grening
Chief Executive Officer

FINAL CLOSURE PLAN PORT OF RIDGEFIELD STEAM ENHANCED REMEDIATION SYSTEM

Prepared for the Port of Ridgefield, Ridgefield, Washington
Prepared by Karl Jolin, P.E. Port of Ridgefield
and
Craig Rankine, RG, LHG, Department of Ecology
Report Date: June 20, 2012

FINAL CLOSURE PLAN
PORT OF RIDGEFIELD STEAM ENHANCED REMEDIATION SYSTEM

1.0 Introduction

This Closure Plan (Plan) is for clean closure of the Port of Ridgefield's (Port) steam-enhanced remediation (SER) system at the Port's Lake River Industrial Site (LRIS) in Ridgefield, Washington. The system is used to remove and treat free-phase wood treating compounds from the ground and groundwater at the former Pacific Wood Treating (PWT) Corporation. Closure of the system is required to prevent the release of dangerous materials contained by and within the system.

Except as noted herein this plan follows guidelines in the documents; *"Guidance for Clean Closure of Dangerous Waste Units and Facilities"* publication number 94-111, revised May 2005 and "*Closure Plan Template for Dangerous Waste Recyclers and Used Oil Processors*", publication number 05-04-006, May 2005. These documents were prepared by Washington State Department of Ecology (Ecology) Hazardous Waste and Toxics Reduction Program. This closure plan applies only to the well field piping and treatment plant process equipment. Other material such as below grade wells, dirt, concrete, asphalt or buildings are being decommissioned and demolished under Interim Actions required by Agreed Order 01TCPSR-3119 executed by the Ecology and the Port for work at the PWT site.

1.1 Facility Contact Information

- Laurie Olin, Director of Operations, 360-887-3873, lolin@portridgefield.org
- Craig Rankine, Ecology Site Manager/Hydrogeologist, 360-690-4795, cran461@ecy.wa.gov
- Karl Jolin, Project Manager, 360-772-2580, kjolin@portridgefield.org

The Port mailing address is PO Box 55, Ridgefield, WA 98642.
The site physical address is 111 West Division, Ridgefield, WA.

1.2 Facility description and information

The system consists of a well field containing steam injection wells, liquid and vapor extraction wells and connecting piping. The recovered liquid and vapor is routed through piping to the treatment plant. The SER process being used by the Port is based on steam flooding processes that have been used successfully in oil fields around the world. Essentially, steam is injected into the subsurface through a series of steam injection wells. As the heat is put in the ground, semi-volatile contaminants become volatile and are captured by vapor extraction wells; simultaneously, the viscosity of nonaqueous-phase liquids (NAPL) is lowered so that NAPL can be recovered through groundwater extraction wells.

Liquids are treated using heat exchangers, bulk oil/water separation, coagulation and flocculation, filtration and finally granular activated carbon (GAC). Vapors are treated using heat exchangers, bulk oil/liquid separators, dryers and finally GAC.

The Port has owned the property since September 27, 1943.

1.3 Facility History, Function, Location and Layout

For approximately 30 years, PWT treated wood on property owned by the Port. PWT used a variety of wood-treating chemicals, including creosote, pentachlorophenol (PCP), and water-borne solutions containing copper, chromium, and arsenic.

The SER system is located on paved and open bare flat ground covering approximately four acres at the former PWT industrial site (zone industrial) Port of Ridgefield. It has been in operation since March 3, 2004. The system is surrounded by open space and Port warehouse buildings. The facility arrangement and layout, including locations of the tent housing the SER treatment system and the adjacent well field, is shown on the attached Figure 1.

The dangerous waste identification number for the facility is WAD 009422411.

A summary of the waste, waste destinations (treatment facilities addresses) and treatment type can be seen on the attached Table POR SER Waste Removal. Treatment system flow diagram is provided on the attached Figure FS-1. NAPL is collected in T-11 tank and then transferred to T-6 before loading into a tank truck for shipment to be incinerated. Filtered sludge is removed from the filter press and stored in a shipping hopper until it can be scheduled for shipment to the landfill. Both vapor and liquid carbon is removed from their respective vessels under vacuum with dust collection and loaded into super sacks and are then shipped out for regeneration. Hazardous waste shipped from the treatment system goes out under waste code K-001 except liquid NAPL in tank T-6 which is listed as D-004, D-007, D-039, F-032, F-034, and F-035.

1.4 Product and Production Processes

NAPL contamination containing creosote, pentachlorophenol and copper chrome arsenate are removed from the subsurface strata via steam injection and subsequent vacuum extraction. There is a vapor system consisting of vacuum pumps, decant tanks and a vapor carbon system. The bulk of the contaminants in vapor end up on the carbon and are remove by steam stripping. The steam stripped contaminants are sent to a condenser then to a collection tank and then to a decant tank where they are separated from the condensed steam. The condensed steam is sent to the liquid system and the NAPL to the NAPL storage tank. The liquid system consists of a decant tank, equalization tank, chemical treatment tanks, clarifier, sludge tank, sand filters, liquid carbon vessels, clean water storage and chillers. The chillers cool the cleaned water prior to discharge to Lake River.

1.5 Dangerous Waste Management Units

The SER process consists of a single dangerous waste management unit. The sole purpose of this management unit is to remove aforementioned subsurface contamination, collect it, concentrate it and store liquid NAPL for incineration and filter press sludge for landfill disposal. An ancillary requirement necessitated by the treatment technology employed is to treat and purify a large volume of water that must be pumped from the ground in order to insure that ground water is not dispersed by the steam injection and thereby spread contamination.

1.6 Unit Description

The SER Process is comprised of a liquid and vapor system plus utilities that include compressed air, steam, electrical supply, cooling water and domestic water. Process equipment includes vessels, pumps, heat exchangers, sand filters, carbon adsorption vessels, instrumentation and miles of piping. Materials of construction are carbon steel with some fiberglass and a limited amount of plastic. Consult the attached figures and preceding descriptions for more details.

1.6.1 Maximum Waste Inventory

The NAPL tanks are capable of holding a total of 20,000 gallons and the maximum capacity for filter press sludge is 72,000 lbs.

2.0 Closure Performance Standard

The SER system will be closed in a manner that complies with the performance standard in WAC 173-303-610(2)(a) to achieve clean closure.
System removal:

- Will eliminate need for system maintenance.
- Will to the extent necessary protect human health and the environment and will control, minimize, or eliminate post-closure escape of dangerous waste or dangerous constituents.
- Will remove all waste and waste residues for proper disposal.
- Will remove tanks, containers, piping and other items used to recover and treat dangerous waste.

3.0 Closure Activities

Due to the unique circumstances of the overall system closure and to keep the upcoming site surface soil interim action work schedule intact, a number of the listed activities have been performed before the final version of this SER system Closure Plan was prepared.

3.1 Removal of Wastes and Waste Residues, Unit Parts, and Equipment, Piping and other Ancillary Equipment:

Once closure begins removal of wastes and waste residues will be accomplished by the following measures:

- Treatment of well field water and vapor extraction will cease.
- Because the entire well field was steamed again during the polish phase with a rental boiler there may be some equipment that will be difficult to steam that is obviously clean (as evidenced by lack of odor, etc.). In those particular cases and on a case by case basis if the evidence clearly indicates clean equipment it will be deemed clean.
- All of the well pumps will be removed from their respective wells. The pumps will be disassembled sufficient to be placed in a boiling water bath for decontamination. Pumps that can be salvaged will be rebuilt for sale or reuse elsewhere.

- Some pumps are stuck in their wells and in those cases the piping connections will be severed and the wells prepared for decommissioning.
- Cleanup will be conducted in phases, the well field first followed by the treatment system.
- The well field consists of six trunk systems, each will be cleaned separately; discharge water or condensate will be routed through the treatment system. It may be possible to make interconnections between some of the trunk systems and steam combinations. If this can be accomplished effectively some of the trunk systems will be steamed in tandem.
- The trunk systems have been color coded for easy identification in the field and on system figures and consist of the following: the outer well ring, the VT-1 liquid header, the VT-1 vapor header, the lower discharge lines from the QED air lift pumps, the upper discharge lines from the QED air lift pumps and finally the sucker tube header.
- Sludge removal is paramount and water movement through the system will be used where appropriate to move sludge through and from the well field and treatment system during cleaning.
- System flushing will be done first with City water at the combined rate of 40 gpm more or less introduced at the front of both the liquid and vapor systems T-18 and ET-1 (see system diagram on Figure 2).
- Cold city water will be processed for one week while all decant tanks and knock out pots are manually purged at least three times.
- After one week of flushing with cold city water, steam will be added to the city water producing hot water ≥ 100 °F at the front of both liquid and vapor systems. If it proves not to be practical to always maintain at least 100 F as near to it as possible will be maintained.
- Hot water will be processed for one week while simultaneously performing decant tank and knock out pot flushing multiple times during the week.
- Toward the end of the one week period of processing hot city water grab samples will be taken downstream of the major equipment in both the liquid and vapor systems for visual inspection. If oil sheens and noxious fumes are still in evidence more steam will be used to raise the water temperature to eliminate the oil sheens and noxious fumes. Grab samples will be used to assess time needed for hot water flushing.
- Flushing complete trunk sequences will be attempted to maximize cleaning effectiveness but due to system wear and corrosion adjustments will be needed on a case by case situation. Steam will be introduced into the liquid system piping and run backward through that piping towards each extraction well. A bridge will be installed between the liquid to the vapor piping lines bypassing the extraction wells. Discharge will be through the vapor system piping returning steam or condensate to the treatment system. Steam injection points and vapor removal points will be located such that all the piping and vessels including low points and dead ends (where practical) can be thoroughly purged with steam.

- A steam bath will be used for boiling small pipe pieces removed from trunk sections that are impractical to flow steam through. Vapors from the bath will be recovered and treated through the vacuum treatment system. Bath water can also be recovered and be treated through the liquid treatment system.
- The vapor removal points will be connected to the existing vapor system such that steam vented from the system being decontaminated is directed to the existing vapor treatment system. Thus this vented steam will be condensed and then scrubbed through the existing vapor carbon system. Therefore no contaminated steam used for decontamination will be vented directly to atmosphere. However, near completion of this operation the vapor system will be cleaned and at some point the carbon will be removed and the system will no longer function for contaminant removal. At that point only a diminimus amount of contaminants will remain and those contaminants will be steamed uncontrolled to atmosphere.
- Several steam headers with multiple valve connections will be installed within the process area in order to facilitate multiple purge steam connections throughout the process area. Conversely several vapor collection headers will be installed throughout the process area in order to facilitate directing the contaminated purge steam to the vapor treatment system. Liquid will collect in the existing vessels in both the liquid and the vapor systems and pumps associated with those vessels will be used to send the collected liquid to the liquid treatment system. Steam hoses will be used to route steam injection to the various steam injection points at upstream piping and inlets to vessels. Chemical resistant hoses will be used to route contaminated steam from downstream piping runs and vents from tanks to the vapor collection headers.
- The endeavor will be to steam the entire contaminated portion of the well field both liquid and vapor as a unit and in both directions (toward the inlet of the vapor and liquid systems and backwards into the injection and extraction wells). It will not be practical to steam the entire well field simultaneously. Several separate steaming operations will be necessary in order to accomplish this. Once the well field steaming is complete the entire decontaminated portion of the well field will either be blinded from or physically disconnected from the rest of the treatment system.
- Once the well field has been decontaminated and isolated from the rest of the system demobilization will begin.
- It should be noted that not only in the well field but also throughout the process the non contaminated utility piping (air, city water, etc.) will not be decontaminated simply because it has never been contaminated.
- The well field and the process will be steamed separately as two independent projects. The well field will be done first and then the process. Once the well field is done steaming multiple connections throughout the well field will be opened up. Flex-hoses will be removed and multiple flanges will be separated. The well field will then be examined as a unit. If there is no evidence of contamination in any of

these multiple connections then the well field will be deemed clean as a unit and the on-site crew will be tasked with disassembly.

- The liquid treatment system will be steamed from upstream to downstream until all of the liquid system prior to the media beds (sand & carbon) has been cleaned. Multiple steam injection points and multiple vapor collection points will be utilized as previously described above.
- Steam will be introduced simultaneously to the vapor system while the liquid system is being steamed (because the vapor system will be removing the steam introduced into the liquid system) such that contaminants are simultaneously removed from both the liquid and vapor systems. Knock out pots and decant tanks will be purged in both systems while this is going on. During this time period the treatment system may at times be operated on a batch basis due to insufficient water flow to operate continuously. Some days the system may be operated continuously and other days or at least part of days it may be down.
- Once both liquid and vapor systems are judged to be predominantly cleaned by assessing clarity of condensed steam in both systems a shutdown will be taken.
- Prior to shutdown samples of condensed steam (the only source of water for the liquid treatment system) will be sampled for compliance with the NPDES discharge permit. Sampling and analytical will be somewhat flexible: for example if grab samples have no odor indicating very clean condensate no analytical will be deemed necessary. But on the other hand if odors indicate the need for analytical work it may be done or the steaming continued until absence of odors indicate clean equipment.
- The purpose of the shutdown will be to open up the media beds (sand and carbon) for media removal. All media will be shipped out as K-001 hazardous waste.
- All media beds will be steamed thoroughly for multiple days with media intact. Once the media bed steaming has been completed the vessels will be opened up. If the vessel and the media look clean and smell clean both the media and the vessel will be deemed clean. All interconnecting piping on the media beds will be steamed individually. Steam will be directed to the vapor system.
- Once the media has been removed from the media beds the liquid treatment system will no longer function as designed and condensed steam sent to the liquid treatment system will have to be sampled for NPDES compliance prior to discharge to the river. In this manner cleanliness of the entire system will be judged.
- Once sampling confirms NPDES compliance with all sources of condensed steam (both vapor system and liquid system) the vapor system will also be shut down for carbon removal. Both carbon systems (vent control system and process system) will be opened up and carbon removed. All media will be shipped out as K-001 hazardous waste.

- Once the vapor carbon vessels are empty the secondary vapor carbon units will be shutdown and opened up for carbon removal.
- Upon secondary carbon removal the carbon will be shipped out as K-001 waste as well.
- Once the secondary vapor carbon units are emptied the entire POR SER treatment system will have been decontaminated.
- Any further decontamination will be conducted on individual pieces of equipment that fail inspection as noted during the deconstruction phase of the closure. Every attempt will be made to clean equipment before the treatment system is off-line.
- At this point the treatment system will no longer be functional and steaming or hot water boiling operations will be on equipment that cannot be judged to meet the "clean debris surface" criteria. A small amount of contaminants will go direct to atmosphere should this become necessary. However, since the entire system has been systematically cleaned any contaminants thus released should be of a 'de-minimus' quantity. In the very unlikely event that heavy contamination is encountered, as a alternate, disposal as a hazardous waste will be used as appropriate.
- Once all the equipment and piping is decontaminated the crew will commence disassembly more or less from the front of the system to the rear.
- All equipment that can be removed by hand, hand truck or forklift will be tackled first.
- Once all the equipment that can be removed in this manner is gone crane and custom heavy equipment contractors will be scheduled for the remainder of the equipment. As an alternative the deconstruction could be turned over to a qualified demolition contractor.
- Equipment and piping to be scrapped will go to the dumpsters and metal recycling bins as appropriate.
- Equipment to be sold or reused will be staged accordingly and appropriate used equipment vendors will be invited to bid on the equipment as appropriate.
- The process tent structure will be taken down by a contractor familiar with such operations. However, prior to taking it down various vendors who might be interested in purchasing this structure will be invited in to bid on it while it is still standing.
- Once all the treatment system equipment has been decontaminated and inspected to verify a clean debris surface closure of the treatment system will have been deemed complete.

3.2 Unit Inspection Prior to Decontamination

One of the recommendations in section 5.7 of the Guidance for Clean Closure is: "Waste removal and visual inspection must be completed before tank decontamination begins". We will have no problem with waste removal prior to decontamination. However, in order to enter these vessels while still contaminated will require self contained breathing apparatus (SCBA), permit required vessel entry (necessitating an outside contractor with retrieval device) thus representing a very onerous and time consuming task. The purpose of the internal inspection is to look for cracks and anything that might lead to a spill during decontamination. However, with the contamination still staining the walls cracks are not likely to be visible, the vessels are in secondary containment anyway, we regularly perform metal thickness checks to anticipate leaks and there just is not any good reason, therefore, to perform these inspections prior to decontamination. Additionally the vessels are externally inspected multiple times each shift. In the past, for vessels that have entered have first decontaminated and isolated it from the process such that a non-permit required vessel entry can be performed. Previously, in those rare cases where decontamination could not reasonably be performed, it has taken several weeks of prior preparation to meet all the requirements of a permit required vessel entry. Those requirements, include; a certified vessel emergency rescue supervisor (with documented yearly training), hazardous waste operations emergency response (HAZWOPER) trained crew (with documented yearly training), a certified rescue retrieval system, and full time atmospheric monitoring of the atmosphere in the vessel. There are very few contractors who possess these capabilities and lead times to schedule their services can be long. We strongly believe that the existing secondary containment, prior vessel wall thickness checks and shift by shift external vessel inspections **meet** the substantive requirements of section 5.7 regarding visual inspection prior to decontamination. Therefore, a variance is respectfully requested in order to avoid risky, time consuming and onerous internal inspections prior to decontamination. Additionally there are a number of vessels full of media (sand filters, carbon beds). We want these vessels operational with media during the decontamination operation and emptying them for inspection prior to decontamination precludes their operational use unless they were refilled with fresh media prior to the decontamination operation.

Complete vessel inspections after decontamination and prior to dismantling will be made. After decontamination, though, since the possibility of any hazardous atmosphere has been eliminated a non-permit required vessel entry can be performed. Any further spot cleaning required

3.3 Decontamination

That has been covered in section 3.1.

3.4 Identifying and Managing Contaminated Environmental Media

The extent of environmental media, soil and groundwater is under investigation through the Remedial Investigation and Feasibility Study (RI/FS) process required by the Agreed Order with Ecology. Ecology is presently reviewing RI/FS documentation and Interim Action Work Plans for cleanup or removal of contaminated environmental media at the site, including in the SER area.

3.5 Confirming Clean Closure

Confirming clean closure of the entire SER system applies to decontamination of metal tanks, tank systems, ancillary equipment, pumps and piping. Per Section 5.7 of the Guidance for Clean Closure.

Two options are allowed for decontaminating this sort of equipment:

- Meet the operating and performance standards associated with the Alternative Treatment Standards for Hazardous Debris appropriate to metal tanks and tank systems or,
- Propose a site specific decontamination method.

The Alternative Treatment Standards for Hazardous Debris (first option) includes high pressure steam and water sprays and steam boiling (physical extraction) as options for decontamination. The POR SER process has successfully employed these techniques since the beginning of the project for decontamination. Over the life of the project many tons of equipment and piping have been decontaminated and sent to metal recyclers or land filled after utilizing this method. All the crew has substantial prior experience utilizing this method and it has consistently achieved outstanding results (clean equipment and piping). Therefore high pressure steam and water spray and steam boiling are the chosen decontamination methods for the entire process.

3.6 Sampling and Analysis Plan and Constituents to be Analyzed

This section does not apply as the purpose of building the SER process was to perform fully contained clean-up of environmental media. The process has been operated release free for nearly eight years. It is expected that the system can be decontaminated without leading to the release of contamination. Therefore this section will not be addressed herein.

3.7 Closure Activity Manager

Karl Jolin is the qualified registered professional chemical engineer who constructed the working SER system as well as managed the operation the SER for eight years and has written or reviewed this plan will also be in charge of the closure activity.

3.8 Role of Independent Qualified Registered Professional Engineer

An independent qualified registered professional engineer, who has familiarity with SER operation, will be engaged to observe and verify the current status of the closure, to review records of the closure activities to date, to interview SER operations staff and other participants, and to field observe any remaining closure efforts.

3.9 Certification of Clean Closure

On completion of the closure activities, the POR will submit to Ecology a closure report certifying that the SER has been closed in accordance with the Closure Plan. The closure certification will be signed by POR management, and signed and stamped by the independent qualified registered professional engineer engaged under Section 3.8.

4.0 Conditions That Will Be Achieved When Closure is Complete

When closure is complete, Port staff will have completely removed the SER system. All waste and all unit parts, associated equipment and piping will be removed and properly prepared for sale or offsite disposal.

5.0 Closure Schedule

Closure is expected to take approximately six months from the start date on October, 24, 2011.

6.0 Closure Cost Estimate

A monthly expenditure of $250,000 includes, labor, material and outside contractors for the duration of closure. However, the duration of closure is in question given the challenges inherent with a custom one of a kind operation.

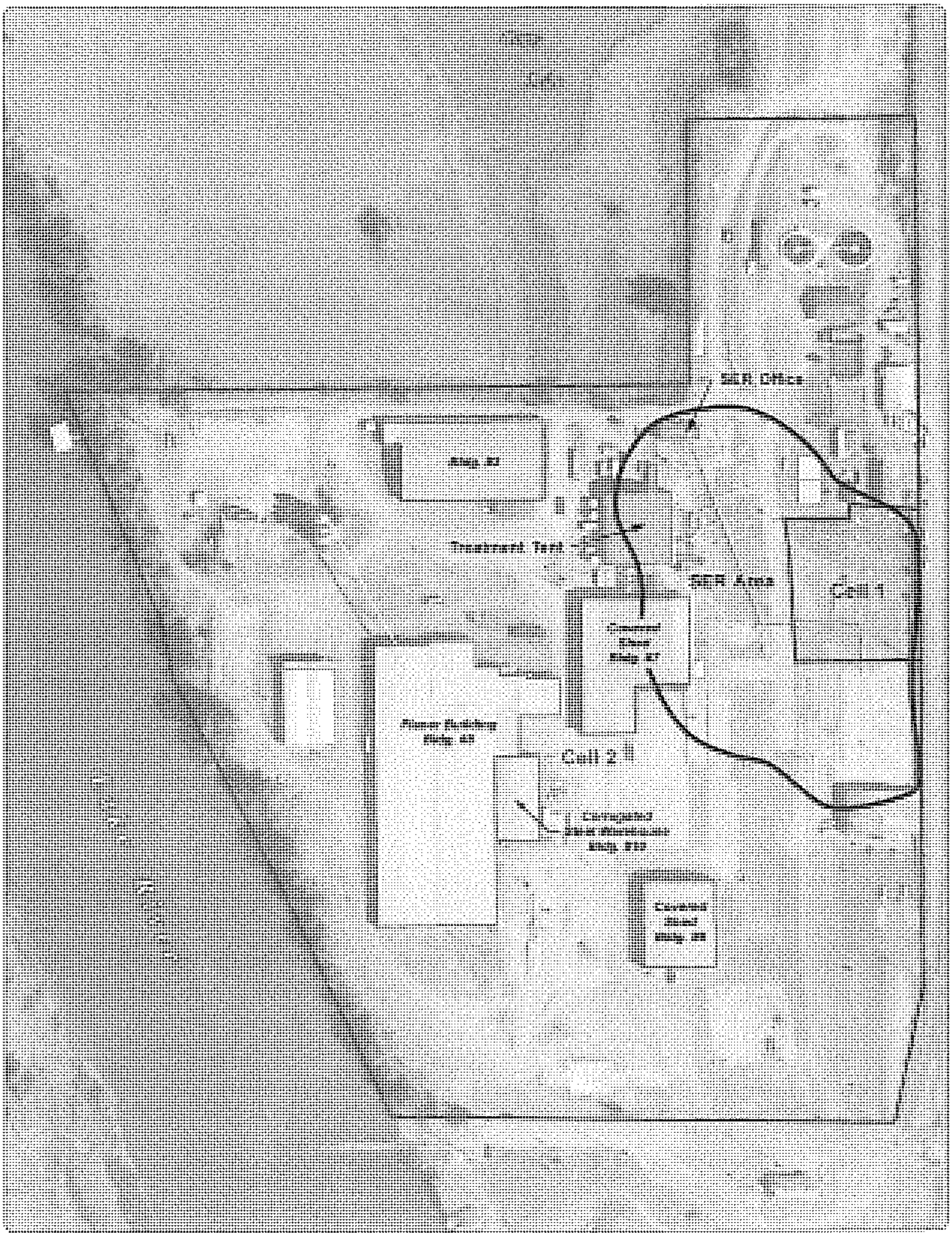
6.1 Financial Assurance for Closure

SER system was installed and operated and will be closed using funds provided by Ecology through Model Toxics Control Act grants and loans to the Port. A total of approximately $65 million has been granted and loaned to the Port. A grant and loan in the amount of $10 million was awarded to the Port for the 2012 – 2013 biennium from which SER closure will be conducted.

7.0 Figure, Drawing and Table

A figure, a drawing and a table are included as follows:

- Figure 1 Site Plan
- Drawing POR SER Flow Sheet Phase II System
- Table POR SER Waste Removal



Source: Aerial photograph obtained from
Clark County GIS Department (August 2007)

Notes:
SER = Stream Enhanced Remediation

Figure 1
Site Plan

Port of Ridgefield
Ridgefield, Washington

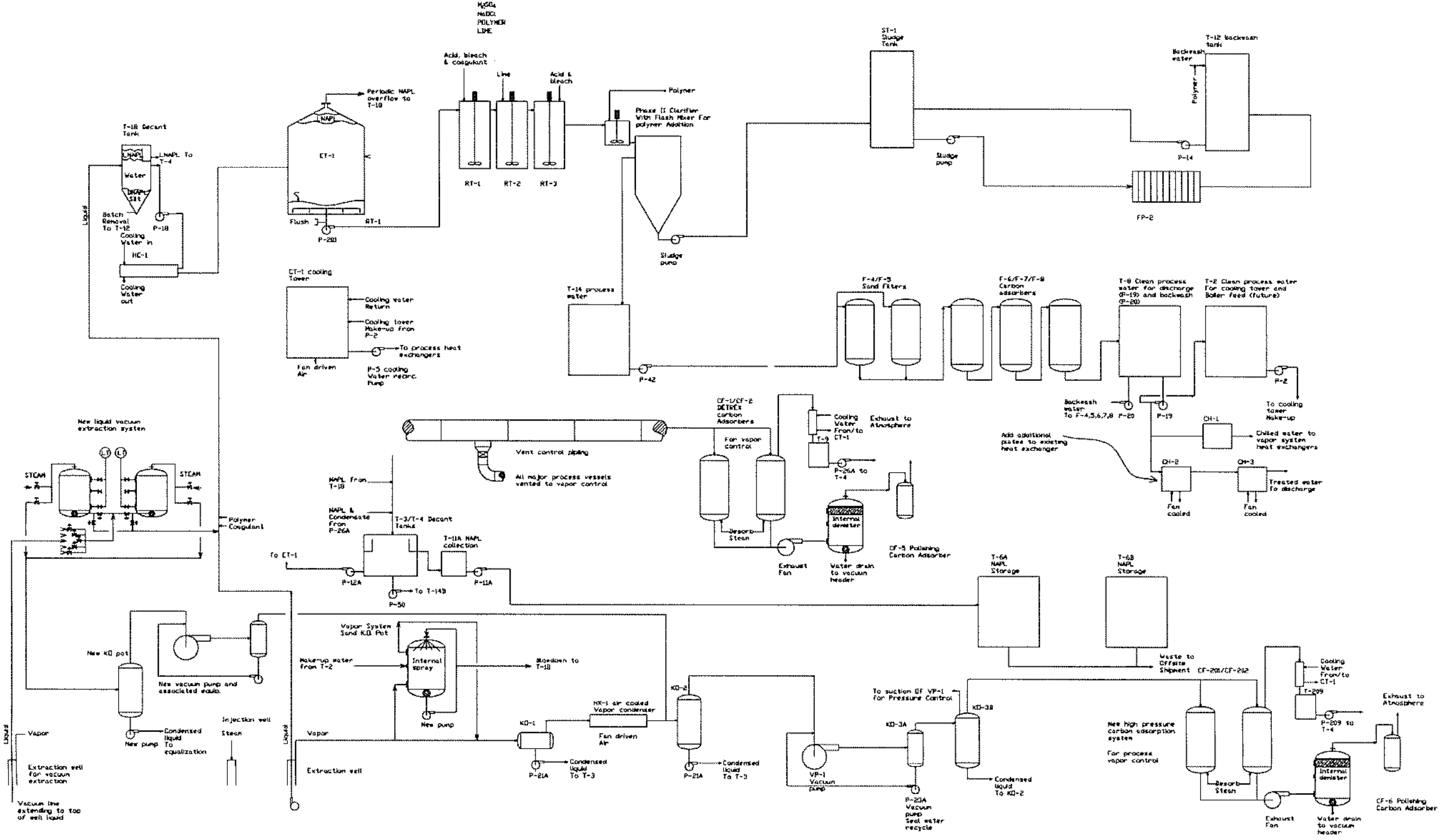
Legend

▭	Building
▨	SER System
☐	Cell Boundaries

0 100 200
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

PDR SER FLOWSHEET
Phase II System



BY: KNJ 11/07

POR SER Waste Removal

Waste	Destination	Treatment
Vapor Carbon (VC-1/VC-2)	Envirogreen Technologies Ltd. LELA Lot 401 Similico Mine Site Princeton, B.C. Canada	Recuperative thermal reactor disorption. Clean soils are recycled exclusively for mine reclamation.
Liquid Carbon (F-6,7,8)	Envirogreen Technologies Ltd. LELA Lot 401 Similico Mine Site Princeton, B.C. Canada	Recuperative thermal reactor disorption. Clean soils are recycled exclusively for mine reclamation.
Multi-Media (F-4 and 5)	Envirogreen Technologies Ltd. LELA Lot 401 Similico Mine Site Princeton, B.C. Canada	Recuperative thermal reactor disorption. Clean soils are recycled exclusively for mine reclamation.
L-NAPL (T-6's)	Clean Harbors Aragonite LLC Grantsville,UT	Incinerated for energy recovery.
Solid waste (filtered sludge)	Chem Waste MGMT of Northwest Arlington, OR (Contracted through PSC)	Biologically treated and then landfilled.
Solid waste (waste wrangler boxes for ppe, tubing, absorbant pads, etc.)	Burlington Environmental, INC Kent, WA Facility (Contracted through PSC)	Macroencapsulation (procedure initiated in Kent then shipped to facility in Idaho.)

Address of treatment Facilities

Burlington Environmental, INC 20245 77th Ave. South Kent,WA 98032	Chem Waste Mgmt of Northwest 17629 Cedar Springs Lane Arlington, OR 97812	Clean Harbors Arogonite LLC. 11600 North Aptus Road Grantsville, UT 84029	Envirogreen Technologies Ltd. LELA Lot 401 Similico Mine Site Princeton, B.C. Canada

APPENDIX B

FORMER PWT SITE TERRESTRIAL ECOLOGICAL EVALUATIONS

APPENDIX B FORMER PWT SITE TERRESTRIAL ECOLOGICAL EVALUATIONS

CONTENTS

This appendix consists of the Upland Off-Property Terrestrial Ecological Evaluation (TEE) (Appendix B-1), the Supplemental TEE Evaluation for the Off-Property (Appendix B-2), and the LRIS Terrestrial Ecological Evaluation (Appendix B-3).

The Upland Off-Property TEE was first submitted to the Washington State Department of Ecology (Ecology) on January 23, 2012 and was included in the Draft RI/FS. In response to Ecology's comments, a Final Off-Property TEE was submitted on July 3, 2012, and was approved by Ecology on July 31, 2012.

The Final Off-Property TEE recommended additional sampling which was completed in September 20, 2012, with results presented in the January 15, 2013 Supplemental TEE Evaluation for the Off-Property. The Supplemental Evaluation presents additional dioxin data collected and, all previous dioxin data relevant to the TEE has been updated to ensure consistent treatment of interferences and non-detects during data qualification (see Appendix F). Updated dioxin and furan TEQs are calculated according to the methodology developed in coordination with Ecology; the methodology is described in the Final Off-Property TEE. Therefore, the Supplemental Evaluation contains the complete, updated dioxin dataset and the most recent evaluation of potential risk to ecological receptors in the off-property area. The Supplemental Evaluation was approved by Ecology on February 22, 2013.

The LRIS Terrestrial Ecological Evaluation was submitted to Ecology on April 13, 2010 and approved by Ecology on June 30, 2010. This TEE is presented exactly as it was submitted to Ecology with the exception of Table 1 "Soil Analytical Results" in which the dioxin toxicity equivalent (TEQ) data has been removed. Instead, the supplemental Table in Appendix B-3 presents the updated dioxin TEQ data and updated notes page, which fully explains all abbreviations and qualifiers in the tables. The dioxin data has been updated to ensure consistent treatment of interferences and non-detects during data qualification and calculation of TEQs. Updated TEQs are calculated according to the methodology developed in coordination with Ecology and are described in Appendix F.

As presented in the original Table 1, the TEQs in the supplemental Table are also compared to the Model Toxics Control Act (MTCA) Wildlife Ecological Indicator Concentration calculated by Malcolm Pirnie in 2007 (182 ng/kg). In all cases the original and updated TEQs either both exceed or both do not exceed the ecological screening criteria. Therefore, updating the dioxin TEQ calculation method does not change the interpretation of the dioxin data presented in the original report.

B-1 FINAL TERRESTRIAL ECOLOGICAL EVALUATION FOR THE OFF-PROPERTY

TABLES

FIGURES

ATTACHMENTS

B-2 SUPPLEMENTAL TERRESTRIAL ECOLOGICAL EVALUATION FOR THE OFF-PROPERTY

TABLES

FIGURE

ATTACHMENTS

TABLES

SUPPLEMENTAL TABLE

ATTACHMENTS

APPENDIX B-1

FINAL TERRESTRIAL ECOLOGICAL EVALUATION FOR THE OFF-PROPERTY

MAUL FOSTER ALONGI
400 East Mill Plain Blvd., Suite 400 | Vancouver, WA 98660 | 360 694 2691 | www.maulfoster.com

July 3, 2012
Project No. 9003.01.39

Mr. Craig Rankine
Washington State Department of Ecology
2108 Grand Boulevard, MS: S-70
Vancouver, Washington 98661-462

Re: Final Terrestrial Ecological Evaluation for the Off-Property Former Pacific Wood Co. Treating Site Agreed Order No. 01TCPSR-3119

Dear Mr. Rankine:

On behalf of the Port of Ridgefield (Port), Maul Foster & Alongi, Inc. (MFA) has prepared this final terrestrial ecological evaluation (TEE) for the off-property area located adjacent to the Port's Lake River Industrial Site (LRIS) at 111 West Division Street in Ridgefield, Washington. Historical operations of Pacific Wood Treating Company (PWT) on the LRIS resulted in wood-treating chemical impacts to soil and groundwater. Remedial investigations and feasibility studies (RI/FSs) are being conducted to evaluate and manage site-related chemical impacts to soil and groundwater. The RI/FSs will be completed consistent with the requirements of the Model Toxics Control Act (MTCA) and the Agreed Order No. 01TCPSR-3119 between the Washington State Department of Ecology (Ecology) and the Port. TEEs for the LRIS property (MFA, 2010b) and for soil north of Cell 4 in the Ridgefield National Wildlife Refuge (MFA, 2010e) were submitted to and approved by Ecology (Ecology, 2010a,b). In a verbal communication to MFA on September 26, 2010, Ecology requested that a TEE be completed to evaluate surface soils for the off-property areas just to the east and south of the LRIS (see Figure 1). In response, MFA submitted an off-property TEE on January 23, 2012. In a subsequent series of communications, MFA and Ecology refined the approach to developing appropriate cleanup levels. This letter updates the previous TEE to reflect that approach.

In coordination with Ecology, the Port has conducted sampling of upland off-property areas adjacent to the LRIS (see Figure 1). Off-property sampling was conducted in July 2008; February 2009; June, August, and September, 2010; and May 2011. Wood-treating chemicals, including metals (arsenic, chromium, copper, and zinc), pentachlorophenol, and polycyclic aromatic hydrocarbons (PAHs), were analyzed in off-property soil samples along with dioxin (dibenzo-p-dioxin) and furan (dibenzofuran) compounds. In these off-property areas, no wood-treating chemicals have been detected above applicable cleanup levels. Results were previously submitted (MFA, 2010a,c,d; 2011).

This letter presents a site-specific TEE for the off-property area, following the procedures outlined in Washington Administrative Code (WAC) 173-340-7490 and WAC 173-340-7493. The purpose of this TEE is to present sufficient information to evaluate the surface soil data with respect to ecological screening values (see WAC 173-340-7490(1)(b)). This letter report for the off-property TEE presents:

- A summary of the off-property surface soil data
- An ecological exposure assessment for the off-property soil east and south of the LRIS
- Derivation of ecological indicator concentrations (EICs) for dioxins and furans in soil
- Ecological screening of chemicals analyzed in soil

PROBLEM FORMULATION

Exposure pathways and points and chemicals of ecological concern (CECs) are identified to define the focus of the TEE as follows:

Exposure Pathways: Currently, the off-property area just east of the LRIS includes the Port-owned Railroad Avenue property and residential properties. The properties south of the LRIS are marina properties and include the parking and landscaped areas for the Port-owned and privately owned McCuddy's marina properties. Figure 2 displays the zoning designations for the off-property areas. These areas do not provide important ecological habitat. While it is possible for wildlife to visit the off-property areas, potential exposures to impacted soil are expected to be minimal because there is substantial human disturbance and development and no important resources for wildlife. The exposure routes assessed for this off-property TEE include ingestion of soil and of dioxins in consumed plant material or prey.

Exposure Points: The exposure point evaluated for this off-property TEE includes the area east and south of the LRIS and is defined by the soil point of compliance of 0 to 15 feet below ground surface (bgs) as stated in WAC 173-340-7490 (4)(b). However, all samples collected in the off-property area are representative of surface soil (0 to 0.5 foot bgs) concentrations.

CECs: CECs are identified by comparing off-property soil concentrations to EICs. EICs are from WAC 173-340-900 Table 749-3, except for zinc and dioxins and furans (derivation of zinc and dioxin and furan EICs are described further below). Tables 1, 2, and 3 summarize concentrations in soil for metals, pentachlorophenol and PAHs, and dioxins and furans, respectively. For metals, off-property soil concentrations are also compared with default natural background soil metals concentrations for Clark County (Ecology, 1994). Only concentrations of zinc and dioxins and furans exceeded EICs. Exceedances are described further below:

> Zinc concentrations exceeded the EIC for plants of 160 milligrams per kilogram (mg/kg)[1] in one of 13 samples at sample location SS-37 (see Table 1).

---

[1] The EIC for zinc is based on a literature survey conducted by MFA consistent with MTCA requirements, submitted on May 30, 2012, and accepted by Ecology via electronic mail on June 15, 2012. See Attachment 1.

Zinc concentrations do not appear to result in adverse effects to plants. Plant life in the area appears abundant and unaffected by chemical impacts. Further, the off-site area complies with MTCA criteria identified in 173-340-740 as follows:

- The 95 percent upper confidence limit on the mean is 121, which is less than the EIC of 160 mg/kg (see Attachment 2 for statistics).
- No single sample concentration is greater than two times the soil cleanup level.
- No more than ten percent of the sample concentrations exceeds the soil cleanup level.

In addition, all sample concentrations are well below the soil biota and wildlife EICs. Therefore, zinc is not selected as a CEC.

- As shown in Table 2, pentachlorophenol and PAHs do not exceed screening levels for ecological receptors. Therefore, these constituents are not selected as CECs for the off-property.
- For dioxins, Table 749-3 presents indicator concentrations only for wildlife and not for plants or soil biota; therefore, this off-property TEE assessed only exposures of wildlife to dioxins in off-property soils. The Table 749-3 EIC for total dioxins and total furans is 2 nanograms per kilogram (ng/kg). This EIC has remained unchanged since at least 2003, and does not reflect recent updates in how Ecology evaluates the toxicity of dioxin and dioxin-like compounds (Ecology, 2007a,b; U.S. Environmental Protection Agency [USEPA], 2008; Van den Berg et al., 2006). In addition, the Table 749-3 EIC is also below Ecology's estimated natural background concentrations for Washington soils. Furthermore, Ecology recognizes that MTCA does not appear to be specific on methodology for dioxins and furans in terms of ecological risk and that an updated method for calculation of dioxin and furan EICs is needed. Ecology and MFA developed a method for developing dioxin and furan EICs appropriate for the PWT site; the method for developing EICs and evaluating dioxin and furan risk to ecological receptors is discussed below.

Ecological Indicator Concentrations for Dioxins and Furans

Ecology is in the process of formulating methodology as part of the forthcoming Terrestrial Ecological Evaluation Technical Assistance document. The process for developing EICs for dioxins and furans for ecological risk assessment is different from the approach used for calculating cleanup levels for human health risk assessment. Ecological risk assessment treats dioxins as one chemical mixture and furans as another, whereas human health risk assessment (in MTCA) treats dioxins and furans as one combined chemical mixture.

For ecological risk assessment, the sum of the toxic equivalency factor (TEF) for the seven dioxin congeners (commonly referred to as the toxicity equivalency quotient, i.e., TEQ) is compared to the calculated EIC for the dioxin sentinel congener. Similarly, the TEQ for the ten furan congeners is compared to the calculated EIC of the furan sentinel congener. The sentinel congener for each group is the congener with the highest TEF (equal to 1) against which the relative toxicity of other congeners within each group is measured. For dioxins, both 1,2,3,7,8-pentochloro dibenzo-p-dioxin and 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) have mammal-based TEF values equal to 1. For furans, both 2,3,7,8-tetrachlorodibenzofuran (2,3,7,8-TCDF) and 2,3,4,7,8-pentachloro dibenzofuran have avian-based TEF values equal to 1. However, use of 2,3,7,8-TCDD in calculations is preferable, given that it has been best studied and has associated toxicity and bioaccumulation values readily available in literature. For the same reason, use of 2,3,7,8-TCDF in calculating furan-associated risk is most reliable. A description of the derivation of dioxin and furan EICs follows.

Table 749-4 (Attachment 3) presents the MTCA wildlife exposure model to be used for site-specific evaluations, with default dioxin- and furan-specific parameters noted in Table 749-5 (see Attachment 4). The following equations are applied to evaluate risk to three receptors (shrew [*Sorex*], robin [*Turdus migratorius*], and vole [*Microtus*]) that act as surrogate receptors for mammalian predators, avian predators, and mammalian herbivores, respectively:

(1) Mammalian predator:

$$SC_{MP} = (T_{Shrew})/[(FIR_{Shrew,DW} \text{ x } P_{SB(Shrew)} \text{ x } BAF_{Worm}) + (SIR_{Shrew,DW} \text{ x } RGAF_{Soil,Shrew})]$$

(2) Avian predator:

$$SC_{AP} = (T_{Robin})/[(FIR_{Robin,DW} \text{ x } P_{SB(Robin)} \text{ x } BAF_{Worm}) + (SIR_{Robin,DW} \text{ x } RGAF_{Soil,Robin})]$$

(3) Mammalian herbivore:

$$SC_{MH} = (T_{Vole})/[(FIR_{Vole,DW} \text{ x } P_{Plant,Vole} \text{ x } K_{Plant}) + (SIR_{Vole,DW} \text{ x } RGAF_{Soil,Vole})]$$

Briefly, SC represents soil concentrations protective of wildlife (EICs), T represents toxicity reference values (or TRVs), FIR represents food ingestion rate, P is proportion of contaminated food in diet, BAF is the earthworm bioaccumulation factor, SIR is soil ingestion rate, RGAF is the gut adsorption factor for a hazardous substance in soil expressed relative to the gut adsorption factor for the hazardous substance in food, and K_{Plant} is the plant uptake coefficient. Units and default values are presented in Table 749-4 (Attachment 3). As specified in Table 749-4, the lowest of the three SC values calculated is to be used as the EIC for a site-specific evaluation.

MTCA (WAC 173-340, Sections 7490 to 7494) uses K_{Plant} and soil to earthworm BAFs in the wildlife exposure model to estimate the concentration of a hazardous substance expected to be present in biota, given a measured concentration in the soil. The site-specific wildlife exposure model presented here varies K_{Plant} and BAFs to calculate EICs (SC); all other parameters are MTCA defaults.

Plant Uptake Coefficients: In general, chemicals that migrate from subsurface soil into aboveground plant structures (e.g., leaves) first dissolve from soil into soil pore water, and are then taken up by roots (McKone and Maddalena, 2007). They can be transported from roots to leaves in the dissolved phase through either transpiration or translocation. Plant uptake of chemicals from soil is determined by numerous factors such as the species of plant, soil type, pH in soil, organic carbon content of soil, temperature, and nutrient levels. Organic compounds with high molecular weights (e.g., dioxins) are relatively insoluble and plant uptake of these chemicals is low (McKone and Maddalena, 2007; Travis and Arms, 1988).

K_{Plant} for aboveground plant parts is typically defined as the ratio of the chemical concentration in the plant over the concentration in soil (expressed as dry weight). Travis and Arms (1988) found that a K_{Plant} was associated with the logarithm of the octanol-water partition coefficient (log K_{ow}) for a chemical. The K_{ow} is a measure of chemical solubility. The following equation can therefore be used to estimate a conservative K_{Plant} for organic chemicals (Travis and Arms, 1988):

$$\mathrm{Log}K_{Plant} = 1.588 - 0.578\log K_{ow}$$

MTCA uses the equation based on Travis and Arms (1988) to model uptake of organic chemicals into plants (Table 749-5; see Attachment 4), and this equation was applied for 2,3,7,8-TCDD to determine mammalian herbivore EICs for dioxins. Mammalian herbivore EICs were not calculated for furans, and a furan mammalian herbivore TRV currently is not provided in MTCA (Attachment 4). Log K_{ow} values were sourced from the USEPA (2003); the minimum values reported were used in equations, as these result in the most protective EICs (see Table 4).

Soil to Earthworm Bioaccumulation Factors: Soil to earthworm BAFs are typically defined as the ratio of the chemical concentration in the earthworm over the concentration in soil (expressed as dry weight). MTCA uses a soil to earthworm BAF value of 48 (dry weight basis) for both dioxin and furan congeners; the basis and source of this value are not identified in Table 749-5 (Attachment 4). The USEPA (1999) presented a recommended 2,3,7,8-TCDD soil to soil invertebrate BAF of 1.59 (wet weight basis). Soil to soil invertebrate BAFs expressed on a wet weight tissue concentration basis can be converted to a dry weight tissue concentration basis, using an assumed water content of 84 percent for earthworms (USEPA, 1993). Converted to a dry weight basis, the recommended 2,3,7,8-TCDD BAF is 9.94.

The recommended 2,3,7,8-TCDD BAF is within the range of BAFs presented in other studies. Sample et al. (1998) evaluated literature-derived soil to earthworm BAFs for 2,3,7,8-TCDD and presented a mean BAF of 11.7 (dry-weight basis) and a 90th percentile BAF of

22.2 (dry-weight basis). At the Rayonier site in western Washington, colocated soil and earthworm samples were analyzed to determine a BAF of 0.361 (dry weight basis) for 2,3,7,8-TCDD, showing relatively low bioaccumulation potential (Malcolm Pirnie, 2007).

To ensure consistency with derivation of the 2,3,7,8-TCDD BAF, the 2,3,7,8-TCDF BAF was calculated based on the USEPA (1999) reported value (1.27 as measured on a wet weight basis). The resulting recommended 2,3,7,8-TCDF BAF is 7.94 (dry weight tissue basis).

TRVs: 2,3,7,8-TCDD TRVs are provided in MTCA for both mammalian and avian receptors, and dioxin EICs were calculated for all receptor surrogates. For 2,3,7,8-TCDF, only an avian receptor TRV is provided. Thus the furan EIC was calculated only for the avian surrogate. The furan EIC is expected to be protective of other receptor types, given that furan toxicity is known to impact birds most significantly (USEPA, 2008).

For a summary of all calculated EICs see Table 4. Multiple MTCA default parameters (e.g. ingestion proportions/rates and TRVs) used in calculations are protective of the conservative end of the species exposure distribution. For example, the proportion of contaminated food for mammalian herbivore receptors is assumed to be 100% and all TRVs are based on lowest observable effects levels. Given multiple layers of conservatism inherent to the EIC model, calculated EICs may therefore be overly conservative. In addition, the following selected EICs are the lowest and therefore the most protective of all calculated EICs. The selected 2,3,7,8-TCDD EIC is 9.8 ng/kg for dioxins (based on the shrew surrogate receptor for mammalian predators) and the selected 2,3,7,8-TCDF EIC is 11.4 ng/kg (based on the robin surrogate receptor for avian predators).

Dioxin and Furan Screening

For the purposes of this screening evaluation, all soil data collected throughout the off-property area for dioxins and furans were included. The sum of the TEF applied to the seven dioxin congeners (dioxin TEQ) is compared to the calculated EIC. Similarly, the furan TEQ for the ten furan congeners was calculated and compared to the calculated EIC. To be consistent with the receptor of question, mammalian TEFs were applied for dioxin screening, whereas avian TEFs were applied for the furan screening (Van den Berg et al., 2006).

Table 5 presents the results of the ecological screening evaluation. Data were screened only against the most protective EIC for dioxin and furan TEQs, respectively. The screening was completed only on a point-by-point basis (WAC 173-340-740). Thirteen locations exceeded the dioxin TEQ EIC, while 12 exceeded the furan TEQ EIC (see Table 5 and Figure 3). Thus, based on this preliminary screening, dioxins are identified as CECs for off-property soils.

Assessing risk to receptors based on surface soil results alone (i.e., not including subsurface) is likely to be unrepresentative of the actual exposure to ecological receptors. Burrowing mammals, for example, are exposed to subsurface soils in addition to surface soils, and birds feed on organisms that inhabit subsurface as well as surface soils. Given that the dioxins and furans are thought to be atmospherically deposited and that these chemicals are relatively immobile in soils, surface soil is likely to have the highest concentrations. If subsurface exposure is taken into account, then the exposure to ecological receptors is likely to be significantly reduced.

In summary, metals, pentachlorophenol, and PAHs are not identified as CECs for off-property soils. Dioxins and furans in surface soil exceed screening levels at certain locations in off-property surface soils; however, actual exposure to ecological receptors is anticipated to be less than concentrations representative of surface soil. If you have any questions, please contact us.

Sincerely,

Maul Foster & Alongi, Inc.

Madi Novak

Madi Novak
Senior Environmental Scientist

Phil Wiescher, PhD
Staff Environmental Scientist

Attachments:
Limitations
References
Tables
Figures
1—Letter to Ecology (re: Proposal for a Zinc Soil EIC for Plants based on a Literature Survey)
2—Zinc ProUCL Output
3—Ecology Table 749-4
4—Ecology Table 749-5

cc:
Brent Grening and Laurie Olin, Port of Ridgefield
Cindy Donnerberg, CH2M Hill

R:\9003.01 Port of Ridgefield\Correspondence\39_2012.07.03 TEE Update\Lf-Off-Site-TEE.doc

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

REFERENCES

Ecology. 1994. Natural background soil metals concentrations in Washington State. Publication No. 94-115. Washington State Department of Ecology, Toxics Cleanup Program. October.

Ecology. 2007a. Concise explanatory statement and responsiveness summary for the amendment of Chapter 173-340 WAC, Model Toxics Control Act cleanup regulation. Publication No. 07-09-108. Washington State Department of Ecology, Toxics Cleanup Program. October 10.

Ecology. 2007b. Evaluating the toxicity and assessing the carcinogenic risk of environmental mixtures using toxicity equivalency factors. Washington State Department of Ecology. October.

Ecology. 2009. Terrestrial ecological evaluations. Washington State Department of Ecology. http://www.ecy.wa.gov/programs/tcp/regs/2009MTCA/issues/terrestrialEcologicalEvaluationsIssueSummaryJuly2009.pdf. July.

Ecology. 2010a. Letter (re: Ecology acknowledgement of April 13, 2010, final terrestrial ecological evaluation report for the former Pacific Wood Treating Corporation site, Ecology facility site identification #1019) to B. Grening, Port of Ridgefield, from C. Rankine, Washington State Department of Ecology. June 30.

Ecology. 2010b. Letter (re: Ecology approval of the November 29, 2010, Cell 4 remedial investigation and feasibility study report for the former Pacific Wood Treating Corp. site, Ecology facility site identification #1019) to B. Grening, Port of Ridgefield, from C. Rankine, Washington State Department of Ecology. December 17.

Malcolm Pirnie. 2007. Terrestrial ecological evaluation for the uplands environment at the former Rayonier Mill site. Prepared for Rayonier. Malcolm Pirnie, Seattle, Washington. March.

McKone, T. E., and R. L. Maddalena. 2007. Plant uptake of organic chemicals from soil: bioconcentration estimates based on models and experiments. Environmental Toxicology and Chemistry 26:2494-2504.

MFA. 2010a. Letter (re: boundary soil sampling results at the former Pacific Wood Treating site, Port of Ridgefield Lake River industrial site, Agreed Order No. 01TCPRSR-3119) to L. Klasner, Washington State Department of Ecology, from A. Hughes and S. Taylor, Maul Foster & Alongi, Inc., Vancouver, Washington. February 9 (revised).

MFA. 2010b. Letter (re: final terrestrial ecological evaluation for the former Pacific Wood Treating site, Agreed Order No. 01TCPSR-3119) to C. Rankine, Washington State Department of Ecology, from J. Peterson and A. Hughes, Maul Foster & Alongi, Inc., Vancouver, Washington. April 13.

MFA. 2010c. Letter (re: supplemental soil sampling results at the former Pacific Wood Treating site, Port of Ridgefield Lake River industrial site, Agreed Order No. 01TCPRSR-3119) to C. Rankine, Washington State Department of Ecology, from A. Hughes and S. Taylor, Maul Foster & Alongi, Inc., Vancouver, Washington. May 17.

MFA. 2010d. Letter (re: off-property soil sampling results at the former Pacific Wood Treating site, Port of Ridgefield Lake River industrial site, Agreed Order No. 01TCPRSR-3119) to C. Rankine, Washington State Department of Ecology, from M. Novak and A. Hughes, Maul Foster & Alongi, Inc. November 9.

MFA. 2010e. Cell 4 remedial investigation and feasibility study report, former Pacific Wood Treating Corporation. November 29.

MFA. 2011. Letter (re: additional off-property soil sampling results at former Pacific Wood Treating site, Port of Ridgefield Lake River industrial site, Agreed Order No. 01TCPSR-3119) to C. Rankine, Washington State Department of Ecology, from M. Novak and A. Hughes, Maul Foster & Alongi, Inc. August 24.

Sample, B. E., J. J. Beauchamp, R. A. Efroymson, G. W. Suter, and T. L. Ashwood. 1998. Development and validation of bioaccumulation models for earthworms, ES/ER/TM-220. February.

Travis, C. C., and A. D. Arms. 1988. Bioconcentration of organics in beef, milk, and vegetation. Environmental Science and Technology 22:271–274.

USEPA. 1993. Wildlife exposure factors handbook. Vol. I of II. EPA-600-R-93-187. U.S. Environmental Protection Agency, Office of Research and Development. December.

USEPA. 1999. Screening level ecological risk assessment protocol for hazardous waste combustion facilities. Peer review draft. EPA-530-D-99-001A. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. August.

USEPA. 2003. Exposure and human health reassessment of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and related compounds. EPA/600/P-00/001Cb. U.S. Environmental Protection Agency. December.

USEPA. 2008. Framework for application of the toxicity equivalence methodology for polychlorinated dioxins, furans, and biphenyls in ecological risk assessment. EPA/100/R-08/004. U.S. Environmental Protection Agency. June.

Van den Berg, M., W. S. Birnbaum, M. Denson, M. De Vito, W. Farland, M. Feeley, H. Fiedler, H. Hakansson, A. Hanberg, L. Haws, M. Rose, S. Safe, D. Schrenk., C. Tohyama, A. Tritscher, J. Tuomisto, M. Tysklind, N. Walker, and R. Peterson. 2006. The 2005 World Health Organization re-evaluation of human and mammalian toxic equivalency factors for dioxins and dioxin-like compounds. Toxicological Sciences 2006 93(2):223-241.

TABLES

Table 1
Metals in Surface Soils (mg/kg)
Off-Property Lake River Industrial Site

Location	Sample Name	Date	Depth (ft. bgs)	Arsenic	Chromium	Copper	Zinc
TEE—Plants				10	42	100	160[a]
TEE—Soil Biota				60	42	50	200
TEE—Wildlife				132	67	217	360
Clark County Background				6	27	34	96
SS-6	SS-6	07/17/2008	0.3	2.78	18.2	19.5	67.6
SS-31	SS-31-S-0.5	02/26/2009	0.5	5.08	17.7	8.46	74.9
SS-32	SS-32-S-0.5	02/26/2009	0.5	4.49	13.9	6.18	76.5
SS-33	SS-33-S-0.5	02/26/2009	0.5	4.19	14.4	5.80	60.4
SS-34	SS-34	06/17/2010	0	9.52	15.6	9.56	99.7
SS-35	SS-35	06/17/2010	0	8.90	18.2	15.3	97.4
SS-36	SS-36	06/17/2010	0	6.89	12.5	11.7	82.5
SS-37	SS-37	06/17/2010	0	7.20	14.5	14.1	161
SS-38	SS-38	06/17/2010	0	8.32	19.7	38.9	153
SS-39	SS-39	06/17/2010	0	9.81	14.7	10.6	93.9
SS-43	SS-43	09/21/2010	0	7.99	15.9	12.0	119
SS-44	SS-44	09/21/2010	0	6.58	17.3	16.5	160
SS-45	SS-45	09/21/2010	0	7.17	18.1	8.10	76.2

NOTES:

Clark County Background from Washington State Department of Ecology October 1994 Natural Background Soil Metals Concentrations in Washington State.

TEE values from WAC 173-340-900 Table 749-3.

ft. bgs = feet below ground surface.

mg/kg = milligrams per kilogram.

TEE = terrestrial ecological evaluation.

[a] Zinc TEE value based on USEPA Eco-SSL value. See text for further details.

Table 2
Pentachlorophenol and Polycyclic Aromatic Hydrocarbons in Surface Soil (µg/kg)
Off-Property Lake River Industrial Site

Location	Sample Name	Date	Depth (ft. bgs)	Penta-chlorophenol	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno (1,2,3-cd)-pyrene	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(ghi) perylene	Fluoran-thene	Fluorene	Naphtha-lene	Phenan-threne	Pyrene
TEE—Plants				3,000	NV	NV	NV	NV	NV	NV	NV	20,000	NV	NV	NV	NV	NV	NV	NV	NV
TEE—Soil Biota				6,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	30,000	NV	NV	NV
TEE—Wildlife				4,500	NV	12,000	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
SS-6	SS-6	07/17/2008	0.3	53.2	13.2	18.1	47.3	11.8	26.4	6.95	14.6	6.95 U	6.95 U	12.5	20.9	32.7	6.95 U	6.95 U	13.9	26.4
SS-31	SS-31-S-0.5	02/26/2009	0.5	447 U	8.95 U	8.95 U	10.7	8.95 U	11.6	8.95 U	9.84	8.95 U	8.95 U	8.95 U	14.3	11.6	8.95 U	8.95 U	8.95 U	11.6
SS-32	SS-32-S-0.5	02/26/2009	0.5	431 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U
SS-33	SS-33-S-0.5	02/26/2009	0.5	438 U	8.76 U	8.76 U	8.76 U	8.76 U	8.76 U	8.76 U	8.76 U	8.76 U	8.76 U	8.76 U	8.76 U	8.76	8.76 U	8.76 U	8.76 U	8.76 U
SS-34	SS-34	06/17/2010	0	19.9 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U	8.83 U
SS-35	SS-35	06/17/2010	0	18.3 U	8.12 U	11.4	12.2	8.12 U	8.12 U	8.12 U	9.74	8.12 U	8.12 U	8.12 U	12.2	9.74	8.12 U	8.12 U	8.12	9.74
SS-36	SS-36	06/17/2010	0	18.7 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U
SS-37	SS-37	06/17/2010	0	19.9 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U	8.86 U
SS-38	SS-38	06/17/2010	0	19.8 U	8.81 U	13.2	14.1	8.81 U	8.81 U	8.81 U	13.2	8.81 U	8.81 U	8.81 U	20.3	10.6	8.81 U	8.81 U	8.81 U	11.4
SS-39	SS-39	06/17/2010	0	18.4 U	8.19	9.83	16.4	8.19 U	12.3	8.19 U	9.01	8.19 U	8.19 U	8.19 U	12.3	39.3	8.19 U	8.19 U	18.0	27.0
SS-43	SS-43	09/21/2010	0	23.2	12.7	15.7	30.7	10.5	27.7	11.2	18.7	7.49 U	7.49 U	7.49 U	21.0	37.4	7.49 U	7.49 U	14.2	24.7
SS-44	SS-44	09/21/2010	0	17.8 U	7.89 U	8.68	13.4	7.89 U	13.4	7.89 U	11.0	7.89 U	7.89 U	7.89 U	11.8	18.9	7.89 U	7.89 U	11.8	14.2
SS-45	SS-45	09/21/2010	0	18 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U

NOTES:

-- = not analyzed.

ft. bgs = feet below ground surface.

µg/kg = micrograms per kilogram.

NV = no value.

TEE = terrestrial ecological evaluation.

U = not detected at or above MRL.

Table 3
Soil Dioxin/Furan Sampling Results
Off-Property Lake River Industrial Site

Location	Sample Name	Date	Start Depth (ft. bgs)	1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDD	2,3,7,8-TCDF	OCDD	OCDF
SS-6	SS-6	07/17/2008	0.3	970	160	15	7.1	45	25	43	17 J	13	15	3.9	3.9	9.6	0.65 U	1.4 J	7,800	410
SS-31	SS-31-S-0.5	02/26/2009	0.5	230	23	1.5 J	3.2 J	14	6.5	2.6 J	1.1 UJ	1.1 U	2.3 J	2.4 J	1.1 U	1.7 J	0.46 J	1.3	1,600	36
SS-32	SS-32-S-0.5	02/26/2009	0.5	160	18	1.1 UJ	2.8 J	9.3	6.1	1.1 UJ	1.1 UJ	1.1 U	1.8 J	1.5 J	1.1 U	1.3 J	0.28 UJ	0.83 J	1,000	32
SS-33	SS-33-S-0.5	02/26/2009	0.5	150	17	1.2 J	2.8 J	10	6	1.9 J	1.1 UJ	1.1 U	1.6 J	2 J	1.1 U	1.1 UJ	0.45 J	0.35 UJ	940	28
SS-34	SS-34	06/17/2010	0	9.7	1.5 J	0.33 U	0.17 J	0.54 J	0.25 J	0.35 J	0.15 U	0.18 U	0.21 J	0.15 J	0.088 U	0.13 J	0.13 U	0.24 J	69	4.3 J
SS-35	SS-35	06/17/2010	0	59	7.8	0.63 J	0.61 J	3.1 J	1.3 J	1.4 J	0.74 J	0.39 J	0.81 J	0.37 J	0.18 J	0.8 J	0.12 U	0.25 J	370	17
SS-36	SS-36	06/17/2010	0	68	8.2	0.61 J	0.33 J	3.3 J	1.4 J	2.1 J	0.99 J	0.66 J	1.2 J	0.35 J	0.41 J	1.4 J	0.2 U	0.3 J	500	10
SS-37	SS-37	06/17/2010	0	1000	140	10	10	56	30	23	14	6.1	13	7.1	3.9 J	14	0.67 J	2.3	6200 J	200
SS-38	SS-38	06/17/2010	0	1400	150	14	15	62	36	28	15	6.6	20	8.3	5	13	0.55 J	2.3	8900 J	230
SS-39	SS-39	06/17/2010	0	110	22	1.4 J	1.3 J	5.5	3.2 J	2.7 J	1.9 J	0.95 J	2.7 J	0.95 J	0.75 J	3 J	0.13 U	0.35 J	700	40
SS-41	SS-41	08/09/2010	0	460	76	5.8	6.3	25	15	16 U	7.3	3.8 J	7.4	2.9 J	2.5 J	5.8	0.23 U	0.7 U	3300	84
	SS-41-Dup	08/09/2010	0	550	87	5.8	6.5	29	13	17 U	7.6	4.8 J	9.4	3.2 J	2.7 J	6.5	0.28 U	0.95 J	3600	90
SS-42	SS-42	08/10/2010	0	2400 E	370	26	37	150	74	86 U	44	19	44	20	12	35	1.1	4.1	15000 E	330
SS-43	SS-43	09/21/2010	0	1100	170	11	14	72	34	25	16	6.6	17	8.2	4.6	11	3.1	1.9	6500 E	210
SS-44	SS-44	09/21/2010	0	550	110	6.1	7.5	32	16	12	4.9	3.4 J	8.6	3.9 J	3.1 J	6	0.76 J	1.7	3500	150
SS-45	SS-45	09/21/2010	0	160	25	2.1 J	2.5 J	9	4.9	2.3 J	1.3 J	0.7 J	2 J	1.3 J	0.53 J	1.2 J	0.28 J	1.00 U	1400	79
SS-46	SS-46	05/24/2011	0	21	5.3	0.098 UJ	0.29 J	1 J	0.45 J	0.54 J	0.072 UJ	0.081 U	0.29 J	0.16 J	0.14 U	0.059 UJ	0.11 U	0.088 U	150	18
SS-47	SS-47	05/24/2011	0	1400	190	13	14	71	32	50	0.3 UJ	13	27	5.6	7.6	23	2.3	3.1	11000 J	230
SS-48	SS-48	05/24/2011	0	670	160	10	8.8	30	15	16	0.23 UJ	3.5 J	11	4.1 J	0.15 UJ	7.3	4.5	3	5200	510
SS-49	SS-49	05/24/2011	0	590	93	5.5	9.5	33	19	13	0.21 UJ	3.7 J	11	4 J	2.7 J	9.5	0.41 J	0.14 U	3500	160
SS-50	SS-50	05/24/2011	0	1100	130	9.1	11	57	20	23	0.5 UJ	8.4	15	3.5 J	5.4	14	0.4 J	2.2	7900 J	190
SS-51	SS-51	05/24/2011	0	410	59	4 J	4 J	21	8.2	11	0.25 UJ	3.5 J	6	1.3 J	2.4 J	6	0.13 UJ	0.13 U	3700	110
SS-52	SS-52	05/24/2011	0	150	20	1.5 J	1.5 J	9.5	3.3 J	2.5 J	1.5 J	1.1 J	2 J	0.97 J	0.88 J	2.3 J	0.1 UJ	0.57 J	1100	32
SS-53	SS-53	05/24/2011	0	110	15	1.1 J	1.3 J	6.4	2.4 J	1.8 J	1.2 J	0.78 J	1.6 J	0.81 J	0.47 J	1.4 J	0.1 UJ	0.43 J	820	27
SS-54	SS-54	05/24/2011	0	21	12	1.1 J	0.12 U	1.4 J	0.48 J	4 J	0.82 J	0.51 J	0.92 J	0.11 UJ	0.16 J	0.82 J	0.16 U	0.16 U	130	10 J
SS-55	SS-55	05/24/2011	0	140	26	1.8 J	1.8 J	7.5	3 J	4.4 J	3.3 J	1.3 J	5.7 J	0.8 J	0.71 J	8	0.12 U	0.46 J	770	36
SS-56	SS-56	05/24/2011	0	82	12	0.068 U	0.95 J	4.3 J	1.4 J	2.4 J	1.1 J	0.71 J	1.4 J	0.11 U	0.44 J	1.1 J	0.098 UJ	0.21 UJ	460	9.4 J
SS-57	SS-57	05/24/2011	0	670	100	6.5	9.7	40	18	0.86 UJ	11	5.6 J	13	4.8 J	3.5 J	13	0.12 UJ	1.4	3500	110
SS-58	SS-58	05/24/2011	0	63	11	1.1 J	1.2 J	3.7 J	1.8 J	0.22 UJ	0.95 J	0.49 J	1.4 J	0.13 U	0.17 UJ	1.2 J	0.12 U	0.2 J	360	13
SS-59	SS-59	05/24/2011	0	54	9.6	0.18 U	0.74 J	3.1 J	1.3 J	1.8 J	0.81 J	0.51 J	1.1 J	0.11 UJ	0.22 U	0.99 J	0.12 U	0.24 U	330	16

NOTES:

E = estimated concentration.

ft. bgs = feet below ground surface.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

J = estimated concentration.

MRL = method reporting limit.

ng/kg = nanogram per kilogram (parts per trillion).

OCDD = octachloro dibenzo-p-dioxin.

PeCDF = pentachloro dibenzofuran.

TCDD = tetrachloro dibenzo-p-dioxin.

TCDF = tetrachloro dibenzofuran.

U = not detected at or above MRL.

UJ = because of matrix interference, analyte could not be quantified; concentration is no greater than elevated MRL presented on table.

Table 4
Ecological Indicator Concentrations
Off-Property Lake River Industrial Site

Sentinel Congener	Congener-specific LogK_{ow}[a]	Congener-specific K_{plant}[b]	Soil-to-Soil Invertebrate Bioaccumulation Factor 1[c,d] (mg/kg dry tissue) / (mg/kg dry soil)	TEF—Mammals	TEF—Birds	SCMH[e]	SCMP[e]	SCAP[e]
2,3,7,8-TCDD	6.10	1.15E-02	9.94E+00	1	1	1500	9.8	12.8
2,3,7,8-TCDF	NA	NA	7.94E+00	0.1	1	NA	NA	11.4
	Dioxin EIC (ng/kg); screening value in bold					**9.8**		
	Furan EIC (ng/kg); screening value in bold					**11.4**		

NOTES:

EIC = ecological indicator concentration.

mg/kg = milligrams per kilogram.

NA = not applicable.

ng/kg = nanograms per kilogram.

TCDD = tetrachloro dibenzo-p-dioxin.

TCDF = tetrachloro dibenzofuran.

TEF = toxic equivalency factor.

[a] Source of LogK_{ow} values: Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. EPA/600/P-00/001Cb. December 2003.

[b] K_{plant} = 10^(1.588-(0.578logKow)). Table 749-5.

[c] USEPA, 1999. Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities **Peer Review Draft**.

[d] Dry weight concentrations were estimated assuming an 84% water content (USEPA, 1993). Wildlife Exposure Factors Handbook. Volume I. Office of Research and Development, Washington, DC. EPA/600/R-93/187a.

[e] SC = soil concentrations (ng/kg) protective of wildlife (ecological indicator concentrations) for mammalian herbivores (MH), mammalian predators (MP), and avian predators (AP).

Table 5
Terrestrial Ecological Evaluation Screening Results
Off-Property Lake River Industrial Site

Location	Sample Name	Date	Dioxin TEQ	Furan TEQ	Exceedance of Dioxin TEQ EIC (9.8 ng/kg)?	Exceedance of Furan TEQ EIC (11.4 ng/kg)?
SS-6	SS-6	07/17/2008	24.0	22.0	X	X
SS-31	SS-31-S-0.5	02/26/2009	8.0	3.9		
SS-32	SS-32-S-0.5	02/26/2009	5.4	2.7		
SS-33	SS-33-S-0.5	02/26/2009	6.1	1.4		
SS-34	SS-34	06/17/2010	0.4	0.5		
SS-35	SS-35	06/17/2010	1.6	1.5		
SS-36	SS-36	06/17/2010	1.8	2.3		
SS-37	SS-37	06/17/2010	29.2	23.8	X	X
SS-38	SS-38	06/17/2010	36.8	24.4	X	X
SS-39	SS-39	06/17/2010	3.3	4.5		
SS-41	SS-41	08/09/2010	13.2	9.9	X	
	SS-41-Dup	08/09/2010	14.8	11.7	X	X
SS-42	SS-42	08/10/2010	75.7	59.3	X	X
SS-43	SS-43	09/21/2010	36.3	21.7	X	X
SS-44	SS-44	09/21/2010	16.8	12.1	X	X
SS-45	SS-45	09/21/2010	5.2	2.7		
SS-46	SS-46	05/24/2011	0.6	0.2		
SS-47	SS-47	05/24/2011	36.9	37.9	X	X
SS-48	SS-48	05/24/2011	22.2	15.1	X	X
SS-49	SS-49	05/24/2011	17.5	13.6	X	X
SS-50	SS-50	05/24/2011	26.1	22.8	X	X
SS-51	SS-51	05/24/2011	9.9	9.0	X	
SS-52	SS-52	05/24/2011	4.3	3.9		
SS-53	SS-53	05/24/2011	3.2	2.6		
SS-54	SS-54	05/24/2011	0.6	1.7		
SS-55	SS-55	05/24/2011	3.7	10.3		
SS-56	SS-56	05/24/2011	1.7	1.9		
SS-57	SS-57	05/24/2011	19.4	18.8	X	X
SS-58	SS-58	05/24/2011	1.5	1.8		
SS-59	SS-59	05/24/2011	1.3	1.6		

Table 5
Terrestrial Ecological Evaluation Screening Results
Off-Property Lake River Industrial Site

NOTES:

EIC = Ecological Indicator Concentration

ng/kg = nanograms per kilogram (parts per trillion).

TEQ = toxicity equivalent quotient calculated using toxicity equivalent factors, consistent with Washington Administrative Code 173-340-900.

FIGURES

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Figure 1
Off-Property
Surface Soil Sample Locations
Ridgefield, Washington

Legend

- ● Surface Soil Sample Location
- ▭ Off-Property Area Designations
- ▭ Tax Lots

0 200 400
Feet

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\39\Projects\Updated TEE Figs June 2012\Fig1_Off-Property Surface Soil Sample Locations.mxd

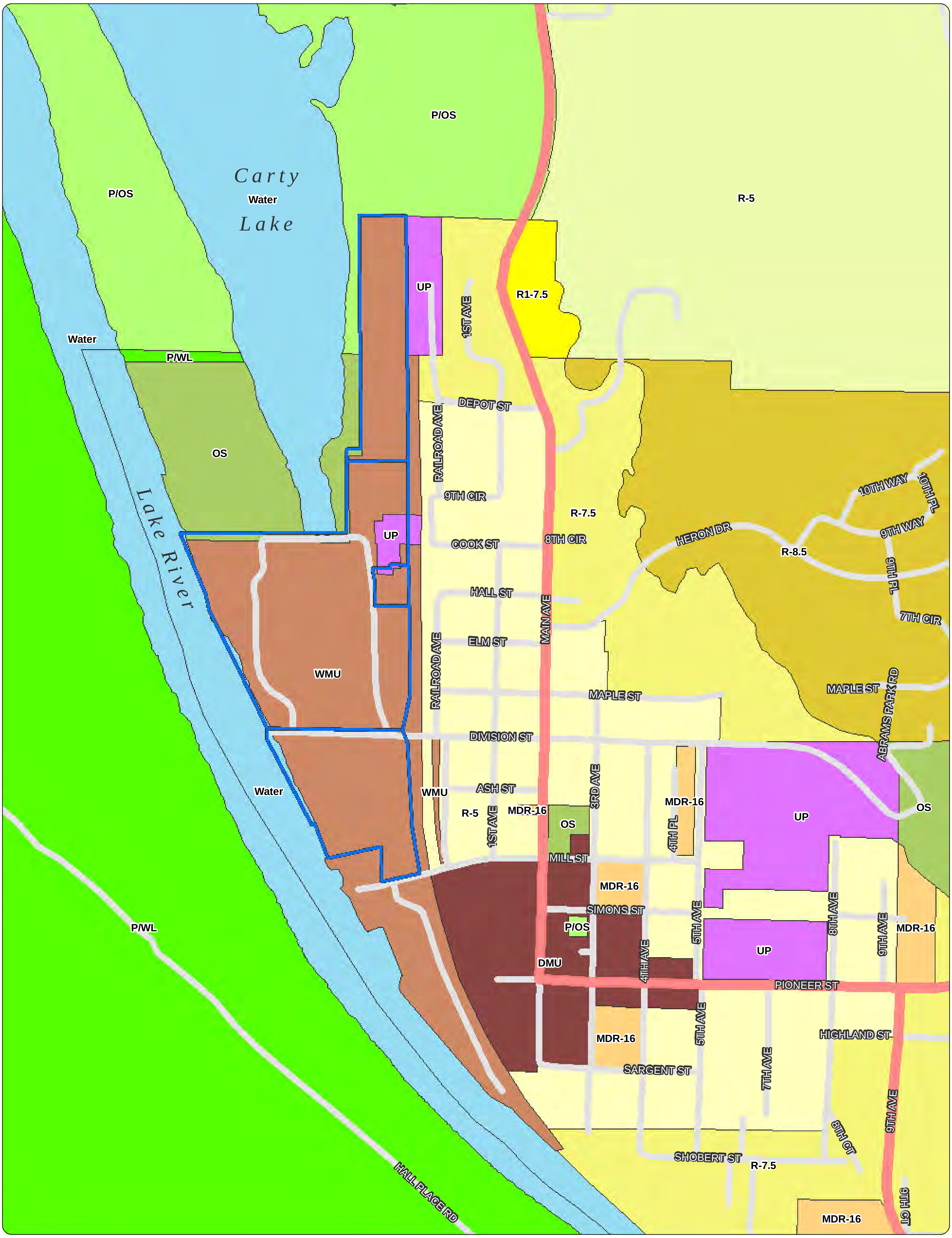
Print Date: 6/20/2012

Approved By: M. Novak

Produced By: J. Schane

Project: 9003.01.39/01

Path: X:\9003.01 Port of Ridgefield\39\Projects\Updated TEE Figs June 2012\Fig2_Zoning Designations.mxd



Source: Zoning and Roads data
obtained from Clark County GIS (2010).

Legend

Zoning

- 🟨 Low-Density Residential-5 (R-5)
- 🟨 Low-Density Residential (R-7.5)
- 🟨 Low-Density Residential-8.5 (R-8.5)
- 🟧 Medium-Density Residential (MDR-16)
- 🟨 R1-7.5
- 🟩 Rural-5 (R-5)
- 🟪 Urban Public (UP)
- 🟫 Downtown Mixed Use (DMU)
- 🟫 Waterfront Mixed Use (WMU)
- 🟩 Open Space (OS)
- 🟩 Parks/Open Space (P/OS)
- 🟩 Parks/Wildlife Refuge (P/WL)
- 🟦 Water
- ━ Major Roads
- ━ Roads
- ▢ Port of Ridgefield Cell Boundaries

Figure 2
Zoning Designations
Ridgefield, Washington

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

0 250 500
Feet

Print Date: 6/20/2012

Approved By: H. Brunelle

Produced By: J. Schane

Project: 9003.01.39

Path: X:\9003.01 Port of Ridgefield\39\Projects\Updated TEE Figs June 2012\Fig3_Off-Property Soil Dioxin and Furan TEQs Ecological Indicator Exceedances.mxd

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Notes:
1. EIC = ecological indicator concentration
2. TEQ = Toxicity Equivalent
3. ng/kg = nanograms per kilogram

Legend

Surface Soil Sample Location

- ● Exceedance of Dioxin TEQ EIC (9.8 ng/kg) and Exceedance of Furan TEQ EIC (11.4 ng/kg)
- ● Exceedance of Dioxin TEQ EIC
- ○ No Dioxin TEQ or Furan TEQ Exceedances Found
- ▭ Off-Property Area Designations
- ▭ Tax Lots

Figure 3
Off-Property Soil Dioxin and Furan TEQs Ecological Indicator Exceedances
Ridgefield, Washington

0 200 400
Feet

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Project: 9003.01.39/01 Produced By: J. Schane Approved By: M. Novak Print Date: 6/18/2012

ATTACHMENT 1

LETTER TO ECOLOGY (RE: PROPOSAL FOR A ZINC SOIL EIC FOR PLANTS BASED ON A LITERATURE SURVEY)

MAUL FOSTER ALONGI

2001 NW 19th Avenue, Suite 200 | Portland, OR 97209 | 971 544-2139 | www.maulfoster.com

May 30, 2012
Project No. 9003.01.39

Craig Rankine
Washington State Department of Ecology
2108 Grand Boulevard, MS: S-70
Vancouver, Washington 98661-462

Re: Proposal for a Zinc Soil EIC for Plants based on a Literature Survey, Former Pacific Wood Co. Treating Site, Agreed Order No. 01TCPSR-3119

Dear Mr. Rankine:

On behalf of the Port of Ridgefield, Maul Foster & Alongi (MFA) has prepared this letter to propose a zinc soil ecological indicator concentration (EIC) based on a literature survey. MFA understands that levels of zinc in the upland off-property area exceed the plant EIC of 86 mg/kg in Table 749-3 of the Model Toxics Control Act (MTCA). Upland off-property soil concentrations are well below wildlife and soil biota MTCA EICs of 360 mg/kg and 200 mg/kg, respectively. Soil concentrations only exceed the EIC listed for plants of 86 mg/kg. The listed EIC is footnoted in MTCA with "Benchmark replaced by Washington state natural background concentration". Therefore, it appears that the EIC for protection of plants is based on background levels rather than on anticipated adverse effects on plants.

A literature survey was conducted in accordance with WAC 173-340-7493(4) to determine an alternative EIC that is protective of plants based on anticipated adverse effects. As stated in WAC 173-340-7493, a literature survey may be used for purposes including identifying a soil concentration for the protection of plants relevant to site-specific conditions. The use of the US Environmental Protection Agency (USEPA) ecological soil screening level (Eco-SSL) for zinc of 160 mg/kg is proposed. WAC 173-340-7493(4) requirements are provided below in italics; justification for the appropriateness of the alternative zinc EIC of 160 mg/kg is provided below each relevant section.

(4) Literature surveys.

(a) Toxicity reference values or soil concentrations established from the literature shall represent the lowest relevant LOAEL found in the literature. Bioaccumulation factor values shall represent a reasonable maximum value from relevant information found in the literature.

USEPA identified 680 papers from the literature search process for further review. Of these papers acquired, 78 met acceptance criteria and 5 were classified eligible for Eco-SSL derivation. The Eco-SSL is calculated as the geometric mean of the maximum acceptable toxicant concentration (MATC) values. MATC values are calculated as the geometric mean of both NOAEL (no observed adverse effects level) and LOAEL (lowest observed adverse effects level) values. Thus MATC values are more conservative (i.e., protective) than the LOAEL values MTCA specifies for use (see section (a) above) and Eco-SSLs are therefore protective of the conservative end of the exposure and effects species distribution.

(i) Literature benchmark values should be obtained from studies that have test conditions as similar as possible to site conditions.

The Eco-SSL is calculated as the geometric mean of MATC values for three plant species (representative of several widely distributed and utilized species) under varying test conditions (pH and percent organic matter); pH ranged from 4.3-6.5 and organic matter from 0.8 percent to 2.6 percent. Given studies with varying species and test conditions were incorporated, site conditions similar to those found at the upland off-property area are likely accounted for.

(ii) The literature benchmark values or toxicity reference values should correspond to the exposure route being assessed.

Eco-SSLs for plants correspond to the exposure route being assessed, i.e., root uptake of zinc from soil.

(iii) The toxicity reference value or bioaccumulation factor value shall be as appropriate as possible for the receptor being assessed. The toxicity reference value should be based on a significant endpoint, as described in subsection (2) of this section.

Plant toxicity concentrations for oats (*Avena sp.*) were predominantly used in development of zinc Eco-SSLs (and to a lesser extent soybean [Glycine max] and lettuce [Lactuca sativa]). Oats are part of the true grass family (*Poaceae*) and therefore likely approximate the physiology and therefore susceptibility to zinc found in the ruderal grasses and plants common to the off-property upland.

(iv) The literature benchmark value or toxicity reference value should preferably be based on chronic exposure.

Studies selected for Eco-SSL derivation evaluated impacts of chronic zinc exposure on plant growth.

(v) The literature benchmark value, toxicity reference value, or bioaccumulation factor should preferably correspond to the chemical form being assessed. Exceptions may apply for toxicity reference values

where documented biological transformations occur following uptake of the chemical or where chemical transformations are known to occur in the environment under conditions appropriate to the site.

The Eco-SSL discussed corresponds to the chemical form being assessed (zinc).

(b) A list of relevant journals and other literature consulted in the survey shall be provided to the department. A table summarizing information from all relevant studies shall be provided to the department in a report, and the studies used to select a proposed value shall be identified. Copies of literature cited in the table that are not in the possession of the department shall be provided with the report. The department may identify relevant articles, books or other documents that shall be included in the survey.

Please see http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_zinc.pdf for the USEPA document detailing studies evaluated and studies included in Eco-SSL calculations (Table 3-1).

Summary

Based on a literature survey in accordance with MTCA requirements, the Eco-SSL for zinc of 160 mg/kg is protective of the conservative end of the exposure and effects species distribution. The majority of the upland off-property soil samples are less than 160 mg/kg, with only one sample exceedance at 161 mg/kg. The offsite area complies with MTCA criteria using the tests identified in 1713-340-740, i.e., the 95 percent upper confidence limit on the mean is less than the soil cleanup level, no single sample concentration is greater than two times the soil cleanup level, and less than ten percent of the sample concentrations exceed the soil cleanup level. Please also note that vegetation in the vicinity of elevated zinc concentrations is abundant (i.e., shows no signs of toxic effects).

Sincerely,

Maul Foster & Alongi, Inc.

Madi Novak

Madi Novak
Senior Environmental Scientist

Phil Wiescher
Staff Scientist

cc: Brent Grening and Laurie Olin, Port of Ridgefield
Cindy Donnerberg, CH2MHill

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

ATTACHMENT 2

ZINC PROUCL OUTPUT

	A	B	C	D	E	F	G	H	I	J	K	L
1				**General UCL Statistics for Full Data Sets**								
2	**User Selected Options**											
3	From File			Sheet1_a.wst								
4	Full Precision			OFF								
5	Confidence Coefficient			95%								
6	Number of Bootstrap Operations			2000								
7												
8												
9	**Zinc**											
10												
11	**General Statistics**											
12	Number of Valid Observations					13	Number of Distinct Observations					13
13												
14	**Raw Statistics**						**Log-transformed Statistics**					
15	Minimum					60.4	Minimum of Log Data					4.101
16	Maximum					161	Maximum of Log Data					5.081
17	Mean					101.7	Mean of log Data					4.57
18	Geometric Mean					96.5	SD of log Data					0.332
19	Median					93.9						
20	SD					35.56						
21	Std. Error of Mean					9.861						
22	Coefficient of Variation					0.35						
23	Skewness					0.827						
24												
25	**Relevant UCL Statistics**											
26	**Normal Distribution Test**						**Lognormal Distribution Test**					
27	Shapiro Wilk Test Statistic					0.859	Shapiro Wilk Test Statistic					0.913
28	Shapiro Wilk Critical Value					0.866	Shapiro Wilk Critical Value					0.866
29	**Data not Normal at 5% Significance Level**						**Data appear Lognormal at 5% Significance Level**					
30												
31	**Assuming Normal Distribution**						**Assuming Lognormal Distribution**					
32	95% Student's-t UCL					119.3	95% H-UCL					122.7
33	**95% UCLs (Adjusted for Skewness)**						95% Chebyshev (MVUE) UCL					142.7
34	95% Adjusted-CLT UCL (Chen-1995)					120.3	97.5% Chebyshev (MVUE) UCL					160.5
35	95% Modified-t UCL (Johnson-1978)					119.7	99% Chebyshev (MVUE) UCL					195.6
36												
37	**Gamma Distribution Test**						**Data Distribution**					
38	k star (bias corrected)					7.5	**Data appear Gamma Distributed at 5% Significance Level**					
39	Theta Star					13.56						
40	MLE of Mean					101.7						
41	MLE of Standard Deviation					37.14						
42	nu star					195						
43	Approximate Chi Square Value (.05)					163.7	**Nonparametric Statistics**					
44	Adjusted Level of Significance					0.0301	95% CLT UCL					117.9
45	Adjusted Chi Square Value					159.6	95% Jackknife UCL					119.3
46							95% Standard Bootstrap UCL					117.3
47	Anderson-Darling Test Statistic					0.586	95% Bootstrap-t UCL					123.4
48	Anderson-Darling 5% Critical Value					0.734	95% Hall's Bootstrap UCL					117.1
49	Kolmogorov-Smirnov Test Statistic					0.174	95% Percentile Bootstrap UCL					118.2
50	Kolmogorov-Smirnov 5% Critical Value					0.237	95% BCA Bootstrap UCL					120.3

	A	B	C	D	E	F	G	H	I	J	K	L
51	**Data appear Gamma Distributed at 5% Significance Level**						95% Chebyshev(Mean, Sd) UCL					144.7
52							97.5% Chebyshev(Mean, Sd) UCL					163.3
53	**Assuming Gamma Distribution**						99% Chebyshev(Mean, Sd) UCL					199.8
54	95% Approximate Gamma UCL (Use when n >= 40)					121.2						
55	95% Adjusted Gamma UCL (Use when n < 40)					124.3						
56												
57	**Potential UCL to Use**						Use 95% Approximate Gamma UCL					121.2
58												
59	**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**											
60	**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**											
61	**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**											
62												

ATTACHMENT 3

ECOLOGY TABLE 749-4

Washington State Department of Ecology
Toxics Cleanup Program

Table 749-4

Wildlife Exposure Model for Site-Specific Evaluations[a]

Plant	
K_{Plant}	Plant uptake coefficient (dry weight basis)
	Units: mg/kg plant/mg/kg soil
	Value: chemical specific (See Table 749-5)
Soil Biota - Surrogate receptor: Earthworm	
BAF_{Worm}	Earthworm bioaccumulation factor (dry weight basis)
	Units: mg/kg worm/mg/kg soil
	Value: chemical-specific (See Table 749-5)
Mammalian Predator - Surrogate receptor: Shrew *(Sorex)*	
$P_{SB(Shrew)}$	Proportion of contaminated food (earthworms) in shrew diet
	Units: unitless
	Value: 0.50
$FIR_{Shrew,DW}$	Food ingestion rate (dry weight basis)
	Units: kg dry food/kg body weight-day
	Value: 0.45
$SIR_{Shrew,DW}$	Soil ingestion rate (dry weight basis)
	Units: kg dry soil/kg body weight-day
	Value: 0.0045
$RGAF_{Soil,shrew}$	Gut adsorption factor for a hazardous substance in soil expressed relative to the gut adsorption factor for the hazardous substance in food.
	Units: unitless
	Value: chemical specific (See Table 749-5)
T_{Shrew}	Toxicity reference value for shrew
	Units: mg/kg-day
	Value: chemical specific (See Table 749-5)
Home Range	0.1 Acres
Avian Predator - Surrogate receptor: American Robin *(Turdus migratorius)*	
$P_{SB(Robin)}$	Proportion of contaminated food (soil biota) in Robin diet
	Units: unitless
	Value: 0.52
$FIR_{Robin,DW}$	Food ingestion rate (dry weight basis)
	Units: kg dry food/kg body weight-day
	Value: 0.207

$SIR_{Robin,DW}$	Soil ingestion rate (dry weight basis)
	Units: kg dry soil/kg body weight-day
	Value: 0.0215
$RGAF_{Soil,Robin}$	Gut adsorption factor for a hazardous substance in soil expressed relative to the gut adsorption factor for the hazardous substance in food.
	Units: unitless
	Value: chemical specific (See Table 749-5)
T_{Robin}	Toxicity reference value for Robin
	Units: mg/kg-day
	Value: chemical specific (See Table 749-5)
Home Range	0.6 Acres
Mammalian herbivore - Surrogate receptor: Vole *(Microtus)*	
$P_{Plant,Vole}$	Proportion of contaminated food (plants) in vole diet
	Units: unitless
	Value: 1.0
$FIR_{Vole,DW}$	Food ingestion rate (dry weight basis)
	Units: kg dry food/kg body weight-day
	Value: 0.315
$SIR_{Vole,DW}$	Soil ingestion rate (dry weight basis)
	Units: kg dry soil/kg body weight-day
	Value: 0.0079
$RGAF_{Soil,Vole}$	Gut adsorption factor for a hazardous substance in soil expressed relative to the gut adsorption factor for the hazardous substance in food.
	Units: unitless
	Value: chemical specific (See Table 749-5)
Home Range	0.08 Acres
Soil concentrations for wildlife protection[b]	
(1) Mammalian predator: $SC_{MP}=(T_{Shrew})/[(FIR_{Shrew,DW}\ x\ P_{SB(Shrew)}\ x\ BAF_{Worm)} + (SIR_{Shrew,DW}\ x\ RGAF_{Soil,Shrew)}]$	
(2) Avian predator: $SC_{AP}=(T_{Robin})/[(FIR_{Robin,DW}\ x\ P_{SB(Robin)}\ x\ BAF_{Worm)} + (SIR_{Robin,DW}\ x\ RGAF_{Soil,Robin)}]$	
(3) Mammalian herbivore: $SC_{MH}=(T_{Vole})/[(FIR_{Vole,DW}\ x\ P_{Plant,Vole}\ x\ K_{Plant)} + (SIR_{Vole,DW}\ x\ RGAF_{Soil,Vole)}]$	

Table 749-4 Notes

[a] Substitutions for default receptors may be made as provided for in WAC 173-340-7493(7). If substitute species is used, the values for food and soil ingestion rates, and proportion of contaminated

food in the diet, may be modified to reasonable maximum exposure estimates for the substitute species based on a literature search conducted in accordance with WAC 173-340-7493(4). Additional species may be added on a site-specific basis as provided in WAC 173-340-7493(2)(a). The department shall consider proposals for modifications to default values provided in this table based on new scientific information is accordance with WAC 173-340-702(14).

[b] Use the lowest of the three concentrations calculated as the wildlife value.

[Exclusions Main] [TEE Definitions] [Simplified or Site-Specific?] [Simplified Ecological Evaluation]
[Site-Specific Ecological Evaluation] [WAC 173-340-7493] [Index of Tables]

[TEE Home]

ATTACHMENT 4

ECOLOGY TABLE 749-5

Washington State Department of Ecology
Toxics Cleanup Program

Table 749-5

Default Values for Selected Hazardous Substances for use with the Wildlife Exposure Model in Table 749-4[a]

	Toxicity Reference Value (mg/kg - d)				
Hazardous Substance	**BAF$_{Worm}$**	**K$_{Plant}$**	**Shrew**	**Vole**	**Robin**
METALS:					
Arsenic III	1.16	0.06	1.89	1.15	
Arsenic V	1.16	0.06	35	35	22
Barium	0.36		43.5	33.3	
Cadmium	4.6	0.14	15	15	20
Chromium	0.49		35.2	29.6	5
Copper	0.88	0.020	44	33.6	61.7
Lead	0.69	0.0047	20	20	11.3
Manganese	0.29		624	477	
Mercury, inorganic	1.32	0.0854	2.86	2.18	0.9
Mercury, organic	1.32		0.352	0.27	0.064
Molybdenum	0.48	1.01	3.09	2.36	35.3
Nickel	0.78	0.047	175.8	134.4	107
Selenium	10.5	0.0065	0.725	0.55	1
Zinc	3.19	0.095	703.3	537.4	131
Pesticides					
Aldrin	4.77	0.007[b]	2.198	1.68	0.06
Benzene hexachloride (including lindane)	10.1				7
Chlordane	17.8	0.011[b]	10.9	8.36	10.7
DDT/DDD/DDE	10.6	0.004[b]	8.79	6.72	0.87
Dieldrin	28.8	0.029[b]	0.44	0.34	4.37
Endrin	3.6	0.038[b]	1.094	0.836	0.1
Heptachlor/heptachlor epoxide	10.9	0.027[b]	2.857	2.18	0.48
Hexachlorobenzene	1.08				2.4
Pentachlorophenol	5.18	0.043[b]	5.275	4.03	
Other Chlorinated Organics					
Chlorinated dibenzofurans	48				1.0E-05
Dioxins	48	0.005[b]	2.2E-05	1.7E-05	1.4E-05
PCB mixtures	4.58	0.087[b]	0.668	0.51	1.8
Other Nonchlorinated Organics					
Benzo(a)pyrene	0.43	0.011	1.19	0.91	

Table 749-5 Notes

[a] For hazardous substances not shown in this table, use the following default values. Alternatively, use values established from a literature survey conducted in accordance with WAC 173-340-7493(4) and approved by the department.

$K_{Plant:}$	Metals (including metalloid elements): 1.01
	Organic chemicals: $K_{Plant:} = 10^{(1.588-(0.578 \log Kow))}$ Where $\log K_{ow}$ is the logarithm of the octanol-water partition coefficient.
$BAF_{Worm:}$	Metals (including metalloid elements): 4.6
	Nonchlorinated organic chemicals:
	$\log K_{ow} < 5$: 0.7
	$\log K_{ow} \geq 5$: 0.9
	Chlorinated organic chemicals:
	$\log K_{ow} < 5$: 4.7
	$\log K_{ow} \geq 5$: 11.8
$RGAF_{Soil}$	(All receptors): 1.0
	Toxicity reference values (all receptors): Values established from a literature survey conducted in accordance with WAC 173-340-7493(4).
	Site-specific values may be substituted for default values, as described below:
	$K_{Plant:}$ Value from a literature survey conducted in accordance with WAC 173-340-7493(4) or from empirical studies at the site.
	$BAF_{Worm:}$ Value from a literature survey conducted in accordance with WAC 173-340-7493(4) or from empirical studies at the site.
	$RGAF_{Soil:}$ (All receptors): Values established from a literature survey conducted in accordance with WAC 173-340-7493(4). Toxicity reference values (all receptors): Default toxicity reference values provided in this table may be replaced by a value established from a literature survey conducted in accordance with WAC 173-340-7493(4).

[b] Calculated from $\log K_{ow}$ using formula in footnote a.

[Area Calculation Aid] [Aerial Photo with Area Designations] [TEE Table 749-1] [TEE Table 749-2] [TEE Table 749-3] [TEE Table 749-4] [TEE Table 749-5] [TEE Table 830-1]

[Exclusions Main] [TEE Definitions] [Simplified or Site-Specific?] [Simplified Ecological Evaluation] [Site-Specific Ecological Evaluation] [WAC 173-340-7493]

[TEE Home]

APPENDIX B-2

SUPPLEMENTAL TERRESTRIAL ECOLOGICAL EVALUATION FOR THE OFF-PROPERTY

MAUL FOSTER ALONGI
400 East Mill Plain Blvd., Suite 400 | Vancouver, WA 98660 | 360 694 2691 | www.maulfoster.com

January 15, 2013
Project No. 9003.01.39

Mr. Craig Rankine
Washington State Department of Ecology
2108 Grand Boulevard, MS: S-70
Vancouver, Washington 98661-462

Re: Supplemental Terrestrial Ecological Evaluation for the Off-Property
Former Pacific Wood Treating Corporation Site
Agreed Order No. 01TCPRSR-3119

Dear Mr. Rankine:

On behalf of the Port of Ridgefield (Port), Maul Foster & Alongi, Inc. (MFA) has prepared this terrestrial ecological evaluation (TEE) of the off-property areas located adjacent to the Port's Lake River Industrial Site (LRIS) at 111 West Division Street in Ridgefield, Washington, formerly operated by Pacific Wood Treating Corporation. A final off-property TEE, indicating potential unacceptable ecological risk resulting from exposure to polychlorinated dibenzo dioxins (dioxins) and polychlorinated dibenzo furans (furans) in surface soil in the off-property areas, was submitted by MFA (MFA, 2012a) and approved by the Washington State Department of Ecology (Ecology) on July 31, 2012 (Ecology, 2012a). Additional sampling was proposed to refine the ecological exposure to dioxins and furans in soil. A supplemental sampling and analysis plan (SAP) was submitted to Ecology in August 2012 (MFA, 2012b) and was approved by Ecology on August 22, 2012 (Ecology, 2012b). The results of the additional sampling and an assessment of risk to ecological receptors resulting from potential exposure to dioxins and furans are provided below.

BACKGROUND

In coordination with Ecology, the Port has conducted several soil sampling events in upland off-property areas adjacent to the LRIS. Off-property areas and sampling locations are shown on Figure 1. As shown on Figure 1, the off-property includes areas owned by the Port (Railroad Avenue and Marina properties), and other areas (Ridgefield National Wildlife Refuge property, the residential area, and the privately-owned McCuddy's marina). Off-property sampling was previously conducted in July 2008; February 2009; June, August, and September, 2010; and May 2011. Wood-treating chemicals, including metals (arsenic, chromium, copper, and zinc), pentachlorophenol, and polycyclic aromatic hydrocarbons, along with dioxins and furans, were analyzed in off-property soil samples. The final TEE (MFA, 2012a) shows that chemicals in the off-property areas are not expected to result in unacceptable risk to ecological receptors, with the possible exception of dioxins and furans. Dioxin and furan ecological indicator concentrations (EICs) protective of avian receptors that may feed on worms that have the potential to accumulate organics present in the soil were established in the final TEE. Dioxin and furan toxicity equivalent quotients (TEQs) in multiple samples exceeded these levels. Ecology approved the TEE on July 31, 2012 (Ecology, 2012a).

Historical soil samples were collected from the surface (top 0.5 foot) of soil. However, assessing risk to ecological receptors based on surface soil results alone (i.e., not including subsurface) is likely to be unrepresentative. Assuming that dioxin and furan concentrations decrease with depth, actual receptor exposure is expected to be less than surface soil concentrations indicate. Vertical composite sampling (specifically, homogenizing a core sample then analyzing the result) is appropriate when the goal is to obtain the mean concentration over a depth of interest in which receptor exposure can occur (Ecology 1995). Therefore, vertical composited samples of surface and subsurface soil were collected, consistent with the Ecology-approved SAP (MFA, 2012b) and a Ecology memorandum regarding the use of composite samples for ecological risk assessment (Ecology 2012c), to refine the ecological exposure assessment.

2012 OFF-PROPERTY COMPOSITE SOIL SAMPLING

The objective of the supplemental soil sampling was to estimate the ecological exposure of worms that are the main food source for birds to dioxins and furans in off-property soil. Vertical soil samples integrating surface and subsurface soil layers were collected with a continuous coring device on September 20, 2012, at eight off-property locations. The composite soil sample locations were selected based on whether historical surface soil concentrations exceeded dioxin and/or furan EICs. However, as specified in the SAP, additional sample collection was specifically excluded in Port-owned properties:

- The Railroad Avenue Property (see Figure 1) is undeveloped at this time, but because the Port anticipates developing commercial parking lots on these parcels, future ecological exposure to soil in this area is expected to be minimal.
- Ecological exposure at the Port-Owned Marina Property south of the LRIS is limited. This area includes primarily paved parking and landscaped areas for the Port-owned boat launch; the Port plans to retain ownership and continue to use the area for parking and/or to develop this waterfront for mixed use in the foreseeable future. The soil around historical sample, SS-6, collected between the LRIS property boundary and the paved area of the Marina property (see Figure 1) has been capped with approximately 1 foot of clean soil and a polypropylene geotextile fabric has been placed above the native, impacted soil and below the clean layer. This fabric acts as a barrier to potential ecological exposure. Because ecological receptors are not exposed to soil surrounding sample SS-6, the sample results are not further evaluated in terms of ecological risk.

The samples were integrated over the biologically active soil zone of 0 to 6 feet below ground surface (bgs) (Washington Administrative Code [WAC] 173-340-7490(4)(a)) in accordance with the SAP. This sampling depth provides data that are representative of the depths where exposure to persistent organic compounds such as dioxins and furans may occur, and composite sampling is appropriate for understanding risk to invertebrates inhabiting the soil column (Ecology, 2012c) and their potential predators. Specifically, three main ecological types of earthworms (which higher trophic level predatory receptors such as birds may feed on) are found in the Columbia River Basin: epigeic, endogeic, and anecic (USDA, 2000). Epigeic worms are generally found on the surface and in shallow subsurface in areas of substantial leaf litter. Endogeic worm are generally found at depths of up to 20 cm below the surface. Anecic worms are the largest worms and construct vertical burrows that can reach up to 6 feet deep (e.g., Gupta et al., 2009). All of these worm types are potentially present in the off-property area (soil moisture, pH, and soil temperature is likely adequate to support all worm type; e.g. [USDA 2000]) and are found at the surface or come to surface to acquire organic matter, leaving them exposed to predators. In the off-property area, the soil cores collected verify that adequate soil (i.e., damp silt/fine sand/clay soils which retains organic matter [see boring logs provided as an Attachment]) at depths up to 10 feet is generally present. Therefore, worms in the off-property area potentially acquire organic matter from soils at depths up to approximately 6 feet, and any soil contamination acquired at the off-property area has the potential to transfer in the food chain because all worm types can be present at shallow subsurface and surface.

A continuous soil sample spanning only the top 4 feet of soil was collected at location SS-51 because woody debris at 4 feet bgs prevented collection of soil below this depth. Significant woody debris was also observed at SS-50 from approximately 6 to 10 feet bgs. Figure 1 shows the eight locations sampled, including six locations in the residential area and two locations in McCuddy's Marina (SS-50 and SS-51).

Composite samples were collected and described following procedures outlined in the SAP; soils from the sample interval (0-6 feet bgs) were thoroughly mixed (i.e., homogenized) and then subsampled to prevent an unbiased mean (Ecology, 2012c). All composite samples were analyzed for dioxins/furans by U.S. Environmental Protection Agency Method 1613B at Pace Analytical, Inc. (an Ecology-approved laboratory) under appropriate laboratory quality assurance/quality control procedures. The rest of the samples (i.e., archived samples collected from each 1-foot interval) were archived at the laboratory.

The laboratory analytical report is included as Attachment 1. A data quality assurance/quality control review of the analytical data was conducted; the review indicated that the data are acceptable for their intended use with the assigned data qualifiers. The data quality assurance/quality control review memorandum is provided as Attachment 2. The analytical sensitivity was adequate to compare with EICs.

SOIL COMPOSITE RESULTS

Dioxin and furan TEQs were calculated using the methods developed in coordination with Ecology and described by MFA (2012a). Qualified data were handled as follows:

- Congeners qualified as non-detect and flagged with a "U" are used in the TEQ calculations at one-half the associated value.
- Congeners qualified as estimated and flagged with a "J" are used without modification in the TEQ calculations.

Composite results for each location are provided in Table 1, and were compared to applicable EICs (dioxin TEQ EIC = 9.8 nanograms per kilogram [ng/kg]; furan TEQ EIC = 11.4 ng/kg) (MFA, 2012a) to evaluate the potential for ecological risk in the off-property areas (see Table 2). Dioxin TEQs ranged from 0.3 ng/kg to 14.4 ng/kg. Two samples, SS-47-Comp-0-6 (14.4 ng/kg) and SS-50-Comp-0-6 (11.2 ng/kg), exceeded the EIC, while the other six samples were at or well below the EIC. Only one sample (SS-47-Comp-0-6 at 12.8 ng/kg furan TEQ) exceeded the furan TEQ of 11.4 ng/kg. Figure 2 shows EIC exceedances for all locations based on samples previously collected (in locations where composite samples were not collected) and composite samples.

ECOLOGICAL RISK EVALUATION

To evaluate risk to ecological receptors resulting from off-property soils, a 95th upper confidence limit (UCL) was calculated for both the dioxin and furan TEQs. Calculations included all composite soil results reported here and previous surface sample results (MFA, 2012a) at stations where composite samples were not collected. Table 2 shows all samples used in the UCL calculation. TEQs were recalculated for historical data, as an updated approach to qualifying dioxin data has been coordinated with Ecology since the final TEE submission.

Note that this UCL evaluation is conservative, as surface samples (in addition to composite samples) are included in calculations. Surface samples are likely elevated relative to the subsurface, and actual exposure to receptors is anticipated to be less than surface soil concentrations indicate. This is further supported by the composite soil results that are consistently substantially lower than collocated surface sample results (see Table 2 for results of composite samples and previously collected collocated surface samples). As a result, the analyses conducted are likely to overestimate ecological risk.

Off-Property Ecological Risk

When including all off-property locations, the dioxin TEQ UCL (13.9 ng/kg and 22.1 ng/kg assuming gamma and lognormal distribution, respectively) exceeds the dioxin EIC of 9.8 ng/kg, while the furan TEQ UCL (10.5 ng/kg and 17.1 ng/kg assuming gamma and lognormal distribution, respectively) is below or above the furan EIC of 11.4 ng/kg, depending on the statistics applied. Therefore, unacceptable risk to ecological receptors may result from exposure to dioxins. The ProUCL output is provided as Attachment 3; gamma and lognormal distribution results are provided because data follow both gamma and lognormal distributions.

The highest dioxin TEQ concentrations in the off-property areas are generally in the Port-owned properties (see Table 2). The soil at sample location SS-6 has been remediated (see above) and additional analysis was conducted to evaluate whether remediation of the remaining Port-owned soils (i.e., the area including SS-37, SS-38, SS-39, SS-41, and SS-42) would mitigate for potentially unacceptable risk resulting from dioxins. A UCL was therefore calculated excluding Port-owned property samples; the ProUCL output is provided in Attachment 4.

Both the dioxin TEQ UCL (5.3 ng/kg and 7.9 ng/kg assuming gamma and lognormal distribution, respectively) and the furan TEQ UCL (3.6 ng/kg and 5.0 ng/kg assuming gamma and lognormal distribution, respectively) are well below the dioxin and furan EICs of 9.8 ng/kg and 11.4 ng/kg, respectively, for the off-property areas when excluding the Port-owned Properties. Other Model Toxics Control Act criteria for unrestricted land use (WAC 713-340-740) are also met, i.e., less than ten percent of the sample concentrations exceed the soil cleanup level (EIC), and no single sample concentration is greater than two times the soil cleanup level (EIC).

UNCERTAINTY ANALYSIS

Sampling methodology may, in some cases, contribute to uncertainty associated with exposure estimates. In the case of this TEE, vertical composite sampling was selected to limit the bias associated with estimating exposure using discrete samples. As discussed above, bioaccumulation of dioxins and furans in worms and subsequent ingestion by avian receptors is the exposure scenario for which the soil EICs were generated. Analyzing a composite of the top six feet of soil results in the most representative exposure concentration in any one location.

CONCLUSIONS

The analysis indicates that Port Railroad Avenue Property soils may result in unacceptable risk to ecological receptors, due to elevated dioxin TEQ. If this area is remediated (e.g., capped), no significant ecological risk is expected to result from concentrations of dioxins and furans remaining in off-property soils.

If you have any questions, please contact us.

Sincerely,

Maul Foster & Alongi, Inc.

Madi Novak

Madi Novak
Senior Environmental Scientist

Phil Wiescher, PhD
Staff Environmental Scientist

Attachments: Limitations
References
Tables
Figures
1—Laboratory Analytical Report
2—Data Validation Memorandum
3—ProUCL Output 1
4—ProUCL Output 2
5—Boring Logs

cc: Brent Grening and Laurie Olin, Port of Ridgefield
Cindy Donnerberg, CH2M Hill

LIMITATIONS

The services undertaken in completing this work plan were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This work plan is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this work plan apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

Ecology. 1995. Guidance on Sampling and Data Analysis Methods. Publication No. 94-49. January.

Ecology. 2012a. Letter (re: approval of July 3, 2012, final terrestrial ecological evaluation for the off-property former Pacific Wood Treating Co. site) to B. Grening, Port of Ridgefield, from C. Rankine, Washington State Department of Ecology. July 31.

Ecology. 2012b. Letter (re: approval of August 8, 2012, supplemental off-property soil sampling and analysis plan for the former Pacific Wood Treating Corp. site) to B. Grening, Port of Ridgefield, from C. Rankine, Washington State Department of Ecology. August 22.

Ecology. 2012c. Letter (re: use of composite samples for ecological risk assessment) to C. Rankine, Washington State Department of Ecology, from A. Buchan, Washington State Department of Ecology. November 30.

Gupta R.J., M. Kumar and D. Vyas. 2009. Soil Microflora. Daya Publishing House. July 1.

MFA. 2012a. Letter (re: final terrestrial ecological evaluation for the off-property former Pacific Wood Treating Co. site Agreed Order No. 01TCPSR-3119) to C. Rankine, Washington State Department of Ecology, from M. Novak and P. Wiescher, Maul Foster & Alongi, Inc., Vancouver, Washington. July 3.

MFA. 2012b. Letter (re: supplemental off-property soil sampling and analysis plan for the former Pacific Wood Treating Corporation site Agreed Order No. 01TCPRSR-3119) to C. Rankine, Washington State Department of Ecology, from M. Novak and P. Wiescher, Maul Foster & Alongi, Inc., Vancouver, Washington. August 8.

USDA. 2000. Earthworms (Annelida: Oligochaeta) of the Columbia River Basin Assessment Area. U.S. Department of Agriculture and Forest Service (Pacific Northwest Research Station Portland, Oregon). General Technical Report PNW-GTR-491. June.

TABLES

Table 1
Off-property Composite Dioxin and Furan Results (ng/kg)
Ridgefield, WA

Sample Name	SS-43-Comp-0-6	SS-44-Comp-0-6	SS-47-Comp-0-6	SS-48-Comp-0-6	SS-49-Comp-0-6	SS-50-Comp-0-6	SS-51-Comp-0-4	SS-57-Comp-0-6
Location Name	SS-43-Comp	SS-44-Comp	SS-47-Comp	SS-48-Comp	SS-49-Comp	SS-50-Comp	SS-51-Comp	SS-57-Comp
Sample Date	09/20/2012	09/20/2012	09/20/2012	09/20/2012	09/20/2012	09/20/2012	09/20/2012	09/20/2012
Sample Area	Residential	Residential	Residential	Residential	Residential	McCuddy's Marina	McCuddy's Marina	Residential
Dioxin/Furan	Result	Result	Result	Result	Result	Result	Result	Result
2,3,7,8-TCDD	0.13 J	0.1 U	0.19 U	0.37 J	0.12 U	0.16 U	0.15 U	0.18 U
1,2,3,7,8-PeCDD	0.41 U	0.16 U	1.8 J	0.18 U	0.21 J	1.4 J	1.3 J	0.17 U
1,2,3,4,7,8-HxCDD	0.99 J	0.14 U	5.4	0.25 U	0.64 J	4.9 J	3.4 J	0.16 U
1,2,3,6,7,8-HxCDD	4 J	0.58 J	36	0.64 J	1.8 J	26	24	0.5 J
1,2,3,7,8,9-HxCDD	2 J	0.3 J	11	0.31 J	1 J	6.8	8	0.42 J
1,2,3,4,6,7,8-HpCDD	83	9.3	590	9.9	31	480	400	4.2 U
OCDD	440	74	4600	78	170	3900	3000	31
2,3,7,8-TCDF	0.19 J	0.13 U	1.1 U	0.16 U	0.2 U	0.96 U	0.73 J	0.25 U
1,2,3,7,8-PeCDF	0.31 U	0.15 U	4.4 J	0.19 U	0.18 U	2.1 J	1.3 J	0.26 U
2,3,4,7,8-PeCDF	0.58 J	0.13 U	5.9	0.21 J	0.59 J	2.4 J	2.9 J	0.38 J
1,2,3,4,7,8-HxCDF	1.4 J	0.15 U	29	0.24 U	0.56 J	9.4	4.5 J	0.25 U
1,2,3,6,7,8-HxCDF	0.51 J	0.2 U	16 U	0.2 U	0.3 J	4.8 U	2.6 J	1.7 U
1,2,3,7,8,9-HxCDF	0.11 U	0.085 U	6.1	0.26 U	0.12 U	2.6 J	1.6 J	0.23 U
2,3,4,6,7,8-HxCDF	0.94 J	0.14 U	13	0.27 J	0.59 J	4.6 J	3.9 J	0.78 J
1,2,3,4,6,7,8-HpCDF	12	1.6 J	55 U	2.3 J	3.4 J	14 U	51	0.65 U
1,2,3,4,7,8,9-HpCDF	0.65 J	0.13 U	6.1	0.22 U	0.23 J	2.7 J	2.7 J	0.28 U
OCDF	12	2.6 J	87	5.9 J	5.2 J	38	80	1.1 U

NOTES:

J = estimated value.

ng/kg = nanograms per kilogram.

U = compound analyzed, but not detected above detection limit.

Table 2
Off-Property Dioxin and Furan TEQs and Ecological Indicator Concentrations
Ridgefield, WA

Sample Area	Sample Location	Sample Name	Date	Dioxin TEQ (ng/kg)	Furan TEQ (ng/kg)
			EIC	9.8	11.4
Port-owned Properties					
Port Railroad Property	SS-37	SS-37	06/17/2010	**29.2**	**23.8**
Port Railroad Property	SS-38	SS-38	06/17/2010	**36.8**	**24.4**
Port Railroad Property	SS-39	SS-39	06/17/2010	3.3	4.3
Port Railroad Property	SS-41	SS-41	08/09/2010	**13.2**	9.9
		SS-41-Dup	08/09/2010	**14.8**	**11.7**
Port Railroad Property	SS-42	SS-42	08/10/2010	**75.7**	**59.3**
Port Marina Property	SS-6	SS-6[a]	07/17/2008	**24.0**	**20.4**
Other Properties					
McCuddy's Marina	SS-50	SS-50b	05/24/2011	**22.5**	**23.6**
		SS-50-Comp-0-6	09/20/2012	**11.2**	5.1
McCuddy's Marina	SS-51	SS-51[b]	05/24/2011	8.3	10.2
		SS-51-Comp-0-4	09/20/2012	9.8	5.6
McCuddy's Marina	SS-52	SS-52	05/24/2011	2.9	0.4
McCuddy's Marina	SS-53	SS-53	05/24/2011	2.1	0.3
Residential	SS-34	SS-34	06/17/2010	0.4	0.4
Residential	SS-35	SS-35	06/17/2010	1.6	1.5
Residential	SS-36	SS-36	06/17/2010	1.8	2.3
Residential	SS-43	SS-43[b]	09/21/2010	**36.3**	**20.7**
		SS-43-Comp-0-6	09/20/2012	2.0	1.2
Residential	SS-44	SS-44[b]	09/21/2010	**16.8**	11.2
		SS-44-Comp-0-6	09/20/2012	0.3	0.2
Residential	SS-45	SS-45	09/21/2010	5.2	2.7
Residential	SS-46	SS-46	05/24/2011	0.4	0.7
Residential	SS-47	SS-47[b]	05/24/2011	**36.9**	**39.5**
		SS-47-Comp-0-6	09/20/2012	**14.4**	**12.8**
Residential	SS-48	SS-48[b]	05/24/2011	**18.3**	**16.3**
		SS-48-Comp-0-6	09/20/2012	0.7	0.4
Residential	SS-49	SS-49[b]	05/24/2011	**13.3**	**15.0**
		SS-49-Comp-0-6	09/20/2012	1.0	0.9
Residential	SS-54	SS-54	05/24/2011	0.5	0.3
Residential	SS-55	SS-55	05/24/2011	2.5	8.4
Residential	SS-56	SS-56	05/24/2011	1.5	0.3
Residential	SS-57	SS-57[b]	05/24/2011	**14.7**	**18.9**
		SS-57-Comp-0-6	09/20/2012	0.3	0.7
Residential	SS-58	SS-58	05/24/2011	1.3	0.4
Residential	SS-59	SS-59	05/24/2011	0.8	0.4
RNWR	SS-31	SS-31-S-0.5	02/26/2009	8.0	3.9
RNWR	SS-32	SS-32-S-0.5	02/26/2009	5.4	2.8
RNWR	SS-33	SS-33-S-0.5	02/26/2009	6.1	1.7

NOTES:

Values in **bold** exceed dioxin or furan TEQ EICs.

EIC = ecological indicator concentration.

ng/kg = nanogram per kilogram (parts per trillion).

RNWR = Ridgefield National Wildlife Refuge

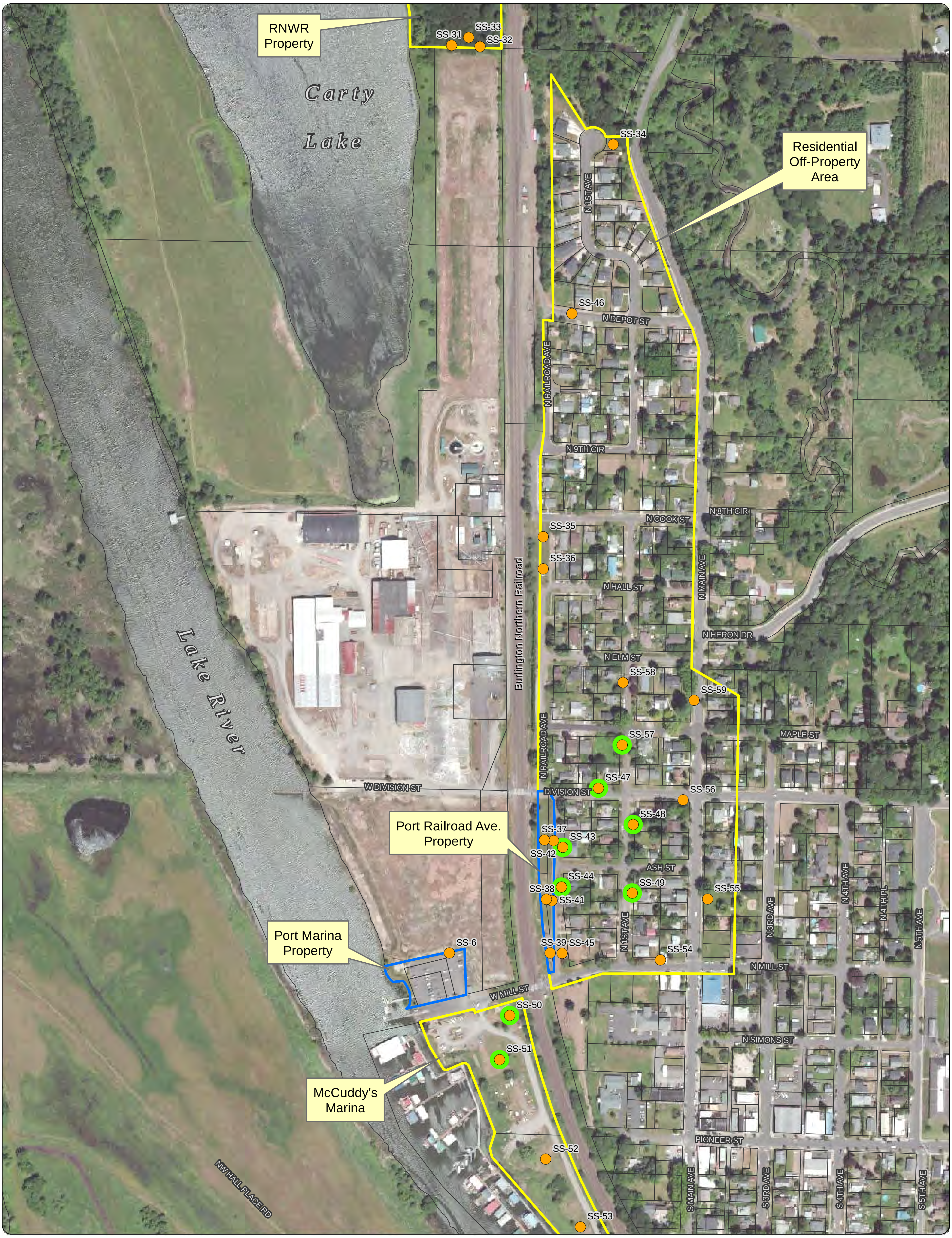
TEQ = toxicity equivalent, calculated using methodology outlined in MFA (2012b).

[a] Not included in ecological risk evaluation. See text for details.

[b] Surface sample results for which composite samples were collected; not included in TEQ upper confidence limit calculations.

FIGURES

Path: X:\9003.01 Port of Ridgefield\39\Projects\Updated TEE Figs June 2012\Fig1_Soil Sample Locations.mxd



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Notes:
1. EIC = ecological indicator concentration
2. TEQ = Toxicity Equivalent
3. ng/kg = nanograms per kilogram

Legend

- ● Surface Soil Sample Locations
- ● Composite Sample Locations
- ▭ Port-owned Properties
- ▭ Off-Property Study Area Previously Investigated
- ▭ Tax Lots

Figure 1
Soil Sample Locations

Ridgefield, Washington

0 200 400
Feet

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Project: 9003.01.39/01 Produced By: J. Schane Approved By: M. Novak Print Date: 1/14/2013

ATTACHMENT 1

LABORATORY ANALYTICAL REPORT

Pace Analytical™

www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Report Prepared for:

Madi Novak
Maul Foster & Alongi
2001 NW 19th Avenue
Suite 200
Portland OR 97209

REPORT OF LABORATORY ANALYSIS FOR PCDD/PCDF

Report Information:

Pace Project #: 10206267
Sample Receipt Date: 09/21/2012
Client Project #: 9003.01.39
Client Sub PO #: N/A
State Cert #: C755

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PCDD/PCDF Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

October 23, 2012
Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

ACCREDITED IN ACCORDANCE WITH
nelac

Report of Laboratory Analysis

Report Prepared Date:

October 23, 2012

DISCUSSION

This report presents the results from the analyses performed on eight samples submitted by a representative of Maul Foster & Alongi. The samples were analyzed for the presence or absence of polychlorodibenzo-p-dioxins (PCDDs) and polychlorodibenzofurans (PCDFs) using USEPA Method 1613B. The reporting limits were based on signal-to-noise measurements. Method blank and field sample results with reporting limits corresponding to the lowest calibration points and adjusted for sample amount were included in Appendix A.

The recoveries of the isotopically-labeled PCDD/PCDF internal standards in the sample extracts ranged from 19-96%. Except for two low values, which were flagged "R" on the results tables, the labeled standard recoveries obtained for this project were within the target ranges specified in Method 1613B. Also, since the quantification of the native 2,3,7,8-substituted congeners was based on isotope dilution, the data were automatically corrected for variation in recovery and accurate values were obtained.

In some cases, interfering substances impacted the determinations of PCDD or PCDF congeners. The affected values were flagged "I" where incorrect isotope ratios were obtained or "P" where polychlorinated diphenyl ethers were present.

A laboratory method blank was prepared and analyzed with each sample batch as part of our routine quality control procedures. The results show the blanks to contain trace levels of selected congeners. These levels were below the calibration range of the method. Sample levels similar to the corresponding blank levels were flagged "B" on the results tables and may be, at least partially, attributed to the background. It should be noted that levels less than ten times the background are not generally considered to be statistically different from the background.

Laboratory spike samples were also prepared with the sample batches using clean sand that had been fortified with native standard materials. The results show that the spiked native compounds were recovered at 83-125%, indicating a high degree of accuracy for these determinations. Matrix spikes were prepared with the sample batches using sample materials from separate projects; results from these analyses will be provided upon request.

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
Alabama	40770	Montana	92
Alaska	MN00064	Nebraska	
Arizona	AZ0014	Nevada	MN_00064_200
Arkansas	88-0680	New Jersey (NE	MN002
California	01155CA	New Mexico	MN00064
Colorado	MN00064	New York (NEL	11647
Connecticut	PH-0256	North Carolina	27700
EPA Region 5	WD-15J	North Dakota	R-036
EPA Region 8	8TMS-Q	Ohio	4150
Florida (NELAP	E87605	Ohio VAP	CL101 9507
Georgia (DNR)	959	Oklahoma	D9922
Guam	959	Oregon (ELAP)	MN200001-005
Hawaii	SLD	Oregon (OREL	MN300001-001
Idaho	MN00064	Pennsylvania	68-00563
Illinois	200012	Saipan	MP0003
Indiana	C-MN-01	South Carolina	74003001
Indiana	C-MN-01	Tennesee	2818
Iowa	368	Tennessee	02818
Kansas	E-10167	Texas	T104704192-08
Kentucky	90062	Utah (NELAP)	PAM
Louisiana	03086	Virginia	00251
Maine	2007029	Washington	C755
Maryland	322	West Virginia	9952C
Michigan	9909	Wisconsin	999407970
Minnesota	027-053-137	Wyoming	8TMS-Q
Mississippi	MN00064		

Appendix A

Sample Management

Pace Analytical®
www.pacelabs.com

1151, 1154

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10206267

Page: 1 of 5

1660893

Section A
Required Client Information:

Company: MFA
Address: 2001 NW 19th Ave
Suite 200, Portland, OR, 97209
Email To: mnovak@maulfoster.com
Phone: 9715442139 Fax:
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Madi Novak
Copy To:
Purchase Order No.:
Project Name:
Project Number: 9003.01.39

Section C
Invoice Information:

Attention: Lewis Olin
Company Name: Port of Ridgefield
Address: 111 W Division Ridgefield WA
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: PW Ø WA

Section D
Required Client Information

Matrix Codes
MATRIX / CODE
Drinking Water DW
Water WT
Waste Water WW
Product P
Soil/Solid SL
Oil OL
Wipe WP
Air AR
Tissue TS
Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N Analysis Test	EPA 1613B	ARCHIVE	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SS-57-Comp-0-6	SL	G			9-20-12	9:00		1	X									X			10206267001
2	SS-57-1	↓	↓			↓	↓		↓	↓										X		002
3	SS-57-2	↓	↓			↓	↓		↓	↓										X		003
4	SS-57-3	↓	↓			↓	↓		↓	↓										X		004
5	SS-57-4	↓	↓			↓	↓		↓	↓										X		005
6	SS-57-5	↓	↓			↓	↓		↓	↓										X		006
7	SS-57-6	↓	↓			↓	↓		↓	↓										X		007
8	SS-47-Comp-0-6	↓	↓			↓	9:30		↓	↓									X			008
9	SS-47-1	↓	↓			↓	↓		↓	↓										X		009
10	SS-47-2	↓	↓			↓	↓		↓	↓										X		010
11	SS-47-3	↓	↓			↓	↓		↓	↓										X		011
12	SS-47-4	↓	↓			↓	↓		↓	↓										X		012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	MFA	9-20-12	16:00	Pace	9-21-12	10:10	0.3	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Phil Wiescher
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 9-20-12

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®
www.pacelabs.com

1151, 1154

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10206267

Page: 2 of 5

1660861

Section A
Required Client Information:

Company: MFA
Address: 2001 NW 19th Ave. Suite 200
Portland, OR, 97209
Email To: mnovak@maulfoster.com
Phone: 9715442139 Fax:
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Madi Novak
Copy To:
Purchase Order No.:
Project Name:
Project Number: 9003.01.39

Section C
Invoice Information:

Attention: Laurie Olin
Company Name: Port of Ridgefield
Address: 111 W Division, Ridgefield WA
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: WA

Section D
Required Client Information

Matrix Codes
MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	↓Analysis Test↓ Y/N	EPA 1613B	ARCHIVE	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SS-47-5	SL	G			9-20-12	9:30		1	X										X		10206267013
2	SS-47-6	↓	↓			↓	9:30		↓	↓										X		014
3	SS-50-Comp-0-6	↓	↓			↓	10:15		↓	↓									X			015
4	SS-50-1	↓	↓			↓	↓		↓	↓										X		016
5	SS-50-2	↓	↓			↓	↓		↓	↓										X		017
6	~~SS-50-3~~ PW SS-50-5	↓	↓			↓	↓		↓	↓										X		018
7	~~SS-50-4~~ PW SS-50-6	↓	↓			↓	↓		↓	↓										X		019
8	SS-51-Comp-0-4	↓	↓			↓	10:30		↓	↓									X			020
9	SS-51-1	↓	↓			↓	↓		↓	↓										X		021
10	SS-51-2	↓	↓			↓	↓		↓	↓										X		022
11	SS-51-3	↓	↓			↓	↓		↓	↓										X		023
12	SS-51-4	↓	↓			↓	↓		↓	↓										X		024

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	/ MFA	9-20-12	16:00	Pace	9-21-12	10:10	0.3	Y	Y	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Phil Wiescher
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 9-20-12

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

1151, 1154

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10206267

Page: 3 of 5

1660858

Section A
Required Client Information:

Company: MFA
Address: 2001 NW 19th Ave. Suite 200
Portland, OR, 97209
Email To: mnovak@maulfoster.com
Phone: 9715442139 Fax:
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Madi Novak
Copy To:
Purchase Order No.:
Project Name:
Project Number: 9003.01.39

Section C
Invoice Information:

Attention: Lauria Olin
Company Name: Port of Ridgefield
Address: 111 W Division Ridgefield WA
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER ______

Site Location STATE: WA

Section D
Required Client Information

Matrix Codes
MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	EPA 1613B	ARCHIVE	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SS-48-Comp-0-6	SL	G			9-20-12	11:45		1	X									X			10206267025
2	SS-48-1																			X		026
3	SS-48-2																			X		027
4	SS-48-3																			X		028
5	SS-48-4																			X		029
6	SS-48-5																			X		030
7	SS-48-6							↓												X		031
8	SS-49-Comp-0-6						12:00												X			032
9	SS-49-1																			X		033
10	SS-49-2																			X		034
11	SS-49-3																			X		035
12	SS-49-4	↓	↓			↓	↓		↓	↓										X		036

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	MFA	9-20-12	16:00	Pace	9-21-12	10:10	0.3	Y	Y	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Phil Wiescher
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 9-20-12

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

1151, 1154

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10206267

Page: 4 of 5

1660860

Section A
Required Client Information:

Company: MFA
Address: 2001 NW 19th Ave. Suite 200
Portland, OR, 97209
Email To: mnovak@maulfoster.com
Phone: 9715442139 Fax:
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Madi Novak
Copy To:
Purchase Order No.:
Project Name:
Project Number: 9003-01.39

Section C
Invoice Information:

Attention: Laurie Olin
Company Name: Port of Ridgefield
Address: 111 W Division Ridgefield WA
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER ______

Site Location STATE: WA

Section D
Required Client Information

Matrix Codes
MATRIX / CODE
Drinking Water DW
Water WT
Waste Water WW
Product P
Soil/Solid SL
Oil OL
Wipe WP
Air AR
Tissue TS
Other OT

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: EPA 1613B	ARC II IV	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SS-49-5	SL	G			9-20-12	12:00		1	X									X		10206267037
2	SS-49-6						12:00												X		038
3	SS-44-Comp-0-6						12:30											X			039
4	SS-44-1																		X		040
5	SS-44-2																		X		041
6	SS-44-3																		X		042
7	SS-44-4																		X		043
8	SS-44-5																		X		044
9	SS-44-6						↓												X		045
10	SS-43-Comp-0-6						12:45											X			046
11	SS-43-1																		X		047
12	SS-43-2	↓	↓			↓	↓		↓	↓									X		048

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	MFA	9-20-12	16:00	Pace	9-21-12	10:10	0.3	Y	Y	Y

SAMPLE CONDITIONS

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Phil Wiescher
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 9-20-12

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®
www.pacelabs.com

1151, 1154

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10206267

Page: 5 of 5

1660859

Section A
Required Client Information:

Company: MFA
Address: 2001 NW 19th Ave Suite 200
Portland, OR, 97209
Email To: mnovak@maulfoster.com
Phone: 971 544 2139 Fax:
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Madi Novak
Copy To:
Purchase Order No.:
Project Name:
Project Number: 9003.01.39

Section C
Invoice Information:

Attention: Laurie Olin
Company Name: Port of Ridgefield
Address: 111 W Division Ridgefield WA
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: WA

Section D
Required Client Information

Matrix Codes
MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	↓Analysis Test↓ Y/N	ARCHIVE	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SS-43-3	SL	G			9-20-12	12:45		1	X									X		10206267049
2	SS-43-4	↓	↓			↓	↓		↓	↓									X		050
3	SS-43-5	↓	↓			↓	↓		↓	↓									X		051
4	SS-43-6	↓	↓			↓	↓		↓	↓									X		052
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	MFA	9-20-12	16:00	Pace	9-21-12	10:10	0.3	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Phil Wiescher
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 9-20-12

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 22Aug2012 Page 1 of 1
	Document No.: **F-MN-L-213-rev.04**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: MFA

Project #:

WO# : 10206267

10206267

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: 801105979940

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No **Seals Intact?** ☒ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☒ Yes ☐ No

Thermometer Used: ☒ B88A912167504 ☐ 80512447 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 0.3 **Biological Tissue Frozen?** ☐ Yes ☐ No **Date and Initials of Person Examining Contents:** 9.21.12

Temp should be above freezing to 6°C

				Comments:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	7.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: SL	☒ Yes	☒ No	☐ N/A	12. Wrote SS-57 comp on top of jar As was written on sample Label
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	☐ Yes	☐ No	☒ N/A	13. ☐ HNO$_3$ ☐ H$_2$SO$_4$ ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO$_3$, H$_2$SO$_4$, HCl<2; NaOH>12)	☐ Yes	☐ No	☒ N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	☐ Yes	☒ No		Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	
Pace Trip Blank Lot # (if purchased):				

Field Data Required? ☐ Yes ☐ No

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: **Date:** 09/21/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Method 1613B Blank Analysis Results

Lab Sample ID	BLANK-34130	Matrix	Solid
Filename	U121010A_07	Dilution	NA
Total Amount Extracted	10.6 g	Extracted	10/08/2012 19:45
ICAL ID	U120910	Analyzed	10/10/2012 15:50
CCal Filename(s)	U121010A_01	Injected By	CVS

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg
2,3,7,8-TCDF	ND	-----	0.94
Total TCDF	ND	-----	0.94
2,3,7,8-TCDD	ND	-----	0.94
Total TCDD	ND	-----	0.94
1,2,3,7,8-PeCDF	ND	-----	4.70
2,3,4,7,8-PeCDF	ND	-----	4.70
Total PeCDF	ND	-----	4.70
1,2,3,7,8-PeCDD	ND	-----	4.70
Total PeCDD	ND	-----	4.70
1,2,3,4,7,8-HxCDF	ND	-----	4.70
1,2,3,6,7,8-HxCDF	ND	-----	4.70
2,3,4,6,7,8-HxCDF	ND	-----	4.70
1,2,3,7,8,9-HxCDF	ND	-----	4.70
Total HxCDF	ND	-----	4.70
1,2,3,4,7,8-HxCDD	ND	-----	4.70
1,2,3,6,7,8-HxCDD	ND	-----	4.70
1,2,3,7,8,9-HxCDD	ND	-----	4.70
Total HxCDD	ND	-----	4.70
1,2,3,4,6,7,8-HpCDF	ND	-----	4.70
1,2,3,4,7,8,9-HpCDF	ND	-----	4.70
Total HpCDF	ND	-----	4.70
1,2,3,4,6,7,8-HpCDD	ND	-----	4.70
Total HpCDD	ND	-----	4.70
OCDF	ND	-----	9.40
OCDD	ND	-----	9.40

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	70
2,3,7,8-TCDD-13C	2.00	76
1,2,3,7,8-PeCDF-13C	2.00	85
2,3,4,7,8-PeCDF-13C	2.00	88
1,2,3,7,8-PeCDD-13C	2.00	90
1,2,3,4,7,8-HxCDF-13C	2.00	79
1,2,3,6,7,8-HxCDF-13C	2.00	83
2,3,4,6,7,8-HxCDF-13C	2.00	83
1,2,3,7,8,9-HxCDF-13C	2.00	83
1,2,3,4,7,8-HxCDD-13C	2.00	77
1,2,3,6,7,8-HxCDD-13C	2.00	71
1,2,3,4,6,7,8-HpCDF-13C	2.00	66
1,2,3,4,7,8,9-HpCDF-13C	2.00	68
1,2,3,4,6,7,8-HpCDD-13C	2.00	63
OCDD-13C	4.00	47
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	80

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

Method 1613B Blank Analysis Results

Lab Sample ID	BLANK-34212	Matrix	Solid
Filename	F121019A_02	Dilution	NA
Total Amount Extracted	20.3 g	Extracted	10/16/2012 13:45
ICAL ID	F121011	Analyzed	10/19/2012 10:22
CCal Filename(s)	F121018B_21	Injected By	ACE

Native Isomers	**Conc** ng/Kg	**EMPC** ng/Kg	**RL** ng/Kg
2,3,7,8-TCDF	ND	-----	0.49
Total TCDF	ND	-----	0.49
2,3,7,8-TCDD	ND	-----	0.49
Total TCDD	ND	-----	0.49
1,2,3,7,8-PeCDF	ND	-----	2.50
2,3,4,7,8-PeCDF	ND	-----	2.50
Total PeCDF	ND	-----	2.50
1,2,3,7,8-PeCDD	ND	-----	2.50
Total PeCDD	ND	-----	2.50
1,2,3,4,7,8-HxCDF	ND	-----	2.50
1,2,3,6,7,8-HxCDF	ND	-----	2.50
2,3,4,6,7,8-HxCDF	ND	-----	2.50
1,2,3,7,8,9-HxCDF	ND	-----	2.50
Total HxCDF	ND	-----	2.50
1,2,3,4,7,8-HxCDD	ND	-----	2.50
1,2,3,6,7,8-HxCDD	ND	-----	2.50
1,2,3,7,8,9-HxCDD	ND	-----	2.50
Total HxCDD	ND	-----	2.50
1,2,3,4,6,7,8-HpCDF	ND	-----	2.50
1,2,3,4,7,8,9-HpCDF	ND	-----	2.50
Total HpCDF	ND	-----	2.50
1,2,3,4,6,7,8-HpCDD	ND	-----	2.50
Total HpCDD	ND	-----	2.50
OCDF	ND	-----	4.90
OCDD	ND	-----	4.90

Internal Standards	**ng's Added**	**Percent Recovery**
2,3,7,8-TCDF-13C	2.00	53
2,3,7,8-TCDD-13C	2.00	65
1,2,3,7,8-PeCDF-13C	2.00	68
2,3,4,7,8-PeCDF-13C	2.00	71
1,2,3,7,8-PeCDD-13C	2.00	85
1,2,3,4,7,8-HxCDF-13C	2.00	71
1,2,3,6,7,8-HxCDF-13C	2.00	74
2,3,4,6,7,8-HxCDF-13C	2.00	72
1,2,3,7,8,9-HxCDF-13C	2.00	67
1,2,3,4,7,8-HxCDD-13C	2.00	78
1,2,3,6,7,8-HxCDD-13C	2.00	67
1,2,3,4,6,7,8-HpCDF-13C	2.00	75
1,2,3,4,7,8,9-HpCDF-13C	2.00	72
1,2,3,4,6,7,8-HpCDD-13C	2.00	81
OCDD-13C	4.00	63
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	70

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-57-Comp-0-6		
Lab Sample ID	10206267001		
Filename	F121012B_05		
Injected By	CVS		
Total Amount Extracted	11.7 g	Matrix	Solid
% Moisture	14.1	Dilution	NA
Dry Weight Extracted	10.1 g	Collected	09/20/2012 09:00
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121012B_01	Extracted	10/08/2012 19:45
Method Blank ID	BLANK-34130	Analyzed	10/12/2012 11:57

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg
2,3,7,8-TCDF	ND	-----	0.99
Total TCDF	1.2	-----	0.99
2,3,7,8-TCDD	ND	-----	0.99
Total TCDD	ND	-----	0.99
1,2,3,7,8-PeCDF	ND	-----	5.00
2,3,4,7,8-PeCDF	ND	-----	5.00
Total PeCDF	8.1	-----	5.00
1,2,3,7,8-PeCDD	ND	-----	5.00
Total PeCDD	ND	-----	5.00
1,2,3,4,7,8-HxCDF	ND	-----	5.00
1,2,3,6,7,8-HxCDF	ND	-----	5.00
2,3,4,6,7,8-HxCDF	ND	-----	5.00
1,2,3,7,8,9-HxCDF	ND	-----	5.00
Total HxCDF	ND	-----	5.00
1,2,3,4,7,8-HxCDD	ND	-----	5.00
1,2,3,6,7,8-HxCDD	ND	-----	5.00
1,2,3,7,8,9-HxCDD	ND	-----	5.00
Total HxCDD	ND	-----	5.00
1,2,3,4,6,7,8-HpCDF	ND	-----	5.00
1,2,3,4,7,8,9-HpCDF	ND	-----	5.00
Total HpCDF	ND	-----	5.00
1,2,3,4,6,7,8-HpCDD	ND	-----	5.00
Total HpCDD	ND	-----	5.00
OCDF	ND	-----	9.90
OCDD	31.0	-----	9.90

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	45
2,3,7,8-TCDD-13C	2.00	51
1,2,3,7,8-PeCDF-13C	2.00	48
2,3,4,7,8-PeCDF-13C	2.00	48
1,2,3,7,8-PeCDD-13C	2.00	53
1,2,3,4,7,8-HxCDF-13C	2.00	35
1,2,3,6,7,8-HxCDF-13C	2.00	30
2,3,4,6,7,8-HxCDF-13C	2.00	32
1,2,3,7,8,9-HxCDF-13C	2.00	39
1,2,3,4,7,8-HxCDD-13C	2.00	38
1,2,3,6,7,8-HxCDD-13C	2.00	30
1,2,3,4,6,7,8-HpCDF-13C	2.00	24 R
1,2,3,4,7,8,9-HpCDF-13C	2.00	30
1,2,3,4,6,7,8-HpCDD-13C	2.00	29
OCDD-13C	4.00	19
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	79

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
R = Recovery outside target range

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-47-Comp-0-6		
Lab Sample ID	10206267008		
Filename	F121012B_10		
Injected By	CVS		
Total Amount Extracted	11.3 g	Matrix	Solid
% Moisture	9.2	Dilution	NA
Dry Weight Extracted	10.3 g	Collected	09/20/2012 09:30
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121012B_01	Extracted	10/08/2012 19:45
Method Blank ID	BLANK-34130	Analyzed	10/12/2012 15:50

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	
2,3,7,8-TCDF	-----	1.1	0.97	I
Total TCDF	5.5	-----	0.97	
2,3,7,8-TCDD	ND	-----	0.97	
Total TCDD	ND	-----	0.97	
1,2,3,7,8-PeCDF	ND	-----	4.90	
2,3,4,7,8-PeCDF	5.9	-----	4.90	
Total PeCDF	110.0	-----	4.90	
1,2,3,7,8-PeCDD	ND	-----	4.90	
Total PeCDD	ND	-----	4.90	
1,2,3,4,7,8-HxCDF	29.0	-----	4.90	
1,2,3,6,7,8-HxCDF	-----	16.0	4.90	P
2,3,4,6,7,8-HxCDF	13.0	-----	4.90	
1,2,3,7,8,9-HxCDF	6.1	-----	4.90	
Total HxCDF	300.0	-----	4.90	
1,2,3,4,7,8-HxCDD	5.4	-----	4.90	
1,2,3,6,7,8-HxCDD	36.0	-----	4.90	
1,2,3,7,8,9-HxCDD	11.0	-----	4.90	
Total HxCDD	130.0	-----	4.90	
1,2,3,4,6,7,8-HpCDF	-----	55.0	4.90	P
1,2,3,4,7,8,9-HpCDF	6.1	-----	4.90	
Total HpCDF	160.0	-----	4.90	
1,2,3,4,6,7,8-HpCDD	590.0	-----	4.90	
Total HpCDD	1100.0	-----	4.90	
OCDF	87.0	-----	9.70	
OCDD	4600.0	-----	9.70	

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	43
2,3,7,8-TCDD-13C	2.00	49
1,2,3,7,8-PeCDF-13C	2.00	45
2,3,4,7,8-PeCDF-13C	2.00	46
1,2,3,7,8-PeCDD-13C	2.00	52
1,2,3,4,7,8-HxCDF-13C	2.00	35
1,2,3,6,7,8-HxCDF-13C	2.00	33
2,3,4,6,7,8-HxCDF-13C	2.00	35
1,2,3,7,8,9-HxCDF-13C	2.00	38
1,2,3,4,7,8-HxCDD-13C	2.00	39
1,2,3,6,7,8-HxCDD-13C	2.00	32
1,2,3,4,6,7,8-HpCDF-13C	2.00	27 R
1,2,3,4,7,8,9-HpCDF-13C	2.00	34
1,2,3,4,6,7,8-HpCDD-13C	2.00	31
OCDD-13C	4.00	22
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	83

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
R = Recovery outside target range
P = PCDE Interference
I = Interference present

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-50-Comp-0-6		
Lab Sample ID	10206267015		
Filename	F121012B_11		
Injected By	CVS		
Total Amount Extracted	12.5 g	Matrix	Solid
% Moisture	19.4	Dilution	NA
Dry Weight Extracted	10.1 g	Collected	09/20/2012 10:15
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121012B_01	Extracted	10/08/2012 19:45
Method Blank ID	BLANK-34130	Analyzed	10/12/2012 16:37

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	
2,3,7,8-TCDF	ND	-----	0.99	
Total TCDF	ND	-----	0.99	
2,3,7,8-TCDD	ND	-----	0.99	
Total TCDD	ND	-----	0.99	
1,2,3,7,8-PeCDF	ND	-----	5.00	
2,3,4,7,8-PeCDF	ND	-----	5.00	
Total PeCDF	31.0	-----	5.00	
1,2,3,7,8-PeCDD	ND	-----	5.00	
Total PeCDD	ND	-----	5.00	
1,2,3,4,7,8-HxCDF	9.4	-----	5.00	
1,2,3,6,7,8-HxCDF	ND	-----	5.00	
2,3,4,6,7,8-HxCDF	ND	-----	5.00	
1,2,3,7,8,9-HxCDF	ND	-----	5.00	
Total HxCDF	120.0	-----	5.00	
1,2,3,4,7,8-HxCDD	ND	-----	5.00	
1,2,3,6,7,8-HxCDD	26.0	-----	5.00	
1,2,3,7,8,9-HxCDD	6.8	-----	5.00	
Total HxCDD	110.0	-----	5.00	
1,2,3,4,6,7,8-HpCDF	-----	14	5.00	P
1,2,3,4,7,8,9-HpCDF	ND	-----	5.00	
Total HpCDF	85.0	-----	5.00	
1,2,3,4,6,7,8-HpCDD	480.0	-----	5.00	
Total HpCDD	890.0	-----	5.00	
OCDF	38.0	-----	9.90	
OCDD	3900.0	-----	9.90	

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	42
2,3,7,8-TCDD-13C	2.00	50
1,2,3,7,8-PeCDF-13C	2.00	49
2,3,4,7,8-PeCDF-13C	2.00	49
1,2,3,7,8-PeCDD-13C	2.00	61
1,2,3,4,7,8-HxCDF-13C	2.00	44
1,2,3,6,7,8-HxCDF-13C	2.00	39
2,3,4,6,7,8-HxCDF-13C	2.00	42
1,2,3,7,8,9-HxCDF-13C	2.00	43
1,2,3,4,7,8-HxCDD-13C	2.00	48
1,2,3,6,7,8-HxCDD-13C	2.00	41
1,2,3,4,6,7,8-HpCDF-13C	2.00	37
1,2,3,4,7,8,9-HpCDF-13C	2.00	38
1,2,3,4,6,7,8-HpCDD-13C	2.00	43
OCDD-13C	4.00	31
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	81

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
P = PCDE Interference

REPORT OF LABORATORY ANALYSIS

Report No.....10206267

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-51-Comp-0-4		
Lab Sample ID	10206267020-R		
Filename	F121020A_16		
Injected By	BAL		
Total Amount Extracted	12.8 g	Matrix	Solid
% Moisture	15.7	Dilution	NA
Dry Weight Extracted	10.8 g	Collected	09/20/2012 10:30
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121020A_01	Extracted	10/16/2012 13:45
Method Blank ID	BLANK-34212	Analyzed	10/21/2012 01:54

Native Isomers	**Conc** ng/Kg	**EMPC** ng/Kg	**RL** ng/Kg
2,3,7,8-TCDF	ND	-----	0.93
Total TCDF	1.5	-----	0.93
2,3,7,8-TCDD	ND	-----	0.93
Total TCDD	ND	-----	0.93
1,2,3,7,8-PeCDF	ND	-----	4.60
2,3,4,7,8-PeCDF	ND	-----	4.60
Total PeCDF	32.0	-----	4.60
1,2,3,7,8-PeCDD	ND	-----	4.60
Total PeCDD	ND	-----	4.60
1,2,3,4,7,8-HxCDF	ND	-----	4.60
1,2,3,6,7,8-HxCDF	ND	-----	4.60
2,3,4,6,7,8-HxCDF	ND	-----	4.60
1,2,3,7,8,9-HxCDF	ND	-----	4.60
Total HxCDF	86.0	-----	4.60
1,2,3,4,7,8-HxCDD	ND	-----	4.60
1,2,3,6,7,8-HxCDD	24.0	-----	4.60
1,2,3,7,8,9-HxCDD	8.0	-----	4.60
Total HxCDD	100.0	-----	4.60
1,2,3,4,6,7,8-HpCDF	51.0	-----	4.60
1,2,3,4,7,8,9-HpCDF	ND	-----	4.60
Total HpCDF	140.0	-----	4.60
1,2,3,4,6,7,8-HpCDD	400.0	-----	4.60
Total HpCDD	760.0	-----	4.60
OCDF	80.0	-----	9.30
OCDD	3000.0	-----	9.30

Internal Standards	**ng's Added**	**Percent Recovery**
2,3,7,8-TCDF-13C	2.00	82
2,3,7,8-TCDD-13C	2.00	90
1,2,3,7,8-PeCDF-13C	2.00	83
2,3,4,7,8-PeCDF-13C	2.00	83
1,2,3,7,8-PeCDD-13C	2.00	89
1,2,3,4,7,8-HxCDF-13C	2.00	80
1,2,3,6,7,8-HxCDF-13C	2.00	83
2,3,4,6,7,8-HxCDF-13C	2.00	82
1,2,3,7,8,9-HxCDF-13C	2.00	81
1,2,3,4,7,8-HxCDD-13C	2.00	88
1,2,3,6,7,8-HxCDD-13C	2.00	73
1,2,3,4,6,7,8-HpCDF-13C	2.00	70
1,2,3,4,7,8,9-HpCDF-13C	2.00	75
1,2,3,4,6,7,8-HpCDD-13C	2.00	88
OCDD-13C	4.00	77
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	89

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

Pace Analytical™

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-48-Comp-0-6
Lab Sample ID	10206267025-R
Filename	F121020A_12
Injected By	BAL
Total Amount Extracted	12.5 g
% Moisture	13.9
Dry Weight Extracted	10.8 g
ICAL ID	F121011
CCal Filename(s)	F121020A_01
Method Blank ID	BLANK-34212

Matrix	Solid
Dilution	NA
Collected	09/20/2012 11:45
Received	09/21/2012 10:10
Extracted	10/16/2012 13:45
Analyzed	10/20/2012 22:48

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg
2,3,7,8-TCDF	ND	-----	0.93
Total TCDF	ND	-----	0.93
2,3,7,8-TCDD	ND	-----	0.93
Total TCDD	ND	-----	0.93
1,2,3,7,8-PeCDF	ND	-----	4.60
2,3,4,7,8-PeCDF	ND	-----	4.60
Total PeCDF	ND	-----	4.60
1,2,3,7,8-PeCDD	ND	-----	4.60
Total PeCDD	ND	-----	4.60
1,2,3,4,7,8-HxCDF	ND	-----	4.60
1,2,3,6,7,8-HxCDF	ND	-----	4.60
2,3,4,6,7,8-HxCDF	ND	-----	4.60
1,2,3,7,8,9-HxCDF	ND	-----	4.60
Total HxCDF	ND	-----	4.60
1,2,3,4,7,8-HxCDD	ND	-----	4.60
1,2,3,6,7,8-HxCDD	ND	-----	4.60
1,2,3,7,8,9-HxCDD	ND	-----	4.60
Total HxCDD	ND	-----	4.60
1,2,3,4,6,7,8-HpCDF	ND	-----	4.60
1,2,3,4,7,8,9-HpCDF	ND	-----	4.60
Total HpCDF	ND	-----	4.60
1,2,3,4,6,7,8-HpCDD	9.9	-----	4.60
Total HpCDD	18.0	-----	4.60
OCDF	ND	-----	9.30
OCDD	78.0	-----	9.30

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	80
2,3,7,8-TCDD-13C	2.00	92
1,2,3,7,8-PeCDF-13C	2.00	86
2,3,4,7,8-PeCDF-13C	2.00	83
1,2,3,7,8-PeCDD-13C	2.00	91
1,2,3,4,7,8-HxCDF-13C	2.00	79
1,2,3,6,7,8-HxCDF-13C	2.00	77
2,3,4,6,7,8-HxCDF-13C	2.00	75
1,2,3,7,8,9-HxCDF-13C	2.00	70
1,2,3,4,7,8-HxCDD-13C	2.00	84
1,2,3,6,7,8-HxCDD-13C	2.00	66
1,2,3,4,6,7,8-HpCDF-13C	2.00	60
1,2,3,4,7,8,9-HpCDF-13C	2.00	62
1,2,3,4,6,7,8-HpCDD-13C	2.00	58
OCDD-13C	4.00	48
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	90

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-49-Comp-0-6		
Lab Sample ID	10206267032-R		
Filename	F121020A_13		
Injected By	BAL		
Total Amount Extracted	12.3 g	Matrix	Solid
% Moisture	13.3	Dilution	NA
Dry Weight Extracted	10.7 g	Collected	09/20/2012 12:00
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121020A_01	Extracted	10/16/2012 13:45
Method Blank ID	BLANK-34212	Analyzed	10/20/2012 23:34

Native Isomers	**Conc** ng/Kg	**EMPC** ng/Kg	**RL** ng/Kg
2,3,7,8-TCDF	ND	-----	0.94
Total TCDF	ND	-----	0.94
2,3,7,8-TCDD	ND	-----	0.94
Total TCDD	ND	-----	0.94
1,2,3,7,8-PeCDF	ND	-----	4.70
2,3,4,7,8-PeCDF	ND	-----	4.70
Total PeCDF	ND	-----	4.70
1,2,3,7,8-PeCDD	ND	-----	4.70
Total PeCDD	ND	-----	4.70
1,2,3,4,7,8-HxCDF	ND	-----	4.70
1,2,3,6,7,8-HxCDF	ND	-----	4.70
2,3,4,6,7,8-HxCDF	ND	-----	4.70
1,2,3,7,8,9-HxCDF	ND	-----	4.70
Total HxCDF	ND	-----	4.70
1,2,3,4,7,8-HxCDD	ND	-----	4.70
1,2,3,6,7,8-HxCDD	ND	-----	4.70
1,2,3,7,8,9-HxCDD	ND	-----	4.70
Total HxCDD	ND	-----	4.70
1,2,3,4,6,7,8-HpCDF	ND	-----	4.70
1,2,3,4,7,8,9-HpCDF	ND	-----	4.70
Total HpCDF	5.1	-----	4.70
1,2,3,4,6,7,8-HpCDD	31.0	-----	4.70
Total HpCDD	51.0	-----	4.70
OCDF	ND	-----	9.40
OCDD	170.0	-----	9.40

Internal Standards	**ng's Added**	**Percent Recovery**
2,3,7,8-TCDF-13C	2.00	71
2,3,7,8-TCDD-13C	2.00	83
1,2,3,7,8-PeCDF-13C	2.00	81
2,3,4,7,8-PeCDF-13C	2.00	82
1,2,3,7,8-PeCDD-13C	2.00	96
1,2,3,4,7,8-HxCDF-13C	2.00	77
1,2,3,6,7,8-HxCDF-13C	2.00	78
2,3,4,6,7,8-HxCDF-13C	2.00	79
1,2,3,7,8,9-HxCDF-13C	2.00	75
1,2,3,4,7,8-HxCDD-13C	2.00	87
1,2,3,6,7,8-HxCDD-13C	2.00	69
1,2,3,4,6,7,8-HpCDF-13C	2.00	79
1,2,3,4,7,8,9-HpCDF-13C	2.00	71
1,2,3,4,6,7,8-HpCDD-13C	2.00	71
OCDD-13C	4.00	56
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	84

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-44-Comp-0-6		
Lab Sample ID	10206267039-R		
Filename	F121020A_14		
Injected By	BAL		
Total Amount Extracted	12.2 g	Matrix	Solid
% Moisture	11.2	Dilution	NA
Dry Weight Extracted	10.8 g	Collected	09/20/2012 12:30
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121020A_01	Extracted	10/16/2012 13:45
Method Blank ID	BLANK-34212	Analyzed	10/21/2012 00:21

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg
2,3,7,8-TCDF	ND	-----	0.92
Total TCDF	ND	-----	0.92
2,3,7,8-TCDD	ND	-----	0.92
Total TCDD	ND	-----	0.92
1,2,3,7,8-PeCDF	ND	-----	4.60
2,3,4,7,8-PeCDF	ND	-----	4.60
Total PeCDF	ND	-----	4.60
1,2,3,7,8-PeCDD	ND	-----	4.60
Total PeCDD	ND	-----	4.60
1,2,3,4,7,8-HxCDF	ND	-----	4.60
1,2,3,6,7,8-HxCDF	ND	-----	4.60
2,3,4,6,7,8-HxCDF	ND	-----	4.60
1,2,3,7,8,9-HxCDF	ND	-----	4.60
Total HxCDF	ND	-----	4.60
1,2,3,4,7,8-HxCDD	ND	-----	4.60
1,2,3,6,7,8-HxCDD	ND	-----	4.60
1,2,3,7,8,9-HxCDD	ND	-----	4.60
Total HxCDD	ND	-----	4.60
1,2,3,4,6,7,8-HpCDF	ND	-----	4.60
1,2,3,4,7,8,9-HpCDF	ND	-----	4.60
Total HpCDF	ND	-----	4.60
1,2,3,4,6,7,8-HpCDD	9.3	-----	4.60
Total HpCDD	18.0	-----	4.60
OCDF	ND	-----	9.20
OCDD	74.0	-----	9.20

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	76
2,3,7,8-TCDD-13C	2.00	86
1,2,3,7,8-PeCDF-13C	2.00	77
2,3,4,7,8-PeCDF-13C	2.00	77
1,2,3,7,8-PeCDD-13C	2.00	87
1,2,3,4,7,8-HxCDF-13C	2.00	73
1,2,3,6,7,8-HxCDF-13C	2.00	76
2,3,4,6,7,8-HxCDF-13C	2.00	75
1,2,3,7,8,9-HxCDF-13C	2.00	72
1,2,3,4,7,8-HxCDD-13C	2.00	77
1,2,3,6,7,8-HxCDD-13C	2.00	63
1,2,3,4,6,7,8-HpCDF-13C	2.00	65
1,2,3,4,7,8,9-HpCDF-13C	2.00	67
1,2,3,4,6,7,8-HpCDD-13C	2.00	69
OCDD-13C	4.00	61
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	84

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-43-Comp-0-6		
Lab Sample ID	10206267046-R		
Filename	F121020A_15		
Injected By	BAL		
Total Amount Extracted	12.3 g	Matrix	Solid
% Moisture	11.3	Dilution	NA
Dry Weight Extracted	10.9 g	Collected	09/20/2012 12:45
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121020A_01	Extracted	10/16/2012 13:45
Method Blank ID	BLANK-34212	Analyzed	10/21/2012 01:07

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg
2,3,7,8-TCDF	ND	-----	0.92
Total TCDF	ND	-----	0.92
2,3,7,8-TCDD	ND	-----	0.92
Total TCDD	ND	-----	0.92
1,2,3,7,8-PeCDF	ND	-----	4.60
2,3,4,7,8-PeCDF	ND	-----	4.60
Total PeCDF	ND	-----	4.60
1,2,3,7,8-PeCDD	ND	-----	4.60
Total PeCDD	ND	-----	4.60
1,2,3,4,7,8-HxCDF	ND	-----	4.60
1,2,3,6,7,8-HxCDF	ND	-----	4.60
2,3,4,6,7,8-HxCDF	ND	-----	4.60
1,2,3,7,8,9-HxCDF	ND	-----	4.60
Total HxCDF	13.0	-----	4.60
1,2,3,4,7,8-HxCDD	ND	-----	4.60
1,2,3,6,7,8-HxCDD	ND	-----	4.60
1,2,3,7,8,9-HxCDD	ND	-----	4.60
Total HxCDD	8.0	-----	4.60
1,2,3,4,6,7,8-HpCDF	12.0	-----	4.60
1,2,3,4,7,8,9-HpCDF	ND	-----	4.60
Total HpCDF	26.0	-----	4.60
1,2,3,4,6,7,8-HpCDD	83.0	-----	4.60
Total HpCDD	130.0	-----	4.60
OCDF	12.0	-----	9.20
OCDD	440.0	-----	9.20

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	74
2,3,7,8-TCDD-13C	2.00	85
1,2,3,7,8-PeCDF-13C	2.00	82
2,3,4,7,8-PeCDF-13C	2.00	83
1,2,3,7,8-PeCDD-13C	2.00	94
1,2,3,4,7,8-HxCDF-13C	2.00	82
1,2,3,6,7,8-HxCDF-13C	2.00	87
2,3,4,6,7,8-HxCDF-13C	2.00	85
1,2,3,7,8,9-HxCDF-13C	2.00	84
1,2,3,4,7,8-HxCDD-13C	2.00	93
1,2,3,6,7,8-HxCDD-13C	2.00	78
1,2,3,4,6,7,8-HpCDF-13C	2.00	90
1,2,3,4,7,8,9-HpCDF-13C	2.00	77
1,2,3,4,6,7,8-HpCDD-13C	2.00	77
OCDD-13C	4.00	82
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	79

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

Reporting Flags

A = Reporting Limit based on signal to noise

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interference present

J = Estimated value

Nn = Value obtained from additional analysis

P = PCDE Interference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = See Discussion

Appendix B

Sample Analysis Summary

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-57-Comp-0-6		
Lab Sample ID	10206267001		
Filename	F121012B_05		
Injected By	CVS		
Total Amount Extracted	11.7 g	Matrix	Solid
% Moisture	14.1	Dilution	NA
Dry Weight Extracted	10.1 g	Collected	09/20/2012 09:00
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121012B_01	Extracted	10/08/2012 19:45
Method Blank ID	BLANK-34130	Analyzed	10/12/2012 11:57

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	
2,3,7,8-TCDF	ND	-----	0.25	
Total TCDF	2.50	-----	0.25	
2,3,7,8-TCDD	ND	-----	0.18	
Total TCDD	ND	-----	0.18	
1,2,3,7,8-PeCDF	ND	-----	0.26	
2,3,4,7,8-PeCDF	0.38	-----	0.25	J
Total PeCDF	12.00	-----	0.26	
1,2,3,7,8-PeCDD	ND	-----	0.17	
Total PeCDD	ND	-----	0.17	
1,2,3,4,7,8-HxCDF	-----	0.25	0.19	I
1,2,3,6,7,8-HxCDF	-----	1.70	0.16	P
2,3,4,6,7,8-HxCDF	0.78	-----	0.15	J
1,2,3,7,8,9-HxCDF	ND	-----	0.23	
Total HxCDF	8.70	-----	0.18	
1,2,3,4,7,8-HxCDD	ND	-----	0.16	
1,2,3,6,7,8-HxCDD	0.50	-----	0.20	J
1,2,3,7,8,9-HxCDD	0.42	-----	0.15	J
Total HxCDD	3.30	-----	0.17	J
1,2,3,4,6,7,8-HpCDF	-----	0.65	0.23	I
1,2,3,4,7,8,9-HpCDF	ND	-----	0.28	
Total HpCDF	1.50	-----	0.26	J
1,2,3,4,6,7,8-HpCDD	-----	4.20	0.29	I
Total HpCDD	4.60	-----	0.29	J
OCDF	-----	1.10	0.43	I
OCDD	31.00	-----	0.59	

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	45
2,3,7,8-TCDD-13C	2.00	51
1,2,3,7,8-PeCDF-13C	2.00	48
2,3,4,7,8-PeCDF-13C	2.00	48
1,2,3,7,8-PeCDD-13C	2.00	53
1,2,3,4,7,8-HxCDF-13C	2.00	35
1,2,3,6,7,8-HxCDF-13C	2.00	30
2,3,4,6,7,8-HxCDF-13C	2.00	32
1,2,3,7,8,9-HxCDF-13C	2.00	39
1,2,3,4,7,8-HxCDD-13C	2.00	38
1,2,3,6,7,8-HxCDD-13C	2.00	30
1,2,3,4,6,7,8-HpCDF-13C	2.00	24 R
1,2,3,4,7,8,9-HpCDF-13C	2.00	30
1,2,3,4,6,7,8-HpCDD-13C	2.00	29
OCDD-13C	4.00	19
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	79

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
R = Recovery outside target range
P = PCDE Interference
I = Interference present

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-47-Comp-0-6		
Lab Sample ID	10206267008		
Filename	F121012B_10		
Injected By	CVS		
Total Amount Extracted	11.3 g	Matrix	Solid
% Moisture	9.2	Dilution	NA
Dry Weight Extracted	10.3 g	Collected	09/20/2012 09:30
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121012B_01	Extracted	10/08/2012 19:45
Method Blank ID	BLANK-34130	Analyzed	10/12/2012 15:50

Native Isomers	**Conc** ng/Kg	**EMPC** ng/Kg	**RL** ng/Kg	
2,3,7,8-TCDF	-----	1.1	0.32	I
Total TCDF	7.7	-----	0.32	
2,3,7,8-TCDD	ND	-----	0.19	
Total TCDD	ND	-----	0.19	
1,2,3,7,8-PeCDF	4.4	-----	0.28	J
2,3,4,7,8-PeCDF	5.9	-----	0.22	
Total PeCDF	120.0	-----	0.25	
1,2,3,7,8-PeCDD	1.8	-----	0.18	J
Total PeCDD	5.8	-----	0.18	
1,2,3,4,7,8-HxCDF	29.0	-----	0.39	
1,2,3,6,7,8-HxCDF	-----	16.0	0.21	P
2,3,4,6,7,8-HxCDF	13.0	-----	0.23	
1,2,3,7,8,9-HxCDF	6.1	-----	0.32	
Total HxCDF	310.0	-----	0.29	
1,2,3,4,7,8-HxCDD	5.4	-----	0.44	
1,2,3,6,7,8-HxCDD	36.0	-----	0.45	
1,2,3,7,8,9-HxCDD	11.0	-----	0.48	
Total HxCDD	140.0	-----	0.46	
1,2,3,4,6,7,8-HpCDF	-----	55.0	0.39	P
1,2,3,4,7,8,9-HpCDF	6.1	-----	0.53	
Total HpCDF	160.0	-----	0.46	
1,2,3,4,6,7,8-HpCDD	590.0	-----	0.17	
Total HpCDD	1100.0	-----	0.17	
OCDF	87.0	-----	0.62	
OCDD	4600.0	-----	0.83	

Internal Standards	**ng's Added**	**Percent Recovery**	
2,3,7,8-TCDF-13C	2.00	43	
2,3,7,8-TCDD-13C	2.00	49	
1,2,3,7,8-PeCDF-13C	2.00	45	
2,3,4,7,8-PeCDF-13C	2.00	46	
1,2,3,7,8-PeCDD-13C	2.00	52	
1,2,3,4,7,8-HxCDF-13C	2.00	35	
1,2,3,6,7,8-HxCDF-13C	2.00	33	
2,3,4,6,7,8-HxCDF-13C	2.00	35	
1,2,3,7,8,9-HxCDF-13C	2.00	38	
1,2,3,4,7,8-HxCDD-13C	2.00	39	
1,2,3,6,7,8-HxCDD-13C	2.00	32	
1,2,3,4,6,7,8-HpCDF-13C	2.00	27	R
1,2,3,4,7,8,9-HpCDF-13C	2.00	34	
1,2,3,4,6,7,8-HpCDD-13C	2.00	31	
OCDD-13C	4.00	22	
1,2,3,4-TCDD-13C	2.00	NA	
1,2,3,7,8,9-HxCDD-13C	2.00	NA	
2,3,7,8-TCDD-37Cl4	0.20	83	

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
R = Recovery outside target range
P = PCDE Interference
I = Interference present

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-50-Comp-0-6		
Lab Sample ID	10206267015		
Filename	F121012B_11		
Injected By	CVS		
Total Amount Extracted	12.5 g	Matrix	Solid
% Moisture	19.4	Dilution	NA
Dry Weight Extracted	10.1 g	Collected	09/20/2012 10:15
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121012B_01	Extracted	10/08/2012 19:45
Method Blank ID	BLANK-34130	Analyzed	10/12/2012 16:37

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	
2,3,7,8-TCDF	-----	0.96	0.56	I
Total TCDF	1.90	-----	0.56	
2,3,7,8-TCDD	ND	-----	0.16	
Total TCDD	0.97	-----	0.16	J
1,2,3,7,8-PeCDF	2.10	-----	0.27	J
2,3,4,7,8-PeCDF	2.40	-----	0.31	J
Total PeCDF	38.00	-----	0.29	
1,2,3,7,8-PeCDD	1.40	-----	0.21	J
Total PeCDD	7.80	-----	0.21	
1,2,3,4,7,8-HxCDF	9.40	-----	0.17	
1,2,3,6,7,8-HxCDF	-----	4.80	0.26	P
2,3,4,6,7,8-HxCDF	4.60	-----	0.15	J
1,2,3,7,8,9-HxCDF	2.60	-----	0.24	J
Total HxCDF	130.00	-----	0.21	
1,2,3,4,7,8-HxCDD	4.90	-----	0.52	J
1,2,3,6,7,8-HxCDD	26.00	-----	0.50	
1,2,3,7,8,9-HxCDD	6.80	-----	0.46	
Total HxCDD	110.00	-----	0.49	
1,2,3,4,6,7,8-HpCDF	-----	14.00	0.36	P
1,2,3,4,7,8,9-HpCDF	2.70	-----	0.41	J
Total HpCDF	88.00	-----	0.39	
1,2,3,4,6,7,8-HpCDD	480.00	-----	1.10	
Total HpCDD	890.00	-----	1.10	
OCDF	38.00	-----	0.35	
OCDD	3900.00	-----	0.53	

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	42
2,3,7,8-TCDD-13C	2.00	50
1,2,3,7,8-PeCDF-13C	2.00	49
2,3,4,7,8-PeCDF-13C	2.00	49
1,2,3,7,8-PeCDD-13C	2.00	61
1,2,3,4,7,8-HxCDF-13C	2.00	44
1,2,3,6,7,8-HxCDF-13C	2.00	39
2,3,4,6,7,8-HxCDF-13C	2.00	42
1,2,3,7,8,9-HxCDF-13C	2.00	43
1,2,3,4,7,8-HxCDD-13C	2.00	48
1,2,3,6,7,8-HxCDD-13C	2.00	41
1,2,3,4,6,7,8-HpCDF-13C	2.00	37
1,2,3,4,7,8,9-HpCDF-13C	2.00	38
1,2,3,4,6,7,8-HpCDD-13C	2.00	43
OCDD-13C	4.00	31
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	81

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
P = PCDE Interference
I = Interference present

REPORT OF LABORATORY ANALYSIS

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-51-Comp-0-4		
Lab Sample ID	10206267020-R		
Filename	F121020A_16		
Injected By	BAL		
Total Amount Extracted	12.8 g	Matrix	Solid
% Moisture	15.7	Dilution	NA
Dry Weight Extracted	10.8 g	Collected	09/20/2012 10:30
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121020A_01	Extracted	10/16/2012 13:45
Method Blank ID	BLANK-34212	Analyzed	10/21/2012 01:54

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg		Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	0.73	-----	0.098	J	2,3,7,8-TCDF-13C	2.00	82
Total TCDF	6.60	-----	0.098		2,3,7,8-TCDD-13C	2.00	90
					1,2,3,7,8-PeCDF-13C	2.00	83
2,3,7,8-TCDD	-----	0.15	0.110	I	2,3,4,7,8-PeCDF-13C	2.00	83
Total TCDD	1.70	-----	0.110		1,2,3,7,8-PeCDD-13C	2.00	89
					1,2,3,4,7,8-HxCDF-13C	2.00	80
1,2,3,7,8-PeCDF	1.30	-----	0.220	J	1,2,3,6,7,8-HxCDF-13C	2.00	83
2,3,4,7,8-PeCDF	2.90	-----	0.160	J	2,3,4,6,7,8-HxCDF-13C	2.00	82
Total PeCDF	40.00	-----	0.190		1,2,3,7,8,9-HxCDF-13C	2.00	81
					1,2,3,4,7,8-HxCDD-13C	2.00	88
1,2,3,7,8-PeCDD	1.30	-----	0.120	J	1,2,3,6,7,8-HxCDD-13C	2.00	73
Total PeCDD	10.00	-----	0.120		1,2,3,4,6,7,8-HpCDF-13C	2.00	70
					1,2,3,4,7,8,9-HpCDF-13C	2.00	75
1,2,3,4,7,8-HxCDF	4.50	-----	0.120	J	1,2,3,4,6,7,8-HpCDD-13C	2.00	88
1,2,3,6,7,8-HxCDF	2.60	-----	0.140	J	OCDD-13C	4.00	77
2,3,4,6,7,8-HxCDF	3.90	-----	0.086	J			
1,2,3,7,8,9-HxCDF	1.60	-----	0.140	J	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	98.00	-----	0.120		1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	3.40	-----	0.180	J	2,3,7,8-TCDD-37Cl4	0.20	89
1,2,3,6,7,8-HxCDD	24.00	-----	0.170				
1,2,3,7,8,9-HxCDD	8.00	-----	0.170				
Total HxCDD	110.00	-----	0.170				
1,2,3,4,6,7,8-HpCDF	51.00	-----	0.240				
1,2,3,4,7,8,9-HpCDF	2.70	-----	0.150	J			
Total HpCDF	140.00	-----	0.200				
1,2,3,4,6,7,8-HpCDD	400.00	-----	0.540				
Total HpCDD	760.00	-----	0.540				
OCDF	80.00	-----	0.630				
OCDD	3000.00	-----	0.130				

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
I = Interference present

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-48-Comp-0-6		
Lab Sample ID	10206267025-R		
Filename	F121020A_12		
Injected By	BAL		
Total Amount Extracted	12.5 g	Matrix	Solid
% Moisture	13.9	Dilution	NA
Dry Weight Extracted	10.8 g	Collected	09/20/2012 11:45
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121020A_01	Extracted	10/16/2012 13:45
Method Blank ID	BLANK-34212	Analyzed	10/20/2012 22:48

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	
2,3,7,8-TCDF	ND	-----	0.16	
Total TCDF	0.22	-----	0.16	BJ
2,3,7,8-TCDD	0.37	-----	0.17	J
Total TCDD	0.67	-----	0.17	J
1,2,3,7,8-PeCDF	ND	-----	0.19	
2,3,4,7,8-PeCDF	0.21	-----	0.16	J
Total PeCDF	1.40	-----	0.18	J
1,2,3,7,8-PeCDD	ND	-----	0.18	
Total PeCDD	ND	-----	0.18	
1,2,3,4,7,8-HxCDF	ND	-----	0.24	
1,2,3,6,7,8-HxCDF	ND	-----	0.20	
2,3,4,6,7,8-HxCDF	0.27	-----	0.22	J
1,2,3,7,8,9-HxCDF	ND	-----	0.26	
Total HxCDF	3.00	-----	0.23	J
1,2,3,4,7,8-HxCDD	ND	-----	0.25	
1,2,3,6,7,8-HxCDD	0.64	-----	0.30	J
1,2,3,7,8,9-HxCDD	0.31	-----	0.28	J
Total HxCDD	3.60	-----	0.28	J
1,2,3,4,6,7,8-HpCDF	2.30	-----	0.20	J
1,2,3,4,7,8,9-HpCDF	ND	-----	0.22	
Total HpCDF	6.40	-----	0.21	
1,2,3,4,6,7,8-HpCDD	9.90	-----	0.30	
Total HpCDD	18.00	-----	0.30	
OCDF	5.90	-----	0.37	J
OCDD	78.00	-----	0.44	

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	80
2,3,7,8-TCDD-13C	2.00	92
1,2,3,7,8-PeCDF-13C	2.00	86
2,3,4,7,8-PeCDF-13C	2.00	83
1,2,3,7,8-PeCDD-13C	2.00	91
1,2,3,4,7,8-HxCDF-13C	2.00	79
1,2,3,6,7,8-HxCDF-13C	2.00	77
2,3,4,6,7,8-HxCDF-13C	2.00	75
1,2,3,7,8,9-HxCDF-13C	2.00	70
1,2,3,4,7,8-HxCDD-13C	2.00	84
1,2,3,6,7,8-HxCDD-13C	2.00	66
1,2,3,4,6,7,8-HpCDF-13C	2.00	60
1,2,3,4,7,8,9-HpCDF-13C	2.00	62
1,2,3,4,6,7,8-HpCDD-13C	2.00	58
OCDD-13C	4.00	48
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	90

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
B = Less than 10x higher than method blank level

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-49-Comp-0-6		
Lab Sample ID	10206267032-R		
Filename	F121020A_13		
Injected By	BAL		
Total Amount Extracted	12.3 g	Matrix	Solid
% Moisture	13.3	Dilution	NA
Dry Weight Extracted	10.7 g	Collected	09/20/2012 12:00
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121020A_01	Extracted	10/16/2012 13:45
Method Blank ID	BLANK-34212	Analyzed	10/20/2012 23:34

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	
2,3,7,8-TCDF	ND	-----	0.200	
Total TCDF	1.50	-----	0.200	B
2,3,7,8-TCDD	ND	-----	0.120	
Total TCDD	0.44	-----	0.120	J
1,2,3,7,8-PeCDF	ND	-----	0.180	
2,3,4,7,8-PeCDF	0.59	-----	0.170	J
Total PeCDF	6.00	-----	0.180	
1,2,3,7,8-PeCDD	0.21	-----	0.110	J
Total PeCDD	0.73	-----	0.110	J
1,2,3,4,7,8-HxCDF	0.56	-----	0.120	J
1,2,3,6,7,8-HxCDF	0.30	-----	0.098	J
2,3,4,6,7,8-HxCDF	0.59	-----	0.098	J
1,2,3,7,8,9-HxCDF	ND	-----	0.120	
Total HxCDF	8.70	-----	0.110	
1,2,3,4,7,8-HxCDD	0.64	-----	0.180	J
1,2,3,6,7,8-HxCDD	1.80	-----	0.220	J
1,2,3,7,8,9-HxCDD	1.00	-----	0.200	J
Total HxCDD	9.10	-----	0.200	
1,2,3,4,6,7,8-HpCDF	3.40	-----	0.130	J
1,2,3,4,7,8,9-HpCDF	0.23	-----	0.160	J
Total HpCDF	8.70	-----	0.150	
1,2,3,4,6,7,8-HpCDD	31.00	-----	0.220	
Total HpCDD	51.00	-----	0.220	
OCDF	5.20	-----	0.280	J
OCDD	170.00	-----	0.370	

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	71
2,3,7,8-TCDD-13C	2.00	83
1,2,3,7,8-PeCDF-13C	2.00	81
2,3,4,7,8-PeCDF-13C	2.00	82
1,2,3,7,8-PeCDD-13C	2.00	96
1,2,3,4,7,8-HxCDF-13C	2.00	77
1,2,3,6,7,8-HxCDF-13C	2.00	78
2,3,4,6,7,8-HxCDF-13C	2.00	79
1,2,3,7,8,9-HxCDF-13C	2.00	75
1,2,3,4,7,8-HxCDD-13C	2.00	87
1,2,3,6,7,8-HxCDD-13C	2.00	69
1,2,3,4,6,7,8-HpCDF-13C	2.00	79
1,2,3,4,7,8,9-HpCDF-13C	2.00	71
1,2,3,4,6,7,8-HpCDD-13C	2.00	71
OCDD-13C	4.00	56
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	84

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
B = Less than 10x higher than method blank level

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-44-Comp-0-6		
Lab Sample ID	10206267039-R		
Filename	F121020A_14		
Injected By	BAL		
Total Amount Extracted	12.2 g	Matrix	Solid
% Moisture	11.2	Dilution	NA
Dry Weight Extracted	10.8 g	Collected	09/20/2012 12:30
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121020A_01	Extracted	10/16/2012 13:45
Method Blank ID	BLANK-34212	Analyzed	10/21/2012 00:21

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	
2,3,7,8-TCDF	ND	-----	0.130	
Total TCDF	ND	-----	0.130	
2,3,7,8-TCDD	ND	-----	0.100	
Total TCDD	ND	-----	0.100	
1,2,3,7,8-PeCDF	ND	-----	0.150	
2,3,4,7,8-PeCDF	ND	-----	0.130	
Total PeCDF	1.10	-----	0.140	J
1,2,3,7,8-PeCDD	ND	-----	0.160	
Total PeCDD	ND	-----	0.160	
1,2,3,4,7,8-HxCDF	-----	0.15	0.092	I
1,2,3,6,7,8-HxCDF	-----	0.20	0.072	I
2,3,4,6,7,8-HxCDF	-----	0.14	0.081	I
1,2,3,7,8,9-HxCDF	ND	-----	0.085	
Total HxCDF	2.30	-----	0.082	J
1,2,3,4,7,8-HxCDD	ND	-----	0.140	
1,2,3,6,7,8-HxCDD	0.58	-----	0.180	J
1,2,3,7,8,9-HxCDD	0.30	-----	0.150	J
Total HxCDD	2.80	-----	0.160	J
1,2,3,4,6,7,8-HpCDF	1.60	-----	0.150	J
1,2,3,4,7,8,9-HpCDF	ND	-----	0.130	
Total HpCDF	4.10	-----	0.140	J
1,2,3,4,6,7,8-HpCDD	9.30	-----	0.170	
Total HpCDD	18.00	-----	0.170	
OCDF	2.60	-----	0.310	J
OCDD	74.00	-----	0.260	

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	76
2,3,7,8-TCDD-13C	2.00	86
1,2,3,7,8-PeCDF-13C	2.00	77
2,3,4,7,8-PeCDF-13C	2.00	77
1,2,3,7,8-PeCDD-13C	2.00	87
1,2,3,4,7,8-HxCDF-13C	2.00	73
1,2,3,6,7,8-HxCDF-13C	2.00	76
2,3,4,6,7,8-HxCDF-13C	2.00	75
1,2,3,7,8,9-HxCDF-13C	2.00	72
1,2,3,4,7,8-HxCDD-13C	2.00	77
1,2,3,6,7,8-HxCDD-13C	2.00	63
1,2,3,4,6,7,8-HpCDF-13C	2.00	65
1,2,3,4,7,8,9-HpCDF-13C	2.00	67
1,2,3,4,6,7,8-HpCDD-13C	2.00	69
OCDD-13C	4.00	61
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	84

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
I = Interference present

REPORT OF LABORATORY ANALYSIS

Method 1613B Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	SS-43-Comp-0-6		
Lab Sample ID	10206267046-R		
Filename	F121020A_15		
Injected By	BAL		
Total Amount Extracted	12.3 g	Matrix	Solid
% Moisture	11.3	Dilution	NA
Dry Weight Extracted	10.9 g	Collected	09/20/2012 12:45
ICAL ID	F121011	Received	09/21/2012 10:10
CCal Filename(s)	F121020A_01	Extracted	10/16/2012 13:45
Method Blank ID	BLANK-34212	Analyzed	10/21/2012 01:07

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	
2,3,7,8-TCDF	0.19	-----	0.140	J
Total TCDF	0.89	-----	0.140	BJ
2,3,7,8-TCDD	0.13	-----	0.110	J
Total TCDD	0.54	-----	0.110	J
1,2,3,7,8-PeCDF	-----	0.31	0.130	I
2,3,4,7,8-PeCDF	0.58	-----	0.088	J
Total PeCDF	6.70	-----	0.110	
1,2,3,7,8-PeCDD	-----	0.41	0.100	I
Total PeCDD	0.70	-----	0.100	J
1,2,3,4,7,8-HxCDF	1.40	-----	0.087	J
1,2,3,6,7,8-HxCDF	0.51	-----	0.071	J
2,3,4,6,7,8-HxCDF	0.94	-----	0.073	J
1,2,3,7,8,9-HxCDF	-----	0.11	0.087	I
Total HxCDF	19.00	-----	0.079	
1,2,3,4,7,8-HxCDD	0.99	-----	0.110	J
1,2,3,6,7,8-HxCDD	4.00	-----	0.097	J
1,2,3,7,8,9-HxCDD	2.00	-----	0.110	J
Total HxCDD	20.00	-----	0.110	
1,2,3,4,6,7,8-HpCDF	12.00	-----	0.070	
1,2,3,4,7,8,9-HpCDF	0.65	-----	0.120	J
Total HpCDF	26.00	-----	0.097	
1,2,3,4,6,7,8-HpCDD	83.00	-----	0.230	
Total HpCDD	130.00	-----	0.230	
OCDF	12.00	-----	0.220	
OCDD	440.00	-----	0.170	

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	74
2,3,7,8-TCDD-13C	2.00	85
1,2,3,7,8-PeCDF-13C	2.00	82
2,3,4,7,8-PeCDF-13C	2.00	83
1,2,3,7,8-PeCDD-13C	2.00	94
1,2,3,4,7,8-HxCDF-13C	2.00	82
1,2,3,6,7,8-HxCDF-13C	2.00	87
2,3,4,6,7,8-HxCDF-13C	2.00	85
1,2,3,7,8,9-HxCDF-13C	2.00	84
1,2,3,4,7,8-HxCDD-13C	2.00	93
1,2,3,6,7,8-HxCDD-13C	2.00	78
1,2,3,4,6,7,8-HpCDF-13C	2.00	90
1,2,3,4,7,8,9-HpCDF-13C	2.00	77
1,2,3,4,6,7,8-HpCDD-13C	2.00	77
OCDD-13C	4.00	82
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	79

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
B = Less than 10x higher than method blank level
I = Interference present

REPORT OF LABORATORY ANALYSIS

Method 1613B Blank Analysis Results

Lab Sample ID	BLANK-34130	Matrix	Solid
Filename	U121010A_07	Dilution	NA
Total Amount Extracted	10.6 g	Extracted	10/08/2012 19:45
ICAL ID	U120910	Analyzed	10/10/2012 15:50
CCal Filename(s)	U121010A_01	Injected By	CVS

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	
2,3,7,8-TCDF	ND	-----	0.250	
Total TCDF	ND	-----	0.250	
2,3,7,8-TCDD	ND	-----	0.210	
Total TCDD	ND	-----	0.210	
1,2,3,7,8-PeCDF	ND	-----	0.160	
2,3,4,7,8-PeCDF	ND	-----	0.110	
Total PeCDF	ND	-----	0.140	
1,2,3,7,8-PeCDD	ND	-----	0.180	
Total PeCDD	ND	-----	0.180	
1,2,3,4,7,8-HxCDF	ND	-----	0.110	
1,2,3,6,7,8-HxCDF	ND	-----	0.085	
2,3,4,6,7,8-HxCDF	ND	-----	0.110	
1,2,3,7,8,9-HxCDF	ND	-----	0.130	
Total HxCDF	ND	-----	0.110	
1,2,3,4,7,8-HxCDD	ND	-----	0.110	
1,2,3,6,7,8-HxCDD	ND	-----	0.170	
1,2,3,7,8,9-HxCDD	ND	-----	0.130	
Total HxCDD	0.18	-----	0.140	J
1,2,3,4,6,7,8-HpCDF	ND	-----	0.110	
1,2,3,4,7,8,9-HpCDF	ND	-----	0.160	
Total HpCDF	ND	-----	0.140	
1,2,3,4,6,7,8-HpCDD	ND	-----	0.180	
Total HpCDD	0.23	-----	0.180	J
OCDF	ND	-----	0.280	
OCDD	ND	-----	0.260	

Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF-13C	2.00	70
2,3,7,8-TCDD-13C	2.00	76
1,2,3,7,8-PeCDF-13C	2.00	85
2,3,4,7,8-PeCDF-13C	2.00	88
1,2,3,7,8-PeCDD-13C	2.00	90
1,2,3,4,7,8-HxCDF-13C	2.00	79
1,2,3,6,7,8-HxCDF-13C	2.00	83
2,3,4,6,7,8-HxCDF-13C	2.00	83
1,2,3,7,8,9-HxCDF-13C	2.00	83
1,2,3,4,7,8-HxCDD-13C	2.00	77
1,2,3,6,7,8-HxCDD-13C	2.00	71
1,2,3,4,6,7,8-HpCDF-13C	2.00	66
1,2,3,4,7,8,9-HpCDF-13C	2.00	68
1,2,3,4,6,7,8-HpCDD-13C	2.00	63
OCDD-13C	4.00	47
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	80

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value

Method 1613B Blank Analysis Results

Lab Sample ID	BLANK-34212	Matrix	Solid
Filename	F121019A_02	Dilution	NA
Total Amount Extracted	20.3 g	Extracted	10/16/2012 13:45
ICAL ID	F121011	Analyzed	10/19/2012 10:22
CCal Filename(s)	F121018B_21	Injected By	ACE

Native Isomers	**Conc** ng/Kg	**EMPC** ng/Kg	**RL** ng/Kg	
2,3,7,8-TCDF	ND	-----	0.096	
Total TCDF	0.26	-----	0.096	J
2,3,7,8-TCDD	ND	-----	0.120	
Total TCDD	ND	-----	0.120	
1,2,3,7,8-PeCDF	ND	-----	0.084	
2,3,4,7,8-PeCDF	ND	-----	0.080	
Total PeCDF	ND	-----	0.082	
1,2,3,7,8-PeCDD	ND	-----	0.093	
Total PeCDD	ND	-----	0.093	
1,2,3,4,7,8-HxCDF	ND	-----	0.060	
1,2,3,6,7,8-HxCDF	ND	-----	0.062	
2,3,4,6,7,8-HxCDF	ND	-----	0.068	
1,2,3,7,8,9-HxCDF	ND	-----	0.078	
Total HxCDF	ND	-----	0.067	
1,2,3,4,7,8-HxCDD	ND	-----	0.075	
1,2,3,6,7,8-HxCDD	ND	-----	0.080	
1,2,3,7,8,9-HxCDD	ND	-----	0.085	
Total HxCDD	ND	-----	0.080	
1,2,3,4,6,7,8-HpCDF	-----	0.20	0.055	P
1,2,3,4,7,8,9-HpCDF	ND	-----	0.081	
Total HpCDF	ND	-----	0.068	
1,2,3,4,6,7,8-HpCDD	0.12	-----	0.077	J
Total HpCDD	0.27	-----	0.077	J
OCDF	0.21	-----	0.089	J
OCDD	-----	0.31	0.170	I

Internal Standards	**ng's Added**	**Percent Recovery**
2,3,7,8-TCDF-13C	2.00	53
2,3,7,8-TCDD-13C	2.00	65
1,2,3,7,8-PeCDF-13C	2.00	68
2,3,4,7,8-PeCDF-13C	2.00	71
1,2,3,7,8-PeCDD-13C	2.00	85
1,2,3,4,7,8-HxCDF-13C	2.00	71
1,2,3,6,7,8-HxCDF-13C	2.00	74
2,3,4,6,7,8-HxCDF-13C	2.00	72
1,2,3,7,8,9-HxCDF-13C	2.00	67
1,2,3,4,7,8-HxCDD-13C	2.00	78
1,2,3,6,7,8-HxCDD-13C	2.00	67
1,2,3,4,6,7,8-HpCDF-13C	2.00	75
1,2,3,4,7,8,9-HpCDF-13C	2.00	72
1,2,3,4,6,7,8-HpCDD-13C	2.00	81
OCDD-13C	4.00	63
1,2,3,4-TCDD-13C	2.00	NA
1,2,3,7,8,9-HxCDD-13C	2.00	NA
2,3,7,8-TCDD-37Cl4	0.20	70

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
P = PCDE Interference
I = Interference present

Method 1613B Laboratory Control Spike Results

Lab Sample ID	LCS-34131		
Filename	U121010A_04	Matrix	Solid
Total Amount Extracted	10.6 g	Dilution	NA
ICAL ID	U120910	Extracted	10/08/2012 19:45
CCal Filename	U121010A_01	Analyzed	10/10/2012 13:27
Method Blank ID	BLANK-34130	Injected By	CVS

Compound	**Cs**	**Cr**	**Lower Limit**	**Upper Limit**	**% Rec.**
2,3,7,8-TCDF	10	11	7.5	15.8	111
2,3,7,8-TCDD	10	8.6	6.7	15.8	86
1,2,3,7,8-PeCDF	50	53	40.0	67.0	107
2,3,4,7,8-PeCDF	50	52	34.0	80.0	103
1,2,3,7,8-PeCDD	50	48	35.0	71.0	95
1,2,3,4,7,8-HxCDF	50	53	36.0	67.0	107
1,2,3,6,7,8-HxCDF	50	50	42.0	65.0	101
2,3,4,6,7,8-HxCDF	50	51	35.0	78.0	102
1,2,3,7,8,9-HxCDF	50	54	39.0	65.0	109
1,2,3,4,7,8-HxCDD	50	51	35.0	82.0	103
1,2,3,6,7,8-HxCDD	50	55	38.0	67.0	109
1,2,3,7,8,9-HxCDD	50	54	32.0	81.0	108
1,2,3,4,6,7,8-HpCDF	50	53	41.0	61.0	107
1,2,3,4,7,8,9-HpCDF	50	51	39.0	69.0	101
1,2,3,4,6,7,8-HpCDD	50	46	35.0	70.0	93
OCDF	100	120	63.0	170.0	125
OCDD	100	110	78.0	144.0	106
2,3,7,8-TCDD-37Cl4	10	8.3	3.1	19.1	83
2,3,7,8-TCDF-13C	100	81	22.0	152.0	81
2,3,7,8-TCDD-13C	100	85	20.0	175.0	85
1,2,3,7,8-PeCDF-13C	100	99	21.0	192.0	99
2,3,4,7,8-PeCDF-13C	100	100	13.0	328.0	103
1,2,3,7,8-PeCDD-13C	100	100	21.0	227.0	103
1,2,3,4,7,8-HxCDF-13C	100	87	19.0	202.0	87
1,2,3,6,7,8-HxCDF-13C	100	93	21.0	159.0	93
2,3,4,6,7,8-HxCDF-13C	100	95	22.0	176.0	95
1,2,3,7,8,9-HxCDF-13C	100	92	17.0	205.0	92
1,2,3,4,7,8-HxCDD-13C	100	82	21.0	193.0	82
1,2,3,6,7,8-HxCDD-13C	100	78	25.0	163.0	78
1,2,3,4,6,7,8-HpCDF-13C	100	67	21.0	158.0	67
1,2,3,4,7,8,9-HpCDF-13C	100	70	20.0	186.0	70
1,2,3,4,6,7,8-HpCDD-13C	100	64	26.0	166.0	64
OCDD-13C	200	100	26.0	397.0	52

Cs = Concentration Spiked (ng/mL)
Cr = Concentration Recovered (ng/mL)
Rec. = Recovery (Expressed as Percent)
Control Limit Reference: Method 1613, Table 6, 10/94 Revision
R = Recovery outside of control limits
Nn = Value obtained from additional analysis
* = See Discussion

Method 1613B Laboratory Control Spike Results

Lab Sample ID	LCS-34213		
Filename	F121019A_04	Matrix	Solid
Total Amount Extracted	20.3 g	Dilution	NA
ICAL ID	F121011	Extracted	10/16/2012 13:45
CCal Filename	F121018B_21	Analyzed	10/19/2012 11:54
Method Blank ID	BLANK-34212	Injected By	ACE

Compound	Cs	Cr	Lower Limit	Upper Limit	% Rec.
2,3,7,8-TCDF	10	11	7.5	15.8	105
2,3,7,8-TCDD	10	8.3	6.7	15.8	83
1,2,3,7,8-PeCDF	50	51	40.0	67.0	102
2,3,4,7,8-PeCDF	50	51	34.0	80.0	101
1,2,3,7,8-PeCDD	50	44	35.0	71.0	87
1,2,3,4,7,8-HxCDF	50	51	36.0	67.0	102
1,2,3,6,7,8-HxCDF	50	48	42.0	65.0	96
2,3,4,6,7,8-HxCDF	50	48	35.0	78.0	96
1,2,3,7,8,9-HxCDF	50	51	39.0	65.0	101
1,2,3,4,7,8-HxCDD	50	48	35.0	82.0	96
1,2,3,6,7,8-HxCDD	50	53	38.0	67.0	106
1,2,3,7,8,9-HxCDD	50	53	32.0	81.0	106
1,2,3,4,6,7,8-HpCDF	50	51	41.0	61.0	102
1,2,3,4,7,8,9-HpCDF	50	45	39.0	69.0	91
1,2,3,4,6,7,8-HpCDD	50	46	35.0	70.0	92
OCDF	100	85	63.0	170.0	85
OCDD	100	100	78.0	144.0	103
2,3,7,8-TCDD-37Cl4	10	8.1	3.1	19.1	81
2,3,7,8-TCDF-13C	100	70	22.0	152.0	70
2,3,7,8-TCDD-13C	100	86	20.0	175.0	86
1,2,3,7,8-PeCDF-13C	100	78	21.0	192.0	78
2,3,4,7,8-PeCDF-13C	100	78	13.0	328.0	78
1,2,3,7,8-PeCDD-13C	100	95	21.0	227.0	95
1,2,3,4,7,8-HxCDF-13C	100	71	19.0	202.0	71
1,2,3,6,7,8-HxCDF-13C	100	73	21.0	159.0	73
2,3,4,6,7,8-HxCDF-13C	100	75	22.0	176.0	75
1,2,3,7,8,9-HxCDF-13C	100	68	17.0	205.0	68
1,2,3,4,7,8-HxCDD-13C	100	81	21.0	193.0	81
1,2,3,6,7,8-HxCDD-13C	100	68	25.0	163.0	68
1,2,3,4,6,7,8-HpCDF-13C	100	75	21.0	158.0	75
1,2,3,4,7,8,9-HpCDF-13C	100	75	20.0	186.0	75
1,2,3,4,6,7,8-HpCDD-13C	100	84	26.0	166.0	84
OCDD-13C	200	130	26.0	397.0	63

Cs = Concentration Spiked (ng/mL)
Cr = Concentration Recovered (ng/mL)
Rec. = Recovery (Expressed as Percent)
Control Limit Reference: Method 1613, Table 6, 10/94 Revision
R = Recovery outside of control limits
Nn = Value obtained from additional analysis
* = See Discussion

ATTACHMENT 2

DATA VALIDATION MEMORANDUM

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 9003.01.39 | OCTOBER 25, 2012 | PORT OF RIDGEFIELD

This report provides the results of the data quality assurance/quality control review of analytical results for soil samples collected by the Maul Foster & Alongi, Inc. project team at the off-property area at the former Pacific Wood Treating site. The samples were collected in September 2012.

Pace Analytical Services, Inc. (Pace) in Minneapolis, Minnesota, performed the analyses. Pace report number 10206267_1613B was reviewed. Polychlorinated dibenzo dioxins and polychlorinated dibenzo furans were analyzed by U.S. Environmental Protection Agency (USEPA) Method 1613B.

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2005) and appropriate laboratory and method-specific guidelines (MFA, 2012; Pace, 2012; USEPA, 1986).

Results reported as an estimated maximum potential concentration (EMPC) were qualified with a "U" qualifier.

Method blank detections associated with total tetrachlorodibenzofuran (TCDF) also resulted in "U" qualification of select samples. Details are provided in the Blanks section of this document.

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the same analytical batch. Multiple method blank results had blank detections between the estimated detection limit (EDL) and the reporting limit for various compounds. No actions were taken when the sample result was greater than five times the blank result. Sample results that were not greater than five times the method blank detections resulted in the following qualifications:

Sample	Analyte	Original Results (ng/kg)	Qualified Result (ng/kg)
SS-48-Comp-0-6	Total TCDF	0.22	0.22 U
SS-44-Comp-0-6	Total TCDF	0.13 U	0.13 UJ

ng/kg = nanograms per kilogram.
UJ = The analyte was not detected at a level greater than or equal to the adjusted CRQL and the reported adjusted CRQL is approximate.

All other method blank results met acceptance criteria.

Trip Blanks

Trip blanks were not required for this sampling event.

Equipment Rinsate Blanks

Equipment rinsate blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

SURROGATE/INTERNAL STANDARD RECOVERY RESULTS

The samples were spiked with internal standard compounds to evaluate laboratory performance on individual samples.

The reviewer took no action based on minor internal standard acceptance criteria exceedances for percent recovery, as the affected compounds were previously qualified as "U" based on EMPC results.

The laboratory appropriately documented and qualified internal standard outliers. Associated batch quality assurance/quality control for samples with internal standard outliers was within acceptance limits. All remaining internal standard recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

MS/MSD results are used to evaluate laboratory precision and accuracy. No MS/MSD analyses were performed for these results, as they are not required by USEPA Method 1613B.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. No duplicate analyses were performed for these results, as they are not required by USEPA Method 1613B.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

An LCS/LCSD is spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency. All LCS/LCSD analytes were within acceptance limits for percent recovery.

REPORTING LIMITS

Pace used both routine reporting limits and EDLs for non-detect results, except for samples requiring dilutions because of high analyte concentrations and/or matrix interferences. Sample results are being reported using the EDLs provided with proper data qualifications assigned.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. None were found.

REFERENCES

MFA. 2012. Dioxin and furan analysis, data validation, and TEQ calculation rules. Maul Foster & Alongi, Inc., Portland, Oregon. September.

Pace. 2012. Quality assurance manual. Pace Analytical Services, Minneapolis, Minnesota.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA. 2005. USEPA Analytical Services Branch national functional guidelines for chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans data review. EPA-540-R-05-001. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. February.

ATTACHMENT 3

PROUCL OUTPUT 1

	A	B	C	D	E	F	G	H	I	J	K	L
1				General UCL Statistics for Full Data Sets								
2	User Selected Options											
3	From File			Sheet1.wst								
4	Full Precision			OFF								
5	Confidence Coefficient			95%								
6	Number of Bootstrap Operations			2000								
7												
8												
9	dioxins											
10												
11	General Statistics											
12	Number of Valid Observations					28	Number of Distinct Observations					28
13												
14	Raw Statistics						Log-transformed Statistics					
15	Minimum					0.305	Minimum of Log Data					-1.186
16	Maximum					75.7	Maximum of Log Data					4.327
17	Mean					8.523	Mean of log Data					1.043
18	Geometric Mean					2.838	SD of log Data					1.509
19	Median					2.325						
20	SD					15.77						
21	Std. Error of Mean					2.981						
22	Coefficient of Variation					1.851						
23	Skewness					3.338						
24												
25	Relevant UCL Statistics											
26	Normal Distribution Test						Lognormal Distribution Test					
27	Shapiro Wilk Test Statistic					0.554	Shapiro Wilk Test Statistic					0.964
28	Shapiro Wilk Critical Value					0.924	Shapiro Wilk Critical Value					0.924
29	Data not Normal at 5% Significance Level						Data appear Lognormal at 5% Significance Level					
30												
31	Assuming Normal Distribution						Assuming Lognormal Distribution					
32	95% Student's-t UCL					13.6	95% H-UCL					22.08
33	95% UCLs (Adjusted for Skewness)						95% Chebyshev (MVUE) UCL					20.95
34	95% Adjusted-CLT UCL (Chen-1995)					15.44	97.5% Chebyshev (MVUE) UCL					26.47
35	95% Modified-t UCL (Johnson-1978)					13.91	99% Chebyshev (MVUE) UCL					37.32
36												
37	Gamma Distribution Test						Data Distribution					
38	k star (bias corrected)					0.53	Data Follow Appr. Gamma Distribution at 5% Significance Level					
39	Theta Star					16.09						
40	MLE of Mean					8.523						
41	MLE of Standard Deviation					11.71						
42	nu star					29.66						
43	Approximate Chi Square Value (.05)					18.23	Nonparametric Statistics					
44	Adjusted Level of Significance					0.0404	95% CLT UCL					13.43
45	Adjusted Chi Square Value					17.67	95% Jackknife UCL					13.6
46							95% Standard Bootstrap UCL					13.38
47	Anderson-Darling Test Statistic					1.016	95% Bootstrap-t UCL					19.75
48	Anderson-Darling 5% Critical Value					0.803	95% Hall's Bootstrap UCL					30.67
49	Kolmogorov-Smirnov Test Statistic					0.165	95% Percentile Bootstrap UCL					13.51
50	Kolmogorov-Smirnov 5% Critical Value					0.174	95% BCA Bootstrap UCL					16.12

	A	B	C	D	E	F	G	H	I	J	K	L
51	**Data follow Appr. Gamma Distribution at 5% Significance Level**						95% Chebyshev(Mean, Sd) UCL					21.52
52							97.5% Chebyshev(Mean, Sd) UCL					27.14
53	**Assuming Gamma Distribution**						99% Chebyshev(Mean, Sd) UCL					38.18
54	95% Approximate Gamma UCL (Use when n >= 40)					13.87						
55	95% Adjusted Gamma UCL (Use when n < 40)					14.31						
56												
57	**Potential UCL to Use**						Use 95% Approximate Gamma UCL					13.87
58												
59	**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**											
60	**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**											
61	**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**											
62												
63												
64	**furans**											
65												
66	**General Statistics**											
67	Number of Valid Observations					28	Number of Distinct Observations					26
68												
69	**Raw Statistics**						**Log-transformed Statistics**					
70	Minimum					0.2	Minimum of Log Data					-1.609
71	Maximum					59.29	Maximum of Log Data					4.082
72	Mean					6.257	Mean of log Data					0.604
73	Geometric Mean					1.829	SD of log Data					1.58
74	Median					1.605						
75	SD					12.23						
76	Std. Error of Mean					2.311						
77	Coefficient of Variation					1.954						
78	Skewness					3.448						
79												
80	**Relevant UCL Statistics**											
81	**Normal Distribution Test**						**Lognormal Distribution Test**					
82	Shapiro Wilk Test Statistic					0.537	Shapiro Wilk Test Statistic					0.938
83	Shapiro Wilk Critical Value					0.924	Shapiro Wilk Critical Value					0.924
84	**Data not Normal at 5% Significance Level**						**Data appear Lognormal at 5% Significance Level**					
85												
86	**Assuming Normal Distribution**						**Assuming Lognormal Distribution**					
87	95% Student's-t UCL					10.19	95% H-UCL					17.1
88	**95% UCLs (Adjusted for Skewness)**						95% Chebyshev (MVUE) UCL					15.42
89	95% Adjusted-CLT UCL (Chen-1995)					11.67	97.5% Chebyshev (MVUE) UCL					19.57
90	95% Modified-t UCL (Johnson-1978)					10.44	99% Chebyshev (MVUE) UCL					27.73
91												
92	**Gamma Distribution Test**						**Data Distribution**					
93	k star (bias corrected)					0.483	**Data Follow Appr. Gamma Distribution at 5% Significance Level**					
94	Theta Star					12.95						
95	MLE of Mean					6.257						
96	MLE of Standard Deviation					9.003						
97	nu star					27.05						
98	Approximate Chi Square Value (.05)					16.19	**Nonparametric Statistics**					
99	Adjusted Level of Significance					0.0404	95% CLT UCL					10.06
100	Adjusted Chi Square Value					15.67	95% Jackknife UCL					10.19

	A	B	C	D	E	F	G	H	I	J	K	L
101							95% Standard Bootstrap UCL					9.933
102	Anderson-Darling Test Statistic					1.321	95% Bootstrap-t UCL					15.56
103	Anderson-Darling 5% Critical Value					0.809	95% Hall's Bootstrap UCL					22.08
104	Kolmogorov-Smirnov Test Statistic					0.15	95% Percentile Bootstrap UCL					10.29
105	Kolmogorov-Smirnov 5% Critical Value					0.175	95% BCA Bootstrap UCL					12.46
106	**Data follow Appr. Gamma Distribution at 5% Significance Level**						95% Chebyshev(Mean, Sd) UCL					16.33
107							97.5% Chebyshev(Mean, Sd) UCL					20.69
108	**Assuming Gamma Distribution**						99% Chebyshev(Mean, Sd) UCL					29.25
109	95% Approximate Gamma UCL (Use when n >= 40)					10.45						
110	95% Adjusted Gamma UCL (Use when n < 40)					10.8						
111												
112	**Potential UCL to Use**						Use 95% Approximate Gamma UCL					10.45
113												
114	**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**											
115	**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**											
116	**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**											
117												

ATTACHMENT 4

PROUCL OUTPUT 2

General UCL Statistics for Full Data Sets

User Selected Options	
From File	Sheet1.wst
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

dioxins

General Statistics

Number of Valid Observations	23	Number of Distinct Observations	23

Raw Statistics		**Log-transformed Statistics**	
Minimum	0.305	Minimum of Log Data	-1.186
Maximum	14.42	Maximum of Log Data	2.668
Mean	3.493	Mean of log Data	0.614
Geometric Mean	1.847	SD of log Data	1.207
Median	1.77		
SD	3.953		
Std. Error of Mean	0.824		
Coefficient of Variation	1.132		
Skewness	1.526		

Relevant UCL Statistics

Normal Distribution Test		**Lognormal Distribution Test**	
Shapiro Wilk Test Statistic	0.784	Shapiro Wilk Test Statistic	0.949
Shapiro Wilk Critical Value	0.914	Shapiro Wilk Critical Value	0.914
Data not Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% Student's-t UCL	4.908	95% H-UCL	7.889
95% UCLs (Adjusted for Skewness)		95% Chebyshev (MVUE) UCL	8.309
95% Adjusted-CLT UCL (Chen-1995)	5.129	97.5% Chebyshev (MVUE) UCL	10.33
95% Modified-t UCL (Johnson-1978)	4.952	99% Chebyshev (MVUE) UCL	14.3
Gamma Distribution Test		**Data Distribution**	
k star (bias corrected)	0.825	**Data appear Gamma Distributed at 5% Significance Level**	
Theta Star	4.233		
MLE of Mean	3.493		
MLE of Standard Deviation	3.845		
nu star	37.95		
Approximate Chi Square Value (.05)	24.85	**Nonparametric Statistics**	
Adjusted Level of Significance	0.0389	95% CLT UCL	4.849
Adjusted Chi Square Value	24.08	95% Jackknife UCL	4.908
		95% Standard Bootstrap UCL	4.841
Anderson-Darling Test Statistic	0.553	95% Bootstrap-t UCL	5.387
Anderson-Darling 5% Critical Value	0.774	95% Hall's Bootstrap UCL	5.122
Kolmogorov-Smirnov Test Statistic	0.138	95% Percentile Bootstrap UCL	4.815
Kolmogorov-Smirnov 5% Critical Value	0.187	95% BCA Bootstrap UCL	5.1

	A	B	C	D	E	F	G	H	I	J	K	L
51	**Data appear Gamma Distributed at 5% Significance Level**						95% Chebyshev(Mean, Sd) UCL					7.086
52							97.5% Chebyshev(Mean, Sd) UCL					8.64
53	**Assuming Gamma Distribution**						99% Chebyshev(Mean, Sd) UCL					11.69
54	95% Approximate Gamma UCL (Use when n >= 40)					5.335						
55	95% Adjusted Gamma UCL (Use when n < 40)					5.506						
56												
57	**Potential UCL to Use**						Use 95% Approximate Gamma UCL					5.335
58												
59	**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**											
60	**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**											
61	**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**											
62												
63												
64	**furans**											
65												
66	**General Statistics**											
67	Number of Valid Observations					23	Number of Distinct Observations					21
68												
69	**Raw Statistics**						**Log-transformed Statistics**					
70	Minimum					0.2	Minimum of Log Data					-1.609
71	Maximum					12.8	Maximum of Log Data					2.549
72	Mean					2.325	Mean of log Data					0.118
73	Geometric Mean					1.125	SD of log Data					1.224
74	Median					0.9						
75	SD					3.115						
76	Std. Error of Mean					0.65						
77	Coefficient of Variation					1.34						
78	Skewness					2.231						
79												
80	**Relevant UCL Statistics**											
81	**Normal Distribution Test**						**Lognormal Distribution Test**					
82	Shapiro Wilk Test Statistic					0.702	Shapiro Wilk Test Statistic					0.931
83	Shapiro Wilk Critical Value					0.914	Shapiro Wilk Critical Value					0.914
84	**Data not Normal at 5% Significance Level**						**Data appear Lognormal at 5% Significance Level**					
85												
86	**Assuming Normal Distribution**						**Assuming Lognormal Distribution**					
87	95% Student's-t UCL					3.44	95% H-UCL					4.99
88	**95% UCLs (Adjusted for Skewness)**						95% Chebyshev (MVUE) UCL					5.207
89	95% Adjusted-CLT UCL (Chen-1995)					3.716	97.5% Chebyshev (MVUE) UCL					6.483
90	95% Modified-t UCL (Johnson-1978)					3.491	99% Chebyshev (MVUE) UCL					8.99
91												
92	**Gamma Distribution Test**						**Data Distribution**					
93	k star (bias corrected)					0.738	**Data Follow Appr. Gamma Distribution at 5% Significance Level**					
94	Theta Star					3.149						
95	MLE of Mean					2.325						
96	MLE of Standard Deviation					2.706						
97	nu star					33.96						
98	Approximate Chi Square Value (.05)					21.64	**Nonparametric Statistics**					
99	Adjusted Level of Significance					0.0389	95% CLT UCL					3.393
100	Adjusted Chi Square Value					20.92	95% Jackknife UCL					3.44

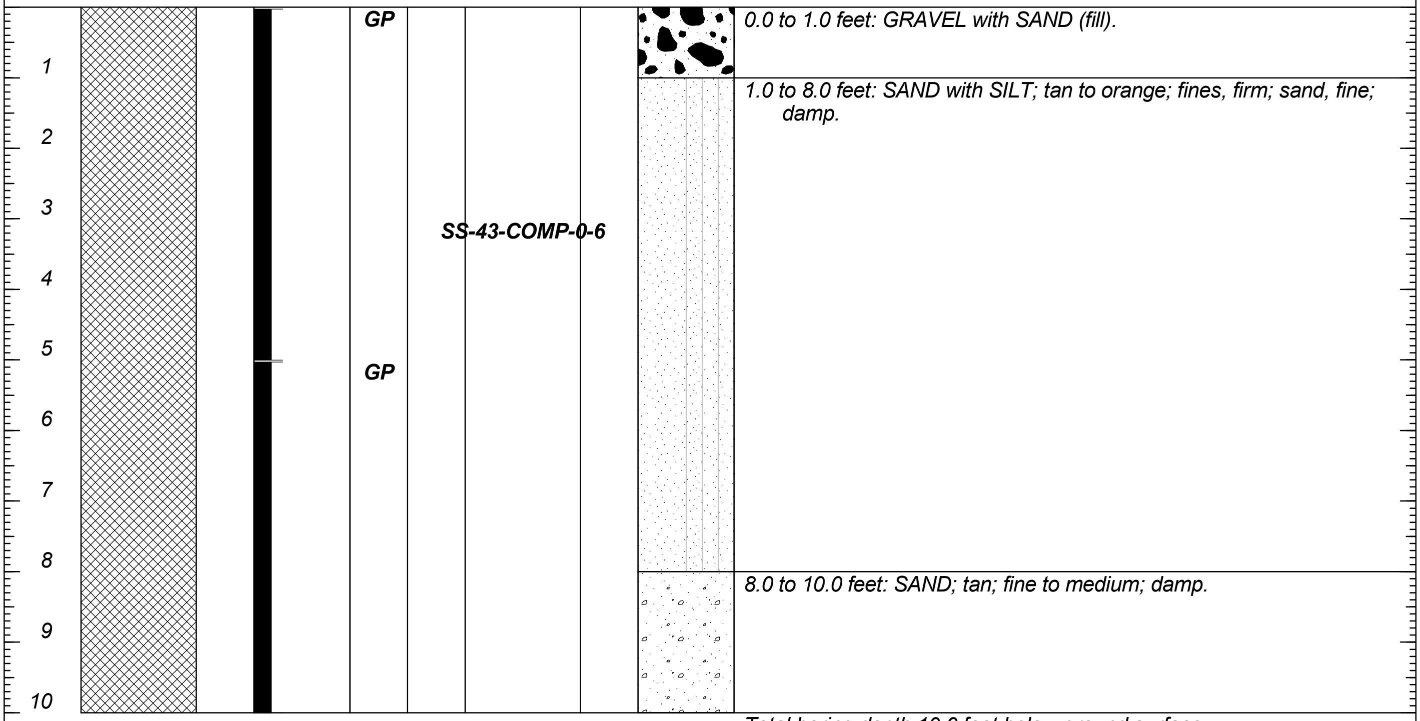
	A	B	C	D	E	F	G	H	I	J	K	L
101							95% Standard Bootstrap UCL					3.372
102	Anderson-Darling Test Statistic					0.946	95% Bootstrap-t UCL					4.184
103	Anderson-Darling 5% Critical Value					0.779	95% Hall's Bootstrap UCL					4.581
104	Kolmogorov-Smirnov Test Statistic					0.185	95% Percentile Bootstrap UCL					3.408
105	Kolmogorov-Smirnov 5% Critical Value					0.188	95% BCA Bootstrap UCL					3.717
106	**Data follow Appr. Gamma Distribution at 5% Significance Level**						95% Chebyshev(Mean, Sd) UCL					5.156
107							97.5% Chebyshev(Mean, Sd) UCL					6.381
108	**Assuming Gamma Distribution**						99% Chebyshev(Mean, Sd) UCL					8.788
109	95% Approximate Gamma UCL (Use when n >= 40)					3.649						
110	95% Adjusted Gamma UCL (Use when n < 40)					3.774						
111												
112	**Potential UCL to Use**						Use 95% Approximate Gamma UCL					3.649
113												
114	**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**											
115	**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**											
116	**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**											
117												

ATTACHMENT 5

BORING LOGS

Maul Foster & Alongi, Inc.	**Geologic Borehole Log/Well Construction**		
	Project Number ***9003.01.39***	*Well Number* ***SS-43***	*Sheet* ***1 of 1***

Project Name	***Port of Ridgefield***	*TOC Elevation (feet)*	***N/A***
Project Location	***Ridgefield, Washington***	*Surface Elevation (feet)*	
Start/End Date	***9/20/2012 to 9/20/2012***	*Northing*	
Driller/Equipment	***Cascade Drilling, LLC/Geoprobe 6600***	*Easting*	
Geologist/Engineer	***Mike Murray and Phil Wiescher***	*Hole Depth*	***10.0-feet***
Sample Method	***Direct Push***	*Outer Hole Diam*	***2.25-inch***



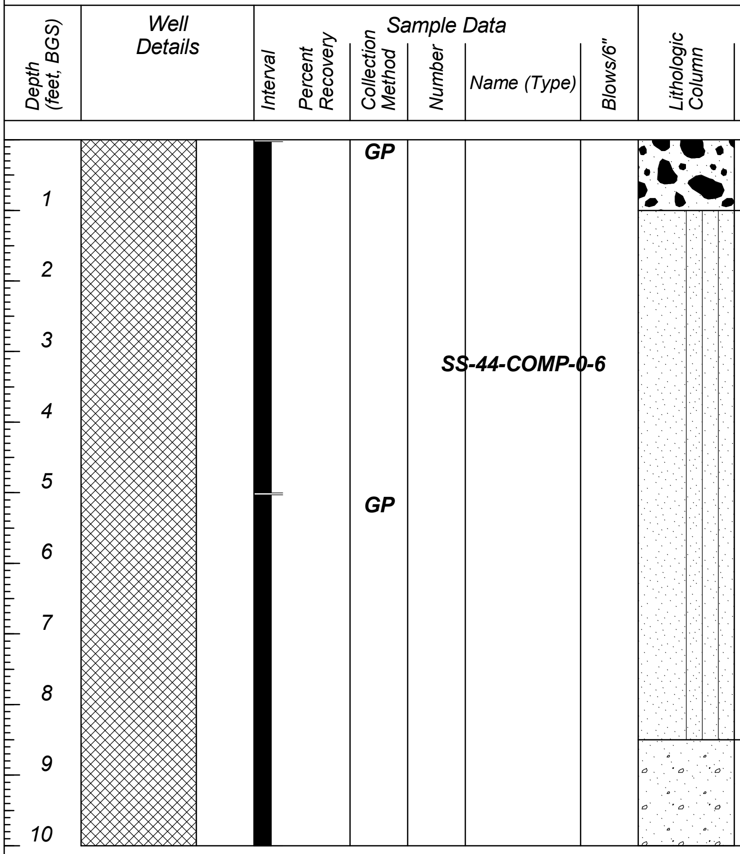
Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
0–1				***GP***		***SS-43-COMP-0-6***			*0.0 to 1.0 feet: GRAVEL with SAND (fill).*
1–8									*1.0 to 8.0 feet: SAND with SILT; tan to orange; fines, firm; sand, fine; damp.*
5				***GP***					
8–10									*8.0 to 10.0 feet: SAND; tan; fine to medium; damp.*

Total boring depth 10.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with bentonite chips hydrated with potable water. (2) Composite soil sample interval collected between 0.0 and 6.0 feet.*

Maul Foster & Alongi, Inc.	**Geologic Borehole Log/Well Construction**		
	Project Number **9003.01.39**	Well Number **SS-44**	Sheet **1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	**N/A**
Project Location	**Ridgefield, Washington**	Surface Elevation (feet)	
Start/End Date	**9/20/2012 to 9/20/2012**	Northing	
Driller/Equipment	**Cascade Drilling, LLC/Geoprobe 6600**	Easting	
Geologist/Engineer	**Mike Murray and Phil Wiescher**	Hole Depth	**10.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**



Soil Description

0.0 to 1.0 feet: GRAVEL with SAND (fill).

1.0 to 8.5 feet: SAND with SILT; tan to orange; fines, firm; sand, fine; dry.

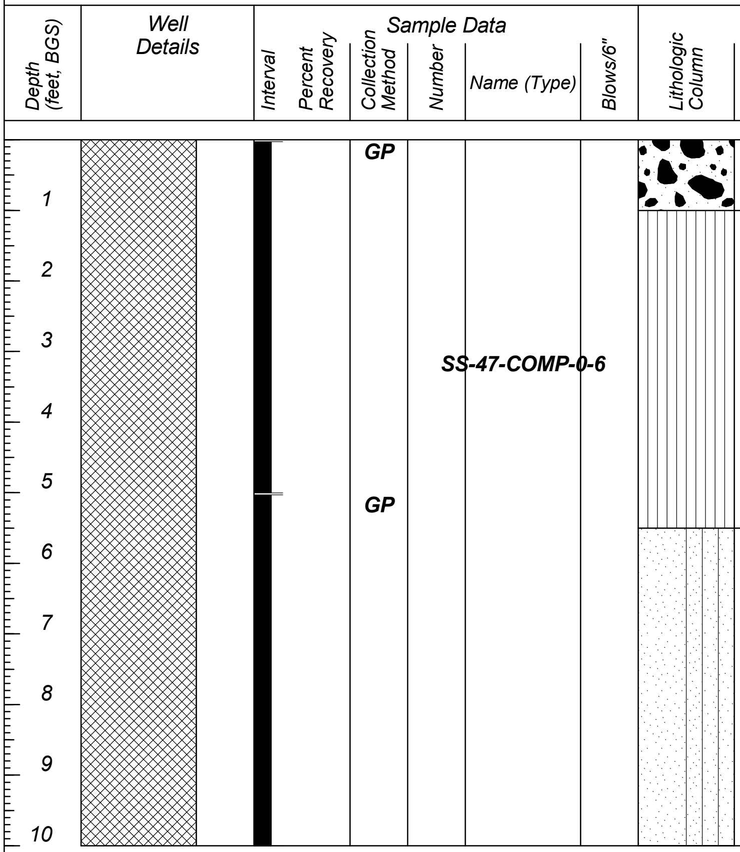
8.5 to 10.0 feet: SAND; tan; fine to medium; firm; damp.

Total boring depth 10.0 feet below ground surface.

NOTES: (1) Borehole was backfilled with bentonite chips hydrated with potable water. (2) Composite soil sample interval collected between 0.0 and 6.0 feet.

Maul Foster & Alongi, Inc.	**Geologic Borehole Log/Well Construction**		
	Project Number	*Well Number*	*Sheet*
	9003.01.39	***SS-47***	***1 of 1***

Project Name	***Port of Ridgefield***	*TOC Elevation (feet)*	***N/A***
Project Location	***Ridgefield, Washington***	*Surface Elevation (feet)*	
Start/End Date	***9/20/2012 to 9/20/2012***	*Northing*	
Driller/Equipment	***Cascade Drilling, LLC/Geoprobe 6600***	*Easting*	
Geologist/Engineer	***Mike Murray and Phil Wiescher***	*Hole Depth*	***10.0-feet***
Sample Method	***Direct Push***	*Outer Hole Diam*	***2.25-inch***



Soil Description

0.0 to 1.0 feet: GRAVEL with SAND (fill).

1.0 to 5.5 feet: SILT; tan to orange; fines, firm; some sand, fine; dry.

5.5 to 10.0 feet: SAND with SILT; fines, firm, medium plasticity; sand, medium; damp.

Total boring depth 10.0 feet below ground surface.

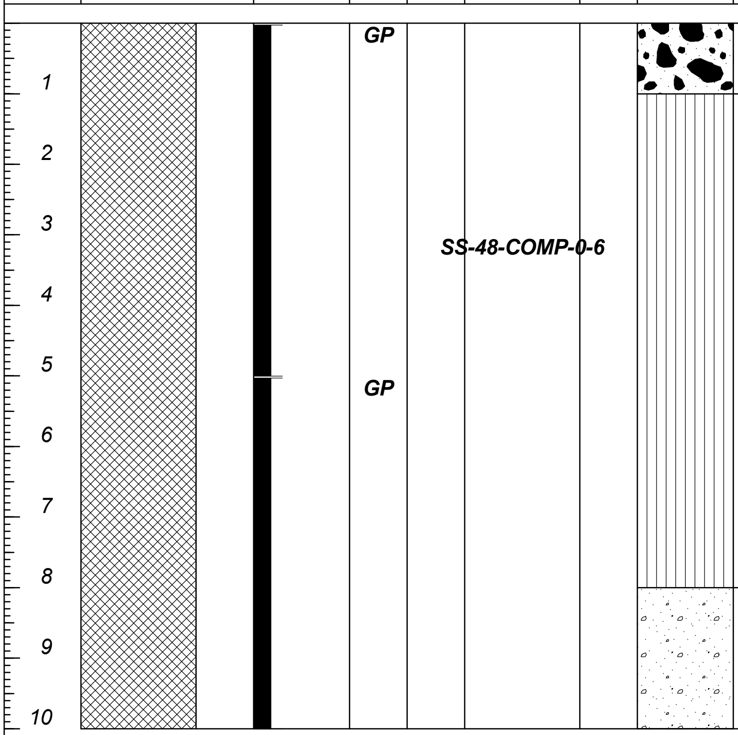
NOTES: *(1) Borehole was backfilled with bentonite chips hydrated with potable water. (2) Composite soil sample interval collected between 0.0 and 6.0 feet.*

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
9003.01.39	**SS-48**	**1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	**N/A**
Project Location	**Ridgefield, Washington**	Surface Elevation (feet)	
Start/End Date	**9/20/2012 to 9/20/2012**	Northing	
Driller/Equipment	**Cascade Drilling, LLC/Geoprobe 6600**	Easting	
Geologist/Engineer	**Mike Murray and Phil Wiescher**	Hole Depth	**10.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**



Soil Description
0.0 to 1.0 feet: GRAVEL with SAND (fill).
1.0 to 8.0 feet: SILT; occasional silt to silt/clay inclusions; tan to orange; fines, firm, medium plasticity; trace sand, fine; dry.
8.0 to 10.0 feet: SAND; trace fines, nonplastic, firm; damp.

Total boring depth 10.0 feet below ground surface.

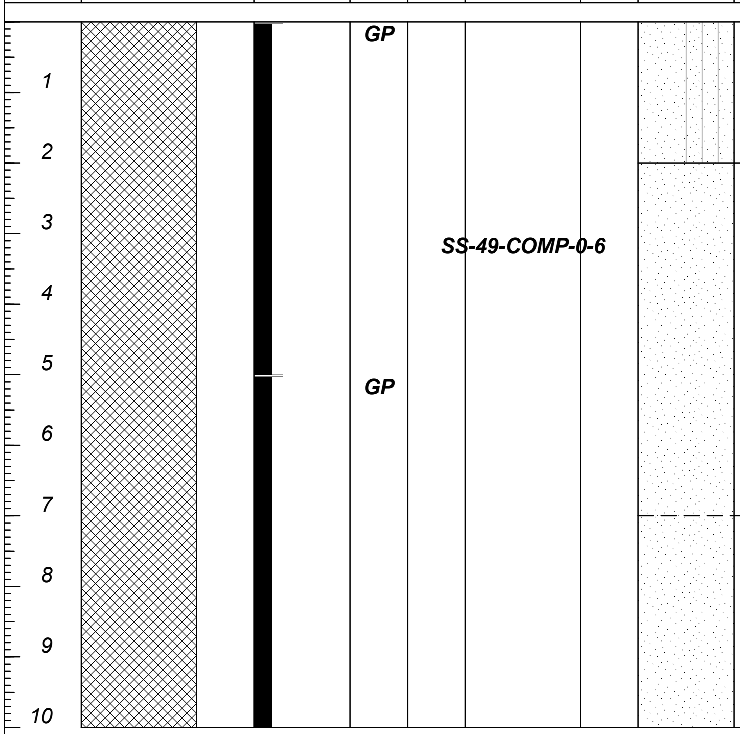
NOTES: (1) Borehole was backfilled with bentonite chips hydrated with potable water. (2) Composite soil sample interval collected between 0.0 and 6.0 feet.

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
9003.01.39	**SS-49**	**1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	**N/A**
Project Location	**Ridgefield, Washington**	Surface Elevation (feet)	
Start/End Date	**9/20/2012 to 9/20/2012**	Northing	
Driller/Equipment	**Cascade Drilling, LLC/Geoprobe 6600**	Easting	
Geologist/Engineer	**Mike Murray and Phil Wiescher**	Hole Depth	**10.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

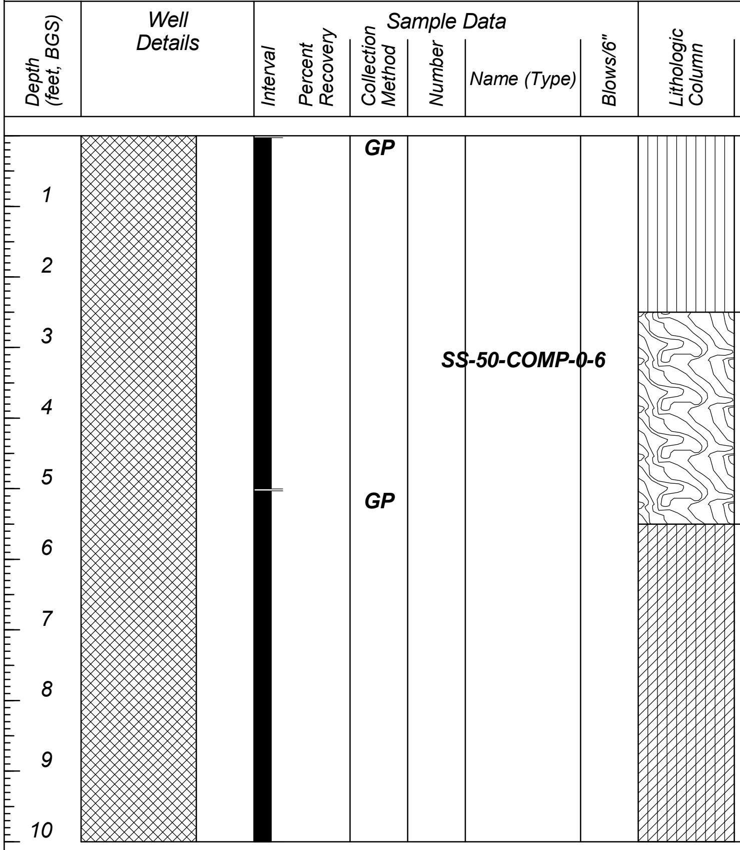


Depth (feet, BGS)	Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Soil Description
0.0			**GP**		**SS-49-COMP-0-6**		0.0 to 2.0 feet: SAND with SILT; tan to orange; fines, loose; sand, fine; dry.
2.0							2.0 to 7.0 feet: SAND; trace fines; sand, medium; damp.
5.0			**GP**				
7.0							7.0 to 10.0 feet: SAND; medium; moist.
10.0							Total boring depth 10.0 feet below ground surface.

NOTES: (1) Borehole was backfilled with bentonite chips hydrated with potable water. (2) Composite soil sample interval collected between 0.0 and 6.0 feet.

Maul Foster & Alongi, Inc.	Geologic Borehole Log/Well Construction		
	Project Number **9003.01.39**	Well Number **SS-50**	Sheet **1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	**N/A**
Project Location	**Ridgefield, Washington**	Surface Elevation (feet)	
Start/End Date	**9/20/2012 to 9/20/2012**	Northing	
Driller/Equipment	**Cascade Drilling, LLC/Geoprobe 6600**	Easting	
Geologist/Engineer	**Mike Murray and Phil Wiescher**	Hole Depth	**10.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**



Soil Description

0 to 2.5 feet: SILT; tan; fines, loose; dry.

2.5 to 5.5 feet: WOOD DEBRIS; fresh; no odor.

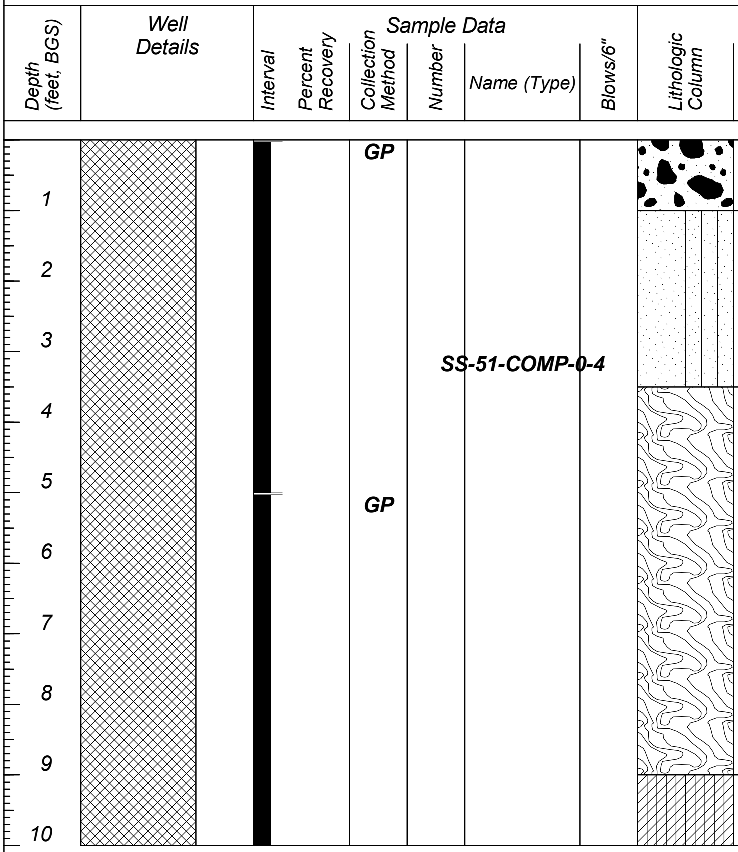
5.5 to 10.0 feet: SILT with CLAY; gray; fines, medium plasticity; damp.

Total boring depth 10.0 feet below ground surface.

NOTES: (1) Borehole was backfilled with bentonite chips hydrated with potable water. (2) Composite soil sample interval collected between 0.0 and 6.0 feet.

Maul Foster & Alongi, Inc.	Geologic Borehole Log/Well Construction		
	Project Number **9003.01.39**	Well Number **SS-51**	Sheet **1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	**N/A**
Project Location	**Ridgefield, Washington**	Surface Elevation (feet)	
Start/End Date	**9/20/2012 to 9/20/2012**	Northing	
Driller/Equipment	**Cascade Drilling, LLC/Geoprobe 6600**	Easting	
Geologist/Engineer	**Mike Murray and Phil Wiescher**	Hole Depth	**10.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**



Depth (feet, BGS)	Collection Method	Name (Type)	Soil Description
0.0–1.0	**GP**		0.0 to 1.0 feet: GRAVEL with SAND (fill).
1.0–3.5			1.0 to 3.5 feet: SAND with SILT; gray; fines, firm; sand, medium; dry.
3.5		**SS-51-COMP-0-4**	
3.5–9.0	**GP**		3.5 to 9.0 feet: WOOD DEBRIS; fresh; no odor.
9.0–10.0			9.0 to 10.0 feet: SILT with CLAY; gray; fines, medium plasticity; damp.

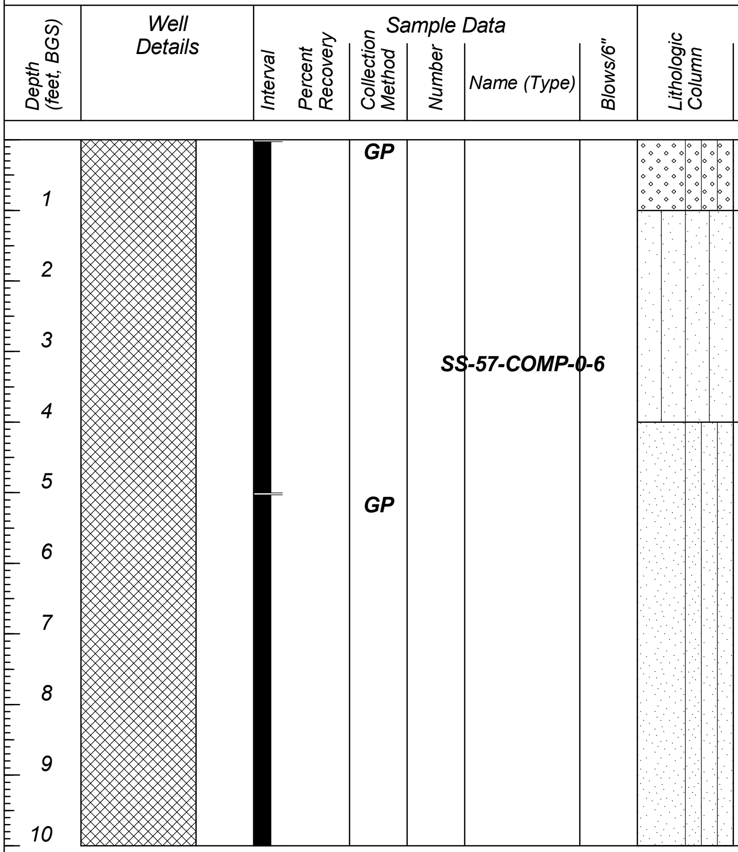
Total boring depth 10.0 feet below ground surface.

NOTES: (1) Borehole was backfilled with bentonite chips hydrated with potable water. (2) Composite soil sample interval collected between 0.0 and 4.0 feet.

Maul Foster & Alongi, Inc.	Project Number **9003.01.39**	Well Number **SS-57**	Sheet **1 of 1**

Geologic Borehole Log/Well Construction

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	**N/A**
Project Location	**Ridgefield, Washington**	Surface Elevation (feet)	
Start/End Date	**9/20/2012 to 9/20/2012**	Northing	
Driller/Equipment	**Cascade Drilling, LLC/Geoprobe 6600**	Easting	
Geologist/Engineer	**Mike Murray and Phil Wiescher**	Hole Depth	**10.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**



Depth (feet, BGS)	Collection Method	Name (Type)
0.0	**GP**	
5.0	**GP**	
0.0–6.0		**SS-57-COMP-0-6**

Soil Description

0.0 to 1.0 feet: GRAVEL with SILT; gravel, rounded; organic debris.

1.0 to 4.0 feet: SANDY SILT; tan to orange; dry.

4.0 to 10.0 feet: SAND with SILT; tan; sand, fine; damp.

Total boring depth 10.0 feet below ground surface.

NOTES: (1) Borehole was backfilled with bentonite chips hydrated with potable water. (2) Composite soil sample interval collected between 0.0 and 6.0 feet.

From: Phil Wiescher
To: Phil Wiescher (pwiescher@maulfoster.com)
Subject: January 15, 2013, Supplemental Terrestrial Ecological Evaluation Report.
Date: Monday, February 25, 2013 9:09:57 AM

From: Rankine, Craig (ECY) [mailto:cran461@ECY.WA.GOV]
Sent: Friday, February 22, 2013 3:52 PM
To: Madi Novak; Laurie Olin ; Alan Hughes
Cc: DeMay, James (ECY)
Subject: January 15, 2013, Supplemental Terrestrial Ecological Evaluation Report.

All,

Ecology reviewed the above referenced report and this e-mail is approval of that document. The referenced report documents the off-property terrestrial ecological evaluation (TEE) work.

The *Supplemental TEE* is already included in an appendix of the redline-strike out version of the *Final Former PWT Remedial Investigation and Feasibility Study* (RI/FS) submitted to Ecology on January 24, 2013 .

Please include this e-mail approval in the same appendix of the RI/FS with the *Supplemental TEE*.

Thank you,

Craig

Craig Rankine, RG, LHG
Dept. of Ecology, Toxics Cleanup Program
Vancouver Field Office
2108 Grand Blvd, Vancouver, 98661
(360) 690-4795

APPENDIX B-3

FINAL TERRESTRIAL ECOLOGICAL EVALUATION FOR THE FORMER PACIFIC WOOD CO. TREATING SITE

MAUL FOSTER ALONGI
7223 NE Hazel Dell Avenue, Suite B | Vancouver, WA 98665 | 360 694 2691 | www.maulfoster.com

April 13, 2010
Project No. 9003.01.41

Mr. Craig Rankine
Washington State Department of Ecology
2108 Grand Boulevard, MS: S-70
Vancouver, Washington 98661-462

Re: Final Terrestrial Ecological Evaluation for the Former Pacific Wood Co. Treating Site
Agreed Order No. 01TCPSR-3119

Dear Mr. Rankine:

On behalf of the Port of Ridgefield (Port), Maul Foster & Alongi, Inc. (MFA) has prepared this terrestrial ecological evaluation (TEE) for the Port's Lake River Industrial Site (LRIS, also referred to as "the property") at 111 West Division Street in Ridgefield, Washington. Historical operations of Pacific Wood Treating Company on the LRIS resulted in wood-treating chemical impacts to soil and groundwater. Remedial investigations (RIs) and feasibility studies (FSs) are being performed to evaluate and manage site-related chemical impacts to soil and groundwater. The RI/FSs will be completed in accordance with the requirements of the Model Toxics Control Act (MTCA) and the Agreed Order No. 01TCPSR-3119 entered between the Washington State Department of Ecology (Ecology) and the Port.

A TEE was included in the draft RI/FS report for Cell 4 (MFA, 2009). Ecology has requested a more expansive TEE that addresses the entire LRIS, not just Cell 4.

A site-specific TEE for the entire LRIS was performed following the procedures outlined in Washington Administrative Code (WAC) 173-340-7490 and WAC 173-340-7493. The purpose of this TEE is to present sufficient information to evaluate the ecological protectiveness of the remedial alternatives being evaluated for the LRIS (see WAC 173-340-7490(1)(b)). The TEE includes problem formulation and an ecological screening evaluation (WAC 173-340-7493(1)(c)).

In addition to evaluating the TEE, this letter assesses the ecological protectiveness of a soil cap proposed for the LRIS. As described in the draft FS reports for Cell 3 (MFA, 2008) and Cell 4 (MFA, 2009), a cap will be part of the recommended interim remedial action to protect human health. The cap over contaminated soil can also protect potential future ecological receptors. Different cap options for the property are discussed in this report. This proposed interim remedial action is also consistent with recommended options discussed with Ecology.

This site specific TEE demonstrates that a future soil cap for the site, along with the proper institutional controls and monitoring, will protect ecological receptors and meets the purpose and requirements of WAC 173-340-7490, such that no additional ecological protective measures will be necessary.

PROBLEM FORMULATION

One of the early steps in any ecological evaluation is problem formulation (U.S. Environmental Protection Agency [USEPA], 1998). Problem formulation involves identifying chemicals of ecological concern (CECs), describing pathways by which ecological receptors may contact CECs in soil, and identifying current or potential future terrestrial ecological receptors that may contact soil (WAC 173-340-7493(2)). The conceptual site model (CSM) and other aspects of problem formulation are described below.

Conceptual Site Model

The LRIS CSM describes potential chemical sources, release mechanisms, environmental transport processes, exposure routes, and receptors. The primary purpose of the CSM is to describe pathways by which terrestrial ecological receptors could be exposed to CECs in soil. A complete exposure pathway consists of four necessary elements: (1) a source and mechanism of chemical release to the environment, (2) an environmental transport medium for a released chemical, (3) a point of potential contact with the impacted medium (referred to as the exposure point), and (4) an exposure route (e.g., soil ingestion) at the exposure point.

Sources

The LRIS was used to treat lumber and to store both treated and untreated wood. Historical wood-treating activities were conducted primarily in Cell 1. Cell 2 was used for fabrication; Cell 4 was historically used to store untreated poles and green lumber before treatment with wood preservatives; and Cell 3 was used to store treated wood. Accidental releases of wood-treating chemicals occurred as part of treatment operations and during storage of treated wood. It appears that wood-treating chemicals were transported on the tires of vehicles throughout most of the LRIS. As a result, soil in much of the LRIS has elevated concentrations of some wood-treating chemicals.

Fate and Transport

The primary mechanisms that influence the fate and transport of chemicals in soil include natural biodegradation of organic chemicals, sorption to soil, redistribution due to vehicle tracking, and leaching of chemicals from soil to groundwater. In some areas of the LRIS, nonaqueous-phase liquid is present in the subsurface and has caused impacts to both soil and groundwater.

Setting

The LRIS was formerly an industrial property that was first used for industrial purposes in the early 1900s. The Port currently restricts public access to much of the LRIS, and the property is largely unused. The LRIS is zoned by the City of Ridgefield for waterfront mixed use. Under this classification, allowed uses include ground floor commercial with upper story living units; retail, restaurants and lodging; and service industries. The City of Ridgefield zoning of the LRIS is consistent with the Port's plans for redevelopment of the property.

Currently, gravel, pavement, and buildings cover most of the LRIS, creating unsuitable substrate for most native plants. Because activity on the property has been low in the recent past, some mostly nonnative invasive plants (e.g., Himalayan blackberry) capable of growing in highly disturbed substrate have become established in some graveled areas. The density and diversity of plants are low. The property is devoid of significant ecological habitats (Ecological Land Services, Inc. [ELS], 2007), and would otherwise have qualified for an exclusion under the Simplified TEE procedures (WAC 173-340-7492) if not for the presence of the adjoining Ridgefield National Wildlife Refuge (RNWR). While it is possible for wildlife to visit the site, because there are no important resources for wildlife (little natural food or cover), potential exposures to impacted soil would be minimal.

Chemicals of Ecological Concern

Wood-treating chemicals detected in soil at concentrations greater than the ecological indicator concentrations given in MTCA Table 749-3 are considered CECs (WAC 173-340-7493(2)(a)(i)). According to WAC 173-340-7490(3)(b), the Table 749-3 ecological indicator concentrations for industrial or commercial sites are those for terrestrial wildlife unless threatened or endangered plant or invertebrate species are present. Because the property was used for industrial purposes for nearly a century, is currently zoned for waterfront mixed use, is planned for redevelopment that will support commercial operations (see Attachment A), and does not support threatened or endangered plants or invertebrates (ELS, 2007; MFA, 2007), only Table 749-3 ecological indicator concentrations for wildlife were used to identify CECs. Attachment B is ELS's habitat evaluation for the property.

The wood-treating chemicals identified in soil include metals (arsenic, chromium, copper, and zinc), diesel, pentachlorophenol (PCP), polycyclic aromatic hydrocarbons (PAHs), and dioxins/furans. With a few exceptions, wildlife screening levels are available in MTCA Table 749-3 for all of these wood-treating chemicals. For example, both creosote and diesel were used as part of historical site operations, and these products may contain several different PAHs. Ecological indicator concentrations for wildlife are presented in Table 749-3 with numeric values for key PAHs (i.e., those that are common, well-studied, and/or relatively toxic).

Two forms of inorganic arsenic are common in the environment: trivalent arsenic (arsenite or As III), and pentavalent arsenic (arsenate or As V). Arsenate is more common under oxidizing conditions and is more stable and less toxic. Arsenite is more prevalent under reducing conditions and is more toxic. For a variety of reasons, that most of the anthropogenic arsenic in soil of the LRIS is arsenate. First, the common wood-treating solutions that include arsenic such as chromate copper arsenate and ammoniacal copper zinc arsenate contain the arsenate species. Therefore, mainly arsenate, and not arsenite, was the form of arsenic accidentally released at the site. Also, surface soil at the LRIS is likely oxidizing, so the arsenate species is the predominate species present in surface soil. The Table 749-3 wildlife indicator concentration for arsenate is substantially higher than the value for arsenite. However, to be conservative, this TEE uses the wildlife indicator concentration for arsenite even though this will result in overestimates of potential risks to wildlife.

Table 749-3 gives separate ecological indicator concentrations for total dioxins and total furans. These MTCA screening values have remained unchanged since at least 2003, and do not reflect recent updates in how Ecology evaluates the toxicity of dioxin and dioxin-like compounds (Ecology, 2007a,b; USEPA, 2008; Van den Berg et al., 2006). The current Ecology evaluation method recognizes that dioxins and dioxin-like substances (i.e., furans) have a common mode of action, and the toxicity of mixtures of these types of chemicals are estimated by summing the relative toxicities of various congeners in the mixture (Ecology, 2007b; USEPA, 2008; Van den Berg et al., 2006). As a result, the wildlife indicator values of 2E-06 milligrams per kilogram given in Table 749-3 for both chlorinated dibenzofurans and for chlorinated dibenzo-p-dioxins are not comparable to the toxicity equivalent concentrations given in Table 1. Ecology recognizes that the Table 749-3 values are inappropriate, and is considering changing them to reflect current standards (Ecology, 2009). Instead of using inappropriate wildlife screening values that will be corrected by Ecology in the near future, this TEE uses updated ecological screening levels for dioxins/furans that were recently developed for another site in western Washington (Malcolm Pirnie, 2007). The updated ecological screening values are based on empirical data for biota of western Washington where each dioxin or furan was measured in colocated soil and biota samples, and were calculated using current Ecology guidance for estimating toxicity of dioxins and furans (Malcolm Pirnie, 2007). The lowest wildlife indicator value for 2,3,7,8-tetrachloro dibenzo-p-dioxin (TCDD) was 182 nanograms per kilogram for voles (Malcolm Pirnie, 2007).

Ecological Screening

The ecological screening evaluation was performed to identify locations where wood-treating chemicals in soil were found at concentrations greater than the ecological indicator concentrations from Table 749-3. As mentioned previously, chemicals with concentrations above these values are considered CECs. Table 1 compares chemical concentrations in soil with ecological indicator concentrations for metals, PCP, benzo(a)pyrene, dioxins, and petroleum hydrocarbons that are listed in Table 749-3. The ecological screening evaluation was performed to identify chemicals in soil with concentrations greater than the ecological indicator concentrations from Table 749-3.

For the purposes of this screening evaluation, all soil data collected throughout the LRIS for the above CECs were included in Table 1. Some of the soil samples were collected almost two decades ago and it is likely that soil conditions have improved over time. For example, remedial actions such as soil removal and steam-enhanced extraction have likely decreased concentrations in soil, and natural biodegradation has also likely reduced concentrations of some organic chemicals in soil. Therefore, the ecological screening evaluation is considered conservative.

Seven chemicals were detected in soil above the ecological indicator concentrations and are considered CECs: arsenic, chromium, copper, zinc, benzo(a)pyrene, dioxins/furans, and PCP (Table 1). The nature and extent of CECs in Cells 3 and 4 have been discussed in previous reports (MFA, 2007, 2009). The nature and extent of CECs in soil of Cells 1 and 2 will be presented in an upcoming report(s). Based on a visual inspection of data in Table 1, it appears that CECs in soil have a heterogeneous spatial distribution. In general, only soil near the surface had CEC concentrations above background levels. With a few exceptions, concentrations of CECs in soil more than approximately 2.5 feet below ground surface were similar to background concentrations.

REMEDY EVALUATION

Concentrations of wood-treating chemicals in soil are above MTCA Method B cleanup levels, background levels, and Table 749-3 ecological indicator concentrations at several locations in the LRIS. Because concentrations exceed MTCA cleanup levels, there is an unacceptable risk for humans and ecological receptors at the LRIS. Therefore, remedial actions are necessary to address both human health and ecological risk.

A capping remedy is proposed to address direct contact, uptake and ingestion by both human and ecological receptors. The purpose of the cap is to prevent future occupants from directly contacting chemicals by creating a physical exposure barrier. The proposed cap profiles, based on land use, are as follows:

Cap Profiles	
Type of Use	Typical section
Landscaping	See landscaping cap profiles below.
Parking	Impermeable surface (min. thickness 3 in.) with clean sub-base as necessary for construction
Building/structure	Slab-on-grade (min. thickness 3 in.) with sub-base as necessary for construction
Sidewalk/pathway	Impermeable surface (min. thickness 3 in.) with clean sub-base as necessary for construction

Based on land use plans, the LRIS will be redeveloped to support commercial activities. If an existing cap is disturbed during development, an equally protective cap will be installed based on the intended use of the area, in accordance with a soil management and cap maintenance plan.

The planned development will include landscaped areas (see Attachment A). Although these do not represent significant ecological habitat for native wildlife, Ecology requested an evaluation of how wildlife could be exposed to contamination below an engineered soil cap in landscaped areas. As discussed below, the proposed cap profiles for landscaped areas will be protective of ecological receptors.

Engineered Soil Cap

The type of cap used in any particular place depends on future development of the site. For example, in some areas the cap may comprise relatively impermeable features such as a building foundation or parking area made of asphalt or concrete. For the purposes of evaluating the ecological protectiveness of a soil cap, it is assumed that the soil cap will consist of a geotextile liner beneath a minimum of 2 feet of clean soil. The geotextile liner will serve as a demarcation layer indicating the bottom of the soil cap, and it will prevent upward migration of fine-grained material while enhancing the barrier effect of the overlying soil cover. A geotextile (SKAPS GT-160 Nonwoven Geotextile™ or equivalent) has an apparent opening size of 0.21 millimeter, which allows for surface water infiltration and avoids creation of a hydraulic barrier while providing negligible pathways for ecological receptors. Additionally, this geotextile has a puncture strength of 90 pounds, minimizing root penetrations. The nonwoven geotextile to be used in the capping will be a polypropylene material. Polypropylene materials typically are subject to degradation by ultraviolet light, but as the material will not be exposed before installation and will be covered with a soil cap following installation, the ultraviolet light degradation will be minimized. According to the manufacturer, the SKAPS geotextile resists ultraviolet deterioration, rotting, biological degradation, and naturally encountered bases and acids.

At the request of Ecology, the cap will be planted with species that have shallow root systems. Attachment C presents some of the plant species that may be planted in the cap areas. Grasses and shallow-rooted ground cover plants are preferred in areas with 2 feet of soil capping. Grasses and shallow-rooted trees and shrubs are preferred in areas with 3 feet of soil capping. No geotextile liner or landscaping restrictions are proposed for soil capping greater than 6 feet. Cover over the soil cap could also include gravel surfaces for roadways or paths. In addition, as part of the soil management and cap maintenance plan, inspection and maintenance of landscaping will be included.

In accordance with Ecology's recommendation, the proposed cap profiles for protection of ecological receptors in landscaped areas, based on soil cap thickness, are as follows:

Landscaping Cap Profiles

Cap Soil Thickness	Additional Cap Components/Restrictions
<2 feet	Geotextile as demarcation; no landscaping; impermeable surface required (e.g., pavement and buildings)
2 to 3 feet	Geotextile as demarcation layer; ground cover as outlined in Attachment C, gravel surfaces, or additional as approved by Ecology, any grasses
3 to 6 feet	Geotextile as demarcation layer; shrubs or trees as outlined in Attachment C, gravel surfaces, or additional as approved by Ecology, any grasses
>6 feet	No geotextile and no vegetation planting restrictions

Although only shallow-rooted plants are proposed for areas where the soil cap is less than 6 feet thick, as described in greater detail below, the proposed soil cap will be protective of terrestrial ecological receptors regardless of the rooting depths of plants on the cap.

Institutional controls will also be used in conjunction with the cap as part of the remedial action. The institutional controls will be in the form of a restrictive environmental covenant requiring adherence to a soil management plan and monitoring to ensure acceptable performance in the future. The soil management plan will outline methods for protecting and maintaining the surface cap and managing residual contaminated soils during redevelopment or subsurface work. A restrictive covenant will also be implemented to prohibit the use of groundwater for drinking, and prevent installation of a water well that could influence groundwater flow and affect the dynamics of contaminant plumes. A cap monitoring program will be implemented to aid in the identification and repair of breaches in the cap.

Potential Future Ecological Receptors

When considering ecological receptors that may be exposed to soil contamination, it is very important to distinguish between current and proposed future conditions that will exist after a cap has been established. Under current conditions, terrestrial wildlife could visit the property and an individual bird or mammal could have incidental exposure to chemicals in soil. Given the poor habitat conditions, current site use by humans (e.g., the adjoining Marina, public boat ramp, and miscellaneous Port activities), and the lack of significant wildlife resources, local populations of birds and mammals will not have sufficient exposure to impacted soil to result in adverse effects. However, current conditions are less relevant than future conditions for evaluating ecological protectiveness of a cap. If the current soil surface were to be capped with 2 feet of clean soil, most wildlife would be unable to directly contact chemicals in the subsurface. Of the wildlife in the region, only a few species have physical attributes or behaviors that would allow them to penetrate 2 feet of soil. The future plantings in landscaped areas are not considered ecologically significant habitat under MTCA regulations (see WAC 173-340-7491(2)(c)(ii)).

According to the U.S. Fish and Wildlife Service species list for the RNWR (USFWS, 2009), biological surveys at the refuge have identified two mammals that routinely develop burrow systems that could extend more than 2 feet below the ground surface in upland habitats (not stream banks): Townsend mole (*Scapanus townsendii*) and California ground squirrel (*Spermophilus beecheyi*). Voles sometimes construct shallow burrows, but these rarely extend more than a few inches below the surface (Maser, 1998). Coyotes may construct underground dens, and other wildlife on the refuge may occasionally use burrows constructed by other species. However, species other than the Townsend mole and California ground squirrel are unlikely to have significant regular exposures to subsurface soil.

The Townsend mole is an invertivore that feeds primarily on earthworms in the subsurface. These moles tend to develop shallow burrows and prefer moist areas with deep friable soil (Maser, 1998). The LRIS does not support moles, and moles will not have significant exposure to contaminants after a soil cap is constructed. Based on visual inspections, soil over most of the LRIS appears compacted. Heavy vehicles have operated over most of the LRIS for decades, and soil was likely graveled and compacted to support industrial operations. Chemicals are located in highly compacted soil that has not supported significant plant growth in decades. As a result, impacted soil does not offer important food resources for earthworms, which forage primarily on decomposed plant materials. Also, compacted soil is not preferred by either earthworms or moles because it is relatively difficult for burrowing animals to move through. Because the compacted soil does not provide good habitat for earthworms, it will not offer significant resources for moles. However, if the soil cap is revegetated in the future, earthworms may colonize the cap to feed on decomposed plant materials, and moles may then follow. Moles that may forage in the soil cap are unlikely to have significant exposure to contaminants because their diet will comprise of earthworms that reside in the soil cap and are uncontaminated.

California ground squirrels, also known as Beechey ground squirrels, are omnivorous rodents that forage primarily on aboveground plant materials. They may develop extensive burrow systems, which are used during hibernation and to escape predators (Maser, 1998). These squirrels are relatively recent invaders in Washington. They appear to have traveled on bridges built over the Columbia River in the early 1900s, and have now settled into areas of south-central Washington. In general, California ground squirrels forage in close proximity to their burrows (within approximately 100 feet). Therefore, unless the landscaping on the future soil cap contains a sufficient density of edible plants, the cap will not be colonized by ground squirrels. Most landscaped features on commercial sites in western Washington are structurally simple (e.g., lawns, ornamental trees and shrubs, perennial showy flowers) and do not represent significant food resources for ground squirrels.

In summary, two mammal species in the area near the LRIS are known to frequently develop and inhabit burrows, and in some cases these burrows can extend more than 2 feet below the ground surface. However, for a variety of reasons, the likelihood that several individuals of either species would colonize the cap is low. The typical landscaping at commercial properties does not offer important food resources for either species. Also, the relatively small size of the landscaped area and the high frequency of human disturbance associated with many commercial areas may make the site unattractive to burrowing mammals.

The cap monitoring program will include regular inspections for burrowing mammals. Provisions will be included in the cap monitoring program that call for the removal of burrowing mammals if they are discovered on the cap.

Indirect Ecological Exposure Scenarios

There are two potential scenarios by which wildlife could potentially have indirect exposure to chemicals in subsurface soil beneath a cap. First, it is theoretically possible that burrowing invertebrates such as earthworms could dig through the cap, ingest impacted soil, migrate back up to the top of the cap, and be caught and consumed by wildlife. Similarly, it is theoretically possible that some plants could develop roots that grow into the soil beneath the cap, uptake contaminants from soil, and then translocate contaminants to plant parts that are consumed by wildlife. As discussed below, neither of these theoretically possible ecological exposure scenarios will lead to significant exposures for wildlife that could visit future landscaped areas. Note that the purpose of limiting the plant species in the soil cap is to minimize the risk of this theoretical possibility.

As mentioned previously, the impacted soil now present at the property does not offer important food resources for populations of earthworms or other soil invertebrates. Soil is compacted, making it difficult for worms to move through, and because no significant plant community has been present for decades, the soil will not contain significant organic material that make up the diet of worms. After plants are established on a soil cap, it will be colonized by worms and other invertebrates that feed on plant materials in the cap.

CEC migration from soil into aboveground foliage will not recontaminate the cap. First, at the request of Ecology, plants with shallow root systems will be planted on the soil cap. In mesic environments such as western Washington, most native plants have shallow root systems designed to capture precipitation and nutrients that infiltrate from the ground surface. Root density for almost all plants decreases exponentially with depth. In ecological risk assessments, 30 centimeters (approximately 12 inches) has often been used as a default estimate of the depth below which plant root exposure to contaminants is insignificant (Suter, 2007). The proposed cap will be at least twice as thick as this default rooting depth estimate (Suter, 2007).

In general, chemicals that migrate from subsurface soil into aboveground plant structures (e.g., leaves) first dissolve from soil into soil pore water, and are then taken up by roots (McKone and Maddalena, 2007). They can be transported from roots to leaves in the dissolved phase through either transpiration or translocation. Plant uptake of chemicals from soil is determined by numerous factors such as the species of plant, soil type, pH in soil, organic carbon content of soil, temperature, and nutrient levels. The primary organic CECs in soil include PCP, PAHs, and dioxin/furans. Organic compounds with high molecular weights (e.g., dioxin/furans, PAHs, PCP) are relatively insoluble and plant uptake of these chemicals is low (Travis and Arms, 1988; McKone and Maddalena, 2007)

Plant uptake factors (PUFs) for aboveground plant parts are typically defined as the ratio of the chemical concentration in the plant over the concentration in soil (expressed as dry weight). Travis and Arms (1988) found that a PUF was associated with the logarithm of the octanol-water partition coefficient (log K_{ow}) for a chemical. The K_{ow} is a measure of chemical solubility. The following equation can be used to estimate conservative PUFs for organic chemicals (Travis and Arms, 1988):

$$\log PUF = 1.588 - 0.578 \log K_{ow}$$

The log K_{ow} and the calculated PUF is given in Table 2 for four representative CECs (i.e., highest frequency of exceedances of screening levels and/or highest relative toxicity of CECs) in soil: benzo(a)pyrene, 2,3,7,8-TCDD, and PCP. The estimated PUFs range from approximately 0.005 to 0.016, indicating that the concentrations of chemicals in aboveground plant parts would be approximately two orders of magnitude lower than concentrations in soil. It should be noted that conservative PUFs typically overestimate chemical concentrations in plant leaves due to translocation from roots (Efroymson et al., 2001). Relative to other processes by which plant leaves may accumulate chemicals (e.g., air-to-plant accumulation processes), plant root uptake and translocation of high-molecular-weight chemicals such as dioxins are insignificant (IOM, 2003). Similarly, concentrations of PAHs in plants due to root uptake are substantially lower than soil concentrations, and foliar herbivory does not appear to be a significant pathway by which wildlife may be exposed to PAHs in the environment (USEPA, 2009).

As with organic chemicals, plant uptake of inorganic chemicals such as arsenic can be complex. Factors that affect plant uptake of arsenic include reduction and oxidation conditions, the species of arsenic, plant types, pH, and phosphate levels. Two separate evaluations of conservative PUFs for arsenic estimated a value of approximately 0.04 (Baes et al., 1984; Efroymson et al., 2001). Plant translocation of arsenic from soil to aboveground parts is minor for most settings, and concentrations in plant parts are expected to be about two orders of magnitude lower than concentrations in soil. It should be noted that arsenic occurs naturally in plants, but concentrations of arsenic in plant parts are typically ten to 1,000 times lower than concentrations in soil (Eisler, 1988).

To evaluate the effect on wildlife from potential bioaccumulation of CECs in plants, conservative PUFs were applied to mean soil concentrations (see Appendix D) to estimate CEC concentrations in aboveground plant parts that wildlife may contact. Although this evaluation was not performed to demonstrate compliance, statistical methods consistent with WAC 173-340-740(7)(c)(iv)(B) were used to estimate CEC concentrations in soil (Table 2). Specifically, the 95 percent upper confidence limit about the mean concentration (95% UCL) of a CEC in soil was used as the soil exposure point concentration. The 95% UCL is a value that has a 95 percent probability of being greater than the true population mean. The 95% UCL provides an estimate of the population mean that is biased on the high side to account for the uncertainty introduced by extrapolating from a sample to the population. The USEPA statistical software ProUCL 4.00.04 was used to calculate 95% UCLs for CECs. The statistical methods used in this USEPA software program are more appropriate than many of the methods described in WAC 173-340-740(7), which is now outdated. The output from ProUCL is presented as Attachment D.

As shown in Table 2, conservative estimates of future CEC concentrations in plants growing in impacted soil are below wildlife ecological indicator concentrations. Therefore, even if no protective soil cap was placed over contamination, CECs would not significantly bioaccumulate in aboveground plant parts. Concentrations in plants on a clean cap will be lower than these conservative estimates because few plant roots will extend into the contaminated soil layer. Therefore, the proposed engineered cap remedy will be protective of terrestrial wildlife that could visit landscaped areas in the future.

Summary

A soil cap with a minimum thickness of 2 feet has been proposed for the LRIS to protect human health. All available evidence suggests that this type of cap is also protective of ecological receptors. Most wildlife that could visit the surface of the cap would be incapable of penetrating the cap (e.g., birds, mice). Given the commercial nature of the property, the future landscaped cap will not provide good habitat. Contaminated soil beneath the future cap will not pose a risk to wildlife that may visit the future landscaped areas at the LRIS.

If you have any questions, please contact us.

Sincerely,

Maul Foster & Alongi, Inc.

State of Washington
2498
Licensed Geologist
Alan R. Hughes

Jeffrey A. Peterson

Jeffrey A. Peterson, PhD
Principal Risk Assessor

Alan R. Hughes, LG
Project Geologist

Attachments: Limitations
References
Tables 1 and 2
Attachment A—Habitat Evaluation
Attachment B—Conceptual Site Development Plan for the Lake River Industrial Site
Attachment C—Lake River Industrial Site Planting List
Attachment D—ProUCL Calculations

cc: Brent Grening and Laurie Olin, Port of Ridgefield
David Sternberg, Washington State Department of Ecology
Patt O'Flaherty, CH2M Hill

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

REFERENCES

Baes, C. F. III, R. D. Sharp, A. L. Sjoreen, and R. W. Shor. 1984. A review and analysis of parameters for assessing transport of environmentally released radionuclides through agriculture. ORNL-5786. U.S. Department of Energy, Oak Ridge, Tennessee.

Ecology. 2007a. Concise explanatory statement and responsiveness summary for the amendment of Chapter 173-340 WAC, Model Toxics Control Act cleanup regulation. Publication No. 07-09-108. Washington State Department of Ecology, Toxics Cleanup Program. October 10.

Ecology, 2007b. Evaluating the toxicity and assessing the carcinogenic risk of environmental mixtures using toxicity equivalency factors. Washington State Department of Ecology.

Ecology. 2009. Terrestrial ecological evaluations. Washington State Department of Ecology. http://www.ecy.wa.gov/programs/tcp/regs/2009MTCA/issues/terrestrialEcologicalEvaluationsIssueSummaryJuly2009.pdf. July.

Efroymson, R. A., B. E. Sample, and G. W. Suter. 2001. Uptake of inorganic chemicals from soil by plant leaves: regressions of field data. Environmental Toxicology and Chemistry 20:2561-2571.

Eisler, R. 1988. Arsenic hazards to fish, wildlife, and invertebrates: a synoptic review. Biological report 85 (1.12). U.S. Fish and Wildlife Service.

ELS. 2007. Habitat evaluation for Port of Ridgefield; Lake River industrial site. Prepared for the Port of Ridgefield. Ecological Land Services, Inc., Longview, Washington. November 12.

IOM. 2003. Dioxins and dioxin-like compounds in the food supply: strategies to decrease exposure. ISBN: 978-0-309-08961-6. Committee on the Implications of Dioxin in the Food Supply, Food and Nutrition Board, Institute of Medicine of the National Academies. Washington, DC: The National Academies Press.

Malcolm Pirnie. 2007. Terrestrial ecological evaluation for the uplands environment at the former Rayonier Mill site. Prepared for Rayonier. Malcolm Pirnie, Inc., Seattle, Washington. March.

Maser, C. 1998. Mammals of the Pacific Northwest: from the coast to the high Cascades. Corvallis, Oregon: Oregon State University Press.

McKone, T.E., and R.L. Maddalena. 2007. Plant uptake of organic chemicals from soil: bioconcentration estimates based on models and experiments. Environmental Toxicology and Chemistry 26:2494-2504.

MFA. 2007. Cell 3 remedial investigation and risk assessment report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. February 23.

MFA. 2008. Draft Cell 3 feasibility study report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. April 21.

MFA. 2009. Draft Cell 4 remedial investigation and feasibility study report (redline strikeout version). Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. April 27.

Suter, G. W. 2007. Ecological risk assessment. 2d ed. Boca Raton: CRC Press, Taylor & Francis Group.

Travis, C.C. and A.D. Arms. 1988. Bioconcentration of organics in beef, milk, and vegetation. *Environ. Sci. Technol.* 22:271–274.

USEPA. 1998. Guidelines for ecological risk assessment. EPA/630/R095/002F. U.S. Environmental Protection Agency, Risk Assessment Forum, Washington, DC.

USEPA, 2004. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Pare E, Supplemental Guidance for Dermal Risk Assessment). U.S. Environmental Protection Agency. EPA/540/R/99/005, July.

USEPA, 2008. Framework for Application of the Toxicity Equivalence Methodology for Polychlorinated Dioxins, Furans, and Biphenyls in Ecological Risk Assessment. U.S. Environmental Protection Agency. EPA/100/R-08/004, June.

USEPA. 2009. USEPA Region 5 ecological toxicity information. U.S. Environmental Protection Agency. http://www.epa.gov/R5Super/ecology/html/toxprofiles.htm. October 16.

USFWS. 2009. Ridgefield National Wildlife Refuge: wildlife checklist. U.S. Fish and Wildlife Service. June.

Van den Berg et al. 2006. The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. Toxicological Sciences 2006 93(2):223-241; doi:10.1093/toxsci/kfl055.

TABLES

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
Cells 1 and 2												
A1	A1	11/07/2000	0	--	--	--	--	--	--	140	--	--
A2	A2	11/07/2000	0	--	--	--	--	--	--	240	--	--
A3	A3	11/07/2000	0	--	--	--	--	--	--	110	--	--
B-1	B1	11/07/2000	0	--	--	--	--	--	--	240	--	--
B-2	B2	11/07/2000	0	--	--	--	--	--	--	150	--	--
B-3	B3	11/07/2000	0	--	--	--	--	--	--	240	--	--
B-1	B1-S-2.5	04/06/2000	2.5	--	--	--	--	10 U	50 U	--	--	--
	B1-S-10.0	04/06/2000	10	--	--	--	--	10 U	50 U	--	--	--
B-2	HC-B2_S2	02/04/1991	3	--	--	--	--	--	2500 U	--	--	--
	HC-B2_S5	02/04/1991	11	--	--	--	--	--	2500 U	--	--	--
	B2-S-10.0	04/06/2000	0	--	--	--	--	10 U	50 U	--	--	--
	B2-S-2.5	04/06/2000	2.5	--	--	--	--	10 U	50 U	--	--	--
B-3	HC-B3_S3	02/04/1991	5.5	--	--	--	--	--	2500 U	--	--	--
	HC-B3_S7	02/04/1991	15	--	--	--	--	--	2500 U	--	--	--
B-4	HC-B4_S2	02/04/1991	3	--	--	--	--	--	2500 U	--	--	--
	HC-B4_S6	02/04/1991	12.5	--	--	--	--	--	2700	--	--	--
B-5	HC-B5_S2	02/04/1991	3	--	--	--	--	--	2500 U	--	--	--
	HC-B5_S8	02/04/1991	18.5	--	--	--	--	--	**350000**	--	--	--
	B5-S-10.0	04/06/2000	10	--	--	--	--	10 U	50 U	--	--	--
B-6	HC-B6_S2	02/04/1991	3	--	--	--	--	--	**150000**	--	--	--
	HC-B6_S14	02/04/1991	33	--	--	--	--	--	2500 U	--	--	--
	B6-S-2.5	04/06/2000	2.5	--	--	--	--	10 U	50 U	--	--	--
	B6-S-10.0	04/06/2000	10	--	--	--	--	10 U	50 U	--	--	--
B-7	HC-B7_S3	02/04/1991	5.5	--	--	--	--	--	2500 U	--	--	--
	HC-B7_S6	02/04/1991	13.5	--	--	--	--	--	2500 U	--	--	--
	B7-S-2.5	04/06/2000	2.5	--	--	--	--	10 U	50 U	--	--	--
	B7-S-10.0	04/06/2000	10	--	--	--	--	10 U	50 U	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-8	B8-S-2.5	04/06/2000	2.5	--	--	--	--	10 U	50 U	--	--	--
	B8-S-10.0	04/06/2000	10	--	--	--	--	10 U	50 U	--	--	--
	HC-B8_S4	02/04/1991	11	--	--	--	--	--	2500 U	--	--	--
	HC-B8_S5	02/04/1991	16	--	--	--	--	--	2500 U	--	--	--
B-9	B9-S-2.5	04/06/2000	2.5	--	--	--	--	13	50 U	--	--	--
	B9-S-5.0	04/06/2000	5	--	--	--	--	10 U	50 U	--	--	--
	B9-S-10.0	04/06/2000	10	--	--	--	--	10 U	50 U	--	--	--
	HC-B9_S3	02/04/1991	5.5	3.8	18.2	--	--	--	**14000**	--	--	--
	HC-B9_S7	02/04/1991	16	--	--	--	--	--	2500 U	--	--	--
B-10	HC-B10_SB	02/04/1991	0	--	--	--	--	--	**15000**	--	--	--
	HC-B10_S4	02/04/1991	10.5	--	--	--	--	3 U	**17000**	--	--	--
	HC-B10_S6	02/04/1991	16	--	--	--	--	--	**7700**	--	--	--
B-11	HC-B11_S2	02/04/1991	3	--	--	--	--	--	2500 U	--	--	--
	HC-B11_S6	02/04/1991	13.5	--	--	--	--	--	2500 U	--	--	--
B-12	HC-B12_S2	02/05/1991	3	--	--	--	--	--	2500 U	--	--	--
	HC-B12_S6	02/05/1991	13	--	--	--	--	--	2500 U	--	--	--
B-13	HC-B13B_S7	02/05/1991	15.5	--	--	--	--	--	2500 U	--	--	--
B-14	HC-B14_S4	02/05/1991	8	--	--	--	--	--	2500 U	--	--	--
	HC-B14_S6	02/05/1991	13	--	--	--	--	--	2500 U	--	--	--
B-15	HC-B15_S2	02/05/1991	3	--	--	--	--	--	4300	--	--	--
	HC-B15_S7	02/05/1991	15.5	--	--	--	--	--	**30000**	--	--	--
B-18	B18-5	05/03/1993	5	4.6	16	20.1	--	--	--	--	--	--
	B18-15	05/03/1993	15	3.7	25.1	16.8	--	--	--	--	--	--
	B18-25	05/03/1993	25	2.7	16.9	17.4	--	--	--	--	--	--
B-20	B20-5	05/03/1993	5	**7.9**	15.7	30	--	--	--	--	--	--
	B20-20	05/03/1993	20	3.1	7.4	16.5	--	6300	--	--	--	--
B-30	CELL 1 3.5-5.0	12/01/1997	3.5	3	13	19	40	5 U	75	10 U	10 U	--
	CELL 1 9.5-11.0	12/01/1997	9.5	1	7	23	86	--	--	1110	10 U	--
	CELL 1 17.0-18.0	12/01/1997	17	1	5	19	43	--	--	619	10 U	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-31	CELL 3-3.5/5.0	11/26/1997	3.5	1 U	6	15	30	5 U	240	10 U	10 U	--
	CELL 3-8/9.5	11/26/1997	8	1	6	17	28	5 U	930	10 U	10 U	--
	CELL 3-15.5/17	11/26/1997	15.5	1	10	22	38	1260 H	3100 H	1100	10 U	--
B-32	CELL 5-S-6.5	12/05/1997	6.5	**12**	13	23	39	16 H	18 H	--	--	--
	CELL 5-S-14	12/08/1997	14	1	7	20	38	--	6	10 U	10 U	--
B-33	CELL 7 3.5-5.0	12/04/1997	3.5	**18**	24	33	69	693	**17000**	1380	10 U	--
	CELL 7 9.5-11.0	12/04/1997	9.5	6	22	28	48	146	3200	151	10 U	--
	CELL 7 15.5-17.0	12/04/1997	15.5	1	7	17	26	--	--	371	10 U	--
B-34	CELL 9-3.5/5.0	11/26/1997	3.5	**10**	14	19	43	65	1400	38	10 U	--
	CELL 9-8.0/9.5	11/26/1997	8	2	12	20	40	--	--	734	10 U	--
	CELL 9-17.0/18.0	11/26/1997	17	1 U	6	16	25	--	--	284	10 U	--
B-35	CELL 11-3.5-5.0	12/02/1997	3.5	**10**	37	32	107	--	--	4430	10 U	--
	CELL 11-11.0-12	12/02/1997	11	2	10	25	42	--	--	2180	10 U	--
	CELL 11-14.0-15	12/02/1997	14	1	8	33	32	--	--	4430	10 U	--
B-36	CELL 13 5.0-6.5	12/03/1997	5	2	22	16	39	--	--	3710	10 U	--
	CELL 13 9.5-11.	12/03/1997	9.5	2	9	25	45	1540	**34000**	2010	10 U	--
	CELL 13 15.5-17	12/03/1997	15.5	1	10	19	35	--	--	147	10 U	--
B-37	CELL 16-5.0-6.5	12/02/1997	5	**25**	28	22	86	--	--	3630	10 U	--
	CELL 16-15.5-17	12/03/1997	15.5	1	9	18	40	5 U	41	10 U	10 U	--
B-38	CELL 19-S-3.5	12/05/1997	3.5	**12**	27	18	188	376	--	--	--	--
	CELL 19-S-9.5	12/05/1997	9.5	2	12	28	126	--	--	--	--	--
	CELL 19-S-15.5	12/05/1997	15.5	2	12	22	43	--	--	--	--	--
B-39	CELL 21-6.5	01/19/1998	6.5	3	27	22	48	--	--	--	--	--
	CELL 21-12.5	01/19/1998	12.5	2	12	23	32	--	--	--	--	--
B-40	CELL 24-S-6.5	12/11/1997	6.5	**8**	**95**	22	116	--	--	--	--	--
	CELL 24-S-14	12/11/1997	14	3	14	17	39	--	--	--	--	--
B-41	CELL 27-S-5	12/10/1997	5	**11**	**110**	21	**411**	--	--	--	--	--
	CELL 27-S-14	12/10/1997	14	1	7	17	30	--	--	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7^a	67	217	360	12,000	4,500	6000^c	5000^c	6000^c
B-42	CELL 30-S-8	12/09/1997	8	3	12	28	48	260	--	--	--	--
	CELL 30-S-12.5	12/09/1997	12.5	1	9	18	38	--	55	10 U	10 U	--
	CELL 30-S-15.5	12/09/1997	15.5	1	10	23	40	--	--	--	--	--
B-43	CELL 31-S-3.5	11/20/1997	3.5	6	13	13	58	8	5 U	--	--	--
	CELL 31-S-9.5	11/20/1997	9.5	3	11	25	39	--	--	--	--	--
B-44	CELL 33-S-6.5	11/20/1997	6.5	6	13	16	43	94	**5800**	--	--	--
	CELL 33-S-12.5	11/20/1997	12.5	**17**	26	20	138	--	--	--	--	--
B-45	CELL 34-S-3.5	11/19/1997	3.5	**8**	19	14	56	--	--	249	415	--
	CELL 34-S-5	11/19/1997	5	**7**	18	18	51	15	**40000**	--	--	--
	CELL 34-S-8.0	11/19/1997	8	**9**	28	17	49	--	--	--	--	--
B-46	CELL 35-S-5	11/19/1997	5	**8**	18	13	42	5	170	10 U	10 U	--
	CELL 35-S-9.5	11/19/1997	9.5	2	13	22	40	5 U	33	10 U	10 U	--
B-47	CELL 36-S-3.5	11/18/1997	3.5	6	14	15	52	--	--	--	--	--
	CELL 36-S-9.5	11/18/1997	9.5	2	8	32	73	5 U	1700	--	--	--
	CELL 36-S-15.5	11/18/1997	15.5	2	11	26	38	--	--	--	--	--
B-48	CELL 37-S-3.5	11/20/1997	3.5	**9**	17	15	62	14	89	--	--	--
	CELL 37-S-12.5	11/20/1997	12.5	2	6	17	30	--	--	--	--	--
B-49	CELL 38-S-5	11/25/1997	5	**7**	16	11	55	--	--	--	--	--
	CELL 38-S-9.5	11/25/1997	9.5	4	8	22	40	--	--	--	--	--
B-50	CELL 39-S-3.5	11/21/1997	3.5	**15**	22	14	62	--	--	--	--	--
	CELL 39-S-8	11/21/1997	8	5	11	24	44	5	1000	--	--	--
B-51	CELL 40-S-3.5	11/24/1997	3.5	**7**	16	14	55	--	--	--	--	--
	CELL 40-S-9.5	11/24/1997	9.5	5	16	30	48	10 U	780	10 U	10 U	--
B-52	CELL 42-S-3.5	11/20/1997	3.5	**101**	37	20	153	70	3700	--	--	--
	CELL 42-S-9.5	11/20/1997	9.5	3	7	19	36	--	--	--	--	--
B-53	CELL 43-9.5	01/14/1998	9.5	4	14	30	38	5 U	15	--	--	--
	CELL 43-15.5	01/14/1998	15.5	2	10	39	48	71	200	--	--	--
B-54	CELL 44-8.0	01/14/1998	8	**7**	22	18	59	8	600	--	--	--
	CELL 44-15.5	01/14/1998	15.5	1	9	16	33	--	--	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-55	CELL 45-8.0	01/15/1998	8	6	20	14	59	5 U	49	--	--	--
	CELL 45-17	01/15/1998	17	4	12	14	37	--	--	--	--	--
B-56	CELL 46-6.5	01/15/1998	6.5	**8**	20	13	53	5 U	35	--	--	--
	CELL 46-12.5	01/15/1998	12.5	3	8	22	36	--	--	--	--	--
B-57	CELL 47-8.0	01/16/1998	8	**8**	20	15	63	5 U	31	--	--	--
	CELL 47-14.0	01/16/1998	14	2	13	24	44	--	--	--	--	--
B-58	CELL 48-6.5	01/16/1998	6.5	2	12	21	38	5 U	69	--	--	--
	CELL 48-14.0	01/16/1998	14	2	14	21	23	--	--	--	--	--
B-58A	B-1-S-5.0	06/12/1998	5	--	--	--	--	10	100 U	--	--	--
	B-1-S-17.0	06/12/1998	17	--	--	--	--	10 U	100 U	--	--	--
B-62	B-5-S-5.0	06/12/1998	5	--	--	--	--	10 U	100 U	--	--	--
	B-5-S-17.0	06/12/1998	17	--	--	--	--	10 U	100 U	--	--	--
B-63	B-6-S-5.0	06/12/1998	5	--	--	--	--	10 U	100 U	--	--	--
	B-6-S-17.0	06/12/1998	17	--	--	--	--	10 U	100 U	--	--	--
B-66	B-9-S-5.0	06/12/1998	5	--	--	--	--	10 U	100 U	--	--	--
	B-9-S-17.0	06/12/1998	17	--	--	--	--	10 U	100 U	--	--	--
B-69	B-12-S-0.5	06/16/1998	0.5	**19**	26	33	63	930	1300	10 U	10 U	25 U
	B-12-S-2.5	06/16/1998	2.5	4	19	19	52	10 U	100 U	10 U	10 U	25 U
	B-12-S-5.0	06/16/1998	5	4	18	24	44	10 U	100 U	10 U	10 U	25 U
	B-12-S-10.0	06/16/1998	10	1	8	19	34	10 U	100 U	10 U	10 U	25 U
	B-12-S-17.0	06/16/1998	17	2	8	17	32	10 U	100 U	10 U	10 U	25 U
B-72	B-15-S-0.5	06/17/1998	0.5	**22**	36	50	111	1000	20000 U	--	--	--
	B-15-S-5.0	06/17/1998	5	3	15	16	32	12	100 U	--	--	--
	B-15-S-10.0	06/17/1998	10	2	16	25	41	18	100 U	--	--	--
	B-15-S-17.0	06/17/1998	17	2	8	19	34	10 U	100 U	--	--	--
B-73	B-73-S-17.0	06/17/1998	17	--	--	--	--	10 U	100 U	--	--	--
B-74	B-74-S-2.5	06/17/1998	2.5	--	--	--	--	10 U	100 U	--	--	--
	B-74-S-17.0	06/17/1998	17	--	--	--	--	10 U	100 U	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-75	B-75-S-2.5	06/17/1998	2.5	--	--	--	--	10 U	100 U	--	--	--
	B-75-S-17.0	06/17/1998	17	--	--	--	--	10 U	100 U	--	--	--
B-76	B-76-S-10.0	06/17/1998	10	--	--	--	--	10 U	100 U	--	--	--
	B-76-S-27.0	06/17/1998	27	--	--	--	--	22	100 U	--	--	--
B-77	B-77-S-2.5	06/17/1998	2.5	--	--	--	--	10 U	100 U	--	--	--
	B-77-S-5.0	06/17/1998	5	--	--	--	--	10 U	100 U	--	--	--
	B-77-S-17.0	06/17/1998	17	--	--	--	--	6300	50000 U	--	--	--
B-78	B-78-S-0.5	06/18/1998	0.5	--	--	--	--	3100	3900	--	--	--
	B-78-S-17.0	06/18/1998	17	--	--	--	--	10 U	100 U	--	--	--
B-79	B-79-S-2.5	06/18/1998	2.5	--	--	--	--	100 U	1000 U	--	--	--
	B-79-S-10.0	06/18/1998	10	--	--	--	--	10 U	100 U	--	--	--
	B-79-S-17.0	06/18/1998	17	--	--	--	--	10 U	100 U	--	--	--
B-80	B-80-S-2.5	06/19/1998	2.5	--	--	--	--	10 U	100 U	--	--	--
	B-80-S-15.0	06/19/1998	15	--	--	--	--	10 U	100 U	--	--	--
	B-80-S-25.0	06/19/1998	25	--	--	--	--	10 U	100 U	--	--	--
B-81	B-81-S-2.5	06/19/1998	2.5	--	--	--	--	10 U	**17000**	--	--	--
B-82	B-82-S-10.0	06/19/1998	10	--	--	--	--	10 U	1100	--	--	--
	B-82-S-20.0	06/19/1998	20	--	--	--	--	10 U	100 U	--	--	--
B-83	B-83-S-5.0	06/23/1998	5	--	--	--	--	10 U	100 U	--	--	--
	B-83-S-17.0	06/23/1998	17	--	--	--	--	1600	2000 U	--	--	--
B-84	B-84-S-10.0	06/23/1998	10	--	--	--	--	16	100	--	--	--
	B-84-S-35.0	06/23/1998	35	--	--	--	--	10 U	100 U	--	--	--
B-85	B-85-S-5.0	06/23/1998	5	--	--	--	--	110	**6500**	--	--	--
	B-85-S-10.0	06/23/1998	10	--	--	--	--	**120000**	**16000**	--	--	--
B-86	B-86-S-5.0	06/23/1998	5	--	--	--	--	10 U	100 U	--	--	--
	B-86-S-15.0	06/23/1998	15	--	--	--	--	4800	**230000**	--	--	--
B-87	B-87-S-5.0	06/23/1998	5	--	--	--	--	10 U	100 U	--	--	--
	B-87-S-15.0	06/23/1998	15	--	--	--	--	89	3900	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-88	B-88-S-5.0	06/23/1998	5	--	--	--	--	10 U	100 U	--	--	--
	B-88-S-15.0	06/23/1998	15	--	--	--	--	10 U	170	--	--	--
B-89	B-89-S-5.0	06/23/1998	5	--	--	--	--	10 U	100 U	--	--	--
	B-89-S-15.0	06/23/1998	15	--	--	--	--	10 U	100 U	--	--	--
B-90	B-90-S-0.5	06/23/1998	0.5	--	--	--	--	1900	**7000**	--	--	--
	B-90-S-17.5	06/23/1998	17.5	--	--	--	--	10 U	100 U	--	--	--
B-91	B-91-S-0.5	06/23/1998	0.5	--	--	--	--	120	**510000**	--	--	--
	B-91-S-15.0	06/23/1998	15	--	--	--	--	10 U	100 U	--	--	--
B-92	B-92-S-10.0	06/23/1998	10	--	--	--	--	10 U	100 U	--	--	--
	B-92-S-30.0	06/23/1998	30	--	--	--	--	10 U	100 U	--	--	--
B-93	B-93-S-25.0	06/24/1998	25	--	--	--	--	19	100 U	--	--	--
	B-93-S-40.0	06/24/1998	40	--	--	--	--	25	620	--	--	--
B-94	B-94-S-10.0	06/24/1998	10	--	--	--	--	130	430	--	--	--
	B-94-S-35.0	06/24/1998	35	--	--	--	--	10 U	100 U	--	--	--
B-95	B-95-S-10.0	06/24/1998	10	--	--	--	--	1100	1500	--	--	--
	B-95-S-25.0	06/24/1998	25	--	--	--	--	10 U	100 U	--	--	--
	B-95-S-32.5	06/24/1998	32.5	--	--	--	--	10 U	310	--	--	--
B-96	B-96-S-30.0	07/08/1998	30	--	--	--	--	10 U	100 U	10 U	10 U	25 U
B-97	B-97-S-2.5	07/08/1998	2.5	--	--	--	--	10 U	100 U	10 U	10 U	2088
B-98	B-98-S-17.0	07/08/1998	17	--	--	--	--	10 U	100 U	--	--	--
B-99	B-99-S-15.0	07/08/1998	15	--	--	--	--	--	--	10 U	10 U	25 U
	B-99-S-45.0	07/08/1998	45	--	--	--	--	10 U	100 U	--	--	--
	B-99-S-64.0	07/08/1998	64	--	--	--	--	10 U	410	--	--	--
B-100	B-100-S-45.0	07/08/1998	45	--	--	--	--	10 U	100 U	--	--	--
	B-100-S-65.0	07/08/1998	65	--	--	--	--	10 U	100 U	--	--	--
	B-100-S-15.0	07/08/1998	15	--	--	--	--	--	--	10 U	10 U	25 U
B-101	B-101-S-10.0	07/08/1998	10	--	--	--	--	10 U	100 U	--	--	--
	B-101-S-33.0	07/08/1998	33	--	--	--	--	10 U	100 U	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-103	B-103-S-2.5	07/08/1998	2.5	--	--	--	--	10 U	100 U	--	--	--
B-119	B119-S-2.5	06/17/1999	2.5	--	--	--	--	--	--	10 U	10 U	25 U
	B119-S-5.0	06/17/1999	5	--	--	--	--	--	--	10 U	10 U	25 U
	B119-S-15.0	06/17/1999	15	--	--	--	--	--	--	10 U	10 U	25 U
B-140	B140-S-10.0	10/06/1999	10	**14**	29	27	89	10 U	59	10 UH	10 U	25 UH
B-141	B141-S-2.5	10/06/1999	2.5	**14**	**133**	19	**631**	83	1200	10 UH	10 UH	270 H
B-142	B142-S-10.0	10/07/1999	10	**9**	29	29	83	1900	740	10 UH	10 UH	25 UH
B-147	B147-S-10.0	10/08/1999	10	**22**	30	26	85	2100	180	10 UH	10 UH	25 UH
B-148	B148-S-10.0	10/08/1999	10	6	27	30	76	1000	78	10 UH	10 UH	25 UH
	B148-S-15.0	10/08/1999	15	**11**	21	25	80	950	310	10 UH	10 UH	25 U
B-149	B149-S-3.0	10/08/1999	3	3	8	5	77	10 U	5.3	10 UH	10 UH	25 UH
	B149-S-10.0	10/08/1999	10	**13**	33	24	197	2700	210	10 UH	10 UH	25 UH
B-150	B150-S-10.5	10/11/1999	10.5	6	26	28	93	210	60	10 U	10 U	830
B-153	B153-S-10.0	10/11/1999	10	**8**	31	20	73	10 U	53	10 U	10 U	29
B-155	B155-S-5.0	10/12/1999	5	6	22	21	83	16	37	10 U	10 U	56
	B155-S-9.0	10/12/1999	9	6	43	28	92	10 U	6.4	10 U	10 U	40
B-160	B160-S-10.0	10/13/1999	10	--	--	--	--	10 UH	14	10 UH	10 UH	25 UH
B-191	B191-S-5.0	10/25/1999	5	2	9	5	25	10 UH	5 U	10 U	10 U	25 U
B-192	B192-S-2.5	10/25/1999	2.5	2	13	5	26	10 UH	5.5	--	--	--
B-193	B193-S-2.5	10/25/1999	2.5	2	11	17	46	14 H	1200 H	10 U	10 U	840
	B193-S-5.0	10/25/1999	5	**14**	31	20	191	140 H	250 H	10 U	10 U	920
	B193-S-10.0	10/25/1999	10	2	22	24	59	10 UH	10	10 U	10 U	25 U
B-194	B194-S-2.5	10/25/1999	2.5	**7**	23	16	85	72 H	**8300**	10 U	10 U	25 U
	B194-S-5.0	10/25/1999	5	3	22	24	85	12 H	1900 H	10 U	10 U	25 U
	B194-S-10.0	10/25/1999	10	3	31	27	68	230 H	5.1 H	10 U	10 U	25 U
B-195	B195-S-2.5	10/26/1999	2.5	**33**	**129**	53	**626**	1000 H	2900 H	10 U	10 U	890
	B195-S-5.0	10/26/1999	5	4	25	8	72	33 H	27	10 U	10 U	230
	B195-S-10.0	10/26/1999	10	4	29	34	79	10 UH	14	10 U	10 U	25 U

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-196	B196-S-3.0	10/26/1999	3	1 U	2	11	11	10 UH	10	10 U	10 U	25 U
	B196-S-9.0	10/26/1999	9	2	19	22	60	15 H	**7500**	10 U	10 U	460
B-197	B197-S-2.5	10/26/1999	2.5	**13**	18	31	73	22 H	120	10 U	10 U	25 U
	B197-S-5.0	10/26/1999	5	4	18	13	72	10 UH	700	10 UH	10 UH	32 H
	B197-S-10.0	10/26/1999	10	5	29	30	72	10 UH	28	10 U	10 U	25 U
B-198	B198-S-2.5	10/27/1999	2.5	3	9	5	24	10 UH	**67000**	10 U	10 U	160
	B198-S-5.0	10/27/1999	5	2	9	6	26	10 UH	**32000**	10 UH	10 UH	25 UH
B-199	B199-S-2.5	10/27/1999	2.5	3	10	7	27	10 UH	140	10 UH	10 UH	25 UH
	B199-S-5.0	10/27/1999	5	3	8	8	23	10 UH	5.3	10 UH	10 UH	25 UH
	B199-S-10.0	10/27/1999	10	**7**	17	13	64	10 UH	81	10 UH	10 UH	25 UH
	B199-S-15.0	10/27/1999	15	5	15	20	41	10 UH	5 U	10 UH	10 UH	25 UH
B-200	B200-S-2.5	10/27/1999	2.5	4	12	8	40	10 UH	19	10 UH	10 UH	25 UH
	B200-S-5.0	10/27/1999	5	3	10	6	27	10 UH	5 U	10 UH	10 UH	25 UH
B-201	B201-S-2.5	10/28/1999	2.5	**8**	12	10	101	10 UH	17	10 UH	10 UH	25 UH
	B201-S-5.0	10/28/1999	5	3	10	6	27	10 UH	10	10 UH	10 UH	25 UH
	B201-S-15.0	10/28/1999	15	**7**	34	30	82	160 H	19	10 UH	10 UH	25 UH
	B201-S-20.0	10/28/1999	20	4	17	24	43	10 UH	10	10 UH	10 UH	25 UH
B-202	B202-S-2.5	10/28/1999	2.5	**8**	18	7	101	10 UH	18	10 UH	10 UH	25 UH
	B202-S-5.0	10/28/1999	5	3	12	8	37	10 UH	5 U	10 UH	10 UH	25 UH
	B202-S-15.0	10/28/1999	15	--	--	--	--	--	--	10 U	10 U	25 U
B-203	B203-S-2.5	10/28/1999	2.5	4	12	7	40	10 UH	21	10 UH	10 UH	25 UH
	B203-S-5.0	10/28/1999	5	2	9	6	28	10 UH	11	10 UH	10 UH	25 UH
	B203-S-10.0	10/28/1999	10	4	23	12	81	470 H	330	10 UH	10 UH	560 H
B-221	B221-S-2.5	11/09/1999	2.5	5	19	24	75	10 U	21	10 U	10 U	25 U
	B221-S-7.5	11/09/1999	7.5	3	15	21	51	10 U	490	10 U	10 U	68
B-222	B222-S-2.5	11/10/1999	2.5	3	15	17	58	900	43	10 U	10 U	25 U
	B222-S-5.0	11/10/1999	5	--	--	--	--	96	47	10 U	10 U	25 U
	B222-S-10.0	11/10/1999	10	5	25	24	74	10 U	25	10 U	10 U	25 U

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-223	B223-S-5.0	11/10/1999	5	3	17	18	55	10 U	7	10 U	10 U	29
	B223-S-10.0	11/10/1999	10	5	22	24	79	10 U	7	10 U	10 U	25 U
B-224	B224-S-2.5	11/10/1999	2.5	**11**	24	27	71	10 U	35	10 U	10 U	25 U
B-226	B226-S-5.0	11/11/1999	5	2	11	6	39	--	--	10 U	10 U	25 U
B-227	B227-S-5.0	11/11/1999	5	3	23	21	61	--	--	10 U	10 U	25 U
B-228	B228-S-1.5	11/11/1999	1.5	6	48	26	62	--	--	10 U	10 U	1200
	B228-S-5.0	11/11/1999	5	1	8	5	26	--	--	10 U	10 U	25 U
B-229	B229-S-2.5	11/11/1999	2.5	4	20	20	66	--	--	10 U	10 U	25 U
B-230	B230-S-2.5	11/12/1999	2.5	2	10	5	26	10 U	**7300**	10 U	10 U	60
	B230-S-5.0	11/12/1999	5	--	--	--	--	10 U	45	10 U	10 U	25 U
B-231	B231-S-2.5	11/12/1999	2.5	--	--	--	--	10 U	59	10 U	10 U	25 U
	B231-S-7.0	11/12/1999	7	2 U	11	7	30	23	**4500**	10 U	10 U	110
B-233	B233-S-15.0	12/07/1999	15	**7**	29	30	76	10 U	130	10 U	10 U	25 U
B-234	B234-S-10.0	12/07/1999	10	**47**	35	48	103	2400	46	10 U	10 U	25 U
	B234-S-15.0	12/07/1999	15	**9**	32	33	115	10 U	39	10 U	10 U	25 U
B-235	B235-S-10.0	12/08/1999	10	6	28	34	83	29	31	10 U	10 U	702
	B235-S-15.0	12/08/1999	15	**10**	25	28	75	10 U	62	10 U	10 U	25 U
	B235-S-25.0	12/08/1999	25	6	23	26	69	10 U	5.4	10 U	10 U	25 U
B-236	B236-S-10.0	12/08/1999	10	**35**	35	27	184	10 U	20	10 U	10 U	148
	B236-S-15.0	12/08/1999	15	2	28	27	64	10 U	71	10 U	10 U	25 U
B-238	B238-S-10.0	12/09/1999	10	5	25	26	67	10 U	144	10 U	10 U	25 U
	B238-S-15.0	12/09/1999	15	5	24	30	67	190	100	10 U	10 U	25 U
B-239	B239-S-10.0	12/09/1999	10	6	32	33	99	16	80	10 U	10 U	25 U
	B239-S-15.0	12/09/1999	15	**9**	28	31	93	20	270	10 U	10 U	25 U
B-240	B240-S-15.0	12/10/1999	15	6	25	25	68	10 U	20	10 U	10 U	25 U
B-241	B241-S-5.0	12/10/1999	5	**9**	39	22	162	42	28	10 U	10 U	120
	B241-S-15.0	12/10/1999	15	5	24	25	67	10 U	91	10 U	10 U	25 U

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-244	B244-S-25.0	12/15/1999	25	--	--	--	--	--	--	10 U	10 U	25 U
	B244-S-30.0	12/15/1999	30	--	--	--	--	--	--	10 U	10 U	25 U
	B244-S-35.0	12/15/1999	35	--	--	--	--	10 U	33	10 U	10 U	25 U
B-245	B245-S-15.0	12/15/1999	15	--	--	--	--	10 U	**17000**	10 U	10 U	5230
	B245-S-30.0	12/15/1999	30	--	--	--	--	11	96	10 U	10 U	25 U
B-246	B246-S-5.0	12/16/1999	5	--	--	--	--	10 U	9	10 U	10 U	25 U
	B246-S-10.0	12/16/1999	10	--	--	--	--	--	--	10 U	10 U	25 U
	B246-S-20.0	12/16/1999	20	--	--	--	--	--	--	10 U	10 U	25 U
B-247	B247-S-2.5	12/17/1999	2.5	--	--	--	--	--	--	10 U	10 U	25 U
	B247-S-5.0	12/17/1999	5	4	15	20	52	--	--	10 U	10 U	25 U
B-248	B248-S-2.5	12/20/1999	2.5	--	--	--	--	--	--	10 U	10 U	25 U
	B248-S-15.0	12/20/1999	15	--	--	--	--	--	--	10 U	10 U	25 U
	B248-S-25.0	12/20/1999	25	--	--	--	--	--	--	10 U	10 U	25 U
B-249	B249-S-2.5	12/20/1999	2.5	--	--	--	--	--	--	10 U	10 U	25 U
	B249-S-20.0	12/20/1999	20	--	--	--	--	--	--	10 U	10 U	25 U
	B249-S-25.0	12/20/1999	25	--	--	--	--	--	--	10 U	10 U	25 U
B-250	B250-S-20.0	12/21/1999	20	**7**	18	27	42	10 U	25	10 U	10 U	25
	B250-S-25.0	12/21/1999	25	3	11	17	27	10 U	8	10 U	10 U	25 U
	B250-S-35.0	12/21/1999	35	2 U	9	14	22	17	6	10 U	10 U	25 U
B-251	B251-S-2.5	12/22/1999	2.5	--	--	--	--	--	--	10 U	10 U	25 U
	B251-S-10.0	12/22/1999	10	--	--	--	--	--	--	10 U	10 U	25 U
	B251-S-25.0	12/22/1999	25	--	--	--	--	--	--	10 U	10 U	25 U
B-252	B252-S-15.0	12/22/1999	15	3	28	30	78	10 U	940	10 U	10 U	25 U
	B252-S-20.0	12/22/1999	20	2	27	31	75	10 U	1900	10 U	10 U	25 U
	B252-S-25.0	12/22/1999	25	3	30	34	87	10 U	40	10 U	10 U	25 U
B-253	B253-S-25.0	12/23/1999	25	5	27	36	84	16	220	10 U	10 U	25 U
B-255	B255-S-10.0	01/14/2000	10	**20**	14	14	64	1600	4000	10 U	10 U	25 U
	B255-S-15.0	01/14/2000	15	4	26	33	199	10 U	49	10 U	10 U	25 U

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-256	B256-S-5.0	01/14/2000	5	4	21	17	45	10 U	15	10 U	10 U	25 U
	B256-S-10.0	01/14/2000	10	5	25	37	58	10 U	14	10 U	10 U	25 U
B-261	B261-S-10.0	01/20/2000	10	2	12	17	61	10 U	61	10 U	10 U	25 U
	B261-S-15.0	01/20/2000	15	2	13	18	37	66	1800	10 U	10 U	25 U
	B261-S-30.0	01/20/2000	30	1	7	15	30	10 U	96	10 U	10 U	25 U
B-264	B264-S-2.5	08/17/2001	2.5	4.9	25.4	21.8	--	14 U	66 U	16 Z	13 U	--
	B264-S-10.0	08/17/2001	10	2.2	21.9	20.6	--	13 U	65 U	20 Z	13 U	--
B-265	B265-S-5.0	08/17/2001	5	2.5	24.5	18.5	--	13 U	62 U	12 U	12 U	--
B-266	B266-S-5.0	08/17/2001	5	5.3	22.4	23.4	--	16 U	80 U	16 U	16 U	--
B-272	B272-S-5.0	08/17/2001	5	**14.4**	45.5	11.8	--	31	58 U	130 Z	17 Z	--
B-273	B273-S-5.0	08/20/2001	5	3.8	26	27.4	--	20	74 U	22 Z	18 Z	--
B-274	B274-S-5.0	08/20/2001	5	2.6	19.9	17.1	--	14 U	70 U	14 U	14 U	--
B-306	B306-S-2.5	03/11/2009	2.5	**592**	**367**	**348**	**669**	**36000**	**46700**	--	--	--
	B306-S-18.0	03/11/2009	18	2.31	18.2	24.3	63.5	541	853	--	--	--
B-308	B308-S-0.5	03/11/2009	0.5	**11.3**	20.7	47.5	72.0	12 U	349 U	--	--	--
	B308-S-2.5	03/11/2009	2.5	4.93	16.7	7.16	81.0	7.27 U	2730	--	--	--
	B308-S-15.0	03/11/2009	15	**47.5**	57.2	20.5	842	**54505**	1550	--	--	--
BH-21	T5060406	04/02/1996	26	1.6	--	17	37.3	760 U	3600	--	--	--
BH-22	T5070104	04/02/1996	21	--	--	--	--	77	**43000**	--	--	--
	T5070110	04/02/1996	49	--	--	--	--	130 U	380	--	--	--
BH-23	T5070116	04/02/1996	16	2	--	23.3	117	160 U	2100 U	--	--	--
	T5070117	04/02/1996	21	3.5	--	24.5	61	--	--	--	--	--
BH-24	T5070133	04/02/1996	26	**24.5**	--	24.2	--	--	--	--	--	--
BH-25	T5070142	04/02/1996	11	1.8	--	8.7 U	27.4	--	--	--	--	--
BH-26	T5070156	04/02/1996	8.5	**10**	24	34	131	300 U	**13000**	--	--	--
C	C	11/07/2000	0	--	--	--	--	--	--	240	--	--
D	D	11/07/2000	0	--	--	--	--	--	--	300	--	--
DS-E	Dry Shed-East-0	06/18/1997	0	--	--	--	--	--	--	10 U	10 U	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
DS-N	Dry Shed-North-0	06/18/1997	0	6	57	23	123	3000 U	**990000**	3200	10 U	--
DS-S	Dry Shed-South-0	06/18/1997	0	**8**	22	32	79	1500 U	**1000000**	10 U	10 U	--
DS-W	Dry Shed-West-0	06/18/1997	0	**40**	54	38	150	300 U	**5200**	10 U	10 U	--
MW-10	HC-W12_S14	02/05/1991	0	--	--	--	--	--	2500 U	--	--	--
	HC-W12_S3	02/05/1991	0	--	--	--	--	--	2500 U	--	--	--
	HC-W12_SE	02/05/1991	0	--	--	--	--	--	2500 U	--	--	--
MW-13	MW13-5	05/03/1993	5	1.8	6.4	3.7	--	--	--	--	--	--
	MW13-15	05/03/1993	15	5.6	10.2	20 U	--	--	--	--	--	--
	MW13-20	05/03/1993	20	2.5	9.2	16.4	--	--	--	--	--	--
MW-14	MW14-5	05/03/1993	5	4.2	14.6	19.1	--	--	--	--	--	--
	MW14-20	05/03/1993	20	4	27.6	17	--	--	--	--	--	--
MW-15	MW15-10	05/03/1993	10	2.2	11.1	7.3	--	--	--	--	--	--
	MW15-20	05/03/1993	20	5.1	22.3	22.7	--	--	--	--	--	--
MW-17	MW17-5	05/03/1993	5	4.9	17.4	11.7	--	--	--	--	--	--
	MW17-12.5	05/03/1993	12.5	5.4	19.5	21.7	--	--	--	--	--	--
MW-18	MW18-10	05/03/1993	10	7	26	20.5	--	--	16000 U	--	--	--
	MW18-15	05/03/1993	15	5.9	21.6	22.7	--	--	--	--	--	--
MW-22	MW22-10	05/03/1993	10	3.6	25.3	16.3	--	--	--	--	--	--
	MW22-15	05/03/1993	15	3	24.3	12.3	--	--	--	--	--	--
MW-24	T5070221	04/02/1996	0.5	--	--	--	--	260	1700 U	--	--	--
	T5070224	04/02/1996	11	--	--	--	--	830	20000 U	--	--	--
	T5070226	04/02/1996	21	**11.9**	--	16.1	60.2	3100	**7800**	--	--	--
MW-25	T5060415	04/02/1996	3	--	--	--	--	120	1100	--	--	--
	T5070003	04/02/1996	36	2.1	--	18	32	--	--	--	--	--
MW-26	T5070204	04/02/1996	8.5	**14**	--	13.9	94.7	1900	**6400**	--	--	--
	T5070207	04/02/1996	21	--	--	--	--	650	1200	--	--	--
MW-27	T5070212	04/02/1996	6	6.8	--	18.8	47.1	--	--	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
MW-31	T5070230	04/02/1996	16	**14.3**	--	12.1	54.9	--	--	--	--	--
	T5070231	04/02/1996	21	--	--	--	--	150 U	73	--	--	--
	T5070232	04/02/1996	26	--	--	--	--	160 U	2100 U	--	--	--
	T5070233	04/02/1996	31	--	--	--	--	150 U	2000 U	--	--	--
NPY-03	HC-NPY_03	02/06/1991	0	--	--	--	--	--	2500 U	--	--	--
NPY-04	HC-NPY_04	02/06/1991	0	--	--	--	--	--	2500 U	--	--	--
P-01	HC-P/01	02/06/1991	0	--	--	--	--	--	**10000000**	--	--	--
P-02	HC-P/02	02/06/1991	0	--	--	--	--	--	**13000000**	--	--	--
SS-01	HC-SS_01	02/06/1991	0	--	--	--	--	--	2500 U	--	--	--
SS-2	T5070258	04/02/1996	8.5	5.3	--	20.2	70.4	--	--	--	--	--
SS-3B	SS-3	07/16/2008	1.5	**294**	**540**	197	**365**	**197000**	**55400**	--	--	--
SS-9	SS-9	07/17/2008	0.3	**8.25**	20.2	36.4	97.9	23.3	596	--	--	--
SS-13	SS13-S-0.5	02/26/2009	0.5	2.59	16.1	5.41	43.7	7.1 U	355 U	--	--	--
SS-14	SS14-S-0.5	02/26/2009	0.5	**7.72**	56.7	5.79	80.6	7.25 U	**21600**	--	--	--
SS-15	SS15-S-0.5	02/26/2009	0.5	**8.32**	18.1	13.4	64.9	7.87 U	393 U	--	--	--
SS-16	SS16-S-0.5	02/26/2009	0.5	**22.9**	46.7	30.7	107	13 U	399 U	--	--	--
SS-17	SS17-S-0.5	02/26/2009	0.5	1.63	11.4	10.1	38.1	7.46 U	372 U	--	--	--
SS-18	SS18-S-0.5	02/26/2009	0.5	2.44	21.2	10.2	39.0	7.49 U	374 U	--	--	--
SS-19	SS19-S-0.5	02/26/2009	0.5	**39.5**	57.4	51.7	119	49.3	821	--	--	--
T-4	T4-S-C	07/21/2000	0	6	17	19	51	--	--	--	--	--
	T4-S-E	07/21/2000	1.5	5	15	24	52	10 U	40 U	--	--	--
	T4-S-N	07/21/2000	1.5	**8**	20	17	57	10 U	40 U	--	--	--
	T4-S-W	07/21/2000	1.75	6	20	18	57	10 U	40 U	--	--	--
	T4-S	07/21/2000	2	5	16	19	45	10 U	40 U	--	--	--
	T4-S-S	07/21/2000	2	6	16	23	51	10 U	40 U	--	--	--
T5-EAST FACE	T5-S-E	08/15/2000	2.5	5	17	18	68	10 U	40 U	--	--	--
T5-NORTH FACE	T5-S-N	08/15/2000	2.5	6	17	18	67	10 U	120	--	--	--
T5-SOUTH FACE	T5-S-S	08/15/2000	2.67	5	16	19	64	10 U	40 U	--	--	--
T5-WEST FACE	T5-S-W	08/15/2000	2.5	6	18	20	71	--	40 U	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
TP-01	TP01-0.3	05/03/1993	0.3	**32.4**	43	38.2	--	--	**250000**	--	--	--
	TP01-9.5	05/03/1993	9.5	4.2	13.1	7.6	--	--	--	--	--	--
TP-02	TP02-0.2	05/03/1993	0.2	6.2	10.4	35	--	--	--	--	--	--
	TP02-5	05/03/1993	5	**8**	18	10.8	--	--	--	--	--	--
	TP02-9	05/03/1993	9	**7.1**	23	11	--	--	--	--	--	--
TP-03	TP03-0.3	05/03/1993	0.3	3.7	28.9	33.7	--	--	**2000000**	--	--	--
	TP03-10	05/03/1993	10	2.2	8.3	4.4	--	--	--	--	--	--
TP-04	TP04-0.5	05/03/1993	0.5	2.4	13.2	21.8	--	--	--	--	--	--
	TP04-5	05/03/1993	5	1.2	0.45	0.32	--	--	--	--	--	--
	TP04-10	05/03/1993	10	0.5	8.9	5.9	--	--	--	--	--	--
TP-05	TP05-0.5	05/03/1993	0.5	**11.3**	24.5	4	--	--	--	--	--	--
	TP05-8	05/03/1993	8	2.2	16.9	7.5	--	--	--	--	--	--
TP-06	TP06-0.3	05/03/1993	0.3	3.7	10.9	4.2	--	--	--	--	--	--
	TP06-3	05/03/1993	3	**13.1**	26.1	6.6	--	--	3600	--	--	--
	TP09-4	05/03/1993	4	--	--	--	--	--	1600 U	--	--	--
	TP09-9	05/03/1993	9	2.5	20.9	10.3	--	--	**130000**	--	--	--
TP-07	TP07-0.5	05/03/1993	0.5	4.8	11.3	40.7	--	--	--	--	--	--
	TP07-9	05/03/1993	9	**7.1**	16.2	12.4	--	--	--	--	--	--
TP-08	TP08-0.1	05/03/1993	0.1	1.1	5.3	10	--	--	--	--	--	--
	TP08-4	05/03/1993	4	0.84	11	7.7	--	--	--	--	--	--
TP-09	TP09-0.3	05/03/1993	0.3	**79.6**	52.5	54.6	--	--	--	--	--	--
	TP09-4	05/03/1993	4	4.8	14.6	12.1	--	--	--	--	--	--
	TP09-9	05/03/1993	9	**61**	**123**	16.2	--	--	--	--	--	--
TP-10	TP10-0.2	05/03/1993	0.2	**18.5**	18.8	36.6	--	--	**15000**	--	--	--
	TP10-5	05/03/1993	5	1.2	15.9	19.2	--	--	--	--	--	--
	TP10-8.5	05/03/1993	8.5	**622**	**520**	20.5	**1570**	--	250000 U	--	--	--
TP-11	TP11-0.5	05/03/1993	0.5	**78**	**69.5**	56.5	--	--	--	--	--	--
	TP11-10	05/03/1993	10	4.7	17.8	18.6	--	--	--	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
TP-12	TP12-3	05/03/1993	3	2.4	15	11.6	--	--	**110000**	--	--	--
	TP12-6.5	05/03/1993	6.5	6.9	16.3	11.3	--	--	8500 U	--	--	--
TP-13	TP13-0.2	05/03/1993	0.2	**122**	**149**	102	**794**	--	--	--	--	--
	TP13-5.5	05/03/1993	5.5	**32.7**	9	9.2	--	--	--	--	--	--
	TP13-7.5	05/03/1993	7.5	**10.6**	14.8	17	--	--	--	--	--	--
TP-14	TP14-0.5	05/03/1993	0.5	**50.1**	55.4	32.2	--	--	--	--	--	--
	TP14-5	05/03/1993	5	2.8	9.1	5.2	--	--	--	--	--	--
TP-15	TP15-0.2	05/03/1993	0.2	**22**	34.1	29.6	--	--	--	--	--	--
	TP15-6	05/03/1993	6	**51.5**	12.1	7.5	--	--	--	--	--	--
TP-16	TP16-0.3	05/03/1993	0.3	**41.2**	40.7	55.1	--	--	--	--	--	--
	TP16-7	05/03/1993	7	**7.6**	11.1	11.1	--	--	--	--	--	--
TP-28	TP28-9.5	05/03/1993	9.5	--	--	--	--	--	330000 U	--	--	--
TP-31	TP31-6	05/03/1993	6	--	--	--	--	--	16000 U	--	--	--
TP-34	TP34-4	05/03/1993	4	--	--	--	--	--	16000 U	--	--	--
UV BLDG	UV-1-S-0.5	06/16/1998	0.5	--	--	--	--	2100	2500	--	--	--
	UV-1-S-2.5	06/16/1998	2.5	--	--	--	--	10 U	100 U	--	--	--
	UV-1-S-5.0	06/16/1998	5	--	--	--	--	10 U	100 U	--	--	--
	UV-1-S-10.0	06/16/1998	10	--	--	--	--	14	100 U	--	--	--
	UV-1-S-17.0	06/16/1998	17	--	--	--	--	10 U	100 U	--	--	--
W-11	HC-W11_S2	02/04/1991	0	--	--	--	--	--	2500 U	--	--	--
	HC-W11_S4	02/04/1991	0	--	--	--	--	--	2500 U	--	--	--
W-23	T5070188	04/02/1996	0.5	3.5	--	8.4 U	25.5	150 U	**8300**	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
Cell 3												
B-204	B204-S-2.5	10/28/99	2.5	**11**	32	41	49	2,500 H	4,300 H	10 U,H	10 U,H	670 H
	B204-S-5.0	10/28/99	5	--	--	--	--	--	5 U	--	--	--
	B204-S-10.0	10/28/99	10	--	--	--	--	--	5 U	--	--	--
B-205	B205-S-2.5	10/29/99	2.5	3	18	23	58	340 H	330 H	10 U,H	10 U,H	160 H
	B205-S-5.0	10/29/99	5	--	--	--	--	--	5 U	--	--	--
	B205-S-10.0	10/29/99	10	--	--	--	--	--	5 U	--	--	--
B-206	B206-S-2.5	11/01/99	2.5	5	21	20	46	10 U	1,200	10 U	10 U[d]	112
	B206-S-5.0	11/01/99	5	--	--	--	--	10 U	40 U	--	--	--
	B206-S-10.0	11/01/99	10	**9**	27	24	62	130	**340,000**	10 U	10 U[d]	1,090
B-207	B207-S-2.5	11/01/99	2.5	**8**	18	18	87	180	1,100	10 U	10 U[d]	884
	B207-S-5.0	11/01/99	5	**7**	31	27	79	10 U	40 U	10 U	10 U[d]	25 U
	B207-S-10.0	11/01/99	10	4	30	27	69	10 U	40 U	10 U	10 U[d]	25 U
B-208	B208-S-2.5	11/01/99	2.5	5	27	23	57	--	--	--	--	--
	B208-S-5.0	11/01/99	5	5	28	34	85	450	950	10 U	10 U[d]	214
	B208-S-10.0	11/01/99	10	--	--	--	--	10 U	40 U	--	--	--
B-209	B209-S-2.5	11/01/99	2.5	--	--	--	--	12	40 U	--	--	--
	B209-S-5.0	11/01/99	5	--	--	--	--	--	5 U	--	--	--
	B209-S-10 MSD	11/01/99	10	5	22	24	62	--	40 U	10 U	10 U[d]	25 U
	B209-S-10.0	11/01/99	10	3	24	24	66	10 U	40 U	10 U	10 U[d]	25 U
	B209-S-901	11/01/99	10	--	--	--	--	10 U	40 U	10 U	10 U[d]	25 U
B-210	B210-S-2.5	11/01/99	2.5	--	--	--	--	10 U	47	--	--	--
	B210-S-5.0	11/01/99	5	6	29	20	74	110	1,400	10 U	10 U[d]	25 U
	B210-S-15.0	11/01/99	15	5	28	31	75	10 U	40 U	10 U	10 U[d]	25 U
B-212	B212-S-2.5	11/02/99	2.5	--	--	--	--	--	5 U	--	--	--
	B212-S-5.0	11/02/99	5	6	22	45	181	10	40 U	10 U	10 U[d]	25 U
	B212-S-10.0	11/02/99	10	--	--	--	--	--	5 U	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-213	B213-S-2.5	11/02/99	2.5	**7**	25	28	80	71	43	--	--	--
	B213-S-5.0	11/02/99	5	--	--	--	--	--	5 U	--	--	--
	B213-S-10.0	11/02/99	10	--	--	--	--	--	5 U	--	--	--
B-214	B214-S-2.5	11/03/99	2.5	--	--	--	--	--	5 U	--	--	--
	B214-S-5.0	11/03/99	5	--	--	--	--	--	5 U	--	--	--
	B214-S-10.0	11/03/99	10	--	--	--	--	--	5 U	--	--	--
B-215	B215-S-2.5	11/04/99	2.5	6	16	18	40	92	620	10 U	10 U[d]	250
	B215-S-5.0	11/04/99	5	5	28	22	53	100 U	430	10 U	10 U[d]	82
	B215-S-10.0	11/04/99	10	5	20	23	56	10 U	780	10 U	10 U[d]	25 U
B-216	B216-S-5.0	11/04/99	5	5	21	22	63	10 U	40 U	10 U	10 U[d]	25 U
	B216-S-10.0	11/04/99	10	4	22	25	63	--	5 U	10 U	10 U[d]	25 U
B-217	B217-S-2.5	11/05/99	2.5	**13**	17	25	59	390	500	10 U	10 U[d]	520
	B217-S-10.0	11/05/99	10	**52**	32	70	163	140	180	10 U	10 U[d]	25 U
	B217-S-15.0	11/05/99	15	6	30	32	73	10 U	1,400	10 U	10 U[d]	25 U
B-218	B218-S-5.0	11/08/99	5	**11**	21	25	63	1,700	4,000	10 U	10 U[d]	1,400
	B218-S-10.0	11/08/99	10	--	--	--	--	--	5 U	--	--	--
	B218-S-15.0	11/08/99	15	5	27	24	64	10 U	1,200	10 U	10 U[d]	25 U
B-219	B219-S-2.5	11/08/99	2.5	--	--	--	--	--	5 U	--	--	--
	B219-S-5.0	11/08/99	5	--	--	--	--	--	5 U	--	--	--
	B219-S-10.0	11/08/99	10	5	23	24	64	10 U	40 U	10 U	10 U[d]	25 U
B-220	B220-S-2.5	11/08/99	2.5	**11**	30	61	52	--	--	--	--	--
	B220-S-5.0	11/08/99	5	6	18	43	58	1,200	2,700	10 U	10 U[d]	270
	B220-S-10.0	11/08/99	10	5	18	22	58	10 U	40 U	10 U	10 U[d]	25 U
B220-S2-ESW	EX-B-220-S2-ESW	04/17/02	2	--	--	--	--	78	830	--	--	--
B220-S2-NSW	EX-B-220-S2-NSW	04/17/02	2	--	--	--	--	15	54 U	--	--	--
B220-S2-SSW	EX-B-220-S2-SSW	04/17/02	2	--	--	--	--	16	170	--	--	--
B220-S2-WSW	EX-B-220-S2-WSW	04/17/02	2	--	--	--	--	410	1300	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B220-S4	EX-B-220-S4-COM	04/17/02	4	--	--	--	--	550	530	--	--	--
B-275	B275-S-0.5	07/08/2004	0.5	6.7	15.3	24.2	--	85	1,200	33	--	--
	B275-S-5.0	07/08/2004	5	**7.2**	21	17	--	10 U	50 U	15 U	--	--
	B275-S-10.0	07/08/2004	10	6	15	20.7	--	10 U	50 U	15 U	--	--
B-276	B276-S-0.5	07/13/2004	0.5	2.4	15.1	32.1	--	10 U	50 U	13 U	--	--
	B276-S-3.0	07/13/2004	3	1.6	30.4	20.6	--	10 U	50 U	13 U	--	--
B-277	B277-S-0.5	07/09/2004	0.5	2.1 U	7.7	14.5	--	9.4 U	47 U	13 U	--	--
	B277-S-2.5	07/09/2004	2.5	2.6	20.2	18.7	--	14	50 U	15 U	--	--
	B277-S-5.0	07/09/2004	5	2.3 U	23.1	19.9	--	9.6 U	48 U	15 U	--	--
	B277-S-10.0	07/09/2004	10	2.6	21	21.7	--	9.8 U	49 U	16 U	--	--
B-278	B278-S-0.5	07/09/2004	0.5	6.3	26.1	29.8	--	140	600	44	--	--
	B278-S-2.5	07/09/2004	2.5	2.9	12.9	20.7	--	12	120	25	--	--
	B278-S-10.0	07/09/2004	10	2.9	26.5	28.5	--	10 U	50 U	16 U	--	--
	B278-S-10.0-Dup	07/09/2004	10	2.9	32.7	29.2	--	9.6 U	48 U	17 U	--	--
B-279	B279-S-0.5	07/09/2004	0.5	3	14	17.4	--	10 U	50 U	14 U	--	--
	B279-S-2.5	07/09/2004	2.5	3.9	15.1	13.8	--	11	50 U	14 U	--	--
	B279-S-5.0	07/09/2004	5	5	20.9	22.8	--	9.8 U	49 U	17 U	--	--
	B279-S-10.0	07/09/2004	10	3.4	26.1	28.2	--	10 U	50 U	17 U	--	--
B-280	B280-S-0.5	07/13/2004	0.5	4.3	13.5	44.8	--	34	200	13 U	--	--
	B280-S-5.0	07/13/2004	5	5.4	22.2	32.5	--	150	280	43	--	--
	B280-S-10.0	07/13/2004	10	2.8	20.3	21.3	--	10 U	50 U	13 U	--	--
B-281	B281-S-0.5	07/09/2004	0.5	4.8	17.4	19.9	--	43	1,300	22	--	--
	B281-S-2.5	07/09/2004	2.5	2.9	10.4	27	--	25	1,400	23	--	--
	B281-S-10.0	07/09/2004	10	**10.1**	22.4	27.9	--	9.9 U	270	16 U	--	--
B-282	B282-S-0.5	07/08/2004	0.5	**25.9**	24	31.7	--	190	**31,000**	290	--	--
	B282-S-5.0	07/08/2004	5	6.2	20.8	15	--	10 U	3,600	160	--	--
	B282-S-10.0	07/08/2004	10	6.7	15.9	20.7	--	10 U	540	15 U	--	--
	B282-S-10.0-Dup	07/08/2004	10	6.7	15.2	17.7	--	10 U	380	16 U	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-283	B283-S-0.5	07/12/2004	0.5	1.3	11.1	10.1	--	9.9 U	50 U	13 U	--	--
	B283-S-2.5	07/12/2004	2.5	1.1 U	12.5	19.5	--	10 U	350	92	--	--
	B283-S-5.0	07/12/2004	5	1.4	15.1	20.9	--	10 U	50 U	13 U	--	--
B-284	B284-S-0.5	07/13/2004	0.5	**17.5**	32.2	44.2	--	100 U	**110,000**	330	--	--
	B284-S-2.5	07/13/2004	2.5	3.6	19.2	22.9	--	18	**6,800**	36	--	--
	B284-S-5.0	07/13/2004	5	4.8	26.7	36.1	--	10 U	50 U	13 U	--	--
	B284-S-10.0	07/13/2004	10	4.2	26.6	31	--	10 U	50 U	13 U	--	--
B-285	B285-S-0.5	07/13/2004	0.5	**37.2**	50.3	38.8	--	570	**8,900**	140	--	--
	B285-S-5.0	07/13/2004	5	5.6	31.6	29.9	--	91	3,900	200	--	--
	B285-S-10.0	07/13/2004	10	2.9	17.2	21.8	--	10 U	50 U	13 U	--	--
B-286	B286-S-0.5	07/08/2004	0.5	**8.4**	37.8	22.9	--	150	**110,000**	5,100	--	--
	B286-S-2.5	07/08/2004	2.5	4.4	20	22.1	--	18	1,100	24	--	--
	B286-S-5.0	07/08/2004	5	3.5	18	12	--	10 U	50 U	16 U	--	--
	B286-S-10.0	07/08/2004	10	**8.2**	19.5	19.5	--	10 U	50 U	15 U	--	--
B-287	B287-S-0.5	07/12/2004	0.5	**7.7**	46.1	27.4	--	180	950	60	--	--
	B287-S-2.5	07/12/2004	2.5	1.9	16.2	18.7	--	26	160	13 U	--	--
	B287-S-5.0	07/12/2004	5	3.2	29.6	26.9	--	57	250	19	--	--
	B287-S-10.0	07/12/2004	10	4.5	32.6	27.3	--	9.7 U	95	13 U	--	--
	B287-S-10.0-Dup	07/12/2004	10	5.2	32.4	28.3	--	9.9 U	79	16 U	--	--
B-288	B288-S-0.5	07/08/2004	0.5	**13.3**	21.4	26.6	--	89	1,100	67	--	--
	B288-S-10.0	07/08/2004	10	5.7	13.1	18.4	--	10 U	50 U	15 U	--	--
B-289	B289-S-0.5	07/12/2004	0.5	4.3	9.3	9.8	--	9.1 U	46 U	140	--	--
	B289-S-2.5	07/12/2004	2.5	2.4	22	22.6	--	810	500 U	13 U	--	--
	B289-S-5.0	07/12/2004	5	1.8	16.4	17.8	--	10	50 U	13 U	--	--
	B289-S-10.0	07/12/2004	10	4.2	49.4	28.3	--	10 U	50 U	15 U	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-290	B290-S-0.5	07/13/2004	0.5	**13.8**	21.1	50.6	--	140	690	89	--	--
	B290-S-2.5	07/13/2004	2.5	**28.9**	**134**	51.9	--	430	**7,200**	650	--	--
	B290-S-5.0	07/13/2004	5	5.6	33.8	32.5	--	170	500 U	88	--	--
	B290-S-10.0	07/13/2004	10	2.8	28.7	27.1	--	10 U	50 U	13 U	--	--
	B290-S-10.0-Dup	07/13/2004	10	2.5	27.4	26.1	--	11 U	51 U	13 U	--	--
B-291	B291-S-0.5	07/12/2004	0.5	**33.5**	**256**	58.5	--	250	730	97	--	--
	B291-S-2.5	07/12/2004	2.5	**10.4**	41.5	38.2	--	260	**12,000**	450	--	--
	B291-S-5.0	07/12/2004	5	5.2	27.2	25.6	--	10 U	110	58	--	--
	B291-S-10.0	07/12/2004	10	2.6	26.8	27.9	--	11 U	51 U	42	--	--
B-292	B292-S-0.5	07/08/2004	0.5	**14.9**	31.6	26.8	--	150	**16,000**	230	--	--
	B292-S-2.5	07/08/2004	2.5	4.4	19.3	15.1	--	18	50 U	16 U	--	--
	B292-S-5.0	07/08/2004	5	4.3	19.2	12.8	--	10 U	50 U	67	--	--
	B292-S-5.0-Dup	07/08/2004	5	5.9	21.5	14.1	--	9.7 U	49 U	15 U	--	--
	B292-S-10.0	07/08/2004	10	**7.6**	16.4	19.4	--	10 U	50 U	16 U	--	--
B-293	B293-S-0.5	07/12/2004	0.5	**12.8**	14.4	39.7	--	130	370	37	--	--
	B293-S-2.5	07/12/2004	2.5	**17.2**	42	31.3	--	450	**130,000**	840	--	--
	B293-S-5.0	07/12/2004	5	2.2	18.1	18.3	--	9.9 U	76	13 U	--	--
	B293-S-10.0	07/12/2004	10	4.5	29.6	30.9	--	10 U	50 U	13 U	--	--
B-294	B294-S-0.5	07/12/2004	0.5	1	10.1	19.4	--	13	89	13 U	--	--
	B294-S-2.5	07/12/2004	2.5	**8.9**	33.3	36.5	--	450	3,300	36	--	--
	B294-S-5.0	07/12/2004	5	**29.4**	35.7	32.2	--	41	240	330	--	--
	B294-S-10.0	07/12/2004	10	3.1	27.2	32.2	--	9.8 U	49 U	13 U	--	--
B-295	B295-S-0.5	07/12/2004	0.5	**13.8**	32.2	56.3	--	350	4,200	310	--	--
	B295-S-2.5	07/12/2004	2.5	2.5	23.8	25.1	--	110	1,700	64	--	--
	B295-S-5.0	07/12/2004	5	3.2	22.4	22.2	--	10 U	50 U	17	--	--
	B295-S-10.0	07/12/2004	10	3.2	23.5	29	--	9.7 U	49 U	13 U	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-296	B296-S-0.5	07/09/2004	0.5	**38.7**	**95.9**	115	--	2,100	**11,000**	110	--	--
	B296-S-2.5	07/09/2004	2.5	6.3	19.9	16.1	--	10 U	**120,000**	28	--	--
	B296-S-5.0	07/09/2004	5	5	31.5	22.5	--	23	**620,000**	1,800	--	--
	B296-S-10.0	07/09/2004	10	**7.5**	15	25.5	--	10	**27,000**	41	--	--
B-297	B297-S-1.0	07/09/2004	1	**27.6**	60.9	70.3	--	110	**7,800**	560	--	--
	B297-S-2.5	07/09/2004	2.5	**8.1**	23.5	17.5	--	15	200	16 U	--	--
	B297-S-5.0	07/09/2004	5	**7.9**	21.7	19.8	--	10 U	50 U	16 U	--	--
	B297-S-10.0	07/09/2004	10	3.4	29.5	25	--	10 U	50 U	17 U	--	--
	B297-S-10.0-Dup	07/09/2004	10	4.5	33.9	34.7	--	10 U	50 U	17 U	--	--
B-299	B299-S-0.5	07/21/2004	0.5	2.1 U	21.3	18.3	--	33	120	14 U	--	--
	B299-S-2.5	07/21/2004	2.5	**11.2**	22.3	20.5	--	93	270	150	--	--
	B299-S-5.0	07/21/2004	5	**19.6**	37.8	26.9	--	14	91	330	--	--
	B299-S-10.0	07/21/2004	10	**15.5**	63.2	33.7	--	59	1,200	560	--	--
B-300	B300-S-0.5	07/21/2004	0.5	2.3	11	19.3	--	21	120	14 U	--	--
	B300-S-2.5	07/21/2004	2.5	6.9	18.9	15.7	--	31	130	29	--	--
	B300-S-10.0	07/21/2004	10	5.4	25.4	25.5	--	10 U	50 U	17 U	--	--
B-301	B301-S-0.5	07/21/2004	0.5	**61.2**	**125**	119	--	3,600	**15,000**	730	--	--
	B301-S-2.5	07/21/2004	2.5	**25.9**	40.5	29.9	--	43	1,100	170	--	--
	B301-S-5.0	07/21/2004	5	3	35.3	15.3	--	10 U	50 U	15 U	--	--
B-307	B307-S-0.5	02/26/09	0.5	**9.12**	15.4	24.6	46.8	94.6	885	--	--	--
	B307-S-2.5	02/26/09	2.5	3.83	14.8	15.3	60.1	20	909	--	--	--
	B307-S-20.0	02/26/09	20	1.89	9.11	12.6	33.2	7.93 U	396 U	--	--	--
MW-45D	MW45-S-0.5	07/20/2004	0.5	**17.4**	35.9	62	--	260	1,900	130	--	--
	MW45-S-2.5	07/20/2004	2.5	1.9	19	16.9	--	11 U	51 U	15 U	--	--
	MW45-S-5.0	07/20/2004	5	1.8	18.1	16.4	--	10 U	50 U	15 U	--	--
	MW45-S-10.0	07/20/2004	10	5.3	26	27.5	--	10 U	50 U	17 U	--	--
MW9	HC-W10/S3	02/04/91	5.5	--	--	--	--	--	2,500 U	--	--	--
	HC-W10/S9	02/04/91	20.5	--	--	--	--	--	2,500 U	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
MW-9S	MW9R-S-0.5	07/14/2004	0.5	**111**	**207**	**243**	--	**18,000**	**39,000**	840	--	--
	MW9R-S-2.5	07/14/2004	2.5	**9.3**	31.5	21.9	--	890	**4,600**	4,500	--	--
	MW9R-S-5.0	07/14/2004	5	**8.2**	30.5	20	--	75	**5,600**	78	--	--
	MW9R-S-10.0	07/14/2004	10	4.7	23.1	22.6	--	15	89	13 U	--	--
MW-19	MW19-5	05/03/93	5	5.2	11.2	7.4	--	--	--	--	--	--
	MW19-20	05/03/93	20	2.8	13.1	15.2	--	--	--	--	--	--
MW-20S	MW20-5	05/03/93	5	2.8	15.1	13.4	--	--	--	--	--	--
	MW20D-5	05/03/93	5	3.8	15.2	13	--	--	--	--	--	--
	MW20-20	05/03/93	20	3.1	15.5	17.5	--	--	--	--	--	--
MW-28S	T5070182	04/02/96	0.5	--	--	--	--	1,600	230	--	--	--
	T5070183	04/02/96	6	3.9 J	10.8	20.6	58.5	140 U	66	--	--	--
	T5070184	04/02/96	11	--	--	--	--	--	--	--	--	--
MW-29	T5070010	04/02/96	8.5	5.30	20.3 J	26.3	65.9 J	--	--	--	--	--
	T5070011	04/02/96	11	5.90	18.7 J	24.9	75.1 J	--	--	--	--	--
	T5070012	04/02/96	16	6.40	22.8 J	31.4	78.2 J	--	--	--	--	--
	T5070015	04/02/96	31	--	--	--	--	--	--	--	--	--
SPY-01	HC-SPY/01	02/06/91	0.5	--	--	--	--	--	**160,000**	--	--	--
SPY-01A	EX-SPY-01-S 1A	05/09/02	1	**115**	**136**	148	69.2	**14,000**	**87,000**	--	--	--
	EX-SPY-01-S 5A	05/09/02	5	3.1	21.2	19.8	48.7	19	62 U	--	--	--
	EX-SPY-01-S 10A	05/09/02	10	**10.9**	23.3	13	55.5	26 U	130 U	--	--	--
SPY-01B	EX-SPY-01-S 1B	05/09/02	1	**15.1**	21.7	28.4	70.4	290	660	--	--	--
	EX-SPY-01-S 5B	05/09/02	5	**98.6**	66.7	90.3	277	1,600	**350,000**	--	--	--
	EX-SPY-01-S 10B	05/09/02	10	**11.2**	31.5	21.2	73.5	800	**130,000**	--	--	--
SPY-01C	EX-SPY-01-S 1C	05/09/02	1	**27.9**	**75.4**	77	70.5	2,000	3,600	--	--	--
	EX-SPY-01-S 5C	05/09/02	5	2.3	20.3	20.7	50.2	13 U	63 U	--	--	--
	EX-SPY-01-S 10C	05/09/02	10	6.8	17	11.6	60.5	13 U	61 U	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
SPY-01D	EX-SPY-01-S 1D	05/09/02	1	**12.9**	34.6	23.9	111	88	**4,900**	--	--	--
	EX-SPY-01-S 5D	05/09/02	5	2.3	20.7	21	59.9	12 U	140	--	--	--
	EX-SPY-01-S 10D	05/09/02	10	5.6	20.3	11.2	60.3	24 U	120 U	--	--	--
SPY-01E	EX-SPY-01-S 1E	05/09/02	1	**17.3**	17.6	21.8	43.1	970	1,700	--	--	--
	EX-SPY-01-S 5E	05/09/02	5	**8**	20.7	16.6	80.8	13 U	61 U	--	--	--
	EX-SPY-01-S 10E	05/09/02	10	**7.9**	19.6	12.2	58.9	13 U	61 U	--	--	--
SPY-01F	EX-SPY-01-S 1F	05/09/02	1	**12**	19.1	30	66.6	150	660	--	--	--
	EX-SPY-01-S 5F	05/09/02	5	1.4	14.1	19.9	43.1	11 U	54 U	--	--	--
	EX-SPY-01-S 10F	05/09/02	10	**8**	20	12.2	56.4	13 U	61 U	--	--	--
SPY-01G	EX-SPY-01-S 1G	05/09/02	1	**16.8**	25.1	13.6	80.3	290	**130,000**	--	--	--
	EX-SPY-01-S 3G	05/09/02	3	3.5	15.5	17.7	54.1	12 U	220	--	--	--
	EX-SPY-01-S 5G	05/09/02	5	3.6	19.8	16.9	58.7	12 U	57 U	--	--	--
	EX-SPY-01-S 10G	05/09/02	10	6.3	19.9	12	64.1	12 U	59 U	--	--	--
SPY-01H	EX-SPY-01-S 1H	05/09/02	1	**9.4**	12.7	19.7	35.9	180	390	--	--	--
	EX-SPY-01-S 5H	05/09/02	5	4.4	16.9	21.6	65.5	51	350	--	--	--
	EX-SPY-01-S 10H	05/09/02	10	5.9	18.4	10.9	63.1	13 U	62 U	--	--	--
SPY-02	HC-SPY/02	02/06/91	0.5	--	--	--	--	--	**1,900,000**	--	--	--
SPY-02A	EX-SPY-02-S .5A	05/09/02	0.5	--	--	--	--	--	170	--	--	--
	EXSPY-02-S-1.5A	05/09/02	1.5	--	--	--	--	--	130	--	--	--
SPY-02B	EX-SPY-02-S .5B	05/09/02	0.5	--	--	--	--	--	650	--	--	--
	EXSPY-02-S-1.5B	05/09/02	1.5	--	--	--	--	--	80	--	--	--
SPY-02C	EX-SPY-02-S.5C	05/09/02	0.5	--	--	--	--	--	2,600	--	--	--
	EXSPY-02-S-1.5C	05/09/02	1.5	--	--	--	--	--	**63,000**	--	--	--
SPY-02D	EX-SPY-02-S .5D	05/09/02	0.5	--	--	--	--	--	630	--	--	--
	EXSPY-02-S-1.5D	05/09/02	1.5	--	--	--	--	--	**470,000**	--	--	--
SPY-02E	EX-SPY-02-S .5E	05/09/02	0.5	--	--	--	--	--	1,500	--	--	--
	EXSPY-02-S-1.5E	05/09/02	1.5	--	--	--	--	--	570	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
SPY-02F	EX-SPY-02-S .5F	05/09/02	0.5	--	--	--	--	--	780	--	--	--
	EXSPY-02-S-1.5F	05/09/02	1.5	--	--	--	--	--	**320,000**	--	--	--
SPY-02G	EX-SPY-02-S .5G	05/09/02	0.5	--	--	--	--	--	2,400	--	--	--
	EXSPY-02-S-1.5G	05/09/02	1.5	--	--	--	--	--	1,400	--	--	--
SPY-02H	EX-SPY-02-S .5H	05/09/02	0.5	--	--	--	--	--	**16,000**	--	--	--
	EXSPY-02-S-1.5H	05/09/02	1.5	--	--	--	--	--	**68,000**	--	--	--
SPY-02I	EX-SPY-02-S .5I	05/09/02	0.5	--	--	--	--	--	550	--	--	--
	EXSPY-02-S-1.5I	05/09/02	1.5	--	--	--	--	--	1,300	--	--	--
SPY-03	HC-SPY/03	02/06/91	0.5	--	--	--	--	--	**8,400**	--	--	--
SPY-04	HC-SPY/04	02/06/91	0.5	--	--	--	--	--	**14,000**	--	--	--
SS-7	SS-7	07/17/08	0.3	**374**	**426**	**356**	106	8180	**45500**	--	--	--
SS-8	SS-8	07/17/08	1.5	3.72	15.1	20.8	90.6	468	374	--	--	--
SS-10	SS10-S-0.5	02/26/09	0.5	1.82	11.6	15.1	44.1	7.62 U	381 U	--	--	--
SS-11	SS11-S-0.5	02/26/09	0.5	6.05	18.6	22.5	43.3	803	2950	--	--	--
SS-12	SS12-S-0.5	02/26/09	0.5	**34.4**	32.1	22	78.3	7.4 U	369 U	--	--	--
TP-17	TP17-0.5	05/03/93	0.5	**9.1**	23.8	24.8	--	1,300 U	**72,000**	--	--	--
	TP17-5	05/03/93	5	2.8	18.5	14.2	--	--	--	--	--	--
TP-18	TP18-0.3	05/03/93	0.3	**17.8**	31.2	56.3	--	330 U	560	--	--	--
	TP18-3	05/03/93	3	3.1	19.1	12.9	--	--	1,600 U	--	--	--
	TP18-7	05/03/93	7	**278**	**634**	90.2	--	3,300 U	**150,000**	--	--	--
TP-18A	EX-TP-18-S7A	04/16/02	7	6.1	--	--	--	--	--	--	--	--
	EX-TP-18-S9A	04/16/02	9	**7.1**	--	--	--	--	--	--	--	--
TP-18B	EX-TP-18-S7B	04/16/02	7	4.5	--	--	--	--	--	--	--	--
	EX-TP-18-S9B	04/16/02	9	**7.1**	--	--	--	--	--	--	--	--
TP-18C	EX-TP-18-S7C	04/16/02	7	2.9	--	--	--	--	--	--	--	--
	EX-TP-18-S9C	04/16/02	9	**9.9**	--	--	--	--	--	--	--	--
TP-18Cen	EX-TP-18-S7 cen	04/25/02	7	**12.9**	--	--	--	--	--	--	--	--
	EX-TP-18-S9 cen	04/25/02	9	**8.5**	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
TP-18D	EX-TP-18-S7D	04/16/02	7	1.3	--	--	--	--	--	--	--	--
	EX-TP-18-S9D	04/16/02	9	5.3	--	--	--	--	--	--	--	--
TP-18E	EX-TP-18-S7E	04/16/02	7	4.9	--	--	--	--	--	--	--	--
	EX-TP-18-S9E	04/16/02	9	5.8	--	--	--	--	--	--	--	--
TP-18F	EX-TP-18-S7F	04/16/02	7	**9.7**	--	--	--	--	--	--	--	--
	EX-TP-18-S9F	04/16/02	9	6.8	--	--	--	--	--	--	--	--
TP-18G	EX-TP-18-S7G	04/16/02	7	5.6	--	--	--	--	--	--	--	--
	EX-TP-18-S9G	04/16/02	9	4.4	--	--	--	--	--	--	--	--
TP-18H	EX-TP-18-S7H	04/16/02	7	5.6	--	--	--	--	--	--	--	--
	EX-TP-18-S9H	04/16/02	9	5.1	--	--	--	--	--	--	--	--
TP-19	TP19-0.5	05/03/93	0.5	**29.6**	37	59.7	--	5,100	**22,000**	--	--	--
	TP19-4.5	05/03/93	4	1	4.1	4.1	--	--	--	--	--	--
	TP19D-4.5	05/03/93	4	2.2	22.1	9.6	--	--	--	--	--	--
TP-20	TP20-0.2	05/03/93	0.2	**16.8**	20.1	27	--	--	--	--	--	--
	TP20-4.5	05/03/93	4.5	3.4	24	20.6	--	--	--	--	--	--
TP-21	TP21-0.5	05/03/93	0.5	4	11.7	10.4	--	--	77	--	--	--
	TP21-5	05/03/93	5	3.5	21	17	--	--	--	--	--	--
TP-22	TP22-0.5	05/03/93	0.5	**36.7**	36.7	48.2	--	1,700 U	8,300 U	--	--	--
	TP22-6	05/03/93	6	3.4	9.6	8.1	--	--	--	--	--	--
Cell 4												
B-120	B120-S-2.5	06/17/1999	2.5	--	--	--	--	--	9	10 U	10 U	25 U
	B120-S-5.0	06/17/1999	5	--	--	--	--	--	10	10 U	10 U	25 U
	B120-S-15.0	06/17/1999	15	--	--	--	--	--	6	10 U	10 U	25 U
B-121	B121-S-2.5	06/18/1999	2.5	--	--	--	--	--	5 U	10 U	10 U	25 U
	B121-S-5.0	06/18/1999	5	--	--	--	--	--	5 U	10 U	10 U	25 U
	B121-S-20.0	06/18/1999	20	--	--	--	--	--	5 U	10 U	10 U	25 U
B-122	B122-S-2.5	09/21/1999	2.5	**9**	13	21	67	10 U	6	10 U,H	10 U,H	25 U,H
	B122-S-15.0	09/21/1999	15	--	--	--	--	10 U	5 U	--	--	--
	B122-S-20.0	09/21/1999	20	--	--	--	--	10 U,H	5 U	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-123	B123-S-2.5	09/22/1999	2.5	--	--	--	--	--	5 U	--	--	--
	B123-S-5.0	09/22/1999	5	--	--	--	--	10 U	5 U	--	--	--
	B123-S-10.0	09/22/1999	10	--	--	--	--	--	5 U	--	--	--
	B123-S-15.0	09/22/1999	15	--	--	--	--	--	5 U	--	--	--
	B123-S-20.0	09/22/1999	20	--	--	--	--	--	5 U	--	--	--
B-124	B124-S-2.5	09/23/1999	2.5	4	15	19	61	10 U	20	10 U	10 U[d]	25 U
	B124-S-5.0	09/23/1999	5	--	--	--	--	--	5 U	--	--	--
	B124-S-10.0	09/23/1999	10	--	--	--	--	--	5 U	--	--	--
B-125	B125-S-2.5	09/24/1999	2.5	5	12	17	53	10 U	340	10 U	10 U[d]	25 U
	B125-S-5.0	09/24/1999	5	--	--	--	--	--	5 U	--	--	--
	B125-S-10.0	09/24/1999	10	4	15	19	45	10 U	22	10 U	10 U[d]	25 U
	B125-S-15.0	09/24/1999	15	2	13	26	43	10 U	11	10 U	10 U[d]	25 U
	B125-S-20.0	09/24/1999	20	3	13	22	36	10 U	9	10 U	10 U[d]	25 U
B-126	B126-S-5.0	09/24/1999	5	3	12	14	47	120	250	10 U	10 U[d]	25 U
	B126-S-10.0	09/24/1999	10	--	--	--	--	--	5 U	--	--	--
	B126-S-15.0	09/24/1999	15	--	--	--	--	--	5 U	--	--	--
	B126-S-20.0	09/24/1999	20	--	--	--	--	--	5 U	--	--	--
B-127	B127-S-2.5	09/27/1999	2.5	--	--	--	--	--	5 U	10 U	10 U[d]	25 U
	B127-S-5.0	09/27/1999	5	--	--	--	--	--	5 U	--	--	--
	B127-S-10.0	09/27/1999	10	--	--	--	--	--	5 U	10 U	10 U[d]	25 U
	B127-S-15.0	09/27/1999	15	--	--	--	--	--	5 U	--	--	--
	B127-S-20.0	09/27/1999	20	--	--	--	--	--	5 U	10 U	10 U[d]	25 U
B-128	B128-S-5.0	09/27/1999	5	--	--	--	--	--	5 U	--	--	--
	B128-S-10.0	09/27/1999	10	--	--	--	--	--	5 U	10 U	10 U[d]	25 U
	B128-S-20.0	09/27/1999	20	--	--	--	--	--	5 U	10 U	10 U[d]	25 U

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-129	B129-S-2.5	09/28/1999	2.5	4	14	24	47	110	34	10 U	10 U[d]	25 U
	B129-S-5.0	09/28/1999	5	--	--	--	--	--	5 U	10 U	10 U[d]	25 U
	B129-S-20.0	09/28/1999	20	--	--	--	--	--	5 U	10 U	10 U[d]	25 U
B-130	B130-S-2.5	09/28/1999	2.5	--	--	--	--	--	5 U	10 U	10 U[d]	25 U
	B130-S-5.0	09/28/1999	5	--	--	--	--	--	5 U	--	--	--
	B130-S-15.0	09/28/1999	15	--	--	--	--	--	5 U	--	--	--
B-131	B131-S-2.5	09/29/1999	2.5	**9**	14	22	54	5 U	18	10 U	10 U[d]	25 U
	B131-S-5.0	09/29/1999	5	--	--	--	--	--	5 U	--	--	--
	B131-S-20.0	09/29/1999	20	--	--	--	--	--	5 U	--	--	--
B-132	B132-S-2.5	09/29/1999	2.5	3	20	19	36	7	5.3	10 U	10 U[d]	25 U
	B132-S-5.0	09/29/1999	5	--	--	--	--	--	5 U	10 U	10 U[d]	25 U
	B132-S-20.0	09/29/1999	20	--	--	--	--	--	5 U	--	--	--
B-133	B133-S-2.5	09/29/1999	2.5	2	18	14	37	5	5.1	10 U	10 U[d]	25 U
	B133-S-10.0	09/29/1999	10	--	--	--	--	--	5 U	10 U	10 U[d]	25 U
	B133-S-20.0	09/29/1999	20	--	--	--	--	--	5 U	--	--	--
B-134	B134-S-3.0	09/30/1999	3	2	17	23	55	120	--	10 U	10 U[d]	89
	B134-S-901	09/30/1999	5	5	17	18	73	200	--	10 U	10 U[d]	300
	B134-S-10.0	09/30/1999	10	**10**	26	18	59	17	470	10 U	10 U[d]	70
	B134-S-20.0	09/30/1999	20	3	19	27	48	6	130	10 U	10 U[d]	25 U
B-135	B135-S-2.5	09/30/1999	2.5	--	--	--	--	--	5 U	--	--	--
	B135-S-10.0	09/30/1999	10	--	--	--	--	--	5 U	--	--	--
	B135-S-20.0	09/30/1999	20	--	--	--	--	--	5 U	--	--	--
B-136	B136-S-901	09/30/1999	2.5	--	--	--	--	--	5 U	--	--	--
B-137	B137-S-2.5	10/04/1999	2.5	--	--	--	--	--	5 U	--	--	--
	B137-S-5.0	10/04/1999	5	--	--	--	--	--	5 U	--	--	--
	B137-S-901	10/04/1999	20	--	--	--	--	--	5 U	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
B-138	B138-S-2.5	10/04/1999	2.5	--	--	--	--	--	5 U	--	--	--
	B138-S-901	10/04/1999	5	4	23	20	50	10 U	5.4	10 U	10 U	25 U
	B138-S-20.0	10/04/1999	20	--	--	--	--	--	5 U	--	--	--
B-211	B211-S-2.5	11/02/1999	2.5	--	--	--	--	--	5 U	--	--	--
	B211-S-5.0	11/02/1999	5	--	--	--	--	--	5 U	--	--	--
	B211-S-10.0	11/02/1999	10	--	--	--	--	--	5 U	--	--	--
	B211-S-20.0	11/02/1999	20	2	9	24	40	10 U	5.3	10 U	10 U[d]	25 U
B-309	B309-S-5.0	02/26/2009	5.0	--	--	--	--	--	--	--	--	--
B-310	B-310-S-5.0	02/26/2009	5.0	--	--	--	--	--	--	--	--	--
NPY-01	HC-NPY/01	02/06/1991	0.5	--	--	--	--	--	2,500	--	--	--
NPY-02	HC-NPY/02	02/06/1991	0.5	--	--	--	--	--	**8,000**	--	--	--
SS-4B	SS-4	07/16/2008	0.3	**20.3**	33.3	43	242	467	2,270	--	--	--
SS-5	SS-5	07/16/2008	0.3	5.62	17.6	14.1	50.7	116	116	--	--	--
SS-20	SS20-S-0.5	02/18/2009	0.5	2.4	16.2	14.8	49.4	15.7 U	391 U	--	--	--
SS-21	SS21-S-0.5	02/18/2009	0.5	2.54	8.59	13.8	40.8	13.9	365 U	--	--	--
	SS21-S-1.5	02/18/2009	1.5	--	--	--	--	--	--	--	--	--
SS-22	SS22-S-0.5	02/18/2009	0.5	1.51	7.68	5.1	17.2	16.2 U	404 U	--	--	--
SS-23	SS23-S-0.5	02/18/2009	0.5	3.04	13.8	18.2	98.8	7.36 U	367 U	--	--	--
	SS23-S-1.5	02/18/2009	1.5	--	--	--	--	--	--	--	--	--
SS-24	SS24-S-0.5	02/18/2009	0.5	6.26	13.5	15.2	50.1	33.5	1540	--	--	--
	SS24-S-1.5	02/18/2009	1.5	--	--	--	--	--	--	--	--	--
SS-25	SS25-S-0.5	02/18/2009	0.5	1.58	6.49	39.1	41	29.3	395 U	--	--	--
	SS25-S-1.5	02/18/2009	1.5	--	--	--	--	--	--	--	--	--
SS-26	SS26-S-0.5	02/18/2009	0.5	3.37	19.6	17.2	65.6	7.89 U	394 U	--	--	--
	SS26-S-1.5	02/18/2009	1.5	--	--	--	--	--	--	--	--	--
SS-27	SS27-S-0.5	02/18/2009	0.5	**7.46**	8.19	11.3	34.6	14.3 U	356 U	--	--	--
	SS27-S-1.5	02/18/2009	1.5	--	--	--	--	--	--	--	--	--
SS-28	SS28-S-0.5	02/18/2009	0.5	1.45	2.61	36.1	35.7	7.46 U	372 U	--	--	--
	SS28-S-1.5	02/18/2009	1.5	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Lake River Industrial Site

Location	Sample Name	Date Collected	Depth (feet bgs)	Arsenic (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Zinc (mg/kg)	Benzo(a) pyrene (µg/kg)	PCP (µg/kg)	Diesel (mg/kg)	Gasoline (mg/kg)	PHC as Diesel (mg/kg)
MTCA Wildlife Ecological Indicator Concentrations				7[a]	67	217	360	12,000	4,500	6000[c]	5000[c]	6000[c]
SS-29	SS29-S-0.5	02/19/2009	0.5	3.83	5.18	14.7	38.5	28.1	369 U	--	--	--
	SS29-S-1.5	02/18/2009	1.5	--	--	--	--	--	--	--	--	--
SS-30	SS30-S-0.5	02/19/2009	0.5	**63.8**	58	60.8	119	1250	**5,780**	--	--	--
	SS30-S-1.5	02/18/2009	1.5	**15.7**	24.2	17.7	61	73.5	386 U	--	--	--
TP-23	TP23-0.3	05/03/1993	0.3	1.9	9.4	13.8	--	--	1,100	--	--	--
	TP23-4	05/03/1993	4	4.4	12.8	8.5	--	--	--	--	--	--
	TP23D-4	05/03/1993	4	5.3	11.3	8.2	--	--	--	--	--	--
TP-24	TP24-0.5	05/03/1993	0.5	**14.9**	9.6	39.5	--	--	4,400	--	--	--
	TP24-3	05/03/1993	3	3.1	11	12.8	--	--	--	--	--	--
TP-25	TP25-0.5	05/03/1993	0.5	**59.2**	57.6	65	--	--	--	--	--	--
	TP25-5	05/03/1993	5	5.1	14.6	13.8	--	--	--	--	--	--
TP-26	TP26-0.4	05/03/1993	0.4	**10.4**	14.2	18	--	--	--	--	--	--
	TP26-4.5	05/03/1993	4.5	5.6	7.6	13.4	--	--	--	--	--	--
W9	HC-W9/S2	02/04/1991	3	--	--	--	--	--	2,500 U	--	--	--
	HC-W9/S4	02/04/1991	8	--	--	--	--	--	2,500 U	--	--	--
Off-Site Samples												
SS-6	SS-6	07/17/2008	0.3	--	--	--	--	18.1	53.2	--	--	--
SS-31	SS31-S-0.5	02/26/2009	0.5	5.08	17.7	8.46	74.9	8.95 U	447 U	--	--	--
SS-32	SS32-S-0.5	02/26/2009	0.5	4.49	13.9	6.18	76.5	8.63 U	431 U	--	--	--
SS-33	SS33-S-0.5	02/26/2009	0.5	4.19	14.4	5.8	60.4	8.76 U	438 U	--	--	--

Table 1 Notes
Lake River Industrial Site

-- = not analyzed.

Bold number indicates detected concentration that exceeds screening criteria.

feet bgs = feet below ground surface.

H = sample analyzed outside recommended holding time.

J = estimated concentration.

K_{ow} = octanol-water partitioning coefficient.

mg/kg = milligrams per kilogram (parts per million).

MTCA = Model Toxics Control Act.

µg/kg = micrograms per kilogram (parts per billion).

NA = not available.

ng/kg = nanogram per kilogram (parts per trillion).

PCP = pentachlorophenol.

PHC = petroleum hydrocarbons.

PUF = plant uptake factor, calculated using equation in report.

TCDD = tetrachloro dibenzo-p-dioxin.

U = not detected at or above method reporting limit.

UH = not detected at or above method reporting limit, but sample was analyzed outside recommended hold time.

UCL = upper confidence limit, calculated using ProUCL (see Attachment D).

Z = analyte detected, but its chromatographic fingerprint does not resemble a petroleum product.

[a] Used arsenic III (arsenite) value of 7 mg/kg, not arsenic Vi (arsenate) value of 132 mg/kg.

[c] Residual saturation also has to be considered.

[d] Value is outside control criteria.

Table 2
Plant Uptake
Lake River Industrial Site

Chemical	log K_{ow} [A]	PUF [B]	95% UCL of Mean [C] (µg/kg)	Concentration in Plants [D] (µg/kg)	Wildlife Screening Value [E] (µg/kg)
Benzo(a)pyrene	6.1	0.0115	4303	4.97E+01	1.20E+04
2,3,7,8-TCDD	6.8	0.0045	1.463	6.65E-03	1.82E-01
PCP	5.86	0.0159	39700	6.31E+02	4.50E+03
Arsenic	NA	0.04	21590	8.64E+02	7.00E+03

Notes:

A. log octanol/water partitioning coefficient (K_{ow}) from USEPA 2004.

B. Plant uptake factor (PUF) for organics from Travis and Arms, 1988; PUF for arsenic from Efroymson et al., 2001.

C. 95 percent upper confidence limit (UCL) about the mean from Appendix D. All concentrations have been converted to micrograms per kilogram (ug/kg).

D. Conservative estimate of the concentration in above-ground plant parts = PUF * 95% UCL.

E. MTCA Table 749-3 ecological indicator concentration for wildlife (see Table 1).

Supplemental Table
Updated Dioxin Toxicity Equivalents (ng/kg)
Former PWT Site RI/FS

Sample ID	Location Name	Date	Dioxin TEQ
Wildlife Ecological Indicator Concentration			182[a]
B306-S-15.0	B-306	3/11/2009	**6600**
B306-S-2.5	B-306	3/11/2009	**6800**
B307-S-2.5	B-307	2/26/2009	**370**
B307-S-20.0	B-307	2/26/2009	1.8
B308-S-0.5	B-308	3/11/2009	**490**
B308-S-15.0	B-308	3/11/2009	**2900**
B308-S-2.5	B-308	3/11/2009	**770**
B309-S-5.0	B-309	2/26/2009	120
B310-S-5.0	B-310	2/27/2009	89
SS10-S-0.5	SS-10	2/26/2009	**1000**
SS11-S-0.5	SS-11	2/26/2009	**710**
SS12-S-0.5	SS-12	2/26/2009	**230**
SS13-S-0.5	SS-13	2/26/2009	65
SS14-S-0.5	SS-14	2/26/2009	**3100**
SS15-S-0.5	SS-15	2/26/2009	**260**
SS16-S-0.5	SS-16	2/26/2009	**300**
SS17-S-0.5	SS-17	2/26/2009	18
SS18-S-0.5	SS-18	2/26/2009	2.6
SS19-S-0.5	SS-19	2/26/2009	**820**
SS20-S-0.5	SS-20	2/18/2009	1.7
SS21-S-0.5	SS-21	2/18/2009	150
SS21-S-1.5	SS-21	2/18/2009	84
SS22-S-0.5	SS-22	2/18/2009	9.3
SS23-S-0.5	SS-23	2/18/2009	74
SS23-S-1.5	SS-23	2/18/2009	4.2
SS24-S-0.5	SS-24	2/18/2009	**920**
SS24-S-1.5	SS-24	2/18/2009	16
SS25-S-0.5	SS-25	2/18/2009	54
SS25-S-1.5	SS-25	2/18/2009	3.3
SS26-S-0.5	SS-26	2/18/2009	69
SS26-S-1.5	SS-26	2/18/2009	**440**
SS27-S-0.5	SS-27	2/18/2009	58
SS27-S-1.5	SS-27	2/18/2009	16
SS28-S-0.5	SS-28	2/18/2009	130
SS28-S-1.5	SS-28	2/18/2009	**400**
SS29-S-0.5	SS-29	2/19/2009	41
SS29-S-1.5	SS-29	2/18/2009	5.5
SS30-S-0.5	SS-30	2/19/2009	**1600**
SS30-S-1.5	SS-30	2/18/2009	42

Supplemental Table
Updated Dioxin Toxicity Equivalents (ng/kg)
Former PWT Site RI/FS

Sample ID	Location Name	Date	Dioxin TEQ
Wildlife Ecological Indicator Concentration			182[a]
SS-3	SS-3B	7/16/2008	**830**
SS-4	SS-4B	7/16/2008	**1500**
SS-5	SS-5	7/16/2008	100
SS-7	SS-7	7/17/2008	**7800**
SS-8	SS-8	7/17/2008	19
SS-9	SS-9	7/17/2008	**1300**

Notes:

Bold number indicates a TEQ that exceeds the Ecological Indicator Concentration.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

ng/kg = nanograms per kilogram (parts per trillion).

TEQ = toxicity equivalent calculated using toxicity equivalent factors in Washington Administrative Code 173-340-900 and half of the method reporting limits for nondetect congeners.

[a] Used dioxin TEQ value calculated by Malcolm Pirnie in 2007.

ATTACHMENT A

HABITAT EVALUATION

ECOLOGICAL LAND SERVICES, INC.

November 13, 2007

Todd Johnson
Group Mackenzie
601 Main Street, Suite 101
Vancouver, Washington 98660

Re: Habitat Evaluation for the Port of Ridgefield Lake River Site; ELS Project # 1268.04

Dear Mr. Johnson:

Enclosed are 5 copies of the Habitat Evaluation Report for the Port of Ridgefield Property adjacent to Lake River within Sections 13 and 24 of Township 4 North, Range 1 West, W.M.

While there are no critical area buffers on-site, it is likely that in the future, a No Effect determination may need to be made to comply with WDFW standards.

If you have any questions or I may be of further assistance, please feel free to contact me at (360) 578-1371.

Sincerely,

Lisa F. Willis

Lisa F. Willis

1157 - 3rd Avenue, Suite 220 • Longview, Washington 98632 • (360) 578-1371 • Fax (360) 414-9305

Habitat Evaluation

For

Port of Ridgefield; Lake River Site
Ridgefield, Washington

Prepared for:
Port of Ridgefield
C/O: Group Mackenzie
601 Main Street, Suite 101
Vancouver, Washington 98660
(360) 695-7879

Prepared by:
Ecological Land Services, Inc.
1157 - 3rd Avenue, Suite 220
Longview, Washington 98632
(360) 578-1371

November 12, 2007

ELS project # 1268.04

SIGNATURE PAGE

The information and data in this report were compiled and prepared under the supervision and direction of the undersigned.

Lisa F. Willis

Lisa F. Willis
Biologist

TABLE OF CONTENTS

FIGURES

APPENDIX A

INTRODUCTION

Ecological Land Services, Inc. (ELS) performed a Critical Areas evaluation and a riparian habitat inventory for Group Mackenzie as required by Ridgefield Municipal Code (RMC 18.280) for the potential redevelopment of the former Pacific Wood Treatment Company site and a portion of the current City of Ridgefield sewage treatment facility property. The 42.93 acre site (Table 1) is located at 109 and 111 West Division Street, Ridgefield, Washington, in a portion of Section 24, Township 4 North, Range 1 West of the Willamette Meridian. Group Mackenzie proposes to redevelop the site for multiple uses with a hotel, retail space, office space, public open space, and a pedestrian walkway along the Lake River shoreline.

Table 1: Subject Parcel Account Numbers, Owners, and Land Area

Parcel	*Owner*	*Acres*
219386-000	Port of Ridgefield	4.23
068360-000	Port of Ridgefield	5.78
068362-000	City of Ridgefield	0.44
068354-000	City of Ridgefield	1.32
068314-000	Port of Ridgefield	22.50
067897-000	Port of Ridgefield	8.16
067998-000	Port of Ridgefield	0.21
067883-000	Port of Ridgefield	0.29
	Approximate Total	**42.93**

SITE DESCRIPTION

The subject site consists of an estimated 42.93 acres located immediately south of the Carty Lake Wetland within the Ridgefield National Wildlife Refuge, east of Lake River, and west of downtown Ridgefield, Washington. The site is bordered by Burlington Northern railroad to the east, a small public marina to the south, Lake River to the west, and Ridgefield National Wildlife Refuge to the north.

Multiple buildings and structures associated with the former Pacific Wood Treatment Company located in the northern and central region of the property will be demolished in preparation for future development (Figure 2). Historic photographs show that virtually all surface area on-site not currently or previously covered by buildings is covered with gravel or pavement or was previously filled, continuing up to approximately 10 to 20 linear feet from the Line of Mean High Tide (Figures 2, 2A). The site is generally flat topographically, with steep slopes into Lake River to the west (Figure 2B).

The property was used as a wood processing and shipping site between 1963 and 1993. Contaminants were discovered in an approximately four acre area in the central-northeastern region of the site in 1985. A steam enhanced remediation project has been in process since 2004.

The clean-up project is being carried out by Port of Ridgefield personnel and overseen by the Washington Department of Ecology.

The on-site banks of Lake River slope at approximately 30 to 70 percent and are loosely covered with rip-rap and erosion control gravel. Treated lumber retaining walls are located at the northern and northeastern site boundaries adjacent to the National Wildlife Refuge (NWR; Figure 2B). A former dock and ship loading area are located in the southern region of the site on the riverbank. The loading area is constructed of treated lumber acting as a retaining wall. A fire emergency irrigation pump is located on piles at the northwestern extreme of the property beyond the OHWM. A number of abandoned piles are located beyond the OHWM of Lake River (Figure 2). The area between the OHWM of Lake River and paved surfaces is heavily vegetated, primarily with non-native herbaceous and scrub-shrub plants including California false indigo and Himalayan blackberry, and native trees including black cottonwood and Douglas-fir.

METHODS

Historic and current photographs dating back to 1929 were studied in order to determine the extent of historic disturbance on the site (see Appendix A). A site reconnaissance of the property was conducted by ELS on August 23, 2007 with focus to the western and northern boundaries. The western and northern property boundaries are located adjacent to critical habitat areas, or areas of concern. The current habitat functions within these off-site areas were assessed by ELS. Riparian functions on-site were rated qualitatively using the Clark County Habitat Conservation Ordinance Riparian Habitat Field Rating Form.

Significant trees along the river banks were located and surveyed by Barbieri and Associates, Inc. Only those trees that were six inches or greater in diameter at breast height (dbh) were counted. Trees and shrubs isolated by gravel or paved pads were not counted due to their lack of available habitat. Edges of gravel and pavement as well as existing buildings were also surveyed (Figure 2).

The OHWM of Lake River was not flagged as it was not needed to establish the buffer on-site. The line of Mean High Tide (MHT) was used in place of the OHWM due to the tidal nature of Lake River and the similarity in location of the OHWM and MHT. The existing eastern buffer of Lake River along the project site is functionally isolated by fill, impervious surfaces, and structures (*RMC 18.280.030(B)(2))*. The proposed re-development of the project site will not increase the impervious surface area within the Riparian Management Area or Riparian buffer; therefore, no riparian buffers will be required to extend on-site across the functionally isolated boundary. See "Edge of Gravel as Surveyed" boundary line, Figure 2.

The off-site Carty Lake Wetland located within the National Wildlife Refuge north of the project site was inventoried from the Port Property and aerial photography.Functions for the off-site wetland were assessed using the Wetland Rating Form for Western Washington (DOE 2004). The existing on-site buffer located south of the Carty Lake Wetland is functionally separated from the wetland and does not protect the wetland from adverse impacts. Therefore, a wetland buffer will not be required to extend on-site across the functionally isolated boundary (*RMC 18.280.150.(C)(ii)(f)).* See "Edge of Gravel as Surveyed" boundary line, Figure 2.

SOILS

Soils on-site are mapped as Hillsboro silt loam, 8 to 15 percent slopes (HoC), Hillsboro silt loam, 15 to 20 percent slopes (HoD), Hillsboro silt loam, 30 to 65 percent slopes (HoG), and Sauvie silt loam, 3 to 8 percent slopes (SmB), according to Natural Resource Conservation Service Web Soil Survey Data (NRCS 2007).

Hillsboro silt loam soils are well drained soils formed from alluvium and found on terraces. Sauvie silt loam soils are moderately well drained soils formed from alluvium and found on flood plains. The majority of the soils mapped on-site are Sauvie silt loam (Figure 3). None of the soils mapped on-site are listed as hydric soils by the NRCS (2007).

Soils on-site are significantly disturbed and consist mainly of fill placed prior to 1963. Native soils are not likely to be encountered on-site within the upper two feet of the soil profile adjacent to Lake River.

VEGETATION

Vegetation on-site is generally restricted to the area between MHT and the line of impervious surface. Vegetative cover along the shoreline on-site was dense, predominantly consisting of California false indigo (*Amorpha fruticosa*), Himalayan blackberry (*Rubus armeniacus*), Pacific willow (*Salix lucida*), Douglas fir (*Pseudotsuga menziesii*), and black cottonwood (*Populus balsamifera*). Dominant shrub species on-site were non-native, invasive species. The canopy is composed of mature native species.

Washington State Priority Species

The Washington Department of Fish and Wildlife considers Oregon White Oak (*Quercus garryana*) a protected species (Habitats and Species Report October, 2006). There are protected populations of these trees in the Ridgefield National Wildlife Preserve to the east, north, and south of the property and across Lake River to the west of the site. No other documented priority plant species are located within or near the subject site.

HYDROLOGY

Mapped on-site soils are classified as non-hydric by the Natural Resource Conservation Service (NRCS). The majority of the property is covered by impervious surfaces in the form of buildings, pavement, and gravel. Lake River forms the western boundary of the site and is nearly 300 feet wide at this reach. The river is tidally influenced and flows north toward the Columbia River from Vancouver Lake. Two outlets discharge filtered water into Lake River from the steam-based ecological cleanup on-site. Three additional outlets drain stormwater and runoff from on-site into Lake River. The southern and western regions of the property are within the mapped flood plain (Figure 5A).

WETLANDS INVENTORIES

The National Wetlands Inventory (NWI) has classified Lake River as riverine, tidal, unconsolidated bottom, permanent tidal (R1UBV; Figure 4). No wetlands are mapped on-site. A ponded wetland identified as Carty Lake is located north of the subject site in the National Wildlife Refuge and is classified as palustrine, unconsolidated bottom, permanently flooded (PUBH). NWI maps should be used with discretion because they provide general wetland information about a regional area and therefore are limited in accuracy for smaller sites because of their large scale.

The Clark County Wetlands Inventory maps wetland habitat adjacent to the property to the west and north in the same locations as the identified Lake River and Carty Lake Wetland (Figure 5). ELS did not identify riverine wetlands associated with the Lake River habitat along the western shoreline of the project site.

CRITICAL AREAS

The Clark County Sensitive and Habitat Areas map shows the presence of a threatened or endangered species in the northwestern region of the property (Figure 5). Please see Wildlife section for species information. A Riparian Habitat Conservation area shown in the western region of the property and at the northern boundary is associated with Lake River and Carty Lake Wetland.

WILDLIFE

Numerous species of fauna are known to inhabit Lake River and its associated shorelines. A nesting osprey was observed atop the hopper in the central region of the property (Figure 2). Various songbirds, raptors, and waterfowl are common in the area due to the proximity of the high-quality habitat in the Wildlife Refuge. Chinook, Coho, Sockeye, Chum, and Pink Salmon steelhead, sturgeon, and rainbow and cutthroat trout, as well as numerous other less dominant species populate Lake River and Gee Creek. Mink, river otter, opossum, coyote, and raccoons are very common along the shores of Lake River and are likely to be seen at the subject site.

Washington State Priority Species

Based on database information received from WDFW, multiple Oregon white oak (*Quercus garryana*) stands and wetlands are identified adjacent to the project boundarie. Priority anadromous fish and priority resident fish habitat are located immediately off-site to the west and approximately 700 feet east of the subject site in Lake River and Gee Creek, respectively. Priority waterfowl habitat is documented to the south of the property in the NWR. Regular concentrations of purple martins are documented immediately adjacent to the western property boundary. Three bald eagle nests are identified more than ½ mile north of the subject property. Table 2 lists priority habitats and species within an approximate 0.5 mile radius of the subject site as documented by WDFW.

Table 2. Federal and state important species and habitats that may occur in the vicinity of the project boundaries based on agency database information.

Species Common Name	Species Scientific Name	Federal Status	State Status	Location
BIRDS				
Bald Eagle	*Haliaeetus leucocephalus*	None	Threatened	Off-site to the north, more than 0.5 mi away.
Purple Martin	*Progne subis*	None	Candidate	Off-site to the west, immediately adjacent to site boundaries, and off-site to the south, approximately 0.12 mile.
FISH				
Fall, spring, summer Chinook Salmon; Lower Columbia ESU	*Oncorhynchus tshawytscha*	Threatened	Candidate	Immediately off-site in Lake River
Fall stream Chinook Salmon	*Oncorhynchus tshawytscha*	None	Listed or Candidate	Immediately off-site in Lake River
Fall Chum Salmon; Columbia ESU	*Oncorhynchus keta*	Threatened	Candidate	Immediately off-site in Lake River
Pink Salmon	*Oncorhynchus*	None	Priority	Immediately off-site in Lake River
Sockeye Salmon	*Oncorhynchus*	None	Priority	Immediately off-site in Lake River
Coho Salmon; Lower Columbia ESU	*Oncorhynchus kisutch*	Candidate	Not listed	Immediately off-site in Lake River

Species Common Name	Species Scientific Name	Federal Status	State Status	Location
Summer, winter Steelhead	*Oncorhynchus mykiss*	Threatened	Candidate	Immediately off-site in Lake River
Coastal Cutthroat; resident	*Oncorhynchus clarki clarki*	None	Priority	Immediately off-site in Lake River, Gee Creek.
Rainbow Trout; resident	*Oncorhynchus mykiss*	None	Priority	Immediately off-site in Lake River
HABITAT				
Wetlands	---	None	Priority	Off-site immediately adjacent to northern and eastern site boundaries, within Ridgefield NWR.
Oregon white oak stands	---	None	Priority	Off-site, immediately adjacent to northern and eastern site boundaries, and off-site to the south within Ridgefield NWR. Approximately 0.15 mile off-site to the east in downtown Ridgefield.
Waterfowl concentrations	---	None	Priority	Off-site to the north and south within Ridgefield NWR.
Anadromous fish habitat	---	None	Priority	Immediately off-site within Lake River and Gee Creek.
Resident fish habitat	---	None	Priority	Immediately off-site within Lake River.

CITY CODE STANDARDS

Habitat Evaluation

Ridgefield Municipal Code 18.280.110 (C)(1) requires that a Critical Areas Report for a Riparian Management Area or Riparian Buffer include evaluation of the habitat functions using the Clark County habitat conservation ordinance Riparian Habitat field rating form or another habitat evaluation tool approved by the Washington Department of Fish and Wildlife. We used the Clark County rating form. This field rating form is intended only to qualitatively rate riparian habitats and is not an officially scored rating scale.

The riparian habitat in question received 11 out of a possible 48 points allotted on the rating form to assess fish habitat functions. The vegetation on-site provides little cover, there are no springs contributing to the main water channel, and there are no associated wetlands. The area had no observed influence over water flow, dissolved oxygen, or temperature. Vegetation along the banks may reduce sedimentation to a small degree. There are no pools or off channel habitats in which amphibians and fish may breed.

The habitat scored 10 out of a possible 23 points for terrestrial habitat function. With very few native woody plant species, downed logs, and snags, and the functional separation of the riparian area from other terrestrial habitats, there is limited potential for terrestrial fauna nesting.

Riparian Buffer Requirements

Pursuant to Ridgefield Municipal Code (RMC) 18.280.110 (A)(1), the Riparian Buffer extends landward 175 feet from the Ordinary High Water Mark of Shorelines of the state. The code allows development in the Riparian Management Area if it supports water-dependent, water-related, or water-enjoyment use. These terms are defined by Washington Administrative Code 173-26-020 (36), (37), (40; a, b). Water-dependent activities are those that cannot be accomplished at any location other than one that is directly adjacent to the water's edge. Water-related uses are those that do not require water access, but are economically more practical due to a proximal location to the water body such as those which require shipment of materials or provide services that are made more affordable or more convenient due to the location. Water-enjoyment use encompasses recreational or other appreciative access to the shoreline. The shoreline-oriented space of the establishment must be devoted to the water-enjoyment use and be open to the general public.

The riparian management code also states that if an impervious surface from previous development completely functionally isolates the Riparian Management Area or the Riparian Buffer from the water body, the regulated riparian area is to extend only from the ordinary high water mark to the impervious surface (RMC 18.280.110 (B)(3).

At the subject property, asphalt, concrete, gravel, or filled surfaces exist for the entire length of the shoreline, creating an impervious surface within the code described Riparian Buffer. Therefore, the regulated riparian area is limited to that part of the riverbank between the asphalt or concrete areas and the line of Mean Higher High Tide. Any additional impervious surface in the designated on-site buffer will be mitigated for.

Wetland Buffer Requirements

According to RMC, areas which are completely functionally separated from a wetland and do not protect the wetland from adverse impacts may be excluded from buffers otherwise required (18.280.150 (F)). Because the on-site areas adjacent to the wetland are paved and previously developed and are separated from the wetland by a retaining wall, the buffer will extend to the edge of the existing impervious surface. Any additional impervious surface in the designated on-site buffer will be mitigated for.

CONCLUSIONS

A substantial amount of fill has been placed on the subject property leading to its development and operation as an industrial mill for several decades. Because of this development and historical industrial and commercial activity, overall, the subject area is a low quality habitat and constitutes little functional value for native flora and fauna. Existing habitat value may be retained through preservation of trees within the functional buffers of Lake River and the adjacent off-site wetland. Additional impacts to riverine habitat can be avoided through use of existing piles beyond the ordinary high water mark of Lake River and use of existing stormwater outfalls within the riparian buffer. There is much potential for aesthetic and functional improvement with the construction of walking trails, parks, and landscaping along the river banks and replacement of non-native, invasive plant species with those that are native to this region.

REFERENCES

City of Ridgefield Municipal Code. February 28 2005 Chapter 20.740.110 Fish and Wildlife Habitat Conservation Areas. Ridgefield, Washington.

National Ocean Service (NOAA). Ridgefield, Columbia River, WA Station Information. Station ID 9440083. Online document, <http://tidesandcurrents.noaa.gov/>

Natural Resources Conservation Service. 2006. *Soil Survey of Washington, Clark County Area.* Online document, <http://www.wa.nrcs.usda/pnw_soil/wa_reports.html>. Accessed June 2006.

Soil Conservation Service. 1995. Hydric Soils List for Washington. Online document <http://soils.usda.gov/soils_use/hydric/states/wa.htm >. Accessed June 27, 2003.

Washington Administrative Code. February 5 1997. Chapter 173.22.030, Chapter 173.26.020. Adoption of Designations of Shorelands and Wetlands Associated with Shorelines of the State.

Washington State Department of Fish and Wildlife – Habitats and Species Report in the Vicinity of T02R01E Section 27. Report Date: October 5, 2006

Washington Department of Fish and Wildlife. 2007. *Habitats and Species Map and Report in the Vicinity of T04R01W Sections 13 and 14.* Produced October 23, 2007.

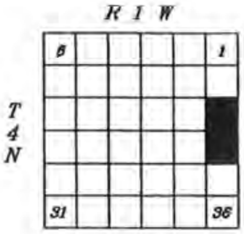
Washington Department of Fish and Wildlife. 2007. *Bald Eagle Buffer Management Zone Map and Report in the vicinity of T04R01W Sections 13 and 14.* Produced October 23, 2007.

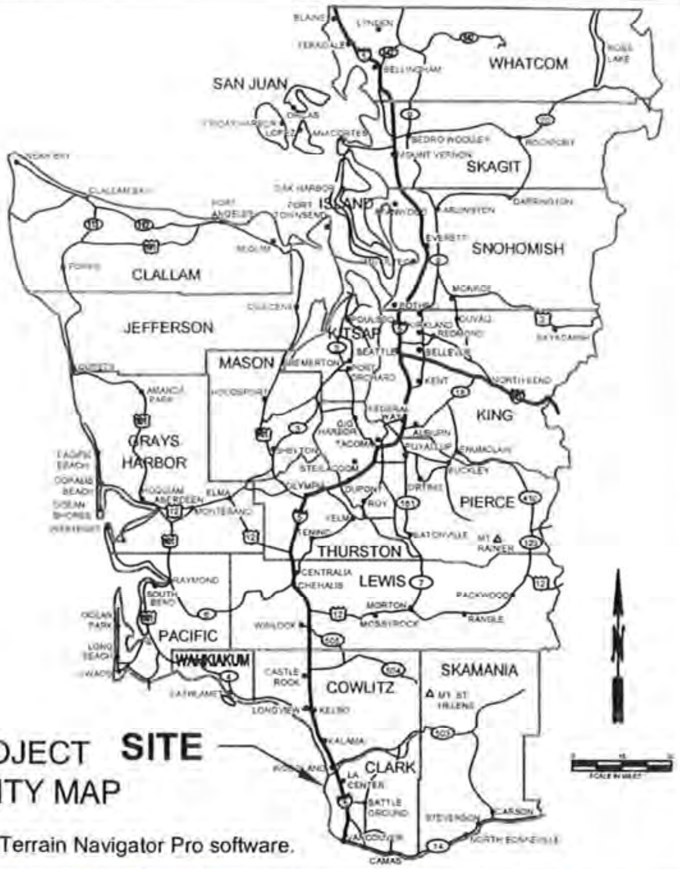
FIGURES

WASHINGTON

Latitude 45° 48' 15.10" N
Longitude 122° 44' 52.00" W

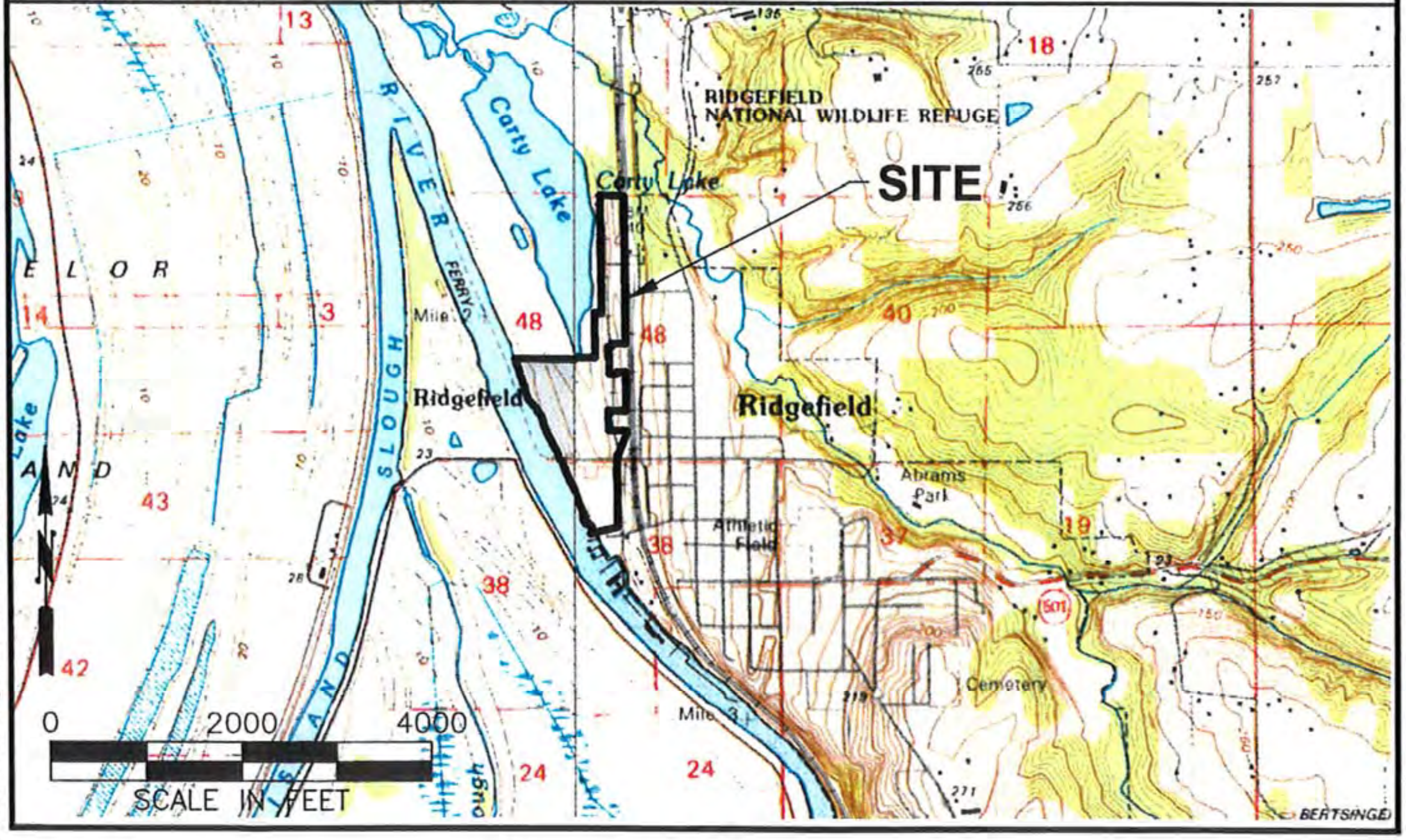
LOCATION MAP





PROJECT VICINITY MAP

NOTE:
USGS topographic quadrangle map reproduced using MAPTECH Inc., Terrain Navigator Pro software.



ECOLOGICAL LAND SERVICES, INC.
1157 3rd Ave., Suite 220 Longview, WA 98632
(360) 578-1371 Fax: (360) 414-9305

DATE: 8/20/07
DWN: KLM/ CB
REQ. BY: LW
PRJ. MGR: AA
CHK:
APPR:
PROJ.#: 1268.04

Figure 1
VICINITY MAP
Port of Ridgefield - Lake River Site
Group Mackenzie
City of Ridgefield, Clark County, Washington
Sections 13 & 24, Township 4N, Range 1W, W.M.

4/13/2007 4:12 PM S:\Clark-WA\Ridgefield\1268-Group Mackenzie\1268.04-Port of Ridgefield-Lake River Site\1268.04-Figures\1268.04 vm sm ss nwi 101607.dwg chris

NOTES:

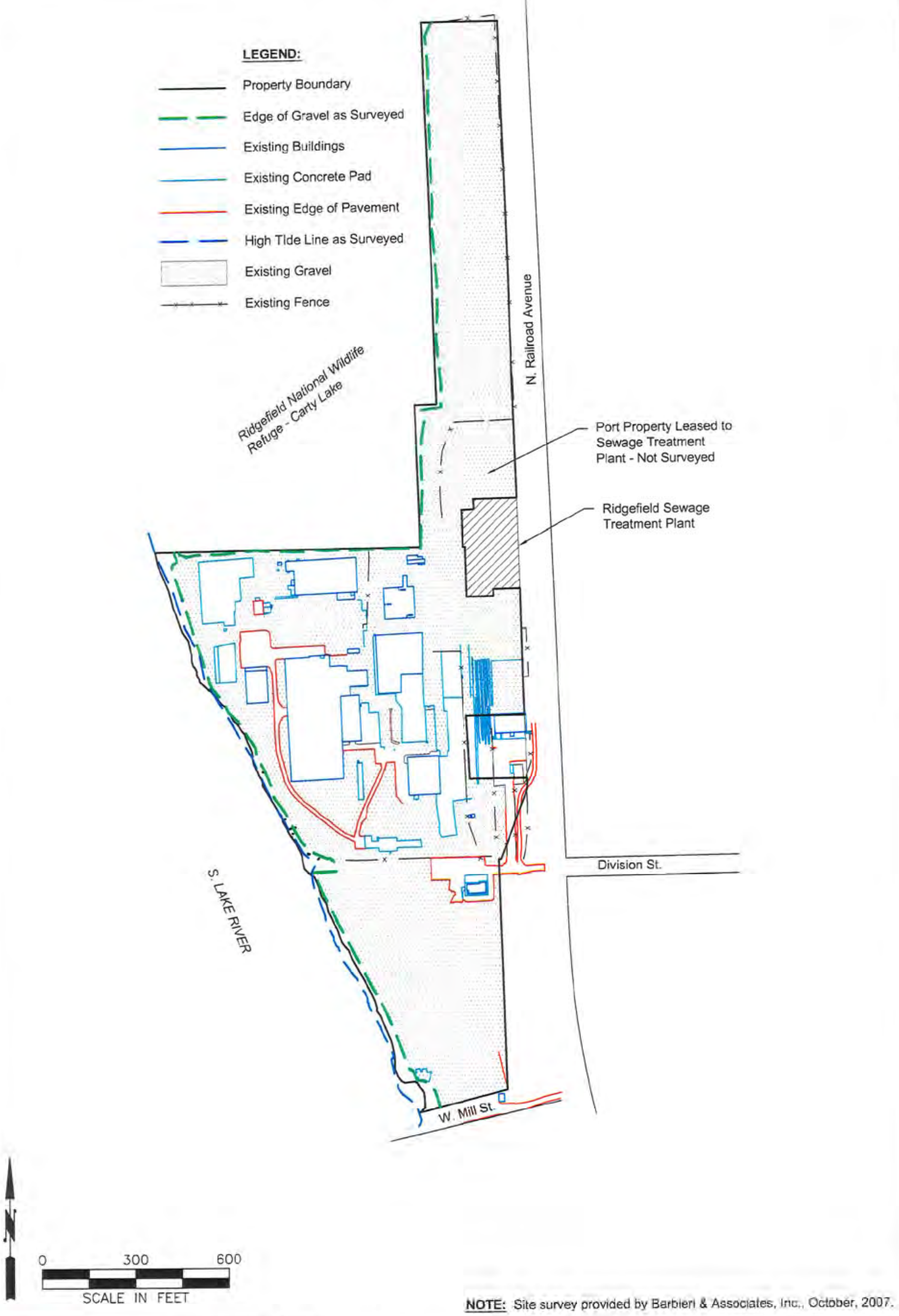
1. Aerial photograph provided by Google Earth ™, 2007.
2. Property Boundary Surveyed by Barbieri & Associates, Inc.

ECOLOGICAL LAND SERVICES, INC.
1157 3rd Ave., Suite 220 Longview, WA 98632
(360) 578-1371 Fax: (360) 414-9305

DATE: 10/30/07
DWN: CB
REQ. BY: LW
PRJ. MGR: AA
CHK:
APPR:
PROJ.#: 1268.04

Figure 2
SITE MAP WITH AERIAL PHOTOGRAPH
Port of Ridgefield - Lake River Site
Group Mackenzie
City of Ridgefield, Clark County, Washington
Sections 13 & 24, Township 4N, Range 1W, W.M.

4/13/2007 4:12 PM S:\Clark-WA\Ridgefield\1268-Group Mackenzie\1268.04-Port of Ridgefield-Lake River Site\1268.04-Figures\1268.04 vm sm ss owl 101607.dwg chris



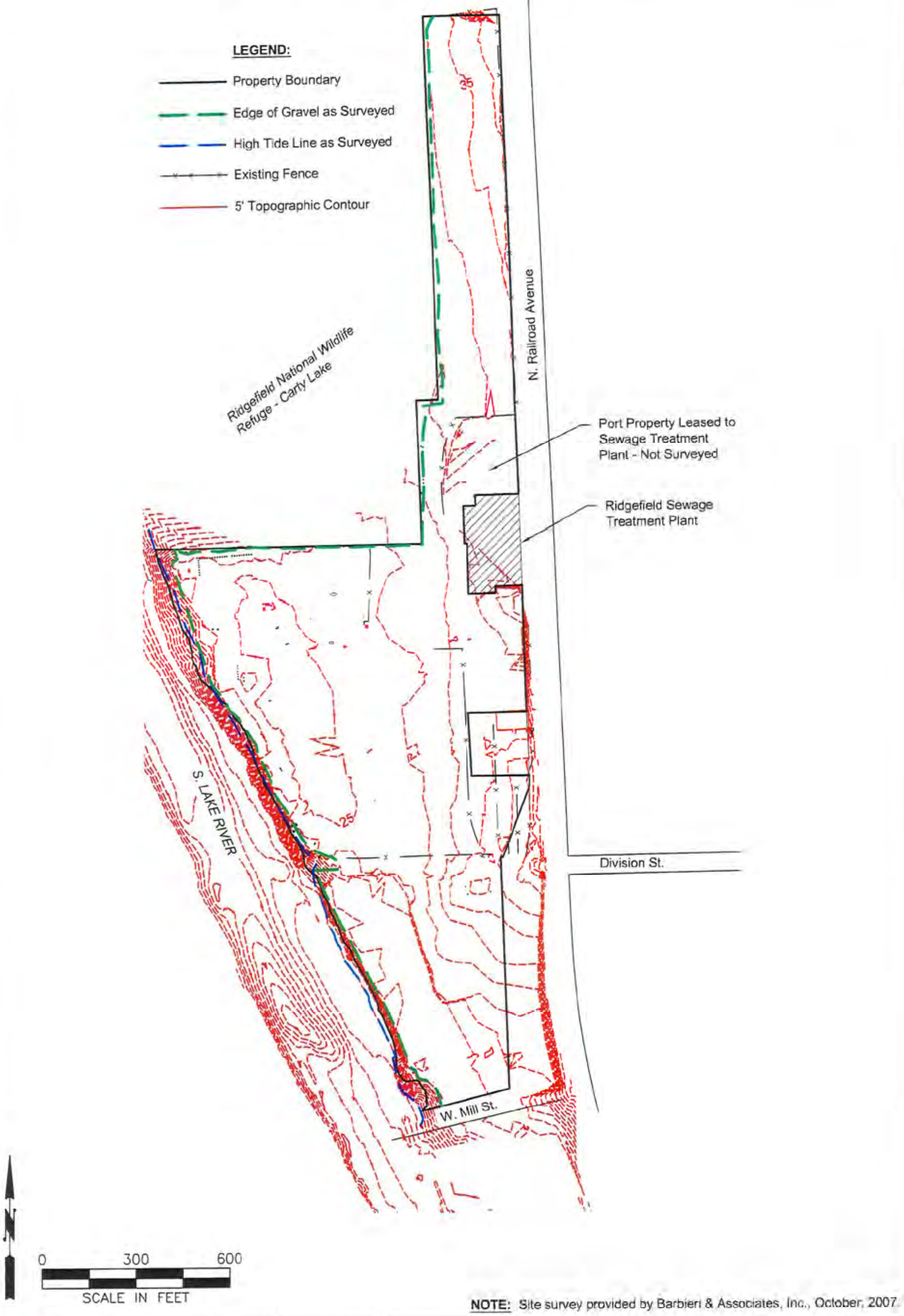
NOTE: Site survey provided by Barbieri & Associates, Inc., October, 2007.

ECOLOGICAL LAND SERVICES, INC.
1157 3rd Ave., Suite 220 Longview, WA 98632
(360) 578-1371 Fax: (360) 414-9305

DATE: 10/17/07
DWN: CB
REQ. BY: LW
PRJ. MGR: AA
CHK:
APPR:
PROJ.#: 1268.04

Figure 2A
SITE MAP WITH EXISTING FEATURES
Port of Ridgefield - Lake River Site
Group Mackenzie
City of Ridgefield, Clark County, Washington
Sections 13 & 24, Township 4N, Range 1W, W.M.

4/13/2007 4:12 PM S:\Clark-WA\Ridgefield\1268-Group Mackenzie\1268.04-Port of Ridgefield-Lake River Site\1268.04-Figures\1268.04 vm sm ss nwi 101607.dwg chris



NOTE: Site survey provided by Barbieri & Associates, Inc., October, 2007.

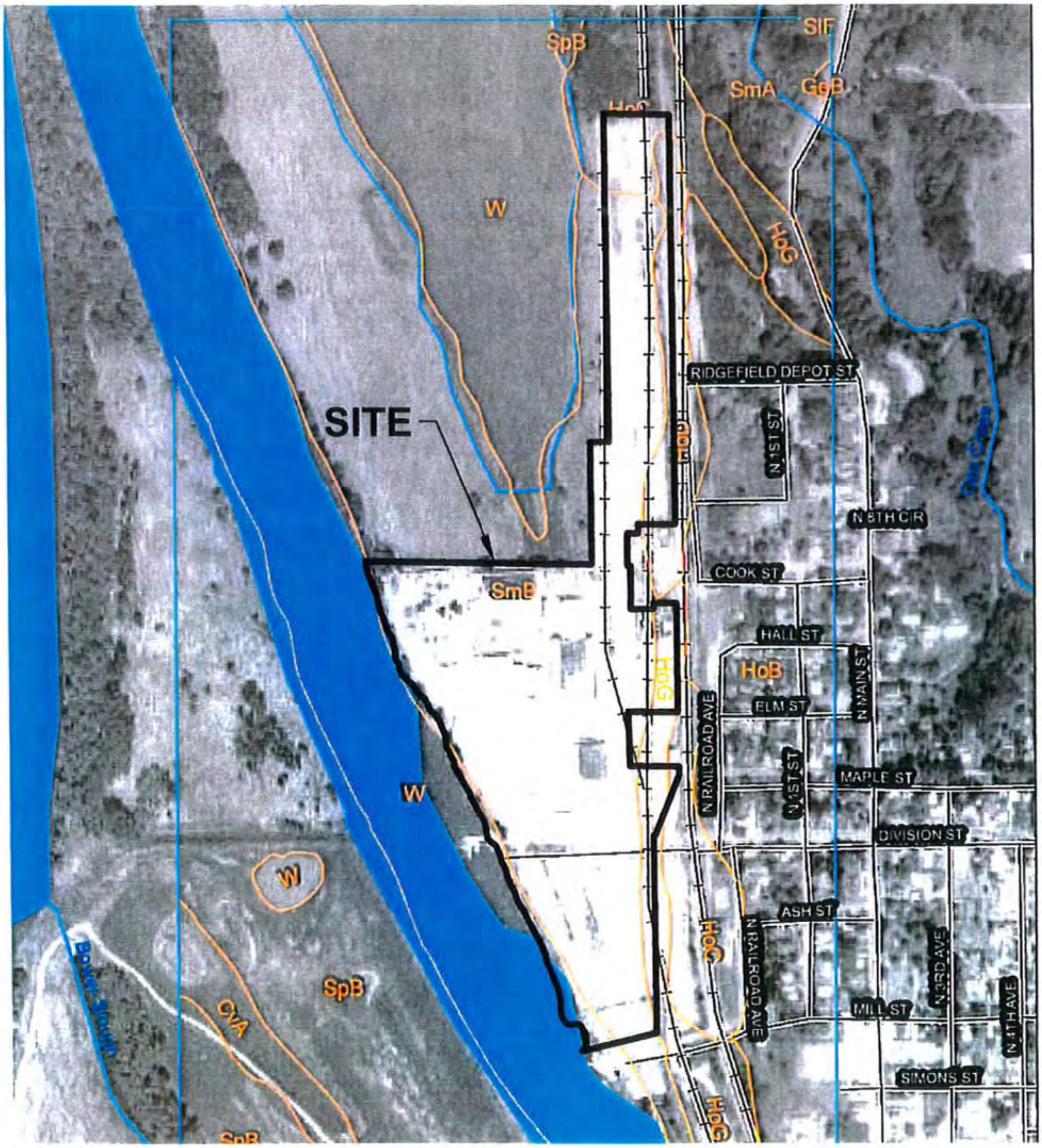
ECOLOGICAL LAND SERVICES, INC.
1157 3rd Ave., Suite 220 Longview, WA 98632
(360) 578-1371 Fax: (360) 414-9305

DATE: 10/17/07
DWN: CB
REQ. BY: LW
PRJ. MGR: AA
CHK:
APPR:
PROJ.#: 1268.04

Figure 2B
SITE MAP WITH TOPOGRAPHY
Port of Ridgefield - Lake River Site
Group Mackenzie
City of Ridgefield, Clark County, Washington
Sections 13 & 24, Township 4N, Range 1W, W.M.

4/13/2007 4:12 PM S:\Clark-WA\Ridgefield\1268-Group Mackenzie\1268.04-Port of Ridgefield-Lake River Site\1268.04-Figures\1268.04 vm sm ss nwi 101607.dwg chris

4/13/2007 4:12 PM S:\Clark-WA\Ridgefield\1268-Group Mackenzie\1268.04-Port of Ridgefield-Lake River Site\1268.04-Figures\1268.04 vm sm ss nwi 101607.dwg chris



W - Water
SmB - Sauvie silt loam, 3 to 8 percent slopes. Not hydric.
HoC - Hillsboro silt loam, 8 to 15 percent slopes. Not hydric.
HoD - Hillsboro silt loam, 15 to 20 percent slopes. Not hydric.
HoG - Hillsboro silt loam, 30 to 65 percent slopes Not hydric.

N

0 600 1200
SCALE IN FEET

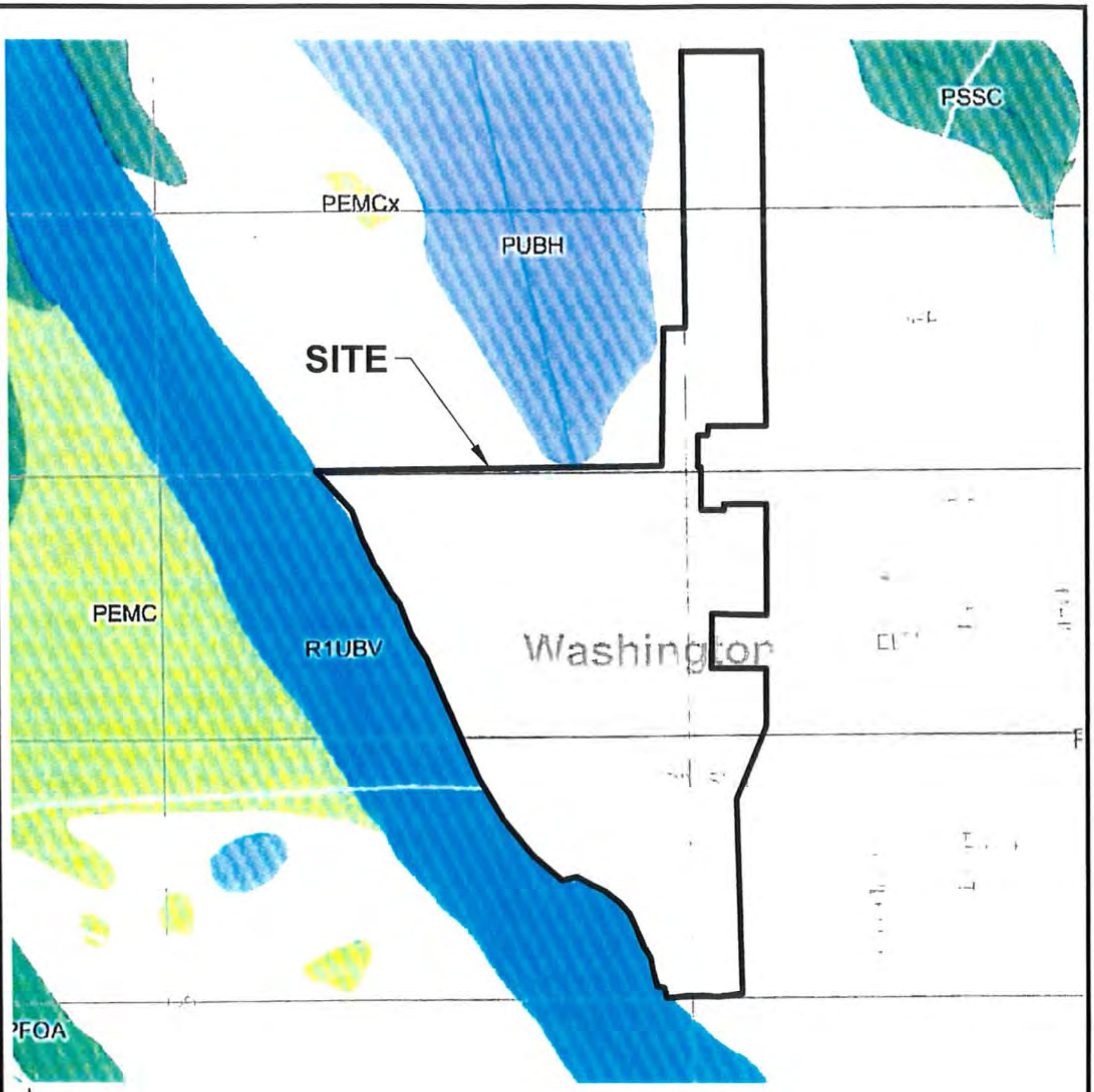
NOTE: Map provided on-line by NRCS at web address:
www.wa.nrcs.usda.gov/pnw_soil/wa_reports.html

ECOLOGICAL LAND SERVICES, INC.
1157 3rd Ave., Suite 220 Longview, WA 98632
(360) 578-1371 Fax: (360) 414-9305

DATE: 8/20/07
DWN: KLM
REQ. BY: LW
PRJ. MGR: AA
CHK:
APPR:
PROJ.#: 1268.04

Figure 3
SOIL SURVEY MAP
Port of Ridgefield - Lake River Site
Group Mackenzie
City of Ridgefield, Clark County, Washington
Sections 13 & 24, Township 4N, Range 1W, W.M.

4/13/2007 4:12 PM S:\Clark-WA\Ridgefield\1268-Group Mackenzie\1268.04-Port of Ridgefield-Lake River Site\1268.04-Figures\1268.04 vm sm ss nwi 101607.dwg chris



No mapped wetlands indicated on site by US Fish & Wildlife Service.

NOTES:

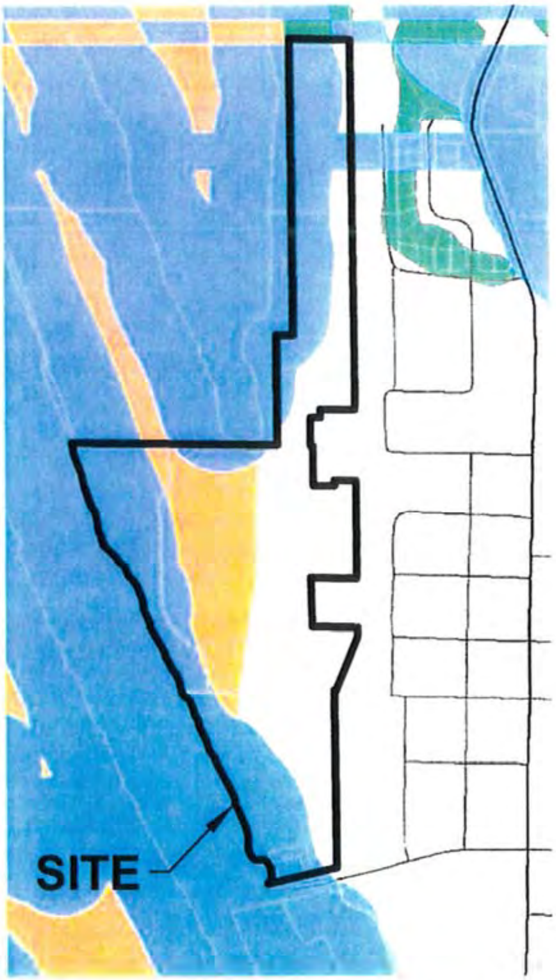
1. Map provided on-line by US Fish & Wildlife Service at web address: *http://www.wetlandsfws.er.usgs.gov/NWI/index.html*
2. Map not to scale. Property boundary location and size is approximate.

ECOLOGICAL LAND SERVICES, INC.
1157 3rd Ave., Suite 220 Longview, WA 98632
(360) 578-1371 Fax: (360) 414-9305

DATE: 8/20/07
DWN: KLM
REQ. BY: LW
PRJ. MGR: AA
CHK:
APPR:
PROJ.#: 1268.04

Figure 4
NATIONAL WETLANDS INVENTORY MAP
Port of Ridgefield - Lake River Site
Group Mackenzie
City of Ridgefield, Clark County, Washington
Sections 13 & 24, Township 4N, Range 1W, W.M.

Clark County Wetlands Inventory



Clark County Riparian Habitat & Species

LEGEND:

▬ Site Boundary

■ County Wetland

LEGEND:

▬ Site Boundary

■ Riparian Habitat Conservation Area

■ Species

N

0 800 1600

SCALE IN FEET

NOTE: Map provided on-line by Clark County, Washington at web address: *http://gis.clark.wa.gov/gishome/property*

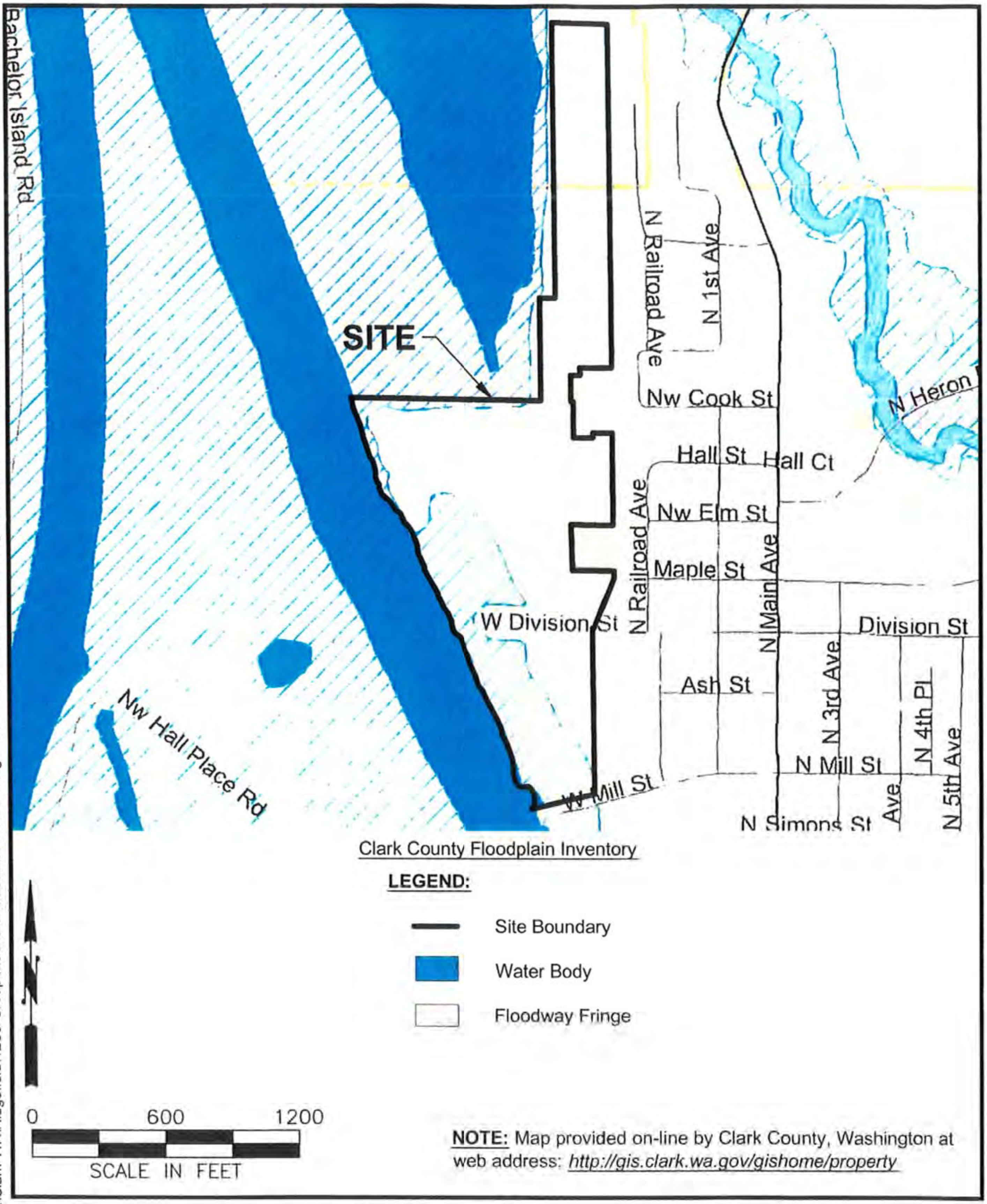
4/13/2007 4:12 PM S:\Clark-WA\Ridgefield\1268-Group Mackenzie\1268.04-Port of Ridgefield-Lake River Site\1268.04-Figures\1268.04 vm sm ss nwi 101607.dwg chris

ECOLOGICAL LAND SERVICES, INC.
1157 3rd Ave., Suite 220 Longview, WA 98632
(360) 578-1371 Fax: (360) 414-9305

DATE: 8/20/07
DWN: KLM/ CB
REQ. BY: LW
PRJ. MGR: AA
CHK:
APPR:
PROJ.#: 1268.04

Figure 5
SENSITIVE & HABITAT AREAS MAP
Port of Ridgefield - Lake River Site
Group Mackenzie
City of Ridgefield, Clark County, Washington
Sections 13 & 24, Township 4N, Range 1W, W.M.

4/13/2007 4:12 PM S:\Clark-WA\Ridgefield\1268-Group Mackenzie\1268.04-Port of Ridgefield-Lake River Site\1268.04-Figures\1268.04 vm sm ss nwi 101607.dwg chris

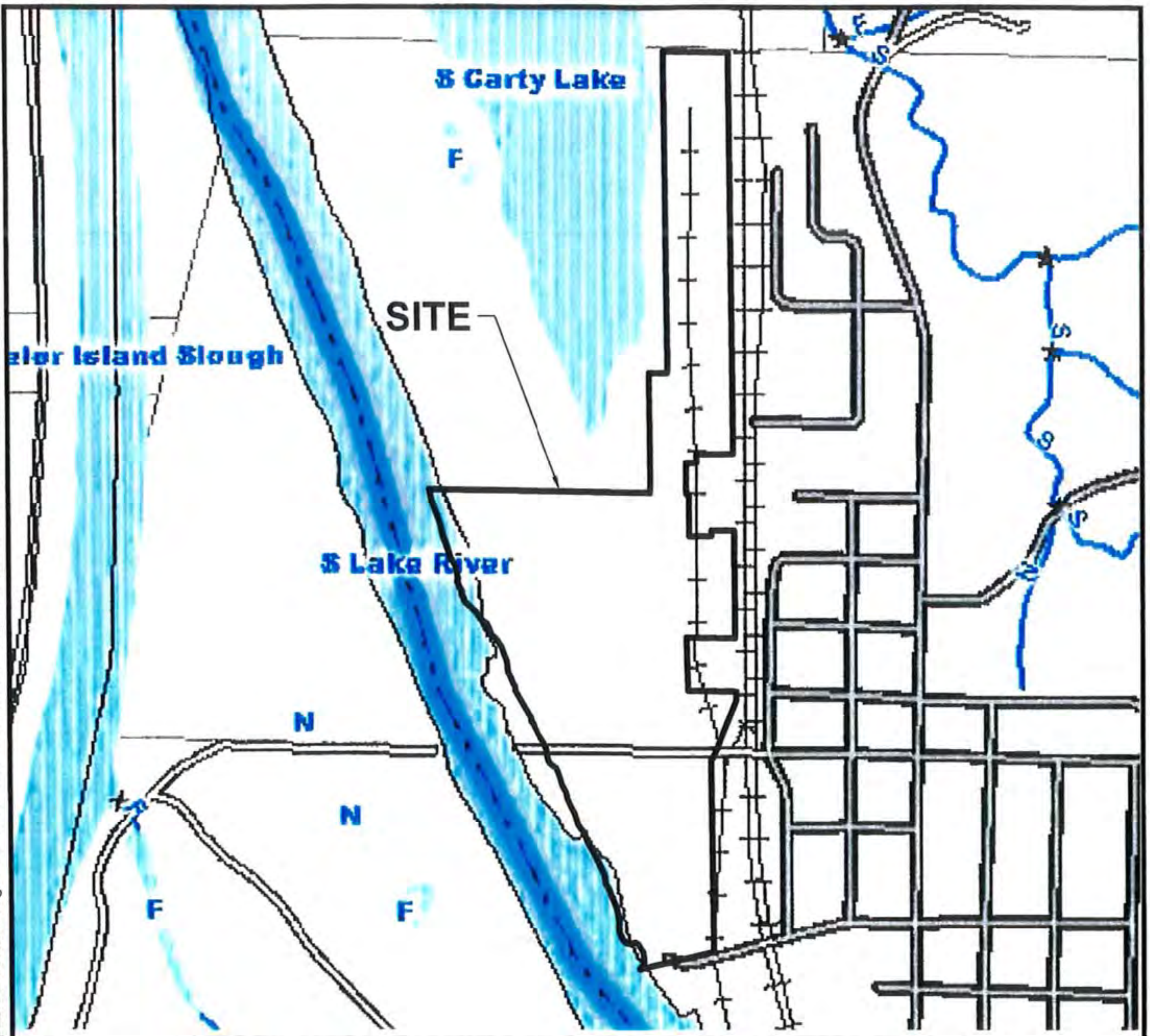


NOTE: Map provided on-line by Clark County, Washington at web address: *http://gis.clark.wa.gov/gishome/property*

ECOLOGICAL LAND SERVICES, INC.
1157 3rd Ave., Suite 220 Longview, WA 98632
(360) 578-1371 Fax: (360) 414-9305

DATE: 8/20/07
DWN: KLM
REQ. BY: LW
PRJ. MGR: AA
CHK:
APPR:
PROJ.#: 1268.04

Figure 5A
FLOODPLAIN AREAS MAP
Port of Ridgefield - Lake River Site
Group Mackenzie
City of Ridgefield, Clark County, Washington
Sections 13 & 24, Township 4N, Range 1W, W.M.



No mapped streams indicated on site by Department of Natural Resources (DNR).

NOTE: Map provided on-line by Washington State Department of Natural Resources at web address: *http://www3.wadnr.gov/dnrapp5/website/fpars/viewer.htm*

LEGEND:

F	Stream Water Type S, F, N
*	Water Type Change
▭	WAU (Watershed Administrative Unit Boundary)
▬	WRIA (Watershed Region Inventory Area)
▨	Open Water

ECOLOGICAL LAND SERVICES, INC.
1157 3rd Ave., Suite 220 Longview, WA 98632
(360) 578-1371 Fax: (360) 414-9305

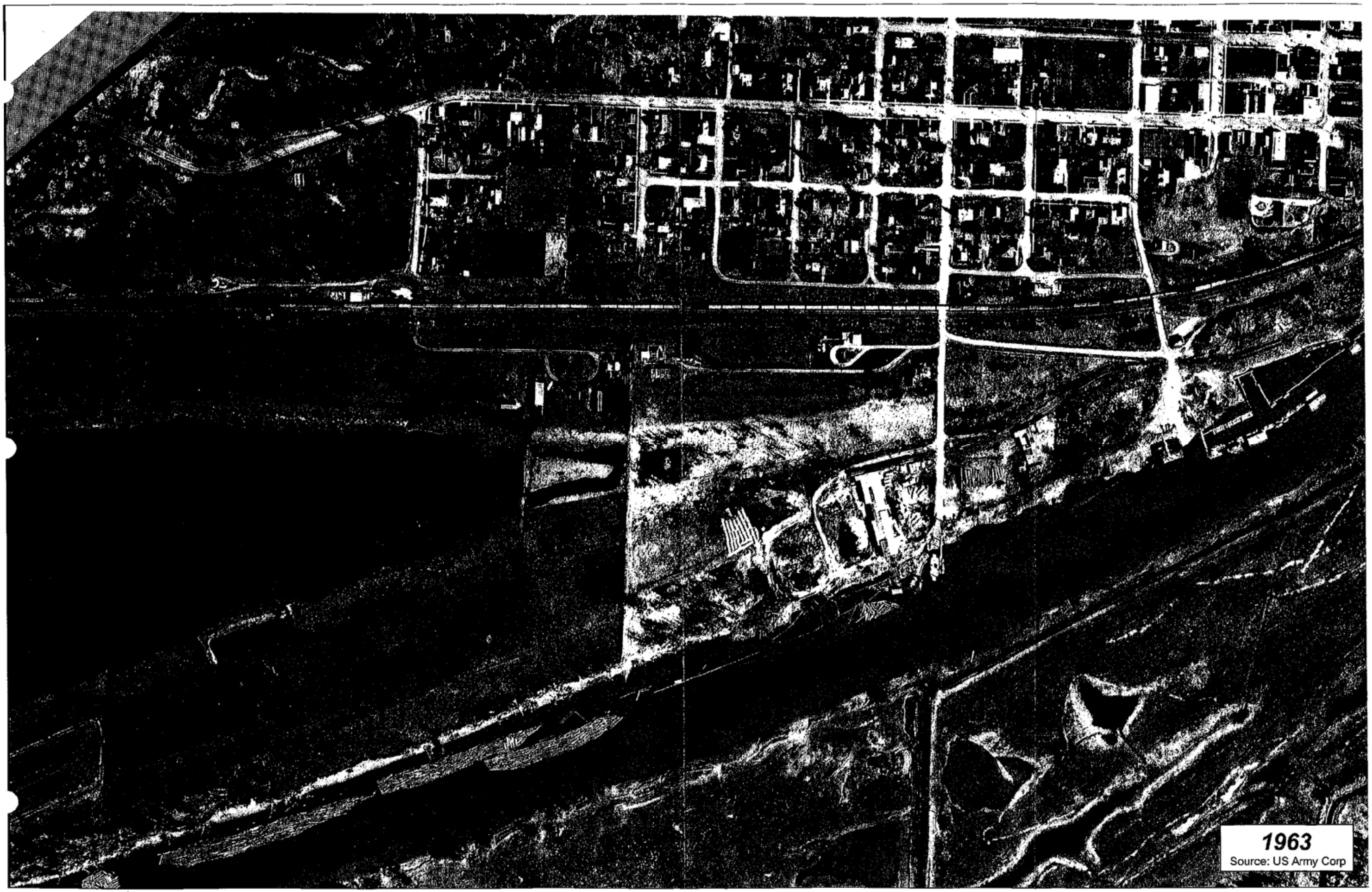
DATE: 8/20/07
DWN: KLM
REQ. BY: LW
PRJ. MGR: AA
CHK:
APPR:
PROJ.#: 1268.04

Figure 6
DNR STREAM TYPING MAP
Port of Ridgefield - Lake River Site
Group Mackenzie
City of Ridgefield, Clark County, Washington
Sections 13 & 24, Township 4N, Range 1W, W.M.

4/13/2007 4:12 PM S:\Clark-WA\Ridgefield\1268-Group Mackenzie\1268.04-Port of Ridgefield-Lake River Site\1268.04-Figures\1268.04 vm sm ss nwi 101607.dwg chris

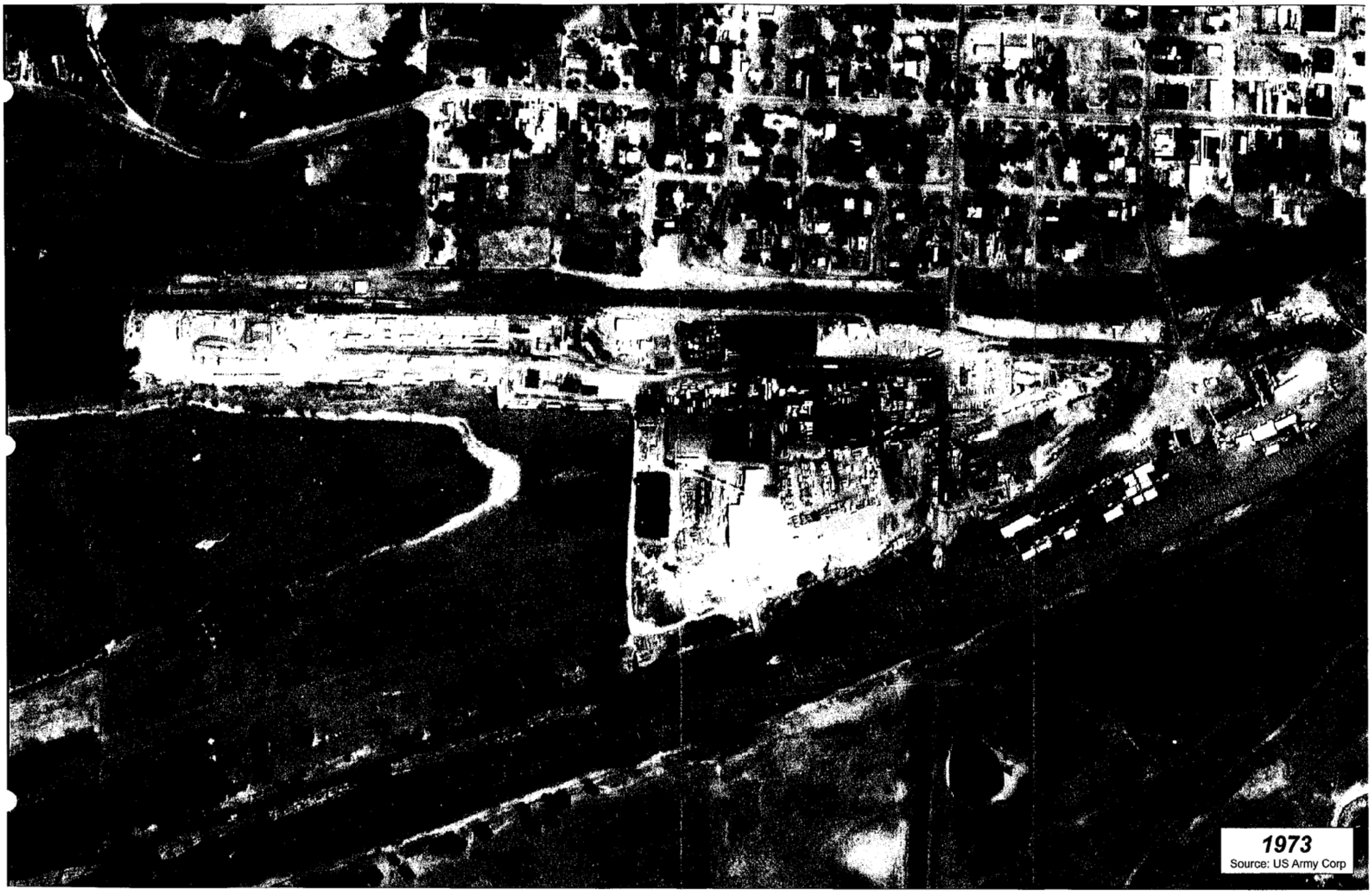
APPENDIX A

Historic Aerial Photographs



1963

Source: US Army Corp



1973

Source: US Army Corp

APPENDIX B

Clark County Habitat Conservation Ordinance Riparian Habitat Field Rating Form

CLARK COUNTY HABITAT CONSERVATION ORDINANCE
RIPARIAN HABITAT FIELD RATING FORM

Date: 8/23/07
Investigator(s): L. Willis
Stream: Lake River
Legal: S 24 T 4N R 1W
Parcel #: 68314000, 67897000, 67998000, 67883000
Stream Type: 1+ [✓ 1] 2 3 4 5 Unknown
Reach #:_____

Land Use Designations
Zoning: Waterfront Mixed Use
Shorelines: Lake River
Other:_____

Base Riparian Zone Width:_____
(Note: complete 1 field rating form for each reach)

FISH HABITAT FUNCTIONS

Stream Flow Influence

1-Vegetative Cover%	
0-33%	[✓ 1]
34-66%	2
67-100%	3

2-Associated Wetlands	
Present	+2
Absent	[✓ +0]

3-Springs or Seeps	
Absent	[✓ 0]
Intermittent	1
Semi-Perm.	2
Permanent	3

4-Hydrology (Excess flows, erosion, scour, etc.)	
Present	-2
Absent	[✓ +0]

Influence on Water Temperature & Dissolved Oxygen

5-Canopy Cover (%)	
0-33%	[✓ 1]
34-66%	2
67-100%	3

6-Riffles (%)	
0%	[✓ 0]
1-16%	1
17-33%	2
34-50+%	3

Control of Sedimentation

7	10-33%Cover	34-66%Cover	67-100%Cover
0-33%Slope	1	2	3
34-66%Slope	[✓ 0]	1	2
67-100%Slope	0	1	2

8-Vegetate Banks	
0-33%	-2
34-66%	[✓ 1]
67-100%	3

Dissolved Oxygen Measurements(optional):__________

Control of Stream Pollution

9-Vegetative Cover %	
0-33%	1
34-66%	[✓ 2]
67-100%	3

10-Associated Wetlands	
Present	+2
Absent	[✓ +0]

Contribution of Food Web

11-Canopy Cover %	
0-33%	1
34-66%	[✓ 2]
67-100%	3

12-Dominant Tree Species		
67-100%	dec	[✓ 1]
67-100%	con.	1
33-66% mixed		3

13-LWD (Pieces per BFW)	
0	[✓ 0]
1	1
2	2
3+	3

General Observations:

***NOTE: Assessment criteria and scoring were based on conditions likely to be encountered. Users of this**

Methodology may be required to exercise their best professional judgment as a result of unique site conditions.

Stream Structural Diversity

Streams <10m(33fr) wide

14-LWD (Key Pieces per BFW	
0.0	0
0.1	1
0.2	2
>=0.3	3

Streams 10-20+m (33-66ft) wide

14-LWD (Key Pieces per BFW	
0.0	[✓ 0]
0.1-0.2	1
0.3-0.4	2
>0.4	3

15 Pools (%)	Gradient (%) <2%	2-5%	>5%
>55%	3	3	3
41-54%	2	3	3
31-40%	1	2	3
10-30%	0	1	2
<10%	0	[✓ 0]	1

16 Riffles (%)	Gradient (%) <2%	2-5%	>5%
1-16%	1	[✓ 1]	0
17-33%	2	2	1
34-50%	2	3	2

17-Off Channel Habitat	
Present	3
Absent	[✓ 0]

18 Fines (%)	Gradient (%) <2%	2-5%	>5%
0-10%	2	[✓ 2]	2
11-44%	1	-3	-4
45-100%	0	-4	-5

TERRESTRIAL WILDLIFE HABITAT FUNCTIONS

Structural/Biological Complexity

Plant Species Diversity

19-Native Woody Plant Species (#)	
0	0
1-3	[✓ 1]
4-6	2
7+	3

Vertical Diversity

20-Multiple Canopy Layers	
1	1
2	[✓ 2]
3+	3

Snags

21-Snags/Acre (20"+dbh,6' high)	
0	0
1	[✓ 1]
2-3	2
4+	3

Downed Material

22-Downed Logs/Acre (12"+ diam, 20'+ long	
1	1
2-3	[✓ 2]
4+	3

Non-Native Plants

23-Non-native Plant Species	
<10%	1
10-33%	-1
34-66%	[✓ -2]
67-100%	-4

Connectivity with other Ecosystems

24-Riparian Corridor Connected to Other PHS Polygons or Points?	
No	+0
Yes	[✓ +2]

Abundant Food Sources

25-Native Woody Plant Species (#)	
1-3	[✓ 1]
4-6	2
7+	3
specify:	

Available Water

26-Hydrological Characteristics	
Intermittent	1
Semi-permanent	2
Permanent	[✓ 3]

Moist and Moderate Microclimate

27-Temperature Microclimate Difference?	
Yes	+2
No	[✓ +0]
Method:	

General Observations and Wildlife Occurrences

-Osprey nest adjacent to
riparian area on man-made structure

EVALUATION SUMMARY

FISH HABITAT FUNCTIONS

FUNCTION	POSSIBLE POINTS	SCORE
Stream Flow Influence		
1-Vegetative Cover	3	1
2-Associated Wetlands	2	0
3-Springs or Seeps	3	0
4-Altered Hydrology	0	0
Influence on Water Temperature & D.O.		
5-Canopy Cover	3	1
6-Riffles	3	0
Control of Sedimentation		
7-Slope/Vegetative Cover	3	0
8-Vegetated Banks	3	1
Control of Stream Pollution		
9-Vegetative Cover	3	2
10-Associated Wetlands	2	0
Contribution to Food Web		
11-Canopy Cover	3	2
12-Dominant Tree Species	3	1
13-Large Woody Debris	3	0
Structural Stream Diversity		
14-Large Woody Debris	3	0
15-Pools	3	0
16-Riffles	3	1
17-Off-channel Habitat	3	0
18-Fines	2	2
HABITAT SUBTOTAL	***48***	11

TERRESTRIAL WILDLIFE HABITAT FUNCTIONS

FUNCTION	POSSIBLE POINTS	SCORE
Structural Complexity		
19-Native Woody Plant Species	3	1
20-Multiple Canopy Layers	3	2
21-Snags	3	1
22-Downed Logs	3	2
Connectivity		
23-Non-native Plant Species	1	-2
24-Connection to Other PHS	2	2
Abundant Food Sources		
25-Native Woody Plant Species	3	1
Available Water		
26-Hydrological Characteristics	3	3
Moist & Mild Microclimate		
27-Temperature/Micro. Difference	2	0
WILDLIFE SUBTOTAL (WS):	***23***	[illegible]
TOTAL: WS X % of Riparian Area that is Vegetated	23	10
TOTAL SCORE +1 FOR Type 1 Waters (FISH+WILDLIFE FUNCTIONS):	***72***	21

APPENDIX C

Wetland Rating Form for Western Washington (for Carty Lake Wetland)

WETLAND RATING FORM – WESTERN WASHINGTON

Version 2 – Updated July 2006 to increase accuracy and reproducibility among users

Name of wetland (if known): off-site, NWR Date of site visit: 8/23/07

Rated by Lisa F. Willis _____ Trained by Ecology? Yes☒ No☐ Date of Training: March 2007

SECTION: 44, 48 TOWNSHIP: 4N RANGE: 1W Is S/T/R in Appendix D? Yes__NoX

Map of wetland unit: Figure___ Estimated size~20 ac

DRAFT SUMMARY OF RATING

Category based on FUNCTIONS provided by wetland

I ___ II X III ___ IV ___

Category I = Score >=70
Category II = Score 51-69
Category III = Score 30-50
Category IV = Score < 30

Score for Water Quality Functions	22
Score for Hydrologic Functions	20
Score for Habitat Functions	22
TOTAL Score for functions	**64**

Category based on SPECIAL CHARACTERISTICS of wetland

I _____ II _____ Does not Apply X

Final Category **(choose the "highest" category from above)** II

Check the appropriate type and class of wetland being rated.

Wetland Type		Wetland Class	
Estuarine	☐	**Depressional**	☒
Natural Heritage Wetland	☐	**Riverine**	☐
Bog	☐	**Lake-fringe**	☐
Mature Forest	☐	**Slope**	☐
Old Growth Forest	☐	**Flats**	☐
Coastal Lagoon	☐	**Freshwater Tidal**	☐
Interdunal	☐		
None of the above		Check if unit has multiple HGM classes present	☐

Comments

Does the wetland being rated meet any of the criteria below?

If you answer YES to any of the questions below you will need to protect the wetland according to the regulations regarding the special characteristics found in the wetland.

Check List for Wetlands That Need Additional Protection (in addition to the protection recommended for its category)	YES	NO
SP1. *Has the wetland been documented as a habitat for any Federally listed Threatened or Endangered animal or plant species (T/E species)?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state or federal database.		unknown
SP2. *Has the wetland unit been documented as habitat for any State listed Threatened or Endangered animal species?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state database. Note: Wetlands with State listed plant species are categorized as Category 1 Natural Heritage Wetlands (see p. 19 of data form).		unknown
SP3. *Does the wetland contain individuals of Priority species listed by the WDFW for the state?*		unknown
SP4. *Does the wetland have a local significance in addition to its functions?* For example, the wetland has been identified in the Shoreline Master Program, the Critical Areas Ordinance, or in a local management plan as having special significance.		unknown

To complete the next part of the data sheet you will need to determine the Hydrogeomorphic Class of the wetland being rated.

The hydrogeomorphic classification groups wetlands into those that function in similar ways. This simplifies the questions needed to answer how well the wetland functions. The Hydrogeomorphic Class of a wetland can be determined using the key below. See p. 24 for more detailed instructions on classifying wetlands.

Comments These questions are marked unknown because research of state and federal listed species was not part of the project scope. Answering these questions has no affect on the final wetland rating.

Classification of Wetland Units in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the wetland usually controlled by tides (i.e. except during floods)?

☒NO – go to 2 ☐**YES** – the wetland class is **Tidal Fringe**

If yes, is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)? ☐ **YES – Freshwater Tidal Fringe** ☐**NO – Saltwater Tidal Fringe (Estuarine)**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is rated as an **Estuarine** wetland.* Wetlands that were called estuarine in the first and second editions of the rating system are called Salt Water Tidal Fringe in the Hydrogeomorphic Classification. Estuarine wetlands were categorized separately in the earlier editions, and this separation is being kept in this revision. To maintain consistency between editions, the term "Estuarine" wetland is kept. Please note, however, that the characteristics that define Category I and II estuarine wetlands have changed (see p.).

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

☒NO – go to 3 ☐**YES** – The wetland class is **Flats**

If your wetland can be classified as a "Flats" wetland, use the form for **Depressional** wetlands.

3. Does the wetland **meet both** of the following criteria?

☐ The vegetated part of the wetland is on the shores of a body of open water (without any vegetation on the surface) at least 20 acres (8 ha) in size;
☐ At least 30% of the open water area is deeper than 6.6 ft (2 m)?

☒NO – go to 4 ☐**YES** – The wetland class is **Lake-fringe (Lacustrine Fringe)**

4. Does the wetland **meet all** of the following criteria?

☐ The wetland is on a slope (*slope can be very gradual*),
☐ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks.
☐ The water leaves the wetland **without being impounded**?
NOTE: *Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks(depressions are usually <3ft diameter and less than 1 foot deep).*

☒NO - go to 5 ☐**YES** – The wetland class is **Slope**

Comments

5. Does the entire wetland unit **meet all** of the following criteria?

☐ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river
☐ The overbank flooding occurs at least once every two years.
NOTE: The riverine unit can contain depressions that are filled with water when the river is not flooding.

☒NO - go to 6 ☐ **YES** – The wetland class is **Riverine**

6. Is the wetland in a topographic depression in which water ponds, or is saturated to the surface, at some time of the year. *This means that any outlet, if present, is higher than the interior of the wetland.*

☐NO – go to 7 ☒**YES** – The wetland class is **Depressional**

7. Is the wetland located in a very flat area with no obvious depression and no overbank flooding. The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

☒NO – go to 8 ☐ **YES** – The wetland class is **Depressional**

8. Your wetland seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within your wetland. NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM Classes within the wetland unit being rated	HGM Class to Use in Rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake-fringe	Lake-fringe
Depressional + Riverine along stream within boundary	Depressional
Depressional + Lake-fringe	Depressional
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE under wetlands with special characteristics

If you are unable still to determine which of the above criteria apply to your wetland, or you have more than 2 HGM classes within a wetland boundary, classify the wetland as **Depressional** for the rating.

Comments

D	**Depressional and Flats Wetlands** **WATER QUALITY FUNCTION** – Indicators that the wetland unit functions to improve water quality	**Points** (only 1 score per box)
D	**D 1. Does the wetland have the potential to improve water quality?**	*(see p.38)*
D	D 1.1 Characteristics of surface water flows out of the wetland: Unit is a depression with no surface water leaving it (no outlet) points = 3 Wetland has an intermittently flowing, OR highly constricted, permanently flowing outlet points = 2 Wetland has an unconstricted, or slightly constricted, surface outlet *(permanently flowing)* points = 1 Unit is a "flat" depression (Q. 7 on key), or in the Flats class, with permanent surface outflow **and no obvious natural outlet** and/or outlet is a man-made ditch points = 1 *(if ditch is not permanently flowing treat unit as "intermittently flowing")* Provide photo or drawing	Figure__ 2
D	D 1.2 The soil 2 inches below the surface (or duff layer) is clay or organic *(use NRCS definitions)* YES points = 4 NO points = 0	0
D	D 1.3 Characteristics of persistent vegetation (emergent, shrub, and/or forest class): Wetland has persistent, ungrazed, vegetation > = 95% of area points = 5 Wetland has persistent, ungrazed, vegetation > = 1/2 of area points = 3 Wetland has persistent, ungrazed vegetation > = 1/10 of area points = 1 Wetland has persistent, ungrazed vegetation <1/10 of area points = 0 Map of Cowardin vegetation classes	Figure__ 5
D	D1.4 Characteristics of seasonal ponding or inundation. *This is the area of the wetland that is ponded for at least 2 months, but dries out sometime during the year. Do not count the area that is permanently ponded. Estimate area as the average condition 5 out of 10 yrs.* Area seasonally ponded is > ½ total area of wetland points = 4 Area seasonally ponded is > ¼ total area of wetland points = 2 Area seasonally ponded is < ¼ total area of wetland points = 0 Map of Hydroperiods	Figure__ 4
D	**Total for D 1** *Add the points in the boxes above*	11
D	**D 2. Does the wetland have the opportunity to improve water quality?** Answer YES if you know or believe there are pollutants in groundwater or surface water coming into the wetland that would otherwise reduce water quality in streams, lakes or groundwater downgradient from the wetland? *Note which of the following conditions provide the sources of pollutants. A unit may have pollutants coming from several sources, but any single source would qualify as opportunity.* ☐ Grazing in the wetland or within 150 ft ☐ Untreated stormwater discharges to wetland ☐ Tilled fields or orchards within 150 ft of wetland ☐ A stream or culvert discharges into wetland that drains developed areas, residential areas, farmed fields, roads, or clear-cut logging ☒ Residential, urban areas, golf courses are within 150 ft of wetland ☐ Wetland is fed by groundwater high in phosphorus or nitrogen ☐ Other ____ ☒ **YES** multiplier is 2 ☐ **NO** multiplier is 1	*(see p.44)* multiplier 2
D	**TOTAL - Water Quality Functions** Multiply the score from D1 by D2 *Add score to table on p. 1*	22

D	**Depressional and Flats Wetlands** HYDROLOGIC FUNCTIONS – Indicators that wetland functions to reduce flooding and stream degradation	**Points**
	D 3. Does the wetland have the potential to reduce flooding and erosion?	*(see p.46)*
D	D 3.1 Characteristics of surface water flows out of the wetland unit Unit is a depression with no surface water leaving it (no outlet) points = 4 Unit has an intermittently flowing, OR highly constricted permanently flowing outlet points = 2 Unit is flat depression (Q. 7 on key), or in the Flats class, with permanent surface outflow **and no obvious natural outlet** and/or is a man-made ditch points = 1 *(If ditch is not permanently flowing treat unit as "intermittently flowing")* Unit has an unconstricted, or slightly constricted, surface outlet (permanently flowing) points = 0	Figure__ 2
D	D 3.2 Depth of storage during wet periods *Estimate the height of ponding above the bottom of the outlet. For units with no outlet measure from the surface of permanent water or deepest part (if dry).* Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 The wetland is a "headwater" wetland points = 5 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 Wetland is flat (yes to Q 2 or Q. 7 on key) but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft points = 0	Figure_ 5
D	D 3.3 Contribution of wetland to storage in the watershed *Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.* The area of the basin is less than 10 times the area of unit points = 5 The area of the basin is 10 to 100 times the area of the unit points = 3 The area of the basin is more than 100 times the area of the unit points = 0 Entire unit is in the FLATS class points = 5	Figure__ 3
D	**Total for D 3** *Add the points in the boxes above*	10
D	**D 4. Does the wetland have the opportunity to reduce flooding and erosion?** Answer YES if the wetland is in a location in the watershed where the flood storage, or reduction in water velocity it provides, helps protect downstream property and aquatic resources from flooding or excessive and/or erosive flows. Answer NO if the water coming into the wetland is controlled by a structure such as flood gate, tide gate, flap valve, reservoir etc. OR you estimate that more than 90% of the water in the wetland is from groundwater in areas where damaging groundwater flooding does not occur. *Note which of the following indicators of opportunity apply.* ☒ Wetland is in a headwater of a river or stream that has flooding problems ☒ Wetland drains to a river or stream that has flooding problems ☐ Wetland has no outlet and impounds surface runoff water that might otherwise flow into a river or stream that has flooding problems ☐ Other ____ ☒ **YES** multiplier is 2 ☐ **NO** multiplier is 1	*(see p.49)* multiplier 2
D	**TOTAL - Hydrologic Functions** Multiply the score from D 3 by D 4 *Add score to table on p. 1*	20

Comments

These questions apply to wetlands of all HGM classes **Points** (only 1 score per box)

HABITAT FUNCTIONS – Indicators that wetland functions to provide important habitat

H 1. Does the wetland have the potential to provide habitat for many species?

H 1.1 Vegetation structure *(see p. 72)* **Figure__**

Check the types of vegetation classes present (as defined by Cowardin)- Size threshold for each class is ¼ acre or more than 10% of the area if unit is smaller than 2.5 acres.

☐ Aquatic bed
☒ Emergent plants
☒ Scrub/shrub (areas where shrubs have >30% cover)
☒ Forested (areas where trees have >30% cover)

If the unit has a forested class check if:

☐ Forested areas have 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the forested polygon

Add the number of vegetation types that qualify. If you have:

4 types or more	points = 4
3 types	points = 2
2 types	points = 1
1 type	points = 0

Map of Cowardin vegetation classes

2

H 1.2 Hydroperiods *(see p. 73)* **Figure__**

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ acre to count. (See text for description of hydroperiods.)

☒ Permanently flooded or inundated
☒ Seasonally flooded or inundated
☐ Occasionally flooded or inundated
☒ Saturated only
☐ Permanently flowing stream or river in, or adjacent to, the wetland
☐ Seasonally flowing stream or river in, or adjacent to, the wetland
☐ ***Lake-fringe wetland* = 2 points**
☐ ***Freshwater tidal wetland* = 2 points**

4 or more types present	points = 3
3 types present	points = 2
2 types present	points = 1

2

H 1.3 Richness of Plant Species *(see p. 75)*

Count the number of plant species in the wetland that cover at least 10 ft². *(Different patches of the same species can be combined to meet the size threshold.)*

You do not have to name the species.

Do not include Eurasian Milfoil, reed canarygrass, purple loosestrife, Canadian Thistle.

If you counted:	> 19 species	points = 2
	5 - 19 species	points = 1
List species below if you want to:	<5 species	points = 0

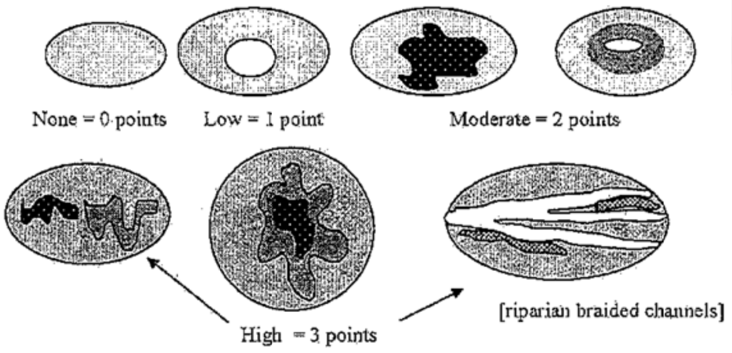
2

Total for page 6

H 1.4 Interspersion of habitats *(see p. 76)* **Figure__**

Decide from the diagrams below whether interspersion between Cowardin vegetation classes (described in H 1.1), or classes and unvegetated areas (can include open water or mudflats) is high, medium, low, or none.

3



NOTE: If you have four or more classes or three vegetation classes and open water the rating is always "high". Use map of Cowardin vegetation classes

H 1.5 Special Habitat Features: *(see p. 77)*

Check the habitat features that are present in the wetland. The number of checks is the number of points you put into the next column.

☒ Large, downed, woody debris within the wetland (>4in. diameter and 6 ft long).
☐ Standing snags (diameter at bottom >4 inches) in the wetland
☐ Undercut banks are present for at least 6.6 ft. (2m) and/or overhanging vegetation extends at least 3.3 ft (1m) over a stream (or ditch) in, or contiguous with the unit, for at least 33 ft (10m)
☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning (>30 degree slope) OR signs of recent beaver activity are present *(cut shrubs or trees that have not yet turned grey/brown)*
☒ At least ¼ acre of thin-stemmed persistent vegetation or woody branches are present in areas that are permanently or seasonally inundated *(structures for egg-laying by amphibians)*
☐ Invasive plants cover less than 25% of the wetland area in each stratum of plants

Note: The 20% stated in early printings of the manual on page 78 is an error

2

H 1. TOTAL Score – potential for providing habitat
Add the scores from H1.1, H1.2, H1.3, H1.4, H1.5 11

Comments:

H 2. Does the wetland have the opportunity to provide habitat for many species?)	
H 2.1 Buffers *(see p. 80)* *Choose the description that best represents condition of buffer of wetland. The highest scoring criterion that applies to the wetland is to be used in the rating. See text for definition of "undisturbed."* ☐ 100 m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% of circumference. No structures are within the undisturbed part of buffer. (relatively undisturbed also means no grazing, no landscaping, no daily human use) Points = 5 ☒ 100 m (330 ft) of relatively undisturbed vegetated areas, rocky areas, or open water >50% circumference. **Points = 4** ☐ 50 m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% circumference. **Points = 4** ☐ 100 m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water >25% circumference. **Points = 3** ☐ 50 m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water for > 50% circumference. **Points = 3** **If buffer does not meet any of the three criteria above** ☐ No paved areas (except paved trails) or buildings within 25 m (80ft) of wetland > 95% circumference. Light to moderate grazing, or lawns are OK. **Points = 2** ☐ No paved areas or buildings within 50m of wetland for >50% circumference. Light to moderate grazing or lawns are OK **Points = 2** ☐ Heavy grazing in buffer. **Points = 1** ☐ Vegetated buffers are <2m wide (6.6ft) for more than 95% of the circumference (e.g. tilled fields, paving, basalt bedrock extend to edge of wetland) **Points = 0** ☐ Buffer does not meet any of the criteria above. **Points = 1** Aerial photo showing buffers	Figure__ 4
H 2.2 Corridors and Connections *(see p. 81)* H 2.2.1 Is the wetland part of a relatively undisturbed and unbroken vegetated corridor (either riparian or upland) that is at least 150 ft wide, has at least 30% cover of shrubs, forest or native undisturbed prairie, that connects to estuaries, other wetlands or undisturbed uplands that are at least 250 acres in size? *(dams in riparian corridors, heavily used gravel roads, paved roads, are considered breaks in the corridor).* ☐YES = **4 points** *(go to H 2.3)* ☒NO = go to H 2.2.2 H 2.2.2 Is the wetland part of a relatively undisturbed and unbroken vegetated corridor (either riparian or upland) that is at least 50ft wide, has at least 30% cover of shrubs or forest, and connects to estuaries, other wetlands or undisturbed uplands that are at least 25 acres in size? **OR a Lake-fringe** wetland, if it does not have an undisturbed corridor as in the question above? ☒YES = **2 points** *(go to H 2.3)* ☐NO = H 2.2.3 H 2.2.3 Is the wetland: within 5 mi (8km) of a brackish or salt water estuary OR within 3 mi of a large field or pasture (>40 acres) OR within 1 mi of a lake greater than 20 acres? ☐YES = **1 point** ☐NO = **0 points**	2

Total for page 6

H 2.3 Near or adjacent to other priority habitats listed by WDFW *(see p. 82)* Which of the following priority habitats are within 330ft (100m) of the wetland? *(NOTE: the connections do not have to be relatively undisturbed.* *These are DFW definitions. Check with your local DFW biologist if there are any questions* ☒ **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. ☐ **Aspen Stands:** Pure or mixed stands of aspen greater than 0.8 ha (2 acres) ☐ **Cliffs:** Greater than 7.6 m (25 ft) high and occurring below 5000 ft ☐ **Old-growth forests:** (Old-growth west of Cascade crest) Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings, with at least 20 trees/ha (8 trees/acre) > 81 cm (32 in) dbh or > 200 years of age. ☐ **Mature forests:** Stands with average diameters exceeding 53 cm (21 in) dbh, crown cover may be less that 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80 - 200 years old west of the Cascade crest ☐ **Prairies:** Relatively undisturbed areas (as indicated by dominance of native plants) where grasses and/or forbs form the natural climax plant community. ☐ **Talus:** Homogenous areas of rock rubble ranging in average size 0.15 - 2.0 m (0.5 - 6.5 ft), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. ☐ **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages ☒ **Oregon white Oak:** Woodlands Stands of pure oak or oak/conifer associations where canopy coverage of the oak component of the stand is 25%. ☐ **Urban Natural Open Space:** A priority species resides within or is adjacent to the open space and uses it for breeding and/or regular feeding; and/or the open space functions as a corridor connecting other *priority habitats*, especially those that would otherwise be isolated; and/or the open space is an isolated remnant of natural habitat larger than 4 ha (10 acres) and is surrounded by urban development ☐ **Estuary/Estuary-like:** Deepwater tidal habitats and adjacent tidal wetlands, usually semi-enclosed by land but with open, partly obstructed or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines there is appreciable dilution of sea water Estuarine habitat extends upstream and landward to where ocean-derived salts measure less than 0.5ppt. during the period of average annual low flow. Includes both estuaries and lagoons. ☐ **Marine/Estuarine Shorelines:** Shorelines include the intertidal and subtidal zones of beaches, and may also include the backshore and adjacent components of the terrestrial landscape (e.g., cliffs, snags, mature trees, dunes, meadows) that are important to shoreline associated fish and wildlife and that contribute to shoreline function (e.g., sand/rock/log recruitment, nutrient contribution, erosion control). If wetland has **3 or more** priority habitats = **4 points** If wetland has **2** priority habitats = **3 points** If wetland has **1** priority habitat = **1 point** No habitats = 0 points *Note: All vegetated wetlands are by definition a priority habitat but are not included in this list. Nearby wetlands are addressed in question H 2.4)*	3

H 2.4 Wetland Landscape *(choose the one description of the landscape around the wetland that best fits) (see p. 84)* There are at least 3 other wetlands within ½ mile, and the connections between them are relatively undisturbed (light grazing between wetlands OK, as is lake shore with some boating, but connections should NOT be bisected by paved roads, fill, fields, or other development. points = 5 The wetland is Lake-fringe on a lake with little disturbance and there are 3 other lake-fringe wetlands within ½ mile points = 5 There are at least 3 other wetlands within ½ mile, BUT the connections between them are disturbed points = 3 The wetland is Lake-fringe on a lake with disturbance and there are 3 other lake-fringe wetlands within ½ mile points = 3 There is at least 1 wetland within ½ mile. points = 2 There are no wetlands within ½ mile. points = 0	2
H 2. TOTAL Score -opportunity for providing habitat *Add the scores in the column above*	11
TOTAL for H 1 from page 14	11
Total Score for Habitat Functions – add the points for H 1, H 2 and record the result on p. 1	22

Comments

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Please determine if the wetland meets the attributes described below and circle the appropriate answers and Category.

Wetland Type *Check off any criteria that apply to the wetland. Select the appropriate Category (from dropdown menu in Category column) when the appropriate criteria are met.*	**Category**
SC 1.0 Estuarine wetlands ***(see p. 86)*** Does the wetland meet the following criteria for Estuarine wetlands? ☐ The dominant water regime is tidal, ☐ Vegetated, and ☐ With a salinity greater than 0.5 ppt. ☐YES = Go to SC 1.1 ☒NO	
SC 1.1 Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? ☐YES = Category I ☐NO go to SC 1.2	Cat. I
SC 1.2 Is the wetland at least 1 acre in size and meets at least two of the following three conditions? YES = Category I NO = Category II ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. If the non-native *Spartina* spp. are the only species that cover more than 10% of the wetland, then the wetland should be given a dual rating (I/II). The area of Spartina would be rated a Category II while the relatively undisturbed upper marsh with native species would be a Category I. Do not, however, exclude the area of Spartina in determining the size threshold of 1 acre. ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland has at least 2 of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	Cat. I Cat. II Dual rating I/II

SC 2.0 Natural Heritage Wetlands *(see p. 87)*

Natural Heritage wetlands have been identified by the Washington Natural Heritage Program/DNR as either high quality undisturbed wetlands or wetlands that support state Threatened, Endangered, or Sensitive plant species.

Cat. I

SC 2.1 Is the wetland being rated in a Section/Township/Range that contains a Natural Heritage wetland? *(this question is used to screen out most sites before you need to contact WNHP/DNR)*

S/T/R information from Appendix D ☒ or accessed from WNHP/DNR web site ☐

YES ☐ – contact WNHP/DNR (see p. 79) and go to SC 2.2 NO ☒

SC 2.2 Has DNR identified the wetland as a high quality undisturbed wetland or as or as a site with state threatened or endangered plant species?

☐YES = Category I ☒NO__not in a Heritage Wetland

SC 3.0 Bogs *(see p. 87)*

Does the wetland (or part of the wetland) meet both the criteria for soils and vegetation in bogs? *Use the key below to identify if the wetland is a bog.* ***If you answer yes you will still need to rate the wetland based on its functions.***

1. Does the unit have organic soil horizons (i.e. layers of organic soil), either peats or mucks, that compose 16 inches or more of the first 32 inches of the soil profile? (See Appendix B for a field key to identify organic soils)
   Yes ☐ - go to Q. 3 No ☒ go to Q. 2
2. Does the wetland have organic soils, either peats or mucks that are less than 16 inches deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on a lake or pond?
   Yes ☐ - go to Q. 3 No ☒ - Is not a bog for purpose of rating
3. Does the wetland have more than 70% cover of mosses at ground level, AND other plants, if present, consist of the "bog" species listed in Table 3 as a significant component of the vegetation (more than 30% of the total shrub and herbaceous cover consists of species in Table 3)?
   Yes ☐– Is a bog for purpose of rating No ☐-go to Q. 4
   NOTE: If you are uncertain about the extent of mosses in the understory you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16" deep. If the pH is less than 5.0 and the "bog" plant species in Table 3 are present, the wetland is a bog.
4. Is the wetland forested (> 30% cover) with sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Englemann's spruce, or western white pine, WITH any of the species (or combination of species) on the bog species plant list in Table 3 as a significant component of the ground cover *(> 30% coverage of the total shrub/herbaceous cover)?*
   YES ☐ = Category I NO ☐ Is not a bog for purpose of rating

Cat. I

SC 4.0 Forested Wetlands *(see p. 90)*

Does the wetland have at least 1 acre of forest that meets one of these criteria for the Department of Fish and Wildlife's forests as priority habitats? *If you answer yes you will still need to rate the wetland based on its functions.*

☐ **Old-growth forests:** (west of Cascade crest) Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/acre (20 trees/hectare) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 inches (81 cm) or more.

NOTE: The criterion for dbh is based on measurements for upland forests. Two-hundred year old trees in wetlands will often have a smaller dbh because their growth rates are often slower. The DFW criterion is and "OR" so old-growth forests do not necessarily have to have trees of this diameter.

☐ **Mature forests:** (west of the Cascade Crest) Stands where the largest trees are 80 – 200 years old OR have average diameters (dbh) exceeding 21 inches (53cm); crown cover may be less that 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth.

☐YES = Category I ☒ NO not a forested wetland with special characteristics

Cat. I

SC 5.0 Wetlands in Coastal Lagoons *(see p. 91)*

Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?

☐ The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks

☐ The lagoon in which the wetland is located contains surface water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon *(needs to be measured near the bottom)*

☐ YES = Go to SC 5.1 NO ☒ not a wetland in a coastal lagoon

SC 5.1 Does the wetland meet all of the following three conditions?

☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of invasive plant species (see list of invasive species on p. 74).

☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland.

☐ The wetland is larger than 1/10 acre (4350 square feet)

YES ☐= Category I NO ☐= Category II

SC 6.0 Interdunal Wetlands *(see p. 93)* Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ☐ YES = Go to SC 6.1 ☒NO -- not an interdunal wetland for rating ***If you answer yes you will still need to rate the wetland based on its functions.*** In practical terms that means the following geographic areas: • Long Beach Peninsula – lands west of SR103 • Grayland-Westport- lands west of SR 105 • Ocean Shores-Copalis- lands west of SR 115 and SR 109 SC 6.1 Is the wetland one acre or larger, or is it in a mosaic of wetlands that is one acre or larger? ☐ YES = Category II ☐ NO go to SC 6.2	
SC 6.2 Is the wetland between 0.1 and 1 acre, or is it in a mosaic of wetlands that is between 0.1 and 1 acre,?	Cat.II
☐ YES = Category III	Cat.III
Category of wetland based on Special Characteristics *Choose the "highest" rating if wetland falls into several categories, and record on p. 1* If you answered NO for all types enter "Not Applicable" on p. 1.	**N/A**

Comments

ATTACHMENT B

CONCEPTUAL SITE DEVELOPMENT PLAN FOR THE LAKE RIVER INDUSTRIAL SITE

1A	OFFICE PARKING		60,000 SF -3 STORIES 3.4 PER 1K SF - 204 CARS
1B	HOTEL/RETAIL PARKING		70,000 SF - 3 STORIES HOTEL 1 PER ROOM, RETAIL 5 PER 1K PER - 140 CARS
1C	OFFICE PARKING		40,000 SF - 2 -3 STORIES 3.3 PER 1K SF - 132 CARS
1D	KIOSK/RESTROOMS		
1E	VISITORS CENTER	TOTAL	170,000 SF / 476 CARS (SURFACE)
2A	OFFICE PARKING		80,000 SF - 4 STORIES 3.4 PER 1K SF - 272 CARS
2B	RETAIL/OFFICE PARKING		60,000 SF - 3 STORIES RETAIL AT 5 PER 1K SF, OFFICE AT 3.4 PER 1K SF - 236 CARS
2C	OFFICE PARKING		30,000 SF - 2 STORIES 3.3 PER 1K SF - 99 CARS
2D	BOAT MARINA	TOTAL	40 SLIP 340,000 SF / 1,083 CARS (SURFACE)
3A	OFFICE PARKING		80,000 SF - 4 STORIES 3.4 PER 1K SF - 272 CARS
3B	RETAIL/OFFICE PARKING		60,000 SF - 3 STORIES RETAIL 5 PER 1K SF, OFFICE 3.4 PER 1K SF - 236 CARS
3C	PUBLIC SAFETY DOCK	TOTAL	480,000 SF / 1,591 CARS (811 - SURFACE; 780 - 3 STORY STRUCTURE)
4	OFFICE PARKING	TOTAL	80,000 SF - 4 STORIES 3.4 PER 1K SF - 272 CARS 560,000 SF / 1,863 CARS (663 - SURFACE; 1,200 - 3 STORY STRUCTURE)
5	OFFICE PARKING	TOTAL	80,000 SF - 4 STORIES 3.4 PER 1K SF - 272 CARS 640,000 SF / 2,135 CARS (620 - SURFACE; 1,515 - 5 STORY STRUCTURE)
6	OFFICE PARKING	TOTAL	80,000 SF - 4 STORIES OFFICE 3.4 PER 1K SF - 204 CARS, RETAIL 5 PER 1K SF - 100 CARS 720,000 SF / 2,450 CARS (575 - SURFACE; 1,875 - 6 STORY STRUCTURE)
7	**CITY / PORT PARTNERSHIP**		
	OFFICE		**100,000 SF - 4 STORIES**
	PARKING		**3.4 PER 1K SF - 340 CARS**
		TOTAL	**820,000 SF / 2,790 CARS (635 - SURFACE; 2,155 - 5 & 6 STORY STRUCTURE)**

Port of Ridgefield

PORT OF RIDGEFIELD

MILLER'S LANDING - 12.17.08 - PHASE 7

GROUP MACKENZIE

ATTACHMENT C

LAKE RIVER INDUSTRIAL SITE PLANTING LIST

Plants without a Tap Root List

Trees

Abies concolor	White Fir
Acer japonicum*	Japanese Maple
Acer macrophyllum	Big-Leaf Maple
Acer palmatum*	Japanese Maple
Acer rubrum*	Red Maple
Betula papyrifera*	Paper Maple
Betula pendula	Weeping Birch
Carpinus betulus*	European Hornbeam
Cercidiphyllum japonicum	Katsuratree
Cornus florida	Flowering Dogwood
Fagus sylvatica*	European Beech
Fraxinus pennsylvanica*	Green Ash
Larix occidentalis	Western Larch
Picea pungens*	Colorado Spruce
Picea sitchensis	Sitka Spruce
Platanus x acerfolia	London Plane Tree
Populus balsamifera	Black Cottonwood
Prunus emarginata	Bitter Cherry
Prunus serrulata	Japanese Flowering Cherry
Psuedotsug menziesii	Douglas Fir
Salix sp.	Willows
Styrax japonicas	Japanese Snowball
Thuja occidentalis*	Arborvitae
Thuja plicata	Western Red Cedar
Tilia cordata	Little Leaf Linden

Shrubs

Abelia x grandifolia	Glossy Abelia
Acer circinatum	Vine Maple
Andromeda polifolia	Bog Rosemary
Arcostaphylos uvu-ursi	Kinnikinnik
Azalea sp*	Azaleas
Berberis Thunbergii*	Japanese Barberry
Clethra alnifolia	Summersweet Clethra
Cornus alba*	Dogwood
Cornus siricea*	Redosier Dogwood
Deutzia gracilis	Slender Deutzia
Euonymus fortunei*	Wintercreeper Euonymus
Gautheria shallon	Salal
Hamamelis mollis*	Chinese Witchhazel
Hamamelis Virginia	Witch Hazel
Kalmia latifolia	Mountain Laurel
Lonicera japonica*	Japanese Honeysuckle
Mahonia aquifolium 'Compacta' - Compact Oregon Grape	
Oemleria cerasiformis	Indian plum
Physocarpus capitatus	Western Ninebark
Rosa Gymnocarpa	Baldhip Rose
Rhododendron sp.*	Rhododendrons
Sambucus cerulean	Blue elderberry
Sambucus racemosa	Red elderberry
Symphoricarpos albus	Snowberry
Vaccinium corymbosum	Highbush blueberry
Viburnum davidii -	Davids Viburnum
Vaccinium ovatum	Evergreen huckleberry
Viburnum lantana	Wayfaring Tree Viburnum
Viburnum opulus*	European Cranberrybush

Ground Cover

The following list includes anticipated ground cover for the site. However, other perennial herbaceous plants, annual flowers, grasses, sedges, ferns, and mosses are acceptable as well.

Aruncus dioicus	Goat's Beard	Helictotrichon sempervirens	Blue Oat Grass
Belchnum spicant	Deer fern	Miscanthus Sinensis	Maiden Grass
Calluna vulgaris*	Scotch Heather	Pennisetum alopecuroides	Fountain Grass
Camassia quamash	Common Camas	Sesleria autumnalis	Autumn Moor Grass
Cornus Canadensis	Bunchberry	Anemone hybrida	Japanese Anemone
Dicentra Formosa	Bleeding Heart	Daffodil -	Narcissus
Fragaria chiloensis	Coastal Strawberry	Echinacea purpurea -	Purple Cone Flower
Fragaria vesca	Woodland Strawberry	Hemerocallis -	Daylily
Maianthemum dilatatum	False Lily-of-the-Valley	Liriope muscari -	Lilyturf
Oxalis oregano	Wood sorrel	Rudbekia hirta -	Black-eyed Susan
Polystichum munitum	Sword fern	Sedum -	Stonecrop
Vancouveria hexandra	Inside-out flower	Lawn mixes	
Carex -	Sedges		
Deschampsia caespitosa	Tufted Hair Grass		

* Including varieties

Note: This list is not all inclusive and other plant material may be added with if they do not have a tap root.

Data for list was obtained from the following sources:

- US Forest Service Handbook 654 http://www.na.fs.fed.us/pubs/silvics_manual/table_of_contents.shtm
- US Forest Service Shrub list http://www.fs.fed.us/database/feis/plants/shrub/
- USDA Natural Resources Conservation Service – Plants Data Base- http://plants.usda.gov/index.html
- *The Complete Plant Selection Guide for Landscape Design* by Marc C. Stoecklein

ATTACHMENT D

PROUCL CALCULATIONS

	A	B	C	D	E	F	G	H	I	J	K	L
1				General UCL Statistics for Data Sets with Non-Detects								
2	User Selected Options											
3	From File			WorkSheet.wst								
4	Full Precision			OFF								
5	Confidence Coefficient			95%								
6	Number of Bootstrap Operations			2000								
7												
8												
9	Dioxin (concentrations in nanograms per kilogram)											
10												
11	General Statistics											
12	Number of Valid Observations					45	Number of Distinct Observations					45
13												
14	Raw Statistics						Log-transformed Statistics					
15	Minimum					1.7	Minimum of Log Data					0.531
16	Maximum					7924	Maximum of Log Data					8.978
17	Mean					899.4	Mean of log Data					4.939
18	Median					132	SD of log Data					2.286
19	SD					1820						
20	Coefficient of Variation					2.024						
21	Skewness					2.905						
22												
23	Relevant UCL Statistics											
24	Normal Distribution Test						Lognormal Distribution Test					
25	Shapiro Wilk Test Statistic					0.536	Shapiro Wilk Test Statistic					0.962
26	Shapiro Wilk Critical Value					0.945	Shapiro Wilk Critical Value					0.945
27	Data not Normal at 5% Significance Level						Data appear Lognormal at 5% Significance Level					
28												
29	Assuming Normal Distribution						Assuming Lognormal Distribution					
30	95% Student's-t UCL					1355	95% H-UCL					7841
31	95% UCLs (Adjusted for Skewness)						95% Chebyshev (MVUE) UCL					5095
32	95% Adjusted-CLT UCL					1471	97.5% Chebyshev (MVUE) UCL					6614
33	95% Modified-t UCL					1375	99% Chebyshev (MVUE) UCL					9596
34												
35	Gamma Distribution Test						Data Distribution					
36	k star (bias corrected)					0.35	Data Follow Appr. Gamma Distribution at 5% Significance Level					
37	Theta Star					2568						
38	MLE of Mean					899.4						
39	MLE of Standard Deviation					1520						
40	nu star					31.52						
41	Approximate Chi Square Value (.05)					19.7	Nonparametric Statistics					
42	Adjusted Level of Significance					0.0447	95% CLT UCL					1346
43	Adjusted Chi Square Value					19.38	95% Jackknife UCL					1355
44							95% Standard Bootstrap UCL					1335
45	Anderson-Darling Test Statistic					0.994	95% Bootstrap-t UCL					1614
46	Anderson-Darling 5% Critical Value					0.848	95% Hall's Bootstrap UCL					1394
47	Kolmogorov-Smirnov Test Statistic					0.132	95% Percentile Bootstrap UCL					1368
48	Kolmogorov-Smirnov 5% Critical Value					0.142	95% BCA Bootstrap UCL					1506
49	Data follow Appr. Gamma Distribution at 5% Significance Level						95% Chebyshev(Mean, Sd) UCL					2082
50							97.5% Chebyshev(Mean, Sd) UCL					2594

	A	B	C	D	E	F	G	H	I	J	K	L
51	**Assuming Gamma Distribution**										99% Chebyshev(Mean, Sd) UCL	3599
52					95% Approximate Gamma UCL	1440						
53					95% Adjusted Gamma UCL	1463						
54												
55	**Potential UCL to Use**										Use 95% Adjusted Gamma UCL	1463
56												
57												
58	**Arsenic (concentrations in milligrams per kilogram)**											
59												
60	**General Statistics**											
61					Number of Valid Data	529					Number of Detected Data	520
62					Number of Distinct Detected Data	180					Number of Non-Detect Data	9
63											Percent Non-Detects	1.70%
64												
65	**Raw Statistics**						**Log-transformed Statistics**					
66					Minimum Detected	0.5					Minimum Detected	-0.693
67					Maximum Detected	622					Maximum Detected	6.433
68					Mean of Detected	13.13					Mean of Detected	1.718
69					SD of Detected	46.04					SD of Detected	1.01
70					Minimum Non-Detect	1					Minimum Non-Detect	0
71					Maximum Non-Detect	2.3					Maximum Non-Detect	0.833
72												
73	Note: Data have multiple DLs - Use of KM Method is recommended										Number treated as Non-Detect	96
74	For all methods (except KM, DL/2, and ROS Methods),										Number treated as Detected	433
75	Observations < Largest ND are treated as NDs										Single DL Non-Detect Percentage	18.15%
76												
77	**UCL Statistics**											
78	**Normal Distribution Test with Detected Values Only**						**Lognormal Distribution Test with Detected Values Only**					
79					Lilliefors Test Statistic	0.393					Lilliefors Test Statistic	0.104
80					5% Lilliefors Critical Value	0.0389					5% Lilliefors Critical Value	0.0389
81	**Data not Normal at 5% Significance Level**						**Data not Lognormal at 5% Significance Level**					
82												
83	**Assuming Normal Distribution**						**Assuming Lognormal Distribution**					
84					DL/2 Substitution Method						DL/2 Substitution Method	
85					Mean	12.92					Mean	1.684
86					SD	45.67					SD	1.035
87					95% DL/2 (t) UCL	16.2					95% H-Stat (DL/2) UCL	10.05
88												
89					Maximum Likelihood Estimate(MLE) Method						Log ROS Method	
90					Mean	5.852					Mean in Log Scale	1.685
91					SD	51.33					SD in Log Scale	1.035
92					95% MLE (t) UCL	9.529					Mean in Original Scale	12.93
93					95% MLE (Tiku) UCL	9.387					SD in Original Scale	45.67
94											95% Percentile Bootstrap UCL	16.34
95											95% BCA Bootstrap UCL	17.08
96												
97	**Gamma Distribution Test with Detected Values Only**						**Data Distribution Test with Detected Values Only**					
98					k star (bias corrected)	0.702	**Data do not follow a Discernable Distribution (0.05)**					
99					Theta Star	18.72						
100					nu star	729.7						

	A	B	C	D	E	F	G	H	I	J	K	L
101												
102					A-D Test Statistic	45.92	**Nonparametric Statistics**					
103					5% A-D Critical Value	0.802					Kaplan-Meier (KM) Method	
104					K-S Test Statistic	0.802					Mean	12.93
105					5% K-S Critical Value	0.0417					SD	45.63
106	**Data not Gamma Distributed at 5% Significance Level**										SE of Mean	1.986
107											95% KM (t) UCL	16.2
108	**Assuming Gamma Distribution**										95% KM (z) UCL	16.2
109					Gamma ROS Statistics using Extrapolated Data						95% KM (jackknife) UCL	16.2
110					Minimum	1E-09					95% KM (bootstrap t) UCL	18.39
111					Maximum	622					95% KM (BCA) UCL	16.87
112					Mean	12.91					95% KM (Percentile Bootstrap) UCL	16.39
113					Median	5					95% KM (Chebyshev) UCL	21.59
114					SD	45.68					97.5% KM (Chebyshev) UCL	25.33
115					k star	0.515					99% KM (Chebyshev) UCL	32.69
116					Theta star	25.05						
117					Nu star	545.4	**Potential UCLs to Use**					
118					AppChi2	492.2					95% KM (Chebyshev) UCL	21.59
119					95% Gamma Approximate UCL	14.31						
120					95% Adjusted Gamma UCL	14.31						
121	**Note: DL/2 is not a recommended method.**											
122												
123												
124	**Pentachlorophenol (concentrations in micrograms per kilogram)**											
125												
126	**General Statistics**											
127					Number of Valid Data	602					Number of Detected Data	264
128					Number of Distinct Detected Data	175					Number of Non-Detect Data	338
129											Percent Non-Detects	56.15%
130												
131	**Raw Statistics**						**Log-transformed Statistics**					
132					Minimum Detected	5.1					Minimum Detected	1.629
133					Maximum Detected	2000000					Maximum Detected	14.51
134					Mean of Detected	33696					Mean of Detected	7.121
135					SD of Detected	145302					SD of Detected	2.65
136					Minimum Non-Detect	5					Minimum Non-Detect	1.609
137					Maximum Non-Detect	330000					Maximum Non-Detect	12.71
138												
139	Note: Data have multiple DLs - Use of KM Method is recommended										Number treated as Non-Detect	595
140	For all methods (except KM, DL/2, and ROS Methods),										Number treated as Detected	7
141	Observations < Largest ND are treated as NDs										Single DL Non-Detect Percentage	98.84%
142												
143	**UCL Statistics**											
144	**Normal Distribution Test with Detected Values Only**						**Lognormal Distribution Test with Detected Values Only**					
145					Lilliefors Test Statistic	0.408					Lilliefors Test Statistic	0.0838
146					5% Lilliefors Critical Value	0.0545					5% Lilliefors Critical Value	0.0545
147	**Data not Normal at 5% Significance Level**						**Data not Lognormal at 5% Significance Level**					
148												

	A	B	C	D	E	F	G	H	I	J	K	L
149	**Assuming Normal Distribution**						**Assuming Lognormal Distribution**					
150					DL/2 Substitution Method						DL/2 Substitution Method	
151					Mean	15564					Mean	5.184
152					SD	97823					SD	2.928
153					95% DL/2 (t) UCL	22132					95% H-Stat (DL/2) UCL	11784
154												
155					Maximum Likelihood Estimate(MLE) Method	N/A					Log ROS Method	
156	**MLE yields a negative mean**										Mean in Log Scale	3.551
157											SD in Log Scale	4.079
158											Mean in Original Scale	14791
159											SD in Original Scale	97563
160											95% Percentile Bootstrap UCL	21998
161											95% BCA Bootstrap UCL	25607
162												
163	**Gamma Distribution Test with Detected Values Only**						**Data Distribution Test with Detected Values Only**					
164					k star (bias corrected)	0.22	**Data do not follow a Discernable Distribution (0.05)**					
165					Theta Star	153483						
166					nu star	115.9						
167												
168					A-D Test Statistic	21.88	**Nonparametric Statistics**					
169					5% A-D Critical Value	0.907					Kaplan-Meier (KM) Method	
170					K-S Test Statistic	0.907					Mean	14835
171					5% K-S Critical Value	0.0621					SD	97492
172	**Data not Gamma Distributed at 5% Significance Level**										SE of Mean	3982
173											95% KM (t) UCL	21394
174	**Assuming Gamma Distribution**										95% KM (z) UCL	21384
175					Gamma ROS Statistics using Extrapolated Data						95% KM (jackknife) UCL	21387
176					Minimum	5.1					95% KM (bootstrap t) UCL	27347
177					Maximum	2000000					95% KM (BCA) UCL	21875
178					Mean	34150					95% KM (Percentile Bootstrap) UCL	21397
179					Median	29229					95% KM (Chebyshev) UCL	32190
180					SD	96602					97.5% KM (Chebyshev) UCL	39700
181					k star	0.44					99% KM (Chebyshev) UCL	54452
182					Theta star	77657						
183					Nu star	529.5	**Potential UCLs to Use**					
184					AppChi2	477.1					97.5% KM (Chebyshev) UCL	39700
185					95% Gamma Approximate UCL	37899						
186					95% Adjusted Gamma UCL	37908						
187	**Note: DL/2 is not a recommended method.**											
188												
189												
190	**Benzo(a)pyrene (concentrations in micrograms per kilogram)**											
191												
192	**General Statistics**											
193					Number of Valid Data	476					Number of Detected Data	195
194					Number of Distinct Detected Data	121					Number of Non-Detect Data	281
195											Percent Non-Detects	59.03%
196												

	A	B	C	D	E	F	G	H	I	J	K	L
197	**Raw Statistics**						**Log-transformed Statistics**					
198	Minimum Detected					5	Minimum Detected					1.609
199	Maximum Detected					197000	Maximum Detected					12.19
200	Mean of Detected					2782	Mean of Detected					4.927
201	SD of Detected					17110	SD of Detected					2.084
202	Minimum Non-Detect					3	Minimum Non-Detect					1.099
203	Maximum Non-Detect					3300	Maximum Non-Detect					8.102
204												
205	Note: Data have multiple DLs - Use of KM Method is recommended						Number treated as Non-Detect					464
206	For all methods (except KM, DL/2, and ROS Methods),						Number treated as Detected					12
207	Observations < Largest ND are treated as NDs						Single DL Non-Detect Percentage					97.48%
208												
209	**UCL Statistics**											
210	**Normal Distribution Test with Detected Values Only**						**Lognormal Distribution Test with Detected Values Only**					
211	Lilliefors Test Statistic					0.436	Lilliefors Test Statistic					0.0826
212	5% Lilliefors Critical Value					0.0634	5% Lilliefors Critical Value					0.0634
213	**Data not Normal at 5% Significance Level**						**Data not Lognormal at 5% Significance Level**					
214												
215	**Assuming Normal Distribution**						**Assuming Lognormal Distribution**					
216	DL/2 Substitution Method						DL/2 Substitution Method					
217	Mean					1157	Mean					3.098
218	SD					11019	SD					2.156
219	95% DL/2 (t) UCL					1989	95% H-Stat (DL/2) UCL					180.4
220												
221	Maximum Likelihood Estimate(MLE) Method					N/A	Log ROS Method					
222	**MLE yields a negative mean**						Mean in Log Scale					1.659
223							SD in Log Scale					3.428
224							Mean in Original Scale					1141
225							SD in Original Scale					11020
226							95% Percentile Bootstrap UCL					2043
227							95% BCA Bootstrap UCL					2430
228												
229	**Gamma Distribution Test with Detected Values Only**						**Data Distribution Test with Detected Values Only**					
230	k star (bias corrected)					0.238	**Data do not follow a Discernable Distribution (0.05)**					
231	Theta Star					11685						
232	nu star					92.84						
233												
234	A-D Test Statistic					22.9	**Nonparametric Statistics**					
235	5% A-D Critical Value					0.897	Kaplan-Meier (KM) Method					
236	K-S Test Statistic					0.897	Mean					1144
237	5% K-S Critical Value					0.0714	SD					11008
238	**Data not Gamma Distributed at 5% Significance Level**						SE of Mean					505.8
239							95% KM (t) UCL					1978

	A	B	C	D	E	F	G	H	I	J	K	L
240	**Assuming Gamma Distribution**						95% KM (z) UCL					1976
241	Gamma ROS Statistics using Extrapolated Data						95% KM (jackknife) UCL					1977
242	Minimum					5	95% KM (bootstrap t) UCL					3877
243	Maximum					197000	95% KM (BCA) UCL					2129
244	Mean					4724	95% KM (Percentile Bootstrap) UCL					2110
245	Median					713.9	95% KM (Chebyshev) UCL					3349
246	SD					12642	97.5% KM (Chebyshev) UCL					4303
247	k star					0.358	99% KM (Chebyshev) UCL					6177
248	Theta star					13202						
249	Nu star					340.6	**Potential UCLs to Use**					
250	AppChi2					298.9	97.5% KM (Chebyshev) UCL					4303
251	95% Gamma Approximate UCL					5384						
252	95% Adjusted Gamma UCL					5386						
253	**Note: DL/2 is not a recommended method.**											
254												

APPENDIX C

LAKE RIVER AND CARTY LAKE HABITAT EVALUATION

APPENDIX C LAKE RIVER AND CARTY LAKE HABITAT EVALUATION CONTENTS

APPENDIX C LAKE RIVER AND CARTY LAKE HABITAT EVALUATION

The lower Columbia River extends 146 river miles from Bonneville Dam to the Pacific Ocean. Lake River lies within the lower Columbia River west of Ridgefield, WA, near the confluence of the Columbia River and the Willamette River. Elongated islands frequently divide the Columbia River and form sloughs, side channels, and adjacent lakes. Lake River is a side channel of the Columbia River, and Carty Lake lies in wetlands adjacent to the Columbia River. Both are part of the Portland metropolitan area's last major remnants of the Columbia River floodplain system.

This Lake River and Carty Lake habitat evaluation summarizes ecological information from the following sources: Ecological Land Services' habitat evaluation for the Port of Ridgefield's Lake River Industrial Site (LRIS) (ELS, 2007), Maul Foster & Alongi, Inc.'s Biological Evaluation/Biological Assessment of Day-use Dock and Floating Boat Expansion Project (MFA, 2003), the U.S. Fish and Wildlife Service's Ridgefield National Wildlife Refuge (RNWR) comprehensive conservation plan (USFWS, 2010), and the Washington State Department of Fish and Wildlife priority habitats and species reports for the vicinities of Carty Lake and Lake River (WDFW, 2011a,b).

1.1 Lake River Overview

Lake River is a tidally influenced, 10-mile-long channel on the Washington side of the Columbia River. The National Wetlands Inventory has classified Lake River as a riverine, tidal, unconsolidated bottom, permanent tidal habitat. For an overview of wetlands habitats surrounding Lake River, see Figure 2-3 in the main body of the RI/FS. Lake River originates at Vancouver Lake in Vancouver, WA, to the south. Lake River runs parallel to the Columbia River and merges with the Columbia at the northern tip of Bachelor Island. Sections of the RNWR border the entire length of Lake River to the west. Vancouver, Ridgefield, the LRIS, and Burlington Northern Santa Fe (BNSF) Railway tracks lie along the ridge to the east of Lake River. Lake River is slow moving, approximately 100 to over 300 feet wide and 10 feet deep or less, with steep banks on both sides, and limited to no emergent vegetation. Lake River is an area of high human traffic and boat usage; for example, a floathouse community is located on Lake River adjacent to RNWR land (MFA, 2003; USFWS, 2010). Because of its proximity to the Columbia River, anadromous fish use Lake River, and nearby areas may provide habitat for a diversity of species, including those in the following categories:

- Plants
- Shellfish
- Fish
- Birds
- Mammals

1.1.1 Plants

Lake River and adjacent areas support a variety of plant species. Three special-status plant species have been identified as potentially being present in the Carty Unit along which Lake River runs:

Water howellia (*Howellia aquatilus*), Bradshaw's desert parsley (*Lomatium bradshawii*), and Nelson's checker-mallow (*Sidalcea nelsoniana*) (MFA, 2003; USFWS, 2010). See the Carty Lake section on plants for further description. Oregon white oak woodlands are found along sections of Lake River both south and north of Ridgefield; this is a Washington State priority habitat potentially containing two plant species listed by the state as sensitive: the smallflower wakerobin (*Trillium parviflorum*) and the tall bugbane (*Cimicifuga elata*). Small patches (approximately 10 acres total) of unmanipulated upland grassland occur in oak woodland habitat in the Carty Unit adjacent to Lake River (USFWS, 2010). See the Carty Lake section on plants for further description of plants found in this habitat. In addition, Washington State priority-designated palustrine aquatic habitats are present along stretches of Lake River (WDFW, 2011b). Where Lake River passes high-impact areas such as the LRIS, vegetation such as reed canary grass, yellow marshcress, California false indigo, Himalaya blackberry, Pacific willow, Douglas fir, black cottonwood, and nonnative invasive shrub species are present (MFA, 2003; ELS, 2007). For a complete list of special-status plants that may occur in the vicinity of Lake River, see Table 1. This list is not specific to Lake River, but does encompass special-status plants that may potentially occur at Lake River.

1.1.2 Shellfish

Exotic mollusks carried in ship ballast (e.g., Asian clam [*Corbicula fluminea*]) are a potential threat to rivers and wetlands connected to the Columbia River. The Asian clam is abundant in some areas of the RNWR but was not found during sampling attempts by USFWS in 2000 (Buck, 2000). WDFW (as cited in Ecology 2011) also reported no recreational take of shellfish from the Columbia River in 2006. Crayfish are likely present in Lake River. No native shellfish found in Lake River are currently listed as special-status species to be considered for conservation and management (USFWS, 2010; WDFW, 2011b).

1.1.3 Fish

More than 40 species of fish have been documented in the RNWR, Lake River, and other waterways that flow in and around the RNWR (USFWS, 2010). Fish known to occur in Lake River include: common carp, largescale sucker, channel catfish (introduced), Pacific lamprey, mountain whitefish, brown trout (introduced), chiselmouth, longnose sucker, and sandroller. Because the RNWR is located along the lower Columbia River, listed anadromous fish may occur in Lake River at certain times of year. Special status species potentially present in Lake River include: steelhead (rainbow trout), chinook salmon, coho salmon, chum salmon, sockeye salmon, coastal cutthroat trout, and Pacific smelt (Eulachon) and critical habitat is identified for Pacific salmon and Eulachon (MFA 2003; USFWS, 2010; WDFW, 2011b). For a complete list of special-status fish that may occur in the vicinity of Lake River, see Table 2. This list is not specific to Lake River, but does encompass special-status fish that may potentially occur at Lake River.

1.1.4 Birds

Various bird species are present and common along Lake River because of its proximity to high-quality habitat at the RNWR. Washington State-designated priority waterfowl habitat occurs along the entire length of Lake River. Waterfowl representing more than 30 species use the RNWR during winter or as stopover sites during spring and fall migrations. Twelve species of waterfowl are known to breed on the RNWR. Wintering species include Canada geese, cackling geese, tundra swan, mallard, American wigeon, gadwall, northern shoveler, northern pintail, and green-winged teal. Special-status sandhill cranes occur along portions of Lake River. The RNWR also attracts significant numbers of diving ducks such as ring-necked duck, lesser scaup, and bufflehead. Common waterbird species that use RNWR wetlands along Lake River include coot, pied-billed grebe, double-crested cormorant, great blue heron, great egret, ring-billed gull, California gull, Thayer's gull, and glaucous-winged gull. The riparian and floodplain forests adjacent to Lake River host breeding terrestrial species, including commonly seen resident and migrant species such as downy woodpecker, northern flicker, western wood-pewee, Pacific slope flycatcher, tree swallow, common bushtit, Bewick's wren, American robin, Swainson's thrush, cedar waxwing, common yellowthroat, Wilson's warbler, spotted towhee, song sparrow, and black-headed grosbeak. WDFW priority designated Purple Martin foraging areas are present near Lake River. RNWR's oak woodlands along Lake River provide habitat for oak-associated landbird species that are now rare in western Washington, including the slender-billed white-breasted nuthatch, western scrub jay, and house wren (USFWS, 2010). As many as 50 bald eagles have been sighted using riparian trees on or near the RNWR for roosts from December through March, and at least six pairs are known to nest and breed within approximately 1 mile of Lake River. Eagles regularly roost along the section of Lake River between the River "S" bridge north to the Ridgefield marina and forage extensively on waterfowl within refuge boundaries (USFWS, 2010; WDFW, 2011b). For a complete list of special-status birds that may occur or that have occurred in the vicinity of Lake River, see Table 3. This list is not specific to Lake River, but does encompass special-status birds that may potentially occur at Lake River.

1.1.5 Mammals

Of the approximately 23 verified species of mammals on the RNWR, only Columbian white-tailed deer (*Odocoileus virginianus leucurus*) are special status-listed. White-tailed deer have recently been translocated form the Julia Butler Hansen Wildlife Refuge to the RNWR and may be present in the vicinity of Lake River. American beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*), river otter (*Lutra canadensis*), common opossum (*Didelphis marsupialis*), and nutria (*Myocastor coypus*) commonly inhabit wetlands along Lake River in the RNWR. Omnivores, including coyote (*Canis latrans*), raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*), as well as carnivores such as mink (*Mustela vison*), are frequently seen along the Lake River shoreline. The most common large mammal occurring on the RNWR is the mule deer (*Odocoileus hemionus*). Priority-designated white oak woodlands near Lake River may provide habitat for the special-status western gray squirrel (*Sciurus griseus*), although the presence of this species has not been confirmed (USFWS, 2010). For a complete list of special-status mammals likely to have occurred historically in the vicinity of Lake River, see Table 4. This list is not specific to Lake River, but does encompass special-status mammals that may potentially occur at Lake River.

1.2 Carty Lake Overview

Carty Lake is a 52-acre, ponded wetland located in the RNWR Carty Unit. The Carty Unit "lowlands" are immediately north of the LRIS, which was formerly used by Pacific Wood Treating Corporation to operate a wood-treating facility. Carty Unit is also bordered by Lake River to the west, Gee Creek to the north, and BNSF Railway tracks to the east. The National Wetlands Inventory has classified Carty Lake as palustrine, unconsolidated bottom, permanent nontidal wetland; the lake contains Washington State-designated priority palustrine habitat (ELS, 2007;

WDFW, 2011a). Diking and filling, in conjunction with agricultural development, have been a primary cause of decreases in tidal wetland area in the Columbia River estuary. These actions eliminated most of the natural tidal exchange of water, materials, and organisms between the Columbia River and the adjacent floodplain forests and overflow lakes. Because of Carty Lake's loss of connection with the Columbia River system, its functionality has been reduced, particularly with respect to anadromous fish rearing habitat and native mussel beds. As with other permanent nontidal wetlands on the RNWR, water quality and aquatic plants have been negatively impacted by introduced carp. Carty Lake and its adjacent areas may provide habitat for a diversity of species, including those in the following categories:

- Plants
- Shellfish
- Fish
- Birds
- Mammals

1.2.1 Plants

Carty Lake and adjacent land and wetlands in the Carty Unit support a variety of plant species. In permanent nontidal wetlands such as Carty Lake, open water and native submergent vegetation generally cover more than 70 to 75 percent of wetland basin during peak water elevations, while covering less than 25 percent of native emergent vegetation. Three special-status plant species have been identified as potentially being present in the Carty Unit: water howellia (*Howellia aquatilus*), Bradshaw's desert parsley (*Lomatium bradshawii*), and Nelson's checker-mallow (*Sidalcea nelsoniana*). Water howellia is often found in shallow water (1 to 2 meters deep) and on the edges of deep ponds that are partially surrounded by deciduous trees. Bradshaw's desert parsley is generally found on seasonally saturated or flooded prairies, adjacent to creeks and small rivers. Bradshaw's desert parsley and Nelson's checker-mallow may have been present historically, and experimental plantings were conducted in 2007. Permanent wetlands in the RNWR also support stands of persistent emergent vegetation such as cattail and softstem bulrush (MFA, 2003; USFWS, 2010). In addition, Oregon white oak woodlands are a state priority-designated habitat. Oregon white oak woodlands occur directly adjacent to the east and north of Carty Lake (WDFW, 2011a). Two plant species listed as sensitive in Washington can occur in Oregon white oak woodlands: the smallflower wakerobin (*Trillium parviflorum*) and the tall bugbane (*Cimicifuga elata*). Smallflower wakerobin has been found on the RNWR, but tall bugbane has not. Small patches (approximately 10 acres total) of unmanipulated upland (dry) grassland occur as openings in oak woodland habitat in the Carty Unit. Characteristic grasses associated with this habitat type include red fescue (*Festuca rubra*) and California oatgrass (*Danthonia californica*). These small patches are often dominated by introduced grasses, for example, poverty brome (*Bromus sterilis*) and orchardgrass (*Dactylis glomerata*); however, native wildflowers such as camas and Nuttall's larkspur also occur in these grassy openings. Along the Carty Lake shoreline, nonnative reed canary grass and Himalayan blackberry are abundant (ELS, 2007). Finally, Carty Lake formerly contained a large native wapato bed, which is currently confined to small areas of Carty Lake. Wapato beds are composed of emergent aquatic plants (tubers) in the family *Alismataceae* and are good indicators of suitable red-legged frog breeding habitat, since wapato beds require a similar water depth and hydroperiod (USFWS, 2010). For a complete list of special-status plants that may occur in the vicinity of Carty Lake, see Table 1. This list is not specific to Carty Lake, but does encompass special-status plants that may potentially occur at Carty Lake.

1.2.2 Shellfish

Because of loss of connection with the Columbia River, Carty Lake is unlikely to be susceptible to invasive shellfish and no longer adequately supports native mussel beds. Crayfish may be present in Carty Lake; however, no native shellfish found in the RNWR and therefore in Carty Lake are currently listed as special-status species to be considered for conservation and management (USFWS, 2010; WDFW, 2011a).

1.2.3 Fish

More than 40 species of fish have been documented in the RNWR and in the waterways that flow in and around the RNWR. Fish found in Carty Lake include primarily warm water fish: introduced common carp and largescale sucker. Other fish commonly found in the RNWR where Carty Lake lies include introduced goldfish, longnose dace, largescale sucker, brown bullhead, mosquitofish, three-spine stickleback, introduced largemouth bass, introduced black crappie, introduced white crappie, introduced bluegill, and introduced yellow perch. Because Carty Lake does not maintain connectivity with the Columbia River, state-listed and federally listed anadromous species such as Chinook and coho salmon are unlikely to use Carty Lake for spawning or rearing habitat (USFWS, 2010; WDFW, 2011a). For a complete list of special-status fish that may occur in the vicinity of Carty Lake, see Table 2. This list is not specific to Carty Lake, but does encompass special-status fish that may potentially occur at Carty Lake.

1.2.4 Birds

Waterfowl representing more than 30 species use the RNWR during winter or as stopover sites during spring and fall migrations. Waterfowl use both lacustrine and palustrine wetland habitats, such as Carty Lake, on the RNWR. Twelve species of waterfowl are known to breed on the RNWR, and Washington State-designated priority waterfowl habitat occurs in the vicinity of Carty Lake. Wintering species include Canada geese, cackling geese, tundra swan, mallard, American wigeon, gadwall, northern shoveler, northern pintail, and green-winged teal (USFWS, 2010). Special-status sandhill crane may aggregate at Carty Lake (MFA, 2003). The RNWR also attracts significant numbers of diving ducks, such as ring-necked duck, lesser scaup, and bufflehead. Common waterbird species that use RNWR wetlands such as Carty Lake include coot, pied-billed grebe, double-crested cormorant, great blue heron, great egret, ring-billed gull, California gull, Thayer’s gull, and glaucous-winged gull. The riparian and floodplain forests adjacent to Carty Lake host a number of breeding terrestrial species, including commonly seen migrant and resident species such as downy woodpecker, northern flicker, western wood-pewee, Pacific slope flycatcher, tree swallow, common bushtit, Bewick’s wren, American robin, Swainson’s thrush, cedar waxwing, common yellowthroat, Wilson’s warbler, spotted towhee, song sparrow, and black-headed grosbeak. As many as 50 bald eagles have been sighted using riparian trees on or near the RNWR for roosts from December through March, and three pairs are known to nest and breed approximately 1 mile northeast of Carty Lake (USFWS, 2010; WDFW, 2011a). RNWR’s oak woodlands near Carty Lake provide habitat for oak-associated landbird species that are now rare in western Washington, including the slender-billed white-breasted nuthatch, western scrub jay, and house wren (USFWS, 2010). For a complete list of special-status birds that may occur or that have occurred in the vicinity of Carty Lake, see Table 3. This list is not specific to Carty Lake, but does encompass special-status birds that may potentially occur at Carty Lake.

1.2.5 Mammals

Of the approximately 23 verified species of mammals on the RNWR, only Columbian white-tailed deer (*Odocoileus virginianus leucurus*) are special status-listed. White-tailed deer have recently been translocated form the Julia Butler Hansen Wildlife Refuge to the RNWR and are present in the vicinity of Carty Lake. American beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*), mink (*Mustela vison*), and river otter (*Lutra canadensis*) inhabit wetlands such as Carty Lake on the RNWR. Nonnative nutria (*Myocastor coypus*) is a commonly observed mammal in wetlands such as Carty Lake. The riparian and floodplain forests surrounding the edges of Carty Lake also provide mammal habitat. The most common large mammal occurring on the RNWR is the mule deer (*Odocoileus hemionus*). Riparian areas provide both forage and cover for this species and other mammals. Omnivores, including coyote (*Canis latrans*), raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*), are frequently seen on the RNWR. The white oak woodlands adjacent to Carty Lake may provide habitat for special-status western gray squirrel (*Sciurus griseus*), although the presence of this species has not been confirmed (USFWS, 2010). For a complete list of special-status mammals likely to have occurred historically in the vicinity of Carty Lake, see Table 4. This list is not specific to Carty Lake, but does encompass special-status mammals that may potentially occur at Carty Lake.

REFERENCES

Buck, J. 2000. Preliminary assessment to determine superfund site impacts on the Ridgefield National Wildlife Refuge. Project ID: 13420-1261-1C58. U.S. Fish and Wildlife Service, Portland, Oregon. June 27.

Ecology. 2011. Fish consumption rates technical support document, a review of data and information about fish consumption in Washington. Publication no. 11-09-050, Version 1.0. Washington. September.

ELS. 2007. Habitat evaluation for Port of Ridgefield; Lake River site, Ridgefield, Washington. Ecological Land Services, Longview, Washington. November.

MFA. 2003. Biological evaluation/biological assessment of day-use dock and floating boat expansion project. Prepared for the Port of Ridgefield. Prepared by Maul Foster & Alongi, Inc., Vancouver, Washington. August 5.

USFWS. 2010. Ridgefield National Wildlife Refuge comprehensive conservation plan. U.S. Fish and Wildlife Service. September.

WDFW. 2011a. Priority habitats and species report in the vicinity of Carty Lake. Washington State Department of Fish and Wildlife. September 7.

WDFW. 2011b. Priority habitats and species report in the vicinity of Lake River. Washington State Department of Fish and Wildlife. September 7.

TABLES

Table C-1
Special-Status Plants That May Occur in Vicinity of Carty Lake and Lake River
Former PWT Site RI/FS

Species	Federal	Washington State	Current Occurrence on Ridgefield National Wildlife Refuge
Bradshaw's desert parsley (*Lomatium bradshawii*)	E	E	Two known locations in Washington, both in Clark County; not documented on RNWR. Experimental plantings on RNWR in 2007.
Nelson's checker-mallow (*Sidalcea nelsoniana*)	T	E	Occurs in Cowlitz and Lewis counties; not documented on RNWR. Experimental plantings on RNWR in 2007.
Smallflower wakerobin (*Trillium parviflorum)* Syn: *T. chloropetalum*		S	Occurs on RNWR.
Water howellia (*Howellia aquatilis*)	T	T	Occurs in small vernal ponds in the Carty Unit (only Clark County record).
Key to Codes: E = Endangered, S = Sensitive, T = Threatened. Source: Adapted from USFWS (2010).			

Table C-2
Special-Status Fish That May Occur in Vicinity of Carty Lake and Lake River
Former PWT Site RI/FS

Species	Federal	Washington State	Current Occurrence on Ridgefield National Wildlife Refuge
Bull trout (*Salvelinus confluentus)*	T	C	Records from Clark County, not known to occur in RNWR.
Chinook salmon (*Oncorhynchus tshawytscha)* (Lower Columbia evolutionarily significant unit [ESU])	T	C	Columbia River migration takes fish past RNWR. RNWR waterways may be used for rearing habitat. Juveniles trapped in Gee Creek in 1990s but not in 2002-2005 surveys. Juveniles trapped in Campbell Slough June 2007.
Chum salmon (*Oncorhynchus keta*) (Columbia River ESU)	T	C (Lower Columbia River)	RNWR not used. Columbia River migration takes fish past RNWR. Reported in Gee Creek in 1940s; extirpated.
Coastal cutthroat trout (*Oncorhynchus clarkii clarkii*)	SC		Spawning documented in Gee Creek. Gee Creek utilized for rearing habitat.
Coho salmon (*Oncorhynchus kisutch*) (Lower Columbia ESU)	T		RNWR waterways may be used for rearing habitat. Juveniles trapped in Gee Creek in 1990s and 2002-2005 surveys. Spawning not known in watersheds adjoining the RNWR.
Sockeye salmon (Snake River ESU)	E	C	RNWR not used. Columbia River migration takes fish past RNWR.
Steelhead trout (*Oncorhynchus mykiss*) (Lower Columbia ESU)	T	C	RNWR not used. Columbia River migration takes fish past RNWR. Spawning not known in watersheds adjoining the RNWR. Juveniles trapped in Gee Creek in 1990s, not in 2002-2005 surveys.
Pacific smelt (Southern distinct population segment [DPS])	T	C	Present in Gee Creek in low numbers; Columbia River migration takes fish past RNWR.

Key to Codes: C = Candidate, E = Endangered, T = Threatened. Source: Adapted from USFWS (2010); WDFW (www.wdfw.wa.gov).

Table C-3
Special-Status Birds That May Occur or That May Have Occurred in Vicinity of Carty Lake and Lake River
Former PWT Site RI/FS

Species	Federal	Washington State	Current Occurrence on Ridgefield National Wildlife Refuge
American white pelican		E	Infrequently seen Jan.-July; wintering and migrant birds; nonbreeding subadults.
Bald eagle	SC	S	Thirty to 50 eagles winter on or near the RNWR; six pairs nest on or near the RNWR.
Caspian tern		M	Infrequent observations.
Common loon		S	Rare, fall/winter/spring.
Golden eagle		C	Rare.
Lewis's woodpecker		C	Rare, fall/winter/spring.
Loggerhead shrike	SC	C	Rare, spring.
Long-billed curlew		M	Rare.
Northern goshawk	SC	C	Rare.
Olive-sided flycatcher	SC		Occasional seasonal migrant, spring/summer/fall.
Oregon vesper sparrow	SC	C	Rare, spring/fall.
Peregrine falcon, American	SC	S	Occasional observations, all seasons; displaced birds reared on RNWR.
Pileated woodpecker		C	Resident and nests on RNWR.
Purple martin		C	Uncommon, spring/summer/fall. Breeding; 15 pairs nest on RNWR.
Rufous hummingbird	SC		Nests on RNWR.
Sandhill crane, Canadian (*G. c. rowani*)		E	The RNWR and Sauvie Island, Oregon, are significant migration and wintering areas. Fall roost averages 1,700 birds; winter population 700-800. Occasionally seen in summer. Unconfirmed breeding record from Bachelor Island, late 1970s.
Short-billed dowitcher	SC		Rare.
Slender-billed white-breasted nuthatch	SC	C	Resident, nests on RNWR. Mainly confined to Vancouver vicinity, especially the RNWR.
Streaked horned lark	C	E	Rare, fall.
Vaux's swift		C	Seasonal migrant; uncommon summer/fall; occasional winter.
Western bluebird		M	Rare, spring.
Western grebe		C	Occasional, fall/winter/spring.
Willow flycatcher (*ssp. brewsteri*)	SC		Uncommon spring/summer/fall. Breeds on RNWR.

Key to Codes: C = Candidate, E = Endangered, M = Monitored, S = Sensitive, SC = Species of Concern. Source: Adapted from USFWS (2010); USFW (2008). (http://www.fws.gov/migratorybirds); WDFW (www.wdfw.wa.gov),

Table C-4
Special-Status Mammals That May Have Occurred Historically in Vicinity of Carty Lake and Lake River
Former PWT Site RI/FS

Species	Federal	Washington State	Current Occurrence on Ridgefield National Wildlife Refuge
Columbian white-tailed deer	E	E	Historically occurred on RNWR; recently been translocated form the Julia Butler Hansen Wildlife Refuge to the RNWR.
Gray-tailed vole *(Microtus canicaudus)*		C	A species known to Clark County, not confirmed on RNWR.
Mazama (Western) pocket gopher *(Thomomys mazama)*	C	T	A species historically present in Clark County; probably extinct in southwest Washington.
Townsend's big-eared bat (*Pacific ssp.*)	SC	C	Within range of species; not confirmed on RNWR.
Western gray squirrel *(Sciurus griseus)*	SC	T	The RNWR is in historical range and contains suitable oak habitat; not confirmed on RNWR. Two or more reliable reports in Clark County in the last five years (Linders and Stinson, 2007).

Key to Codes: C = Candidate, E = Endangered, SC = Species of Concern, T = Threatened. Source: Adapted from USFWS (2010); WDFW (www.wdfw.wa.gov).

Linders and Stinson. 2007. Washington State Recovery Plan for the Western Gray Squirrel. WDFW, Olympia, WA.

ATTACHMENT 1

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE PRIORITY HABITATS AND SPECIES REPORT - LAKE RIVER

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
PRIORITY HABITATS AND SPECIES REPORT

SOURCE DATASET: PHSPlusPublic   Query ID: P110907090520
REPORT DATE: 09/07/2011 9.05 AM

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Bald eagle Haliaeetus leucocephalus	RIDGEFIELD WS_OccurPoint 76070 March 25, 2009	Breeding Area Nest http://wdfw.wa.gov/conservation/bald_eagle/territory/search.php? http://wdfw.wa.gov/conservation/bald_eagle/index.html	GPS	Fed Spp Concern Sensitive PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Points
Bald eagle Haliaeetus leucocephalus	Not Given BaldEagle_Bf	Breeding Area Management buffer http://wdfw.wa.gov/conservation/bald_eagle/index.html	NA	Fed Spp Concern Sensitive PHS Listed	N AS MAPPED	WDFW Wildlife Program Polygons
Bald eagle Haliaeetus leucocephalus	Not Given BaldEagle_Bf	Breeding Area Management buffer http://wdfw.wa.gov/conservation/bald_eagle/index.html	NA	Fed Spp Concern Sensitive PHS Listed	N AS MAPPED	WDFW Wildlife Program Polygons
Bald eagle Haliaeetus leucocephalus	Not Given BaldEagle_Bf	Breeding Area Management buffer http://wdfw.wa.gov/conservation/bald_eagle/index.html	NA	Fed Spp Concern Sensitive PHS Listed	N AS MAPPED	WDFW Wildlife Program Polygons
Bald eagle Haliaeetus leucocephalus	MORGAN EAGLE AREA PHSREGION 905333	Regular Concentration Regular concentration http://wdfw.wa.gov/conservation/bald_eagle/index.html	1/4 mile (Quarter	Fed Spp Concern Sensitive PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Bald eagle Haliaeetus leucocephalus	VANCOUVER LOWLANDS PHSREGION 905334	Regular Concentration Regular concentration http://wdfw.wa.gov/conservation/bald_eagle/index.html	1/4 mile (Quarter	Fed Spp Concern Sensitive PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Biodiversity Areas And	GEE CREEK RIPARIAN PHSREGION 902112	Terrestrial Habitat N/A http://wdfw.wa.gov/publications/pub.php?id=00023	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Biodiversity Areas And	LAKE RIVER URBAN PHSREGION 902115	Terrestrial Habitat N/A http://wdfw.wa.gov/publications/pub.php?id=00023	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Biodiversity Areas And	WHIPPLE-PACKARD CREEKS PHSREGION 902212	Terrestrial Habitat N/A http://wdfw.wa.gov/publications/pub.php?id=00023	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Chinook Salmon Oncorhynchus tshawytscha	FISHDIST 28883	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Chinook Salmon Oncorhynchus tshawytscha	Whipple Creek FISHDIST 31146	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Chinook Salmon Oncorhynchus tshawytscha	Lake River FISHDIST 29053	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Chinook Salmon Oncorhynchus tshawytscha	Lake River FISHDIST 42395	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Chinook Salmon Oncorhynchus tshawytscha	Lake River FISHDIST 28858	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Chinook Salmon Oncorhynchus tshawytscha	FISHDIST 28882	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Chinook Salmon Oncorhynchus tshawytscha	FISHDIST 29048	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Chum Salmon Oncorhynchus keta	FISHDIST 29049	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Chum Salmon Oncorhynchus keta	Lake River FISHDIST 28929	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Chum Salmon Oncorhynchus keta	Lake River FISHDIST 29052	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Chum Salmon Oncorhynchus keta	Gee Creek FISHDIST 28211	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coast Resident Cutthroat Oncorhynchus clarki	FISHDIST 28170	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines
Coast Resident Cutthroat Oncorhynchus clarki	Gee Creek FISHDIST 28422	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines
Coast Resident Cutthroat Oncorhynchus clarki	Lake River FISHDIST 29387	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Coast Resident Cutthroat Oncorhynchus clarki	FISHDIST 42390	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines
Coast Resident Cutthroat Oncorhynchus clarki	FISHDIST 42265	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines
Coast Resident Cutthroat Oncorhynchus clarki	Gee Creek FISHDIST 28423	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines
Coho Oncorhynchus kisutch	Lake River SASI 3770	Occurrence Occurrence http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	Candidate N/A PHS Listed	N AS MAPPED	WDFW Fish Program Lines
Coho Salmon Oncorhynchus kisutch	Whipple Creek FISHDIST 28804	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	FISHDIST 28808	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	FISHDIST 28881	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	Flume Creek FISHDIST 29047	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Coho Salmon Oncorhynchus kisutch	Lake River FISHDIST 29388	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	FISHDIST 28874	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	Gee Creek FISHDIST 28202	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	FISHDIST 28810	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	FISHDIST 29386	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	Flume Creek FISHDIST 42389	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	FISHDIST 28807	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	FISHDIST 29050	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Coho Salmon Oncorhynchus kisutch	Gee Creek FISHDIST 28174	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Coho Salmon Oncorhynchus kisutch	FISHDIST 42393	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Cutthroat Oncorhynchus clarki	Lake River SASI 7880	Occurrence Occurrence http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	Threatened N/A PHS Listed	N AS MAPPED	WDFW Fish Program Lines
Dusky canada goose Branta canadensis occidentalis	VANCOUVER SHILLAPOO PHSREGION 902209	Regular Concentration Regular concentration http://wdfw.wa.gov/publications/pub.php?id=00026	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Great blue heron Ardea herodias	ROTH UNIT WS_OccurPolygon 437 January 01, 2001	Breeding Area Colony http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Monitored PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Green Sturgeon Acipenser medirostris	Lake River FISHDIST 28859	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.	NA	N/A Monitored PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines
Green Sturgeon Acipenser medirostris	FISHDIST 29384	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.	NA	N/A Monitored PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines
LACUSTRINE LITTORAL	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
LACUSTRINE LITTORAL	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
Oak Woodland	CLARK COUNTY OAK PHSREGION 912981	Terrestrial Habitat N/A http://wdfw.wa.gov/publications/pub.php?id=00030	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
Pink Salmon Oncorhynchus gorbuscha	Lake River FISHDIST 28838	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Pink Salmon Oncorhynchus gorbuscha	FISHDIST 28811	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Purple martin Progne subis	PHSREGION 917330	Foraging Area Regular concentration http://wdfw.wa.gov/publications/pub.php?id=00026	1/4 mile (Quarter	N/A Candidate PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Rainbow Trout Oncorhynchus mykiss	Gee Creek FISHDIST 28203	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines
RIVERINE TIDAL	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
RIVERINE TIDAL	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
Sandhill crane Grus canadensis	PHSREGION 917441	Regular Concentration Regular concentration http://wdfw.wa.gov/publications/pub.php?id=00026	1/4 mile (Quarter	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	RIDGEFIELD NWR WS_OccurPolygon 798 October 10, 1989	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	POST OFFICE LAKE WS_OccurPolygon 815 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	POST OFFICE LAKE WS_OccurPolygon 817 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons

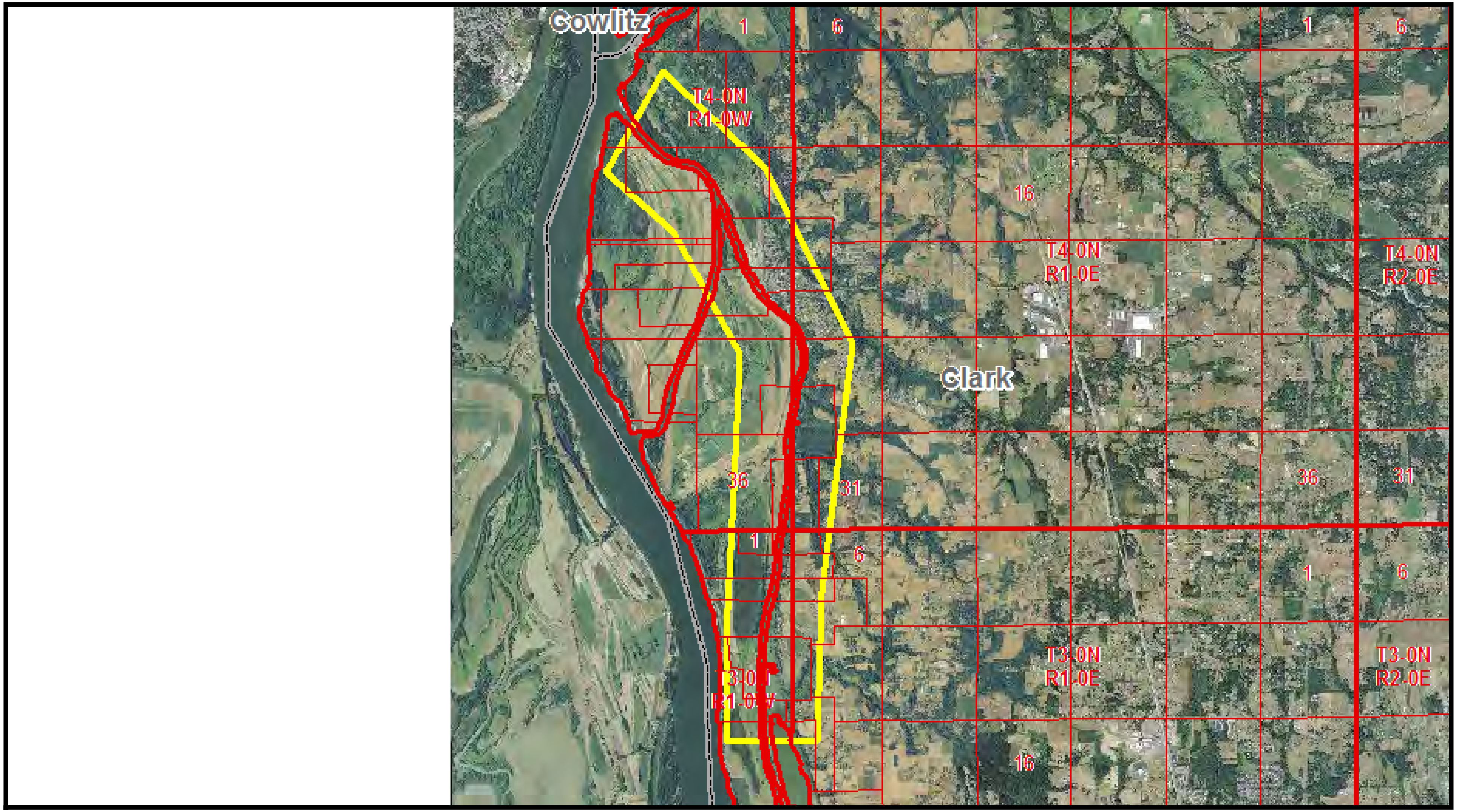
Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Sandhill crane Grus canadensis	CAMPBELL LAKE WS_OccurPolygon 818 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	CAMPBELL LAKE WS_OccurPolygon 819 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	CAMPBELL LAKE WS_OccurPolygon 820 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	CAMPBELL LAKE WS_OccurPolygon 821 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	CAMPBELL LAKE 2 WS_OccurPolygon 829 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	CAMPBELL LAKE 2 WS_OccurPolygon 830 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	CAMPBELL LAKE 2 WS_OccurPolygon 831 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	CAMPBELL LAKE 2 WS_OccurPolygon 832 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Sandhill crane Grus canadensis	LAKE RIVER WS_OccurPolygon 833 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sandhill crane Grus canadensis	LAKE RIVER WS_OccurPolygon 834 January 01, 1990	Regular Concentration Concentration http://wdfw.wa.gov/publications/pub.php?id=00026	Standard buffer	N/A Endangered PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Shorebird Concentrations	CAMPBELL LAKE - PHSREGION 913896	Regular Concentration Regular concentration http://wdfw.wa.gov/publications/pub.php?id=00026	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Sockeye Oncorhynchus nerka	Lake River FISHDIST 31153	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Sockeye Oncorhynchus nerka	FISHDIST 31149	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Oncorhynchus mykiss	Lake River SASI 6777	Occurrence Occurrence http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	Candidate N/A PHS Listed	N AS MAPPED	WDFW Fish Program Lines
Steelhead Trout Oncorhynchus mykiss	FISHDIST 42394	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	Whipple Creek FISHDIST 29382	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Steelhead Trout Oncorhynchus mykiss	FISHDIST 42392	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	FISHDIST 28834	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	FISHDIST 28872	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	Lake River FISHDIST 28921	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	Gee Creek FISHDIST 29097	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	Flume Creek FISHDIST 28871	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	Lake River FISHDIST 28920	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	FISHDIST 29051	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Steelhead Trout Oncorhynchus mykiss	Gee Creek FISHDIST 28175	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	Lake River FISHDIST 28860	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	FISHDIST 28884	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	FISHDIST 28835	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	FISHDIST 28880	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Steelhead Trout Oncorhynchus mykiss	FISHDIST 29046	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?id=00033	NA	N/A N/A PHS LISTED	N AS MAPPED	WDFW and/or LFA Reports, USFS, Lines
Tundra swan Cygnus columbianus	PHSREGION 917440	Regular Concentration Regular concentration http://wdfw.wa.gov/publications/pub.php?id=00026	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Waterfowl Concentrations	CANVAS BACK LAKE PHSREGION 902154	Regular Concentration Regular concentration http://wdfw.wa.gov/publications/pub.php?id=00026	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Waterfowl Concentrations	SALMON CREEK WINTERING PHSREGION 902207	Regular Concentration Regular concentration http://wdfw.wa.gov/publications/pub.php?id=00026	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Waterfowl Concentrations	VANCOUVER SHILLAPOO PHSREGION 902208	Regular Concentration Regular concentration http://wdfw.wa.gov/publications/pub.php?id=00026	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Waterfowl Concentrations	RIDGEFIELD LOWLANDS PHSREGION 904408	Regular Concentration Regular concentration http://wdfw.wa.gov/publications/pub.php?id=00026	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
Wetlands	MORGAN PROPERTY PHSREGION 902153	Aquatic Habitat N/A http://www.ecy.wa.	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
White Sturgeon Acipenser transmontanus	FISHDIST 28812	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.	NA	N/A N/A PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines
White Sturgeon Acipenser transmontanus	Lake River FISHDIST 29055	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wlm/diversty/soc/soc.htm http://wdfw.wa.	NA	N/A N/A PHS LISTED	N AS MAPPED	WA Department of Fish & Wildli Lines



Study Area Diagram

BOUNDING BOX: -13668761,5738321,-13661606,5757721
(web mercator meters)

Query ID: P110907090520

09/07/2011 9.05 AM

ATTACHMENT 2

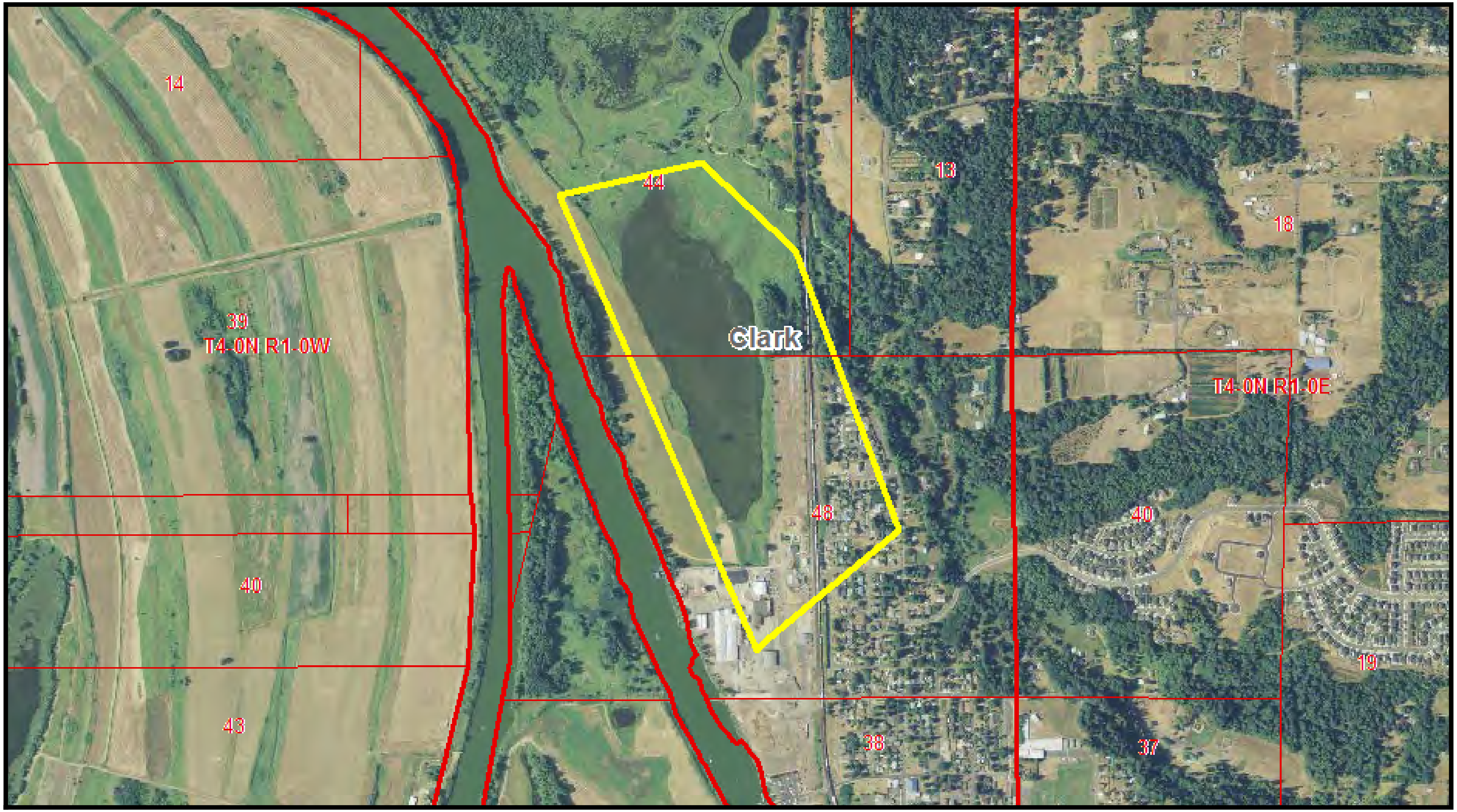
WASHINGTON DEPARTMENT OF FISH AND WILDLIFE PRIORITY HABITATS AND SPECIES REPORT - CARTY LAKE

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
PRIORITY HABITATS AND SPECIES REPORT

SOURCE DATASET: PHSPlusPublic   Query ID: P110907091115
REPORT DATE: 09/07/2011 9.11 AM

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Oak Woodland	CLARK COUNTY OAK PHSREGION 912981	Terrestrial Habitat N/A http://wdfw.wa.gov/publications/pub.php?id=00030	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons

Common Name Scientific Name Notes	Site Name Source Dataset Source Record Source Date	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
PALUSTRINE	N/A NWIPOLY	Aquatic Habitat Aquatic habitat http://www.ecy.wa.	NA	N/A N/A PHS Listed	N AS MAPPED	US Fish and Wildlife Service Polygons
Waterfowl Concentrations	RIDGEFIELD LOWLANDS PHSREGION 904408	Regular Concentration Regular concentration http://wdfw.wa.gov/publications/pub.php?id=00026	1/4 mile (Quarter	N/A N/A PHS LISTED	N AS MAPPED	WA Dept. of Fish and Wildlife Polygons



Study Area Diagram

BOUNDING BOX: -13667168,5751002,-13662128,5753762
(web mercator meters)

Query ID: P110907091115

09/07/2011 9.11 AM

APPENDIX D

SER LABORATORY ANALYTICAL RESULTS AND DATA REVIEW MEMORANDA

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 9003.01.29 | FEBRUARY 10, 2012 | PORT OF RIDGEFIELD

This report reviews the analytical results for samples collected by the Port of Ridgefield and Maul Foster and Alongi on the property of Port of Ridgefield in Ridgefield, Washington. The samples were collected in November 2011.

Specialty Analytical (SA) and Pace Analytical (Pace) performed the analyses. SA report numbers 1111166, 1111219, 1112014 and Pace report number 10176664 were reviewed. The analyses performed are listed below.

Analysis	Reference
Total and dissolved metals	USEPA 6020/ 6010A
Semivolatile organic compounds	USEPA 8270D; USEPA 8270SIM; USEPA E8270B-AF
Volatile organic compounds	USEPA 8260B
NWTPH-Dx	NWTPH-Dx
Dioxins and Furans	USEPA 8290MOD

NWTPH = Northwest Total Petroleum Hydrocarbons.
SIM = selective ion monitoring.
USEPA = U.S. Environmental Protection Agency.

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2008, 2010) and appropriate laboratory and method-specific guidelines (Pace, 2011; SA, 2011; USEPA, 1986). The data from Pace report 10176664 have been qualified below, based on polychlorinated diphenyl ether interference and exceedance of the calibration range as qualified and discussed in the laboratory report.

Sample	Component	Original Result (mg/L)	Confirmation Result (mg/L)
B322-S-2.5	2,3,4,7,8,-PeCDF	3000 P	3000 J
B322-S-2.5	Total HxCDF	71000 ED	71000 J
B322-S-2.5	Total HpCDF	83000 ED	83000 J
B322-S-2.5	1,2,3,4,6,7,8,-HpCDD	380000 ED	380000 J
B322-S-2.5	Total HpCDD	840000 ED	840000 J
B322-S-2.5	OCDD	3700000 ESD	3700000 J

NOTES:
J = estimated.
D = Result based on dilutiuon.
S = Peak Saturated.
HpCDD = heptachloro dibenzo-p-dioxin.
HpCDF = heptachloro dibenzofuran.
HxCDF = hexachloro dibenzofuran.
mg/L = milligrams per liter.
OCDD = octachloro dibenzo-p-dioxin.
P = PCDE Interference.
PeCDF = pentachloro dibenzofuran.

Any Method USEPA 8290 analytes flagged as an estimated maximum potential concentration by the lab have been qualified as estimates (J). The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. In report 10176664, Method USEPA 8290MOD exceeded the reporting limits (RLs) at 10.0 nanograms per kilogram (ng/kg) for OCDD above the limit of 1.8 ng/kg. The sample value is greater than 5x the blank detection; therefore the data are not impacted. For Methods USEPA 6010A and 6020 with dissolved metals analysis, the ICB/Method Blank was not included in the quality control (QC) data. In report 1111219, there was a hit for Method NWTPH-Dx for diesel at 0.08172 mg/L and lube oil at 0.2092 mg/L, exceeding the corresponding practical quantification limits (PQLs) of 0.0800 mg/L and 0.200 mg/L, respectively. All samples greater than 5x the blank hit have not been impacted. The impacted results have been qualified accordingly below.

Sample	Component	Original Result (mg/L)	Confirmation Result (mg/L)
E3647112311	Lube Oil	1.03	1.03 J

Continuing Calibration Blank

CCBs were performed at the required frequency. All CCBs were below the method reporting limits and/or PQLs, with the exception of diesel that was detected at 0.08544 mg/L above the PQL (0.08 mg/L). All samples were greater than 5x the detection; therefore, the data are not impacted.

Trip Blanks

Trip blanks were not required for this sampling event.

Equipment Rinsate Blanks

Equipment rinsate blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples. All surrogate recoveries were within acceptance limits, with the exception of USEPA 8270, USEPA 8270SIM, and NWTPH-Dx, which had minor exceedances or matrix interferences. All samples had passing laboratory control sample (LCS) results.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

MS/MSD results are used to evaluate laboratory precision and accuracy. All MS/MSD samples were extracted and analyzed at the required frequency, excluding Method USEPA 8270D, and documented as LCS and laboratory control sample duplicate (LCSD) in place of MS/MSD. Various recovery results were outside acceptance limits because of one or more of the following:

- The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.
- Matrix interferences prevented accurate quantitation of the spike recovery.

The reviewer took no action based on MS/MSD outliers, as batch LCS percent recoveries were within acceptance limits and remaining MS/MSD results were within acceptance limits for percent recovery and relative percent difference (RPD). In cases of MS/MSD exceedances, the laboratory appropriately documented and qualified the outliers.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. All duplicate samples were extracted and analyzed at the required frequency. All RPDs were within acceptance limits, with the exception of the methods noted below. Certain methods exceeded RPD because of matrix interference or high concentration of analyte, and the laboratory has qualified them accordingly. The duplicate for copper exceeded RPD limits in SA report 1112014 and for arsenic in SA report 1111166. No action was taken, as all associated QC met criteria, including MS/MSD percent recoveries and RPD for the same sample.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

An LCS/LCSD is spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency. All LCS/LCSD samples met acceptance criteria, excluding qualified analytes for Method USEPA 8270D. The USEPA 8270D LCS/LCSD had minor laboratory exceedances, but meets National Functional Guideline requirements. In SA report 1112014, Method USEPA 8270 had a minor exceedance of RPD for the LCS/LCSD. In SA report 1112014, NWTPH-Dx had a minor high exceedance for the LCS and did not have volume to re-extract. No action was taken in cases of exceedances, as they do not impact data quality.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. No field duplicate samples were submitted.

REPORTING LIMITS

SA and Pace used routine RLs for non-detect results, except for samples requiring dilutions because of high analyte concentrations and/or matrix interferences.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. None were found. For Method NWTPH-Dx, samples were qualified, notating that the gasoline-range organic and/or diesel-range organic sample was within the range, but not identified as a specific hydrocarbon when quantified against diesel and/or lube oil calibration standards. The reports also qualified specific samples biased high for diesel because of the amount of oil contained in the sample.

Pace. 2011. Quality assurance manual. Pace Analytical, Minneapolis, Minnesota.

SA. 2011. Quality assurance manual. Specialty Analytical, Clackamas, Oregon.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.

USEPA. 2010. USEPA contract laboratory program, national functional guidelines for inorganics data review. EPA 540/R-94/013. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. January.

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

November 29, 2011

Alan Hughes
Maul, Foster & Alongi
400 East Mill Plain Blvd
Suite 400
Vancouver, WA 98660

TEL: (360) 694-2691
FAX: (360) 906-1958

RE: Port of Ridgefield / 9003.01.29

Dear Alan Hughes:

Order No.: 1111166

Specialty Analytical received 12 samples on 11/18/2011 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Cindy Hillyard
Cindy Hillyard
Project Manager

Technical Review

Specialty Analytical

Date: *29-Nov-11*

CLIENT: Maul, Foster & Alongi
Project: Port of Ridgefield / 9003.01.29
Lab Order: 1111166

Lab ID: 1111166-01
Collection Date: 11/17/2011 10:54:00 AM
Client Sample ID: B316-S-2
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	17.8	16.9		mg/Kg-dry	1	11/21/2011
Lube Oil	242	56.2		mg/Kg-dry	1	11/21/2011
Surr: o-Terphenyl	93.5	50-150		%REC	1	11/21/2011
TOTAL METALS BY ICP		**E6010**				Analyst: **cmt**
Arsenic	11.5	2.04		mg/Kg-dry	1	11/22/2011 9:04:38 PM
SEMI-VOLATILE COMPOUNDS- ACID FRACTION		**E8270B-AF**				Analyst: **bda**
Pentachlorophenol	842	374		µg/Kg-dry	1	11/28/2011 1:54:00 PM
Surr: 2,4,6-Tribromophenol	70.4	57.8-119		%REC	1	11/28/2011 1:54:00 PM
Surr: 2-Fluorophenol	72.1	40.7-111		%REC	1	11/28/2011 1:54:00 PM
Surr: Phenol-d6	72.7	47.5-117		%REC	1	11/28/2011 1:54:00 PM
LOW LEVEL PAH BY GC/MS		**8270SIM**				Analyst: **bda**
1-Methylnaphthalene	ND	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
2-Methylnaphthalene	8.99	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Acenaphthene	40.4	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Acenaphthylene	10.5	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Anthracene	41.2	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Benz(a)anthracene	27.0	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Benzo(a)pyrene	21.0	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Benzo(b)fluoranthene	79.4	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Benzo(g,h,i)perylene	32.2	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Benzo(k)fluoranthene	19.5	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Chrysene	27.0	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Dibenz(a,h)anthracene	18.0	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Fluoranthene	121	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Fluorene	19.5	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Indeno(1,2,3-cd)pyrene	25.5	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Naphthalene	8.99	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Phenanthrene	95.9	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Pyrene	94.4	7.49		µg/Kg-dry	1	11/23/2011 10:07:00 AM
Surr: 2-Fluorobiphenyl	58.1	42.6-128		%REC	1	11/23/2011 10:07:00 AM
Surr: Nitrobenzene-d5	68.6	21.7-155		%REC	1	11/23/2011 10:07:00 AM
Surr: p-Terphenyl-d14	77.3	44.9-155		%REC	1	11/23/2011 10:07:00 AM

CLIENT: Maul, Foster & Alongi **Lab Order:** 1111166
Project: Port of Ridgefield / 9003.01.29

Lab ID: 1111166-02 **Collection Date:** 11/17/2011 12:15:00 PM
Client Sample ID: B317-S-1.25 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	412	17.3		mg/Kg-dry	1	11/21/2011
Lube Oil	257	57.8		mg/Kg-dry	1	11/21/2011
Surr: o-Terphenyl	108	50-150		%REC	1	11/21/2011
TOTAL METALS BY ICP		**E6010**				Analyst: **cmt**
Arsenic	140	2.18		mg/Kg-dry	1	11/22/2011 9:09:39 PM
SEMI-VOLATILE COMPOUNDS- ACID FRACTION		**E8270B-AF**				Analyst: **bda**
Pentachlorophenol	5890	1920		µg/Kg-dry	5	11/28/2011 1:26:00 PM
Surr: 2,4,6-Tribromophenol	66.6	57.8-119		%REC	5	11/28/2011 1:26:00 PM
Surr: 2-Fluorophenol	72.0	40.7-111		%REC	5	11/28/2011 1:26:00 PM
Surr: Phenol-d6	74.2	47.5-117		%REC	5	11/28/2011 1:26:00 PM
LOW LEVEL PAH BY GC/MS		**8270SIM**				Analyst: **bda**
1-Methylnaphthalene	721	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
2-Methylnaphthalene	1440	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
Acenaphthene	1920	38.6		µg/Kg-dry	5	11/23/2011 1:12:00 PM
Acenaphthylene	56.3	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
Anthracene	1080	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
Benz(a)anthracene	1580	38.6		µg/Kg-dry	5	11/23/2011 1:12:00 PM
Benzo(a)pyrene	510	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
Benzo(b)fluoranthene	1230	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
Benzo(g,h,i)perylene	174	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
Benzo(k)fluoranthene	363	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
Chrysene	1510	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
Dibenz(a,h)anthracene	116	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
Fluoranthene	11100	154		µg/Kg-dry	20	11/23/2011 12:45:00 PM
Fluorene	1580	38.6		µg/Kg-dry	5	11/23/2011 1:12:00 PM
Indeno(1,2,3-cd)pyrene	209	7.71		µg/Kg-dry	1	11/22/2011 8:51:00 PM
Naphthalene	1780	38.6		µg/Kg-dry	5	11/23/2011 1:12:00 PM
Phenanthrene	10100	154		µg/Kg-dry	20	11/23/2011 12:45:00 PM
Pyrene	6910	38.6		µg/Kg-dry	5	11/23/2011 1:12:00 PM
Surr: 2-Fluorobiphenyl	59.3	42.6-128		%REC	1	11/22/2011 8:51:00 PM
Surr: Nitrobenzene-d5	64.1	21.7-155		%REC	1	11/22/2011 8:51:00 PM
Surr: p-Terphenyl-d14	85.9	44.9-155		%REC	1	11/22/2011 8:51:00 PM

CLIENT: Maul, Foster & Alongi **Lab Order:** 1111166
Project: Port of Ridgefield / 9003.01.29

Lab ID: 1111166-03 **Collection Date:** 11/17/2011 1:20:00 PM
Client Sample ID: B318-S-1.75 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	94.2	16.4		mg/Kg-dry	1	11/21/2011
Lube Oil	125	54.8		mg/Kg-dry	1	11/21/2011
Surr: o-Terphenyl	95.7	50-150		%REC	1	11/21/2011
TOTAL METALS BY ICP		**E6010**				Analyst: **cmt**
Arsenic	10.2	2.07		mg/Kg-dry	1	11/22/2011 9:14:38 PM
SEMI-VOLATILE COMPOUNDS- ACID FRACTION		**E8270B-AF**				Analyst: **bda**
Pentachlorophenol	13700	7290		µg/Kg-dry	20	11/28/2011 12:33:00 PM
Surr: 2,4,6-Tribromophenol	58.0	57.8-119		%REC	20	11/28/2011 12:33:00 PM
Surr: 2-Fluorophenol	39.2	40.7-111	S	%REC	20	11/28/2011 12:33:00 PM
Surr: Phenol-d6	34.0	47.5-117	S	%REC	20	11/28/2011 12:33:00 PM
LOW LEVEL PAH BY GC/MS		**8270SIM**				Analyst: **bda**
1-Methylnaphthalene	21.9	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
2-Methylnaphthalene	24.1	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Acenaphthene	78.1	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Acenaphthylene	19.7	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Anthracene	118	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Benz(a)anthracene	97.8	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Benzo(a)pyrene	68.6	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Benzo(b)fluoranthene	169	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Benzo(g,h,i)perylene	50.4	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Benzo(k)fluoranthene	48.2	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Chrysene	106	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Dibenz(a,h)anthracene	33.6	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Fluoranthene	672	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Fluorene	112	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Indeno(1,2,3-cd)pyrene	58.4	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Naphthalene	33.6	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Phenanthrene	704	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Pyrene	483	7.31		µg/Kg-dry	1	11/23/2011 9:41:00 AM
Surr: 2-Fluorobiphenyl	62.6	42.6-128		%REC	1	11/23/2011 9:41:00 AM
Surr: Nitrobenzene-d5	71.9	21.7-155		%REC	1	11/23/2011 9:41:00 AM
Surr: p-Terphenyl-d14	104	44.9-155		%REC	1	11/23/2011 9:41:00 AM

Specialty Analytical

Date: *29-Nov-11*

CLIENT: Maul, Foster & Alongi
Lab Order: 1111166
Project: Port of Ridgefield / 9003.01.29

Lab ID: 1111166-04
Collection Date: 11/17/2011 2:02:00 PM
Client Sample ID: B319-S-2
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	46.4	16.9		mg/Kg-dry	1	11/21/2011
Lube Oil	246	56.2		mg/Kg-dry	1	11/21/2011
Surr: o-Terphenyl	71.4	50-150		%REC	1	11/21/2011
TOTAL METALS BY ICP		**E6010**				Analyst: **cmt**
Arsenic	7.84	2.16		mg/Kg-dry	1	11/22/2011 9:19:39 PM
SEMI-VOLATILE COMPOUNDS- ACID FRACTION		**E8270B-AF**				Analyst: **bda**
Pentachlorophenol	3260	375		µg/Kg-dry	1	11/28/2011 2:20:00 PM
Surr: 2,4,6-Tribromophenol	70.1	57.8-119		%REC	1	11/28/2011 2:20:00 PM
Surr: 2-Fluorophenol	69.5	40.7-111		%REC	1	11/28/2011 2:20:00 PM
Surr: Phenol-d6	76.6	47.5-117		%REC	1	11/28/2011 2:20:00 PM
LOW LEVEL PAH BY GC/MS		**8270SIM**				Analyst: **bda**
1-Methylnaphthalene	ND	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
2-Methylnaphthalene	ND	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Acenaphthene	ND	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Acenaphthylene	20.2	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Anthracene	48.7	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Benz(a)anthracene	24.0	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Benzo(a)pyrene	53.2	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Benzo(b)fluoranthene	151	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Benzo(g,h,i)perylene	50.2	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Benzo(k)fluoranthene	31.5	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Chrysene	21.0	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Dibenz(a,h)anthracene	31.5	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Fluoranthene	127	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Fluorene	ND	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Indeno(1,2,3-cd)pyrene	47.2	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Naphthalene	ND	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Phenanthrene	16.5	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Pyrene	72.7	7.50		µg/Kg-dry	1	11/23/2011 10:33:00 AM
Surr: 2-Fluorobiphenyl	83.2	42.6-128		%REC	1	11/23/2011 10:33:00 AM
Surr: Nitrobenzene-d5	90.2	21.7-155		%REC	1	11/23/2011 10:33:00 AM
Surr: p-Terphenyl-d14	97.2	44.9-155		%REC	1	11/23/2011 10:33:00 AM

CLIENT:	Maul, Foster & Alongi	**Lab Order:**	1111166
Project:	Port of Ridgefield / 9003.01.29		

Lab ID:	1111166-05	**Collection Date:**	11/17/2011 3:08:00 PM
Client Sample ID:	B320-S-2.25	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	268	16.6		mg/Kg-dry	1	11/21/2011
Lube Oil	698	55.3		mg/Kg-dry	1	11/21/2011
Surr: o-Terphenyl	91.7	50-150		%REC	1	11/21/2011
TOTAL METALS BY ICP		**E6010**				Analyst: **cmt**
Arsenic	10.2	2.13		mg/Kg-dry	1	11/22/2011 9:24:40 PM
SEMI-VOLATILE COMPOUNDS- ACID FRACTION		**E8270B-AF**				Analyst: **bda**
Pentachlorophenol	52300	29500		µg/Kg-dry	80	11/28/2011 4:05:00 PM
Surr: 2,4,6-Tribromophenol	63.4	57.8-119		%REC	20	11/28/2011 12:59:00 PM
Surr: 2-Fluorophenol	59.0	40.7-111		%REC	20	11/28/2011 12:59:00 PM
Surr: Phenol-d6	66.0	47.5-117		%REC	20	11/28/2011 12:59:00 PM
LOW LEVEL PAH BY GC/MS		**8270SIM**				Analyst: **bda**
1-Methylnaphthalene	50.9	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
2-Methylnaphthalene	86.3	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Acenaphthene	220	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Acenaphthylene	41.3	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Anthracene	232	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Benz(a)anthracene	209	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Benzo(a)pyrene	184	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Benzo(b)fluoranthene	383	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Benzo(g,h,i)perylene	87.8	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Benzo(k)fluoranthene	119	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Chrysene	185	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Dibenz(a,h)anthracene	53.8	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Fluoranthene	2140	36.9		µg/Kg-dry	5	11/23/2011 1:38:00 PM
Fluorene	204	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Indeno(1,2,3-cd)pyrene	84.1	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Naphthalene	255	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Phenanthrene	937	7.38		µg/Kg-dry	1	11/23/2011 2:05:00 PM
Pyrene	1810	36.9		µg/Kg-dry	5	11/23/2011 1:38:00 PM
Surr: 2-Fluorobiphenyl	77.9	42.6-128		%REC	1	11/23/2011 2:05:00 PM
Surr: Nitrobenzene-d5	83.9	21.7-155		%REC	1	11/23/2011 2:05:00 PM
Surr: p-Terphenyl-d14	81.4	44.9-155		%REC	1	11/23/2011 2:05:00 PM

CLIENT: Maul, Foster & Alongi **Lab Order:** 1111166
Project: Port of Ridgefield / 9003.01.29

Lab ID: 1111166-06 **Collection Date:** 11/17/2011 11:20:00 AM
Client Sample ID: B321-S-2 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TOTAL METALS BY ICP		**E6010**				Analyst: **cmt**
Arsenic	4.02	2.30		mg/Kg-dry	1	11/22/2011 9:29:41 PM
LOW LEVEL PAH BY GC/MS		**8270SIM**				Analyst: **bda**
1-Methylnaphthalene	201	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
2-Methylnaphthalene	342	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Acenaphthene	1300	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Acenaphthylene	11.5	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Anthracene	432	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Benz(a)anthracene	386	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Benzo(a)pyrene	147	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Benzo(b)fluoranthene	223	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Benzo(g,h,i)perylene	39.0	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Benzo(k)fluoranthene	74.2	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Chrysene	301	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Dibenz(a,h)anthracene	23.0	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Fluoranthene	2520	38.3		µg/Kg-dry	5	11/23/2011 12:19:00 PM
Fluorene	1230	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Indeno(1,2,3-cd)pyrene	43.6	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Naphthalene	347	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Phenanthrene	3820	38.3		µg/Kg-dry	5	11/23/2011 12:19:00 PM
Pyrene	1500	7.66		µg/Kg-dry	1	11/22/2011 7:58:00 PM
Surr: 2-Fluorobiphenyl	48.9	42.6-128		%REC	1	11/22/2011 7:58:00 PM
Surr: Nitrobenzene-d5	52.2	21.7-155		%REC	1	11/22/2011 7:58:00 PM
Surr: p-Terphenyl-d14	81.8	44.9-155		%REC	1	11/22/2011 7:58:00 PM

CLIENT: Maul, Foster & Alongi **Lab Order:** 1111166
Project: Port of Ridgefield / 9003.01.29

Lab ID: 1111166-07 **Collection Date:** 11/17/2011 12:00:00 PM
Client Sample ID: B322-S-2.5 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TOTAL METALS BY ICP		**E6010**				Analyst: **cmt**
Arsenic	241	1.97		mg/Kg-dry	1	11/22/2011 10:00:21 PM
LOW LEVEL PAH BY GC/MS		**8270SIM**				Analyst: **bda**
1-Methylnaphthalene	10000	375		µg/Kg-dry	50	11/23/2011 2:58:00 PM
2-Methylnaphthalene	10300	375		µg/Kg-dry	50	11/23/2011 2:58:00 PM
Acenaphthene	73900	375		µg/Kg-dry	50	11/23/2011 2:58:00 PM
Acenaphthylene	2870	37.5		µg/Kg-dry	5	11/23/2011 3:24:00 PM
Anthracene	34300	375		µg/Kg-dry	50	11/23/2011 2:58:00 PM
Benz(a)anthracene	28900	375		µg/Kg-dry	50	11/23/2011 2:58:00 PM
Benzo(a)pyrene	9070	375		µg/Kg-dry	50	11/23/2011 2:58:00 PM
Benzo(b)fluoranthene	21700	375		µg/Kg-dry	50	11/23/2011 2:58:00 PM
Benzo(g,h,i)perylene	2740	37.5		µg/Kg-dry	5	11/23/2011 3:24:00 PM
Benzo(k)fluoranthene	6720	37.5		µg/Kg-dry	5	11/23/2011 3:24:00 PM
Chrysene	28200	375		µg/Kg-dry	50	11/23/2011 2:58:00 PM
Dibenz(a,h)anthracene	1930	37.5		µg/Kg-dry	5	11/23/2011 3:24:00 PM
Fluoranthene	189000	1880		µg/Kg-dry	250	11/23/2011 2:31:00 PM
Fluorene	35500	375		µg/Kg-dry	50	11/23/2011 2:58:00 PM
Indeno(1,2,3-cd)pyrene	3490	37.5		µg/Kg-dry	5	11/23/2011 3:24:00 PM
Naphthalene	3780	37.5		µg/Kg-dry	5	11/23/2011 3:24:00 PM
Phenanthrene	178000	1880		µg/Kg-dry	250	11/23/2011 2:31:00 PM
Pyrene	130000	1880		µg/Kg-dry	250	11/23/2011 2:31:00 PM
Surr: 2-Fluorobiphenyl	74.7	42.6-128		%REC	5	11/23/2011 3:24:00 PM
Surr: Nitrobenzene-d5	67.5	21.7-155		%REC	1	11/23/2011 11:26:00 AM
Surr: p-Terphenyl-d14	85.4	44.9-155		%REC	5	11/23/2011 3:24:00 PM

Lab ID: 1111166-08 **Collection Date:** 11/17/2011 2:35:00 PM
Client Sample ID: B323-S-1 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMI-VOLATILE COMPOUNDS- ACID FRACTION		**E8270B-AF**				Analyst: **bda**
Pentachlorophenol	8380	3780		µg/Kg-dry	10	11/28/2011 3:13:00 PM
Surr: 2,4,6-Tribromophenol	53.9	57.8-119	S,MI	%REC	10	11/28/2011 3:13:00 PM
Surr: 2-Fluorophenol	48.6	40.7-111		%REC	10	11/28/2011 3:13:00 PM
Surr: Phenol-d6	43.2	47.5-117	S,MI	%REC	10	11/28/2011 3:13:00 PM

CLIENT: Maul, Foster & Alongi **Lab Order:** 1111166
Project: Port of Ridgefield / 9003.01.29

Lab ID: 1111166-09 **Collection Date:** 11/17/2011 2:20:00 PM
Client Sample ID: B324-S-0.5 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Dibenzofuran	ND	41.0		µg/Kg-dry	1	11/28/2011 3:39:00 PM
Pentachlorophenol	ND	61.5		µg/Kg-dry	1	11/28/2011 3:39:00 PM
Surr: 2,4,6-Tribromophenol	31.6	57.8-119	S,MI	%REC	1	11/28/2011 3:39:00 PM
Surr: 2-Fluorobiphenyl	32.5	52.6-93.2	S,MI	%REC	1	11/28/2011 3:39:00 PM
Surr: 2-Fluorophenol	38.2	40.7-111	S,MI	%REC	1	11/28/2011 3:39:00 PM
Surr: 4-Terphenyl-d14	41.9	49.8-118	S,MI	%REC	1	11/28/2011 3:39:00 PM
Surr: Nitrobenzene-d5	32.0	44.8-103	S,MI	%REC	1	11/28/2011 3:39:00 PM
Surr: Phenol-d6	37.9	47.5-117	S,MI	%REC	1	11/28/2011 3:39:00 PM
LOW LEVEL PAH BY GC/MS		**8270SIM**				Analyst: **bda**
1-Methylnaphthalene	ND	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
2-Methylnaphthalene	ND	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Acenaphthene	ND	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Acenaphthylene	ND	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Anthracene	8.20	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Benz(a)anthracene	8.20	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Benzo(a)pyrene	16.4	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Benzo(b)fluoranthene	29.5	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Benzo(g,h,i)perylene	18.0	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Benzo(k)fluoranthene	ND	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Chrysene	ND	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Dibenz(a,h)anthracene	11.5	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Fluoranthene	26.2	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Fluorene	ND	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Indeno(1,2,3-cd)pyrene	18.0	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Naphthalene	ND	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Phenanthrene	15.6	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Pyrene	19.7	8.20		µg/Kg-dry	1	11/23/2011 9:14:00 AM
Surr: 2-Fluorobiphenyl	42.1	42.6-128	S	%REC	1	11/23/2011 9:14:00 AM
Surr: Nitrobenzene-d5	60.3	21.7-155		%REC	1	11/23/2011 9:14:00 AM
Surr: p-Terphenyl-d14	82.2	44.9-155		%REC	1	11/23/2011 9:14:00 AM

Lab ID: 1111166-10 **Collection Date:** 11/17/2011 3:30:00 PM
Client Sample ID: B325-S-8.5 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TOTAL METALS BY ICP		**E6010**				Analyst: **cmt**
Arsenic	6.79	2.11		mg/Kg-dry	1	11/23/2011 11:13:22 AM

CLIENT: Maul, Foster & Alongi **Lab Order:** 1111166
Project: Port of Ridgefield / 9003.01.29

Lab ID: 1111166-11 **Collection Date:** 11/17/2011 3:35:00 PM
Client Sample ID: B325-S-10 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
LOW LEVEL PAH BY GC/MS		**8270SIM**				Analyst: **bda**
1-Methylnaphthalene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
2-Methylnaphthalene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Acenaphthene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Acenaphthylene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Anthracene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Benz(a)anthracene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Benzo(a)pyrene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Benzo(b)fluoranthene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Benzo(g,h,i)perylene	10.4	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Benzo(k)fluoranthene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Chrysene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Dibenz(a,h)anthracene	11.2	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Fluoranthene	28.8	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Fluorene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Indeno(1,2,3-cd)pyrene	9.62	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Naphthalene	ND	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Phenanthrene	21.6	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Pyrene	20.0	8.02		µg/Kg-dry	1	11/22/2011 7:32:00 PM
Surr: 2-Fluorobiphenyl	28.5	42.6-128	S	%REC	1	11/22/2011 7:32:00 PM
Surr: Nitrobenzene-d5	35.6	21.7-155		%REC	1	11/22/2011 7:32:00 PM
Surr: p-Terphenyl-d14	50.6	44.9-155		%REC	1	11/22/2011 7:32:00 PM

Lab ID: 1111166-12 **Collection Date:** 11/17/2011 4:50:00 PM
Client Sample ID: B326-S-4.5 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TOTAL METALS BY ICP		**E6010**				Analyst: **cmt**
Arsenic	17.8	2.13		mg/Kg-dry	1	11/22/2011 10:05:21 PM

CLIENT: Maul, Foster & Alongi
Work Order: 1111166
Project: Port of Ridgefield / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **MBLK-30055** SampType: **MBLK** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **11/22/2011** Run ID: **TJA IRIS_111122B**
Client ID: **ZZZZZ** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/22/2011** SeqNo: **796254**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	2.00									

Sample ID: **LCS-30055** SampType: **LCS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **11/22/2011** Run ID: **TJA IRIS_111122B**
Client ID: **ZZZZZ** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/22/2011** SeqNo: **796255**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	88.83	2.00	100	0	88.8	85.1	107	0	0		

Sample ID: **1111166-10AMS** SampType: **MS** TestCode: **6010_S** Units: **mg/Kg-dry** Prep Date: **11/22/2011** Run ID: **TJA IRIS_111122B**
Client ID: **B325-S-8.5** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/23/2011** SeqNo: **796380**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	112.1	2.19	109.5	6.788	96.1	86.1	109	0	0		

Sample ID: **1111166-10AMSD** SampType: **MSD** TestCode: **6010_S** Units: **mg/Kg-dry** Prep Date: **11/22/2011** Run ID: **TJA IRIS_111122B**
Client ID: **B325-S-8.5** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/23/2011** SeqNo: **796381**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	96.83	2.19	109.5	6.788	82.2	86.1	109	112.1	14.6	20	S

Sample ID: **1111166-10ADUP** SampType: **DUP** TestCode: **6010_S** Units: **mg/Kg-dry** Prep Date: **11/22/2011** Run ID: **TJA IRIS_111122B**
Client ID: **B325-S-8.5** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/23/2011** SeqNo: **796379**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	3.784	2.11	0	0	0	0	0	6.788	56.8	20	R

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Maul, Foster & Alongi
Work Order: 1111166
Project: Port of Ridgefield / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: Run ID: **TJA IRIS_111122B**
Client ID: **ZZZZZ** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/22/2011** SeqNo: **796253**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	100.5	2.00	100	0	101	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: Run ID: **TJA IRIS_111122B**
Client ID: **ZZZZZ** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/22/2011** SeqNo: **796260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	103.7	2.00	100	0	104	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: Run ID: **TJA IRIS_111122B**
Client ID: **ZZZZZ** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/22/2011** SeqNo: **796269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	104.7	2.00	100	0	105	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: Run ID: **TJA IRIS_111122B**
Client ID: **ZZZZZ** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/22/2011** SeqNo: **796272**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	106.2	2.00	100	0	106	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: Run ID: **TJA IRIS_111122B**
Client ID: **ZZZZZ** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/23/2011** SeqNo: **796382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	100.7	2.00	100	0	101	90	110	0	0		

Sample ID: **ICV** SampType: **ICV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: Run ID: **TJA IRIS_111122B**
Client ID: **ZZZZZ** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/22/2011** SeqNo: **796252**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **ICV** SampType: **ICV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: Run ID: **TJA IRIS_111122B**
Client ID: **ZZZZZ** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/22/2011** SeqNo: **796252**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	98.57	2.00	100	0	98.6	90	110	0	0		

Sample ID: **ICV** SampType: **ICV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: Run ID: **TJA IRIS_111122B**
Client ID: **ZZZZZ** Batch ID: **30055** TestNo: **E6010** Analysis Date: **11/23/2011** SeqNo: **796377**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	104.1	2.00	100	0	104	90	110	0	0		

CLIENT: Maul, Foster & Alongi
Work Order: 1111166
Project: Port of Ridgefield / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270AF_S

Sample ID: **MB-30044** SampType: **MBLK** TestCode: **8270AF_S** Units: **µg/Kg** Prep Date: **11/21/2011** Run ID: **5973G_111128A**
Client ID: **ZZZZZ** Batch ID: **30044** TestNo: **E8270B-AF** Analysis Date: **11/28/2011** SeqNo: **796794**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	ND	333									
Surr: 2,4,6-Tribromophenol	1934	0	3333	0	58	57.8	119	0	0		
Surr: 2-Fluorophenol	2378	0	3333	0	71.4	40.7	111	0	0		
Surr: Phenol-d6	2327	0	3333	0	69.8	47.5	117	0	0		

Sample ID: **LCS-30044** SampType: **LCS** TestCode: **8270AF_S** Units: **µg/Kg** Prep Date: **11/21/2011** Run ID: **5973G_111128A**
Client ID: **ZZZZZ** Batch ID: **30044** TestNo: **E8270B-AF** Analysis Date: **11/28/2011** SeqNo: **796795**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	787.3	333	1667	0	47.2	46.8	120	0	0		

Sample ID: **1111166-02AMS** SampType: **MS** TestCode: **8270AF_S** Units: **µg/Kg-dry** Prep Date: **11/21/2011** Run ID: **5973G_111128A**
Client ID: **B317-S-1.25** Batch ID: **30044** TestNo: **E8270B-AF** Analysis Date: **11/28/2011** SeqNo: **796798**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	7372	1920	1927	5890	76.9	36.6	112	0	0		

Sample ID: **1111166-02AMSD** SampType: **MSD** TestCode: **8270AF_S** Units: **µg/Kg-dry** Prep Date: **11/21/2011** Run ID: **5973G_111128A**
Client ID: **B317-S-1.25** Batch ID: **30044** TestNo: **E8270B-AF** Analysis Date: **11/28/2011** SeqNo: **796799**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	4487	1920	1927	5890	-72.8	36.6	112	7372	48.6	20	S,R

Sample ID: **CCV-30044** SampType: **CCV** TestCode: **8270AF_S** Units: **µg/Kg** Prep Date: Run ID: **5973G_111128A**
Client ID: **ZZZZZ** Batch ID: **30044** TestNo: **E8270B-AF** Analysis Date: **11/28/2011** SeqNo: **796793**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	1089	333	1333	0	81.7	80	120	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Maul, Foster & Alongi
Work Order: 1111166
Project: Port of Ridgefield / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270LL_S

Sample ID: **MB-30069** SampType: **MBLK** TestCode: **8270LL_S** Units: **µg/Kg** Prep Date: **11/23/2011** Run ID: **5973G_111128B**
Client ID: **ZZZZZ** Batch ID: **30069** TestNo: **SW8270D** Analysis Date: **11/28/2011** SeqNo: **796813**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenzofuran	ND	33.3									
Pentachlorophenol	ND	50.0									
Surr: 2,4,6-Tribromophenol	1934	0	3333	0	58	57.8	119	0	0		
Surr: 2-Fluorobiphenyl	2196	0	3333	0	65.9	52.6	93.2	0	0		
Surr: 2-Fluorophenol	2378	0	3333	0	71.4	40.7	111	0	0		
Surr: 4-Terphenyl-d14	3318	0	3333	0	99.5	49.8	118	0	0		
Surr: Nitrobenzene-d5	2531	0	3333	0	75.9	44.8	103	0	0		
Surr: Phenol-d6	2327	0	3333	0	69.8	47.5	117	0	0		

Sample ID: **LCS-30069** SampType: **LCS** TestCode: **8270LL_S** Units: **µg/Kg** Prep Date: **11/23/2011** Run ID: **5973G_111128B**
Client ID: **ZZZZZ** Batch ID: **30069** TestNo: **SW8270D** Analysis Date: **11/28/2011** SeqNo: **796814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenzofuran	1295	33.3	1667	0	77.7	70	130	0	0		
Pentachlorophenol	787.3	50.0	1667	0	47.2	46.8	120	0	0		

Sample ID: **A1111166-02AMS** SampType: **MS** TestCode: **8270LL_S** Units: **µg/Kg-dry** Prep Date: **11/23/2011** Run ID: **5973G_111128B**
Client ID: **ZZZZZ** Batch ID: **30069** TestNo: **SW8270D** Analysis Date: **11/28/2011** SeqNo: **796815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenzofuran	2439	38.5	1927	1909	27.5	60	140	0	0		S,MI

Sample ID: **A1111166-02AMS** SampType: **MS** TestCode: **8270LL_S** Units: **µg/Kg-dry** Prep Date: **11/23/2011** Run ID: **5973G_111128B**
Client ID: **ZZZZZ** Batch ID: **30069** TestNo: **SW8270D** Analysis Date: **11/28/2011** SeqNo: **796817**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	7372	289	1927	5890	76.9	36.6	112	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

Sample ID: **A1111166-02AMSD** SampType: **MSD** TestCode: **8270LL_S** Units: **µg/Kg-dry** Prep Date: **11/23/2011** Run ID: **5973G_111128B**
Client ID: **ZZZZZ** Batch ID: **30069** TestNo: **SW8270D** Analysis Date: **11/28/2011** SeqNo: **796816**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenzofuran	2076	38.5	1927	1909	8.64	60	140	2439	16.1	20	S,MI

Sample ID: **A1111166-02AMSD** SampType: **MSD** TestCode: **8270LL_S** Units: **µg/Kg-dry** Prep Date: **11/23/2011** Run ID: **5973G_111128B**
Client ID: **ZZZZZ** Batch ID: **30069** TestNo: **SW8270D** Analysis Date: **11/28/2011** SeqNo: **796818**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	4487	289	1927	5890	-72.8	36.6	112	7372	48.6	20	S,R,MI

Sample ID: **CCV-30069** SampType: **CCV** TestCode: **8270LL_S** Units: **µg/Kg** Prep Date: Run ID: **5973G_111128B**
Client ID: **ZZZZZ** Batch ID: **30069** TestNo: **SW8270D** Analysis Date: **11/28/2011** SeqNo: **796812**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenzofuran	1466	33.3	1333	0	110	80	120	0	0		
Pentachlorophenol	1089	50.0	1333	0	81.7	80	120	0	0		

CLIENT: Maul, Foster & Alongi
Work Order: 1111166
Project: Port of Ridgefield / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

Sample ID: **MB-30046** SampType: **MBLK** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **11/21/2011** Run ID: **GC-M_111121B**
Client ID: **ZZZZZ** Batch ID: **30046** TestNo: **NWTPH-Dx** Analysis Date: **11/21/2011** SeqNo: **795591**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	35.98	0	33.33	0	108	50	150	0	0		

Sample ID: **LCS-30046** SampType: **LCS** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **11/21/2011** Run ID: **GC-M_111121B**
Client ID: **ZZZZZ** Batch ID: **30046** TestNo: **NWTPH-Dx** Analysis Date: **11/21/2011** SeqNo: **795594**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	151.6	15.0	166.6	0	91	76.3	125	0	0		
Lube Oil	148.7	50.0	166.6	0	89.2	69.9	127	0	0		

Sample ID: **1111166-05ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **11/21/2011** Run ID: **GC-M_111121B**
Client ID: **B320-S-2.25** Batch ID: **30046** TestNo: **NWTPH-Dx** Analysis Date: **11/21/2011** SeqNo: **795607**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	263.3	16.6	0	0	0	0	0	268	1.78	20	
Lube Oil	672.3	55.3	0	0	0	0	0	698.4	3.80	20	

Sample ID: **CCB-30046** SampType: **CCB** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_111121B**
Client ID: **ZZZZZ** Batch ID: **30046** TestNo: **NWTPH-Dx** Analysis Date: **11/21/2011** SeqNo: **796209**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0	0	0	0	0	0	0	0		
Lube Oil	ND	50.0	0	0	0	0	0	0	0		
Surr: o-Terphenyl	35.78	0	33.33	0	107	50	150	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_111121B**
Client ID: **ZZZZZ** Batch ID: **R70304** TestNo: **NWTPH-Dx** Analysis Date: **11/21/2011** SeqNo: **795588**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_111121B**
Client ID: **ZZZZZ** Batch ID: **R70304** TestNo: **NWTPH-Dx** Analysis Date: **11/21/2011** SeqNo: **795588**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1387	15.0	1368	0	101	85	115	0	0		
Lube Oil	676.1	50.0	704.5	0	96	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_111121B**
Client ID: **ZZZZZ** Batch ID: **R70304** TestNo: **NWTPH-Dx** Analysis Date: **11/21/2011** SeqNo: **795610**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	996.2	15.0	1026	0	97.1	85	115	0	0		
Lube Oil	510.3	50.0	528.4	0	96.6	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_111121B**
Client ID: **ZZZZZ** Batch ID: **30046** TestNo: **NWTPH-Dx** Analysis Date: **11/21/2011** SeqNo: **796208**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1070	15.0	1026	0	104	85	115	0	0		
Lube Oil	531.9	50.0	528.4	0	101	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_111121B**
Client ID: **ZZZZZ** Batch ID: **30046** TestNo: **NWTPH-Dx** Analysis Date: **11/21/2011** SeqNo: **796212**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1448	15.0	1368	0	106	85	115	0	0		
Lube Oil	691.7	50.0	704.5	0	98.2	85	115	0	0		

Sample ID: **MB-30045** SampType: **MBLK** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: **11/21/2011** Run ID: **5973G_111122B**
Client ID: **ZZZZZ** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/22/2011** SeqNo: **796098**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	6.67									
2-Methylnaphthalene	ND	6.67									
Acenaphthene	ND	6.67									
Acenaphthylene	ND	6.67									
Anthracene	0.6667	6.67									J
Benz(a)anthracene	2.667	6.67									J
Benzo(a)pyrene	4	6.67									J
Benzo(b)fluoranthene	3.333	6.67									J
Benzo(g,h,i)perylene	6	6.67									J
Benzo(k)fluoranthene	2.667	6.67									J
Chrysene	2	6.67									J
Dibenz(a,h)anthracene	5.333	6.67									J
Fluoranthene	0.6667	6.67									J
Fluorene	ND	6.67									
Indeno(1,2,3-cd)pyrene	6	6.67									J
Naphthalene	ND	6.67									
Phenanthrene	0.6667	6.67									J
Pyrene	ND	6.67									
Surr: 2-Fluorobiphenyl	3873	0	6667	0	58.1	42.6	128	0	0		
Surr: Nitrobenzene-d5	4901	0	6667	0	73.5	21.7	155	0	0		
Surr: p-Terphenyl-d14	6363	0	6667	0	95.4	44.9	155	0	0		

Sample ID: **LCS-30045** SampType: **LCS** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: **11/21/2011** Run ID: **5973G_111122B**
Client ID: **ZZZZZ** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/22/2011** SeqNo: **796095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	183.3	6.67	333.3	0	55	39.6	107	0	0		
Benzo(g,h,i)perylene	250	6.67	333.3	0	75	49.7	135	0	0		
Chrysene	241.3	6.67	333.3	0	72.4	57.1	130	0	0		
Naphthalene	178	6.67	333.3	0	53.4	29.1	109	0	0		
Phenanthrene	229.3	6.67	333.3	0	68.8	48.4	115	0	0		

CLIENT: Maul, Foster & Alongi
Work Order: 1111166
Project: Port of Ridgefield / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: PAHLL_S

Sample ID: **LCS-30045** SampType: **LCS** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: **11/21/2011** Run ID: **5973G_111122B**
Client ID: **ZZZZZ** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/22/2011** SeqNo: **796095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pyrene	251.3	6.67	333.3	0	75.4	47.2	134	0	0		

Sample ID: **1111166-11AMS** SampType: **MS** TestCode: **PAHLL_S** Units: **µg/Kg-dry** Prep Date: **11/21/2011** Run ID: **5973G_111122B**
Client ID: **B325-S-10** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/22/2011** SeqNo: **796096**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	227.6	8.02	400.6	1.603	56.4	33.7	111	0	0		
Benzo(g,h,i)perylene	265.2	8.02	400.6	10.42	63.6	15	128	0	0		
Chrysene	258	8.02	400.6	4.006	63.4	37.5	125	0	0		
Naphthalene	212.3	8.02	400.6	4.808	51.8	27.7	108	0	0		
Phenanthrene	309.3	8.02	400.6	21.63	71.8	20.2	139	0	0		
Pyrene	318.1	8.02	400.6	20.03	74.4	26.8	142	0	0		

Sample ID: **1111166-11AMSD** SampType: **MSD** TestCode: **PAHLL_S** Units: **µg/Kg-dry** Prep Date: **11/21/2011** Run ID: **5973G_111122B**
Client ID: **B325-S-10** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/22/2011** SeqNo: **796097**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	173.9	8.02	400.6	1.603	43	33.7	111	227.6	26.7	20	R
Benzo(g,h,i)perylene	209.9	8.02	400.6	10.42	49.8	15	128	265.2	23.3	20	R
Chrysene	201.9	8.02	400.6	4.006	49.4	37.5	125	258	24.4	20	R
Naphthalene	191.5	8.02	400.6	4.808	46.6	27.7	108	212.3	10.3	20	
Phenanthrene	236.4	8.02	400.6	21.63	53.6	20.2	139	309.3	26.7	20	R
Pyrene	240.4	8.02	400.6	20.03	55	26.8	142	318.1	27.8	20	R

Sample ID: **CCB-30045** SampType: **CCB** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: Run ID: **5973G_111122B**
Client ID: **ZZZZZ** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/23/2011** SeqNo: **796521**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	0.6667	6.67	0	0	0	0	0	0	0		
2-Methylnaphthalene	ND	6.67	0	0	0	0	0	0	0		
Acenaphthene	ND	6.67	0	0	0	0	0	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

Sample ID: **CCB-30045** SampType: **CCB** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: Run ID: **5973G_111122B**
Client ID: **ZZZZZ** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/23/2011** SeqNo: **796521**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthylene	ND	6.67	0	0	0	0	0	0	0		
Anthracene	ND	6.67	0	0	0	0	0	0	0		
Benz(a)anthracene	1.333	6.67	0	0	0	0	0	0	0		
Benzo(a)pyrene	1.333	6.67	0	0	0	0	0	0	0		
Benzo(b)fluoranthene	1.333	6.67	0	0	0	0	0	0	0		
Benzo(g,h,i)perylene	4.667	6.67	0	0	0	0	0	0	0		
Benzo(k)fluoranthene	1.333	6.67	0	0	0	0	0	0	0		
Chrysene	0.6667	6.67	0	0	0	0	0	0	0		
Dibenz(a,h)anthracene	4.667	6.67	0	0	0	0	0	0	0		
Fluoranthene	0.6667	6.67	0	0	0	0	0	0	0		
Fluorene	ND	6.67	0	0	0	0	0	0	0		
Indeno(1,2,3-cd)pyrene	4	6.67	0	0	0	0	0	0	0		
Naphthalene	1.333	6.67	0	0	0	0	0	0	0		
Phenanthrene	ND	6.67	0	0	0	0	0	0	0		
Pyrene	0.6667	6.67	0	0	0	0	0	0	0		
Surr: 2-Fluorobiphenyl	3819	0	6667	0	57.3	42.6	128	0	0		
Surr: Nitrobenzene-d5	4929	0	6667	0	73.9	21.7	155	0	0		
Surr: p-Terphenyl-d14	6589	0	6667	0	98.8	44.9	155	0	0		

Sample ID: **CCV-30045** SampType: **CCV** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: Run ID: **5973G_111122B**
Client ID: **ZZZZZ** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/22/2011** SeqNo: **796079**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	61.33	6.67	66.67	0	92	70	130	0	0		
2-Methylnaphthalene	70.67	6.67	66.67	0	106	70	130	0	0		
Acenaphthene	63.33	6.67	66.67	0	95	70	130	0	0		
Acenaphthylene	77.33	6.67	66.67	0	116	70	130	0	0		
Anthracene	69.33	6.67	66.67	0	104	70	130	0	0		
Benz(a)anthracene	68.67	6.67	66.67	0	103	70	130	0	0		
Benzo(a)pyrene	70.67	6.67	66.67	0	106	70	130	0	0		
Benzo(b)fluoranthene	73.33	6.67	66.67	0	110	70	130	0	0		

Sample ID: **CCV-30045** SampType: **CCV** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: Run ID: **5973G_111122B**
Client ID: **ZZZZZ** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/22/2011** SeqNo: **796079**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(g,h,i)perylene	68.67	6.67	66.67	0	103	70	130	0	0		
Benzo(k)fluoranthene	63.33	6.67	66.67	0	95	70	130	0	0		
Chrysene	59.33	6.67	66.67	0	89	70	130	0	0		
Dibenz(a,h)anthracene	79.33	6.67	66.67	0	119	70	130	0	0		
Fluoranthene	75.33	6.67	66.67	0	113	70	130	0	0		
Fluorene	76	6.67	66.67	0	114	70	130	0	0		
Indeno(1,2,3-cd)pyrene	74	6.67	66.67	0	111	70	130	0	0		
Naphthalene	72	6.67	66.67	0	108	70	130	0	0		
Phenanthrene	68	6.67	66.67	0	102	70	130	0	0		
Pyrene	66	6.67	66.67	0	99	70	130	0	0		

Sample ID: **CCV-30045** SampType: **CCV** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: Run ID: **5973G_111122B**
Client ID: **ZZZZZ** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/23/2011** SeqNo: **796520**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	60.67	6.67	66.67	0	91	70	130	0	0		
2-Methylnaphthalene	75.33	6.67	66.67	0	113	70	130	0	0		
Acenaphthene	66	6.67	66.67	0	99	70	130	0	0		
Acenaphthylene	74	6.67	66.67	0	111	70	130	0	0		
Anthracene	66.67	6.67	66.67	0	100	70	130	0	0		
Benz(a)anthracene	70	6.67	66.67	0	105	70	130	0	0		
Benzo(a)pyrene	71.33	6.67	66.67	0	107	70	130	0	0		
Benzo(b)fluoranthene	74	6.67	66.67	0	111	70	130	0	0		
Benzo(g,h,i)perylene	64	6.67	66.67	0	96	70	130	0	0		
Benzo(k)fluoranthene	69.33	6.67	66.67	0	104	70	130	0	0		
Chrysene	59.33	6.67	66.67	0	89	70	130	0	0		
Dibenz(a,h)anthracene	76	6.67	66.67	0	114	70	130	0	0		
Fluoranthene	76	6.67	66.67	0	114	70	130	0	0		
Fluorene	76	6.67	66.67	0	114	70	130	0	0		
Indeno(1,2,3-cd)pyrene	68.67	6.67	66.67	0	103	70	130	0	0		
Naphthalene	72	6.67	66.67	0	108	70	130	0	0		

CLIENT: Maul, Foster & Alongi
Work Order: 1111166
Project: Port of Ridgefield / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: PAHLL_S

Sample ID: **CCV-30045** SampType: **CCV** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: Run ID: **5973G_111122B**
Client ID: **ZZZZZ** Batch ID: **30045** TestNo: **8270SIM** Analysis Date: **11/23/2011** SeqNo: **796520**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	65.33	6.67	66.67	0	98	70	130	0	0		
Pyrene	68.67	6.67	66.67	0	103	70	130	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page 1 of 1

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager Alan Hughes
Company MFA
Address
Phone
Fax
Project No. 9003.01.29
Project Name Port of Ridgefield
Project Site Location OR ____ WA ____ Other ____
Invoice To
P.O. No.

Collected By:
Signature K Gallagher
Printed KERRY GALLAGHER
Signature
Printed David Knutson

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush ____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1111166
Shipped Via Specialty
Air Bill No.
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Arsenic (6010)	PCP (8270D)	cPAH (8270 SIM)	DRO (NWTPH-Dx)	RRO (NWTPH-Dx)						Comments	Lab I.D.
11/17/11	1054	B316-S-2	soil	3	X	X	X	X	X							
	1215	B317-S-1.25		3	X	X	X	X	X							
	1320	B318-S-1.75		3	X	X	X	X	X							
	1402	B319-S-2		3	X	X	X	X	X							
	1508	B320-S-2.25		3	X	X	X	X	X							
	1120	B321-S-2		2	X		X									
	1200	B322-S-2.5		2	X		X									
	1435	B323-S-1		3		X										
	1420	B324-S-0.5		3		X	X									
	1530	B325-S-8.5		3	X											
	1535	B325-S-10		3			X									
	1650	B326-S-4.5		3	X											

Relinquished By: K Gallagher
Company: MFA
Date 11/18/11
Time 1445

Received By:
Company: Specialty

Relinquished By:
Company: Specialty
Date 11/18/11
Time 1545

Received For Lab By: Cindy Hillegard
Date 11/18/11
Time 1545

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Copies: White-Original   Yellow-Project File   Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

December 06, 2011

Alan Hughes
Maul, Foster & Alongi
400 East Mill Plain Blvd
Suite 400
Vancouver, WA 98660

TEL: (360) 694-2691
FAX: (360) 906-1958

RE: SER Monitoring Dec-11 / 9003.01.29

Dear Alan Hughes: Order No.: 1111219

Specialty Analytical received 16 samples on 11/23/2011 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Cindy Hillyard
Cindy Hillyard
Project Manager

Technical Review

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3729111711
Lab Order:	1111219	**Collection Date:**	11/17/2011 2:20:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-01	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.678	0.0797		mg/L	1	11/30/2011
Lube Oil	0.665	0.199		mg/L	1	11/30/2011
Surr: o-Terphenyl	121	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00790	0.00500		mg/L	1	11/28/2011 4:28:33 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 4:28:33 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 4:28:33 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	3.94	0.100		ug/L	1	11/28/2011 11:15:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
2,3,4,6-Tetrachlorophenol	4.47	0.960		ug/L	1	12/5/2011 3:36:00 PM
2,3,4-Trichlorophenol	1.76	0.960		ug/L	1	12/5/2011 3:36:00 PM
2,3,5,6-Tetrachlorophenol	8.82	0.960		ug/L	1	12/5/2011 3:36:00 PM
2,3,5-Trichlorophenol	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
2,3,6-Trichlorophenol	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
2,4,5-Trichlorophenol	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
2,4,6-Trichlorophenol	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
2-Methylnaphthalene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
3,4,5-Trichlorophenol	9.40	0.960		ug/L	1	12/5/2011 3:36:00 PM
Acenaphthene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Acenaphthylene	1.51	0.960		ug/L	1	12/5/2011 3:36:00 PM
Anthracene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Benz(a)anthracene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Benzo(a)pyrene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Benzo(b)fluoranthene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Benzo(g,h,i)perylene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Benzo(k)fluoranthene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Carbazole	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Chrysene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Dibenz(a,h)anthracene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Dibenzofuran	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Fluoranthene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Fluorene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Naphthalene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Pentachlorophenol	24.1	1.44		ug/L	1	12/5/2011 3:36:00 PM
Phenanthrene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3729111711
Lab Order:	1111219	**Collection Date:**	11/17/2011 2:20:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-01	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.960		ug/L	1	12/5/2011 3:36:00 PM
Surr: 2,4,6-Tribromophenol	75.4	33.1-99.7		%REC	1	12/5/2011 3:36:00 PM
Surr: 2-Fluorobiphenyl	67.7	33.1-96.2		%REC	1	12/5/2011 3:36:00 PM
Surr: 2-Fluorophenol	27.9	13.4-57.1		%REC	1	12/5/2011 3:36:00 PM
Surr: 4-Terphenyl-d14	78.1	41-122		%REC	1	12/5/2011 3:36:00 PM
Surr: Nitrobenzene-d5	68.6	28.9-99.9		%REC	1	12/5/2011 3:36:00 PM
Surr: Phenol-d6	18.5	10.6-38.5		%REC	1	12/5/2011 3:36:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 12:11:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 12:11:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 12:11:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 12:11:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 12:11:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 12:11:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT: Maul, Foster & Alongi
Client Sample ID: E3729111711
Lab Order: 1111219
Collection Date: 11/17/2011 2:20:00 PM
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1111219-01
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 12:11:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 12:11:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 12:11:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Naphthalene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 12:11:00 PM
Surr: 1,2-Dichloroethane-d4	82.6	72.2-129		%REC	1	11/28/2011 12:11:00 PM
Surr: 4-Bromofluorobenzene	101	73.5-125		%REC	1	11/28/2011 12:11:00 PM
Surr: Dibromofluoromethane	89.7	58.8-148		%REC	1	11/28/2011 12:11:00 PM
Surr: Toluene-d8	103	79.8-137		%REC	1	11/28/2011 12:11:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3724111711
Lab Order:	1111219	**Collection Date:**	11/17/2011 3:05:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-02	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.512	0.0811		mg/L	1	11/30/2011
Lube Oil	0.605	0.203		mg/L	1	11/30/2011
Surr: o-Terphenyl	115	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	ND	0.00500		mg/L	1	11/28/2011 4:33:37 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 4:33:37 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 4:33:37 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	3.71	0.100		ug/L	1	11/28/2011 11:22:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
2,3,4,6-Tetrachlorophenol	3.81	0.958		ug/L	1	12/5/2011 4:03:00 PM
2,3,4-Trichlorophenol	1.40	0.958		ug/L	1	12/5/2011 4:03:00 PM
2,3,5,6-Tetrachlorophenol	6.00	0.958		ug/L	1	12/5/2011 4:03:00 PM
2,3,5-Trichlorophenol	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
2,3,6-Trichlorophenol	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
2,4,5-Trichlorophenol	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
2,4,6-Trichlorophenol	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
2-Methylnaphthalene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
3,4,5-Trichlorophenol	7.00	0.958		ug/L	1	12/5/2011 4:03:00 PM
Acenaphthene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Acenaphthylene	1.14	0.958		ug/L	1	12/5/2011 4:03:00 PM
Anthracene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Benz(a)anthracene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Benzo(a)pyrene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Benzo(b)fluoranthene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Benzo(g,h,i)perylene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Benzo(k)fluoranthene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Carbazole	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Chrysene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Dibenz(a,h)anthracene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Dibenzofuran	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Fluoranthene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Fluorene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Naphthalene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Pentachlorophenol	13.5	1.44		ug/L	1	12/5/2011 4:03:00 PM
Phenanthrene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3724111711
Lab Order:	1111219	**Collection Date:**	11/17/2011 3:05:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-02	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.958		ug/L	1	12/5/2011 4:03:00 PM
Surr: 2,4,6-Tribromophenol	70.5	33.1-99.7		%REC	1	12/5/2011 4:03:00 PM
Surr: 2-Fluorobiphenyl	71.3	33.1-96.2		%REC	1	12/5/2011 4:03:00 PM
Surr: 2-Fluorophenol	29.4	13.4-57.1		%REC	1	12/5/2011 4:03:00 PM
Surr: 4-Terphenyl-d14	78.6	41-122		%REC	1	12/5/2011 4:03:00 PM
Surr: Nitrobenzene-d5	71.4	28.9-99.9		%REC	1	12/5/2011 4:03:00 PM
Surr: Phenol-d6	18.8	10.6-38.5		%REC	1	12/5/2011 4:03:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 12:34:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 12:34:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 12:34:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 12:34:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 12:34:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 12:34:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3724111711
Lab Order:	1111219	**Collection Date:**	11/17/2011 3:05:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-02	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 12:34:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 12:34:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 12:34:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Naphthalene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 12:34:00 PM
Surr: 1,2-Dichloroethane-d4	86.0	72.2-129		%REC	1	11/28/2011 12:34:00 PM
Surr: 4-Bromofluorobenzene	100	73.5-125		%REC	1	11/28/2011 12:34:00 PM
Surr: Dibromofluoromethane	94.7	58.8-148		%REC	1	11/28/2011 12:34:00 PM
Surr: Toluene-d8	98.6	79.8-137		%REC	1	11/28/2011 12:34:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3228111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 10:50:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-03	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.819	0.0805		mg/L	1	11/30/2011
Lube Oil	2.01	0.201		mg/L	1	11/30/2011
Surr: o-Terphenyl	122	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00730	0.00500		mg/L	1	11/28/2011 4:59:05 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 4:59:05 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 4:59:05 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	2.26	0.100		ug/L	1	11/28/2011 11:29:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
2,3,4,6-Tetrachlorophenol	3.36	0.960		ug/L	1	12/5/2011 4:29:00 PM
2,3,4-Trichlorophenol	1.41	0.960		ug/L	1	12/5/2011 4:29:00 PM
2,3,5,6-Tetrachlorophenol	2.21	0.960		ug/L	1	12/5/2011 4:29:00 PM
2,3,5-Trichlorophenol	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
2,3,6-Trichlorophenol	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
2,4,5-Trichlorophenol	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
2,4,6-Trichlorophenol	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
2-Methylnaphthalene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
3,4,5-Trichlorophenol	25.1	0.960		ug/L	1	12/5/2011 4:29:00 PM
Acenaphthene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Acenaphthylene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Anthracene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Benz(a)anthracene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Benzo(a)pyrene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Benzo(b)fluoranthene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Benzo(g,h,i)perylene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Benzo(k)fluoranthene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Carbazole	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Chrysene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Dibenz(a,h)anthracene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Dibenzofuran	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Fluoranthene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Fluorene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Naphthalene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Pentachlorophenol	14.5	1.44		ug/L	1	12/5/2011 4:29:00 PM
Phenanthrene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3228111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 10:50:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-03	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.960		ug/L	1	12/5/2011 4:29:00 PM
Surr: 2,4,6-Tribromophenol	73.5	33.1-99.7		%REC	1	12/5/2011 4:29:00 PM
Surr: 2-Fluorobiphenyl	65.9	33.1-96.2		%REC	1	12/5/2011 4:29:00 PM
Surr: 2-Fluorophenol	27.8	13.4-57.1		%REC	1	12/5/2011 4:29:00 PM
Surr: 4-Terphenyl-d14	75.5	41-122		%REC	1	12/5/2011 4:29:00 PM
Surr: Nitrobenzene-d5	69.7	28.9-99.9		%REC	1	12/5/2011 4:29:00 PM
Surr: Phenol-d6	18.5	10.6-38.5		%REC	1	12/5/2011 4:29:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 1:12:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 1:12:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 1:12:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 1:12:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 1:12:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 1:12:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3228111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 10:50:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-03	**Matrix:**	AQUEOUS

VOLATILE ORGANICS BY GC/MS **SW8260B** Analyst: **rkg**

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 1:12:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 1:12:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 1:12:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Naphthalene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 1:12:00 PM
Surr: 1,2-Dichloroethane-d4	89.3	72.2-129		%REC	1	11/28/2011 1:12:00 PM
Surr: 4-Bromofluorobenzene	99.9	73.5-125		%REC	1	11/28/2011 1:12:00 PM
Surr: Dibromofluoromethane	97.5	58.8-148		%REC	1	11/28/2011 1:12:00 PM
Surr: Toluene-d8	99.1	79.8-137		%REC	1	11/28/2011 1:12:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2830111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 11:35:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-04	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.178	0.0808		mg/L	1	11/30/2011
Lube Oil	0.468	0.202		mg/L	1	11/30/2011
Surr: o-Terphenyl	112	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00890	0.00500		mg/L	1	11/28/2011 4:08:19 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 4:08:19 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 4:08:19 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	2.16	0.100		ug/L	1	11/28/2011 11:36:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
2,3,4-Trichlorophenol	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
2,3,5-Trichlorophenol	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
2,3,6-Trichlorophenol	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
2,4,5-Trichlorophenol	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
2,4,6-Trichlorophenol	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
2-Methylnaphthalene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
3,4,5-Trichlorophenol	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Acenaphthene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Acenaphthylene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Anthracene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Benz(a)anthracene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Benzo(a)pyrene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Benzo(b)fluoranthene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Benzo(g,h,i)perylene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Benzo(k)fluoranthene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Carbazole	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Chrysene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Dibenz(a,h)anthracene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Dibenzofuran	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Fluoranthene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Fluorene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Naphthalene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Pentachlorophenol	ND	1.43		ug/L	1	12/5/2011 4:55:00 PM
Phenanthrene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2830111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 11:35:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-04	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.955		ug/L	1	12/5/2011 4:55:00 PM
Surr: 2,4,6-Tribromophenol	78.1	33.1-99.7		%REC	1	12/5/2011 4:55:00 PM
Surr: 2-Fluorobiphenyl	69.9	33.1-96.2		%REC	1	12/5/2011 4:55:00 PM
Surr: 2-Fluorophenol	35.1	13.4-57.1		%REC	1	12/5/2011 4:55:00 PM
Surr: 4-Terphenyl-d14	80.3	41-122		%REC	1	12/5/2011 4:55:00 PM
Surr: Nitrobenzene-d5	81.8	28.9-99.9		%REC	1	12/5/2011 4:55:00 PM
Surr: Phenol-d6	33.0	10.6-38.5		%REC	1	12/5/2011 4:55:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 1:34:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 1:34:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 1:34:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 1:34:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 1:34:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 1:34:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2830111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 11:35:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-04	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 1:34:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 1:34:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 1:34:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Naphthalene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 1:34:00 PM
Surr: 1,2-Dichloroethane-d4	89.6	72.2-129		%REC	1	11/28/2011 1:34:00 PM
Surr: 4-Bromofluorobenzene	100	73.5-125		%REC	1	11/28/2011 1:34:00 PM
Surr: Dibromofluoromethane	98.8	58.8-148		%REC	1	11/28/2011 1:34:00 PM
Surr: Toluene-d8	99.0	79.8-137		%REC	1	11/28/2011 1:34:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2825111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 12:15:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-05	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.219	0.0807		mg/L	1	11/30/2011
Lube Oil	0.472	0.202		mg/L	1	11/30/2011
Surr: o-Terphenyl	118	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00900	0.00500		mg/L	1	11/28/2011 5:04:08 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 5:04:08 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 5:04:08 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	1.38	0.100		ug/L	1	11/28/2011 11:56:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
2,3,4-Trichlorophenol	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
2,3,5-Trichlorophenol	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
2,3,6-Trichlorophenol	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
2,4,5-Trichlorophenol	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
2,4,6-Trichlorophenol	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
2-Methylnaphthalene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
3,4,5-Trichlorophenol	4.35	0.953		ug/L	1	12/5/2011 5:22:00 PM
Acenaphthene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Acenaphthylene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Anthracene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Benz(a)anthracene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Benzo(a)pyrene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Benzo(b)fluoranthene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Benzo(g,h,i)perylene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Benzo(k)fluoranthene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Carbazole	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Chrysene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Dibenz(a,h)anthracene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Dibenzofuran	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Fluoranthene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Fluorene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Naphthalene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Pentachlorophenol	ND	1.43		ug/L	1	12/5/2011 5:22:00 PM
Phenanthrene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2825111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 12:15:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-05	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.953		ug/L	1	12/5/2011 5:22:00 PM
Surr: 2,4,6-Tribromophenol	71.5	33.1-99.7		%REC	1	12/5/2011 5:22:00 PM
Surr: 2-Fluorobiphenyl	77.6	33.1-96.2		%REC	1	12/5/2011 5:22:00 PM
Surr: 2-Fluorophenol	23.8	13.4-57.1		%REC	1	12/5/2011 5:22:00 PM
Surr: 4-Terphenyl-d14	86.9	41-122		%REC	1	12/5/2011 5:22:00 PM
Surr: Nitrobenzene-d5	76.1	28.9-99.9		%REC	1	12/5/2011 5:22:00 PM
Surr: Phenol-d6	15.1	10.6-38.5		%REC	1	12/5/2011 5:22:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 1:57:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 1:57:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 1:57:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 1:57:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 1:57:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 1:57:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2825111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 12:15:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-05	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 1:57:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 1:57:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 1:57:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Naphthalene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 1:57:00 PM
Surr: 1,2-Dichloroethane-d4	84.4	72.2-129		%REC	1	11/28/2011 1:57:00 PM
Surr: 4-Bromofluorobenzene	99.2	73.5-125		%REC	1	11/28/2011 1:57:00 PM
Surr: Dibromofluoromethane	92.4	58.8-148		%REC	1	11/28/2011 1:57:00 PM
Surr: Toluene-d8	99.0	79.8-137		%REC	1	11/28/2011 1:57:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2427111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 2:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-06	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.221	0.0814		mg/L	1	11/30/2011
Lube Oil	0.589	0.203		mg/L	1	11/30/2011
Surr: o-Terphenyl	115	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.0105	0.00500		mg/L	1	11/28/2011 5:09:12 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 5:09:12 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 5:09:12 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	2.04	0.100		ug/L	1	11/29/2011 12:02:00 AM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
2,3,4-Trichlorophenol	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
2,3,5-Trichlorophenol	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
2,3,6-Trichlorophenol	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
2,4,5-Trichlorophenol	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
2,4,6-Trichlorophenol	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
2-Methylnaphthalene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
3,4,5-Trichlorophenol	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Acenaphthene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Acenaphthylene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Anthracene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Benz(a)anthracene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Benzo(a)pyrene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Benzo(b)fluoranthene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Benzo(g,h,i)perylene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Benzo(k)fluoranthene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Carbazole	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Chrysene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Dibenz(a,h)anthracene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Dibenzofuran	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Fluoranthene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Fluorene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Naphthalene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Pentachlorophenol	ND	1.45		ug/L	1	12/5/2011 5:48:00 PM
Phenanthrene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2427111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 2:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-06	**Matrix:**	AQUEOUS

Analyses	**Result**	**Limit**	**Qual**	**Units**	**DF**	**Date Analyzed**
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.967		ug/L	1	12/5/2011 5:48:00 PM
Surr: 2,4,6-Tribromophenol	66.2	33.1-99.7		%REC	1	12/5/2011 5:48:00 PM
Surr: 2-Fluorobiphenyl	73.6	33.1-96.2		%REC	1	12/5/2011 5:48:00 PM
Surr: 2-Fluorophenol	25.4	13.4-57.1		%REC	1	12/5/2011 5:48:00 PM
Surr: 4-Terphenyl-d14	79.2	41-122		%REC	1	12/5/2011 5:48:00 PM
Surr: Nitrobenzene-d5	73.3	28.9-99.9		%REC	1	12/5/2011 5:48:00 PM
Surr: Phenol-d6	15.2	10.6-38.5		%REC	1	12/5/2011 5:48:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 2:20:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 2:20:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 2:20:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 2:20:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 2:20:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 2:20:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2427111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 2:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-06	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 2:20:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 2:20:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 2:20:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Naphthalene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 2:20:00 PM
Surr: 1,2-Dichloroethane-d4	89.0	72.2-129		%REC	1	11/28/2011 2:20:00 PM
Surr: 4-Bromofluorobenzene	99.7	73.5-125		%REC	1	11/28/2011 2:20:00 PM
Surr: Dibromofluoromethane	98.8	58.8-148		%REC	1	11/28/2011 2:20:00 PM
Surr: Toluene-d8	98.2	79.8-137		%REC	1	11/28/2011 2:20:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2644111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 3:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-07	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.383	0.0807		mg/L	1	11/30/2011
Lube Oil	0.437	0.202		mg/L	1	11/30/2011
Surr: o-Terphenyl	140	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00930	0.00500		mg/L	1	11/28/2011 5:14:17 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 5:14:17 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 5:14:17 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	1.66	0.100		ug/L	1	11/28/2011 10:48:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
2,3,4-Trichlorophenol	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
2,3,5-Trichlorophenol	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
2,3,6-Trichlorophenol	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
2,4,5-Trichlorophenol	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
2,4,6-Trichlorophenol	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
2-Methylnaphthalene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
3,4,5-Trichlorophenol	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Acenaphthene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Acenaphthylene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Anthracene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Benz(a)anthracene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Benzo(a)pyrene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Benzo(b)fluoranthene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Benzo(g,h,i)perylene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Benzo(k)fluoranthene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Carbazole	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Chrysene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Dibenz(a,h)anthracene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Dibenzofuran	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Fluoranthene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Fluorene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Naphthalene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Pentachlorophenol	ND	1.44		ug/L	1	12/5/2011 6:14:00 PM
Phenanthrene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2644111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 3:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-07	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.957		ug/L	1	12/5/2011 6:14:00 PM
Surr: 2,4,6-Tribromophenol	72.1	33.1-99.7		%REC	1	12/5/2011 6:14:00 PM
Surr: 2-Fluorobiphenyl	75.0	33.1-96.2		%REC	1	12/5/2011 6:14:00 PM
Surr: 2-Fluorophenol	28.5	13.4-57.1		%REC	1	12/5/2011 6:14:00 PM
Surr: 4-Terphenyl-d14	84.4	41-122		%REC	1	12/5/2011 6:14:00 PM
Surr: Nitrobenzene-d5	77.0	28.9-99.9		%REC	1	12/5/2011 6:14:00 PM
Surr: Phenol-d6	18.5	10.6-38.5		%REC	1	12/5/2011 6:14:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 2:42:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 2:42:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 2:42:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 2:42:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 2:42:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 2:42:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2644111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 3:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-07	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 2:42:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 2:42:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 2:42:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Naphthalene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 2:42:00 PM
Surr: 1,2-Dichloroethane-d4	86.3	72.2-129		%REC	1	11/28/2011 2:42:00 PM
Surr: 4-Bromofluorobenzene	99.8	73.5-125		%REC	1	11/28/2011 2:42:00 PM
Surr: Dibromofluoromethane	94.7	58.8-148		%REC	1	11/28/2011 2:42:00 PM
Surr: Toluene-d8	95.7	79.8-137		%REC	1	11/28/2011 2:42:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2626111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 4:20:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-08	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.377	0.0809		mg/L	1	11/30/2011
Lube Oil	0.448	0.202		mg/L	1	11/30/2011
Surr: o-Terphenyl	134	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00790	0.00500		mg/L	1	11/28/2011 5:19:22 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 5:19:22 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 5:19:22 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	3.12	0.100		ug/L	1	11/29/2011 12:09:00 AM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
2,3,4-Trichlorophenol	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
2,3,5-Trichlorophenol	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
2,3,6-Trichlorophenol	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
2,4,5-Trichlorophenol	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
2,4,6-Trichlorophenol	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
2-Methylnaphthalene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
3,4,5-Trichlorophenol	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Acenaphthene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Acenaphthylene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Anthracene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Benz(a)anthracene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Benzo(a)pyrene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Benzo(b)fluoranthene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Benzo(g,h,i)perylene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Benzo(k)fluoranthene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Carbazole	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Chrysene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Dibenz(a,h)anthracene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Dibenzofuran	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Fluoranthene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Fluorene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Naphthalene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Pentachlorophenol	ND	1.44		ug/L	1	12/5/2011 6:41:00 PM
Phenanthrene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2626111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 4:20:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-08	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.959		ug/L	1	12/5/2011 6:41:00 PM
Surr: 2,4,6-Tribromophenol	76.9	33.1-99.7		%REC	1	12/5/2011 6:41:00 PM
Surr: 2-Fluorobiphenyl	79.7	33.1-96.2		%REC	1	12/5/2011 6:41:00 PM
Surr: 2-Fluorophenol	27.8	13.4-57.1		%REC	1	12/5/2011 6:41:00 PM
Surr: 4-Terphenyl-d14	90.6	41-122		%REC	1	12/5/2011 6:41:00 PM
Surr: Nitrobenzene-d5	79.0	28.9-99.9		%REC	1	12/5/2011 6:41:00 PM
Surr: Phenol-d6	19.2	10.6-38.5		%REC	1	12/5/2011 6:41:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 3:05:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 3:05:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 3:05:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 3:05:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 3:05:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 3:05:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2626111811
Lab Order:	1111219	**Collection Date:**	11/18/2011 4:20:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-08	**Matrix:**	AQUEOUS

Analyses	**Result**	**Limit**	**Qual**	**Units**	**DF**	**Date Analyzed**
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 3:05:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 3:05:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 3:05:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Naphthalene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 3:05:00 PM
Surr: 1,2-Dichloroethane-d4	94.4	72.2-129		%REC	1	11/28/2011 3:05:00 PM
Surr: 4-Bromofluorobenzene	100	73.5-125		%REC	1	11/28/2011 3:05:00 PM
Surr: Dibromofluoromethane	93.5	58.8-148		%REC	1	11/28/2011 3:05:00 PM
Surr: Toluene-d8	100	79.8-137		%REC	1	11/28/2011 3:05:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E4224112111
Lab Order:	1111219	**Collection Date:**	11/21/2011 10:35:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-09	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	1.31	0.0811		mg/L	1	11/30/2011
Lube Oil	4.09	0.203		mg/L	1	11/30/2011
Surr: o-Terphenyl	138	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00690	0.00500		mg/L	1	11/28/2011 5:24:25 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 5:24:25 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 5:24:25 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	26.7	0.100		ug/L	1	11/29/2011 12:16:00 AM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
2,3,4,6-Tetrachlorophenol	5.11	0.965		ug/L	1	11/30/2011 10:36:00 PM
2,3,4-Trichlorophenol	5.24	0.965		ug/L	1	11/30/2011 10:36:00 PM
2,3,5,6-Tetrachlorophenol	7.64	0.965		ug/L	1	11/30/2011 10:36:00 PM
2,3,5-Trichlorophenol	1.75	0.965		ug/L	1	11/30/2011 10:36:00 PM
2,3,6-Trichlorophenol	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
2,4,5-Trichlorophenol	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
2,4,6-Trichlorophenol	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
2-Methylnaphthalene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
3,4,5-Trichlorophenol	22.1	0.965		ug/L	1	11/30/2011 10:36:00 PM
Acenaphthene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Acenaphthylene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Anthracene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Benz(a)anthracene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Benzo(a)pyrene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Benzo(b)fluoranthene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Benzo(g,h,i)perylene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Benzo(k)fluoranthene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Carbazole	1.80	0.965		ug/L	1	11/30/2011 10:36:00 PM
Chrysene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Dibenz(a,h)anthracene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Dibenzofuran	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Fluoranthene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Fluorene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Naphthalene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Pentachlorophenol	36.8	1.45		ug/L	1	11/30/2011 10:36:00 PM
Phenanthrene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E4224112111
Lab Order:	1111219	**Collection Date:**	11/21/2011 10:35:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-09	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.965		ug/L	1	11/30/2011 10:36:00 PM
Surr: 2,4,6-Tribromophenol	65.2	33.1-99.7		%REC	1	11/30/2011 10:36:00 PM
Surr: 2-Fluorobiphenyl	59.7	33.1-96.2		%REC	1	11/30/2011 10:36:00 PM
Surr: 2-Fluorophenol	21.6	13.4-57.1		%REC	1	11/30/2011 10:36:00 PM
Surr: 4-Terphenyl-d14	72.5	41-122		%REC	1	11/30/2011 10:36:00 PM
Surr: Nitrobenzene-d5	61.3	28.9-99.9		%REC	1	11/30/2011 10:36:00 PM
Surr: Phenol-d6	13.4	10.6-38.5		%REC	1	11/30/2011 10:36:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 3:28:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 3:28:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 3:28:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 3:28:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 3:28:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 3:28:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E4224112111
Lab Order:	1111219	**Collection Date:**	11/21/2011 10:35:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-09	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 3:28:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 3:28:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 3:28:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Naphthalene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 3:28:00 PM
Surr: 1,2-Dichloroethane-d4	90.0	72.2-129		%REC	1	11/28/2011 3:28:00 PM
Surr: 4-Bromofluorobenzene	101	73.5-125		%REC	1	11/28/2011 3:28:00 PM
Surr: Dibromofluoromethane	98.6	58.8-148		%REC	1	11/28/2011 3:28:00 PM
Surr: Toluene-d8	99.5	79.8-137		%REC	1	11/28/2011 3:28:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E4324112111
Lab Order:	1111219	**Collection Date:**	11/21/2011 11:35:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-10	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.759	0.0812		mg/L	1	11/30/2011
Lube Oil	0.823	0.203		mg/L	1	11/30/2011
Surr: o-Terphenyl	125	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00830	0.00500		mg/L	1	11/28/2011 5:29:29 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 5:29:29 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 5:29:29 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	75.8	0.100		ug/L	1	11/29/2011 12:22:00 AM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	3.39	0.963		ug/L	1	11/30/2011 9:18:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
2,3,4-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
2,3,5-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
2,3,6-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
2,4,5-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
2,4,6-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
2-Methylnaphthalene	3.44	0.963		ug/L	1	11/30/2011 9:18:00 PM
3,4,5-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Acenaphthene	15.7	0.963		ug/L	1	11/30/2011 9:18:00 PM
Acenaphthylene	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Anthracene	2.23	0.963		ug/L	1	11/30/2011 9:18:00 PM
Benz(a)anthracene	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Benzo(a)pyrene	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Benzo(b)fluoranthene	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Benzo(g,h,i)perylene	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Benzo(k)fluoranthene	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Carbazole	2.33	0.963		ug/L	1	11/30/2011 9:18:00 PM
Chrysene	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Dibenz(a,h)anthracene	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Dibenzofuran	2.34	0.963		ug/L	1	11/30/2011 9:18:00 PM
Fluoranthene	6.59	0.963		ug/L	1	11/30/2011 9:18:00 PM
Fluorene	4.22	0.963		ug/L	1	11/30/2011 9:18:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.963		ug/L	1	11/30/2011 9:18:00 PM
Naphthalene	18.4	0.963		ug/L	1	11/30/2011 9:18:00 PM
Pentachlorophenol	ND	1.45		ug/L	1	11/30/2011 9:18:00 PM
Phenanthrene	9.51	0.963		ug/L	1	11/30/2011 9:18:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E4324112111
Lab Order:	1111219	**Collection Date:**	11/21/2011 11:35:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-10	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	5.75	0.963		ug/L	1	11/30/2011 9:18:00 PM
Surr: 2,4,6-Tribromophenol	13.2	33.1-99.7	S	%REC	1	11/30/2011 9:18:00 PM
Surr: 2-Fluorobiphenyl	33.3	33.1-96.2		%REC	1	11/30/2011 9:18:00 PM
Surr: 2-Fluorophenol	4.86	13.4-57.1	S	%REC	1	11/30/2011 9:18:00 PM
Surr: 4-Terphenyl-d14	40.9	41-122	S	%REC	1	11/30/2011 9:18:00 PM
Surr: Nitrobenzene-d5	32.3	28.9-99.9		%REC	1	11/30/2011 9:18:00 PM
Surr: Phenol-d6	5.34	10.6-38.5	S	%REC	1	11/30/2011 9:18:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 3:51:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 3:51:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 3:51:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 3:51:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 3:51:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 3:51:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E4324112111
Lab Order:	1111219	**Collection Date:**	11/21/2011 11:35:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-10	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 3:51:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 3:51:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 3:51:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Naphthalene	63.0	1.00		µg/L	1	11/28/2011 3:51:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 3:51:00 PM
Surr: 1,2-Dichloroethane-d4	90.5	72.2-129		%REC	1	11/28/2011 3:51:00 PM
Surr: 4-Bromofluorobenzene	101	73.5-125		%REC	1	11/28/2011 3:51:00 PM
Surr: Dibromofluoromethane	95.7	58.8-148		%REC	1	11/28/2011 3:51:00 PM
Surr: Toluene-d8	101	79.8-137		%REC	1	11/28/2011 3:51:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT: Maul, Foster & Alongi
Lab Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1111219-11

Client Sample ID: E4532112111
Collection Date: 11/21/2011 2:20:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	1.57	0.0781		mg/L	1	11/30/2011
Lube Oil	1.44	0.195	B	mg/L	1	11/30/2011
Surr: o-Terphenyl	141	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00790	0.00500		mg/L	1	11/28/2011 5:34:32 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 5:34:32 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 5:34:32 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	35.6	0.100		ug/L	1	11/29/2011 12:29:00 AM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
2,3,4,6-Tetrachlorophenol	4.48	0.962		ug/L	1	11/30/2011 10:10:00 PM
2,3,4-Trichlorophenol	4.26	0.962		ug/L	1	11/30/2011 10:10:00 PM
2,3,5,6-Tetrachlorophenol	12.6	0.962		ug/L	1	11/30/2011 10:10:00 PM
2,3,5-Trichlorophenol	1.42	0.962		ug/L	1	11/30/2011 10:10:00 PM
2,3,6-Trichlorophenol	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
2,4,5-Trichlorophenol	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
2,4,6-Trichlorophenol	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
2-Methylnaphthalene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
3,4,5-Trichlorophenol	13.7	0.962		ug/L	1	11/30/2011 10:10:00 PM
Acenaphthene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Acenaphthylene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Anthracene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Benz(a)anthracene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Benzo(a)pyrene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Benzo(b)fluoranthene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Benzo(g,h,i)perylene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Benzo(k)fluoranthene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Carbazole	4.49	0.962		ug/L	1	11/30/2011 10:10:00 PM
Chrysene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Dibenz(a,h)anthracene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Dibenzofuran	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Fluoranthene	1.13	0.962		ug/L	1	11/30/2011 10:10:00 PM
Fluorene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Naphthalene	ND	0.962		ug/L	1	11/30/2011 10:10:00 PM
Pentachlorophenol	41.8	1.44		ug/L	1	11/30/2011 10:10:00 PM
Phenanthrene	1.99	0.962		ug/L	1	11/30/2011 10:10:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E4532112111
Lab Order:	1111219	**Collection Date:**	11/21/2011 2:20:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-11	**Matrix:**	AQUEOUS

Analyses	**Result**	**Limit**	**Qual**	**Units**	**DF**	**Date Analyzed**
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	1.05	0.962		ug/L	1	11/30/2011 10:10:00 PM
Surr: 2,4,6-Tribromophenol	69.0	33.1-99.7		%REC	1	11/30/2011 10:10:00 PM
Surr: 2-Fluorobiphenyl	62.8	33.1-96.2		%REC	1	11/30/2011 10:10:00 PM
Surr: 2-Fluorophenol	22.1	13.4-57.1		%REC	1	11/30/2011 10:10:00 PM
Surr: 4-Terphenyl-d14	68.3	41-122		%REC	1	11/30/2011 10:10:00 PM
Surr: Nitrobenzene-d5	65.5	28.9-99.9		%REC	1	11/30/2011 10:10:00 PM
Surr: Phenol-d6	13.2	10.6-38.5		%REC	1	11/30/2011 10:10:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
2-Butanone	ND	10.0		µg/L	1	11/29/2011 10:00:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
2-Hexanone	ND	10.0		µg/L	1	11/29/2011 10:00:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/29/2011 10:00:00 AM
Acetone	52.1	50.0		µg/L	1	11/29/2011 10:00:00 AM
Acrylonitrile	ND	5.00		µg/L	1	11/29/2011 10:00:00 AM
Benzene	ND	0.300		µg/L	1	11/29/2011 10:00:00 AM
Bromobenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Bromochloromethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM

Specialty Analytical

Date: *06-Dec-11*

CLIENT: Maul, Foster & Alongi
Lab Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1111219-11

Client Sample ID: E4532112111
Collection Date: 11/21/2011 2:20:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Bromoform	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Bromomethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Carbon disulfide	ND	2.00		µg/L	1	11/29/2011 10:00:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Chlorobenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Chloroethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Chloroform	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Chloromethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Dibromochloromethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Dibromomethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Ethylbenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
m,p-Xylene	ND	2.00		µg/L	1	11/29/2011 10:00:00 AM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Methylene chloride	ND	20.0		µg/L	1	11/29/2011 10:00:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Naphthalene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
o-Xylene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Styrene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Tetrachloroethene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Toluene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Trichloroethene	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Vinyl chloride	ND	1.00		µg/L	1	11/29/2011 10:00:00 AM
Surr: 1,2-Dichloroethane-d4	87.6	72.2-129		%REC	1	11/29/2011 10:00:00 AM
Surr: 4-Bromofluorobenzene	102	73.5-125		%REC	1	11/29/2011 10:00:00 AM
Surr: Dibromofluoromethane	96.3	58.8-148		%REC	1	11/29/2011 10:00:00 AM
Surr: Toluene-d8	105	79.8-137		%REC	1	11/29/2011 10:00:00 AM

Specialty Analytical

Date: *06-Dec-11*

CLIENT: Maul, Foster & Alongi
Lab Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1111219-12

Client Sample ID: E4522112111
Collection Date: 11/21/2011 3:20:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	1.50	0.0818		mg/L	1	11/30/2011
Lube Oil	1.48	0.204		mg/L	1	11/30/2011
Surr: o-Terphenyl	138	50-150		%REC	1	11/30/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	ND	0.00500		mg/L	1	11/28/2011 5:39:37 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 5:39:37 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 5:39:37 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	34.2	0.100		ug/L	1	11/29/2011 12:36:00 AM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
2,3,4,6-Tetrachlorophenol	6.58	0.985		ug/L	1	11/30/2011 9:44:00 PM
2,3,4-Trichlorophenol	4.87	0.985		ug/L	1	11/30/2011 9:44:00 PM
2,3,5,6-Tetrachlorophenol	14.3	0.985		ug/L	1	11/30/2011 9:44:00 PM
2,3,5-Trichlorophenol	1.39	0.985		ug/L	1	11/30/2011 9:44:00 PM
2,3,6-Trichlorophenol	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
2,4,5-Trichlorophenol	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
2,4,6-Trichlorophenol	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
2-Methylnaphthalene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
3,4,5-Trichlorophenol	15.3	0.985		ug/L	1	11/30/2011 9:44:00 PM
Acenaphthene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Acenaphthylene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Anthracene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Benz(a)anthracene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Benzo(a)pyrene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Benzo(b)fluoranthene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Benzo(g,h,i)perylene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Benzo(k)fluoranthene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Carbazole	5.30	0.985		ug/L	1	11/30/2011 9:44:00 PM
Chrysene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Dibenz(a,h)anthracene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Dibenzofuran	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Fluoranthene	1.33	0.985		ug/L	1	11/30/2011 9:44:00 PM
Fluorene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Naphthalene	ND	0.985		ug/L	1	11/30/2011 9:44:00 PM
Pentachlorophenol	49.0	1.48		ug/L	1	11/30/2011 9:44:00 PM
Phenanthrene	2.54	0.985		ug/L	1	11/30/2011 9:44:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E4522112111
Lab Order:	1111219	**Collection Date:**	11/21/2011 3:20:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-12	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	1.09	0.985		ug/L	1	11/30/2011 9:44:00 PM
Surr: 2,4,6-Tribromophenol	80.0	33.1-99.7		%REC	1	11/30/2011 9:44:00 PM
Surr: 2-Fluorobiphenyl	73.0	33.1-96.2		%REC	1	11/30/2011 9:44:00 PM
Surr: 2-Fluorophenol	23.9	13.4-57.1		%REC	1	11/30/2011 9:44:00 PM
Surr: 4-Terphenyl-d14	82.2	41-122		%REC	1	11/30/2011 9:44:00 PM
Surr: Nitrobenzene-d5	71.6	28.9-99.9		%REC	1	11/30/2011 9:44:00 PM
Surr: Phenol-d6	15.1	10.6-38.5		%REC	1	11/30/2011 9:44:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 4:39:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 4:39:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 4:39:00 PM
Acetone	51.1	50.0		µg/L	1	11/28/2011 4:39:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 4:39:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 4:39:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E4522112111
Lab Order:	1111219	**Collection Date:**	11/21/2011 3:20:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-12	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 4:39:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 4:39:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 4:39:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Naphthalene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 4:39:00 PM
Surr: 1,2-Dichloroethane-d4	86.3	72.2-129		%REC	1	11/28/2011 4:39:00 PM
Surr: 4-Bromofluorobenzene	102	73.5-125		%REC	1	11/28/2011 4:39:00 PM
Surr: Dibromofluoromethane	94.6	58.8-148		%REC	1	11/28/2011 4:39:00 PM
Surr: Toluene-d8	102	79.8-137		%REC	1	11/28/2011 4:39:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3933112211
Lab Order:	1111219	**Collection Date:**	11/22/2011 2:15:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-13	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	6.77	0.0816	B,A1	mg/L	1	12/1/2011
Lube Oil	3.38	0.204	B,A2	mg/L	1	12/1/2011
Surr: o-Terphenyl	179	50-150	S,MI	%REC	1	12/1/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00730	0.00500		mg/L	1	11/28/2011 6:05:06 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 6:05:06 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 6:05:06 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	49.9	0.100		ug/L	1	11/29/2011 12:43:00 AM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
2,3,4,6-Tetrachlorophenol	7.94	0.963		ug/L	1	11/30/2011 11:02:00 PM
2,3,4-Trichlorophenol	2.14	0.963		ug/L	1	11/30/2011 11:02:00 PM
2,3,5,6-Tetrachlorophenol	9.00	0.963		ug/L	1	11/30/2011 11:02:00 PM
2,3,5-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
2,3,6-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
2,4,5-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
2,4,6-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
2-Methylnaphthalene	1.22	0.963		ug/L	1	11/30/2011 11:02:00 PM
3,4,5-Trichlorophenol	14.7	0.963		ug/L	1	11/30/2011 11:02:00 PM
Acenaphthene	1.77	0.963		ug/L	1	11/30/2011 11:02:00 PM
Acenaphthylene	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
Anthracene	11.9	0.963		ug/L	1	11/30/2011 11:02:00 PM
Benz(a)anthracene	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
Benzo(a)pyrene	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
Benzo(b)fluoranthene	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
Benzo(g,h,i)perylene	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
Benzo(k)fluoranthene	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
Carbazole	15.6	0.963		ug/L	1	11/30/2011 11:02:00 PM
Chrysene	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
Dibenz(a,h)anthracene	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
Dibenzofuran	1.78	0.963		ug/L	1	11/30/2011 11:02:00 PM
Fluoranthene	13.5	0.963		ug/L	1	11/30/2011 11:02:00 PM
Fluorene	4.10	0.963		ug/L	1	11/30/2011 11:02:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.963		ug/L	1	11/30/2011 11:02:00 PM
Naphthalene	4.49	0.963		ug/L	1	11/30/2011 11:02:00 PM
Pentachlorophenol	65.2	1.45		ug/L	1	11/30/2011 11:02:00 PM
Phenanthrene	6.14	0.963		ug/L	1	11/30/2011 11:02:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3933112211
Lab Order:	1111219	**Collection Date:**	11/22/2011 2:15:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-13	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	14.9	0.963		ug/L	1	11/30/2011 11:02:00 PM
Surr: 2,4,6-Tribromophenol	82.0	33.1-99.7		%REC	1	11/30/2011 11:02:00 PM
Surr: 2-Fluorobiphenyl	64.6	33.1-96.2		%REC	1	11/30/2011 11:02:00 PM
Surr: 2-Fluorophenol	23.5	13.4-57.1		%REC	1	11/30/2011 11:02:00 PM
Surr: 4-Terphenyl-d14	71.1	41-122		%REC	1	11/30/2011 11:02:00 PM
Surr: Nitrobenzene-d5	68.3	28.9-99.9		%REC	1	11/30/2011 11:02:00 PM
Surr: Phenol-d6	15.5	10.6-38.5		%REC	1	11/30/2011 11:02:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 5:01:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 5:01:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 5:01:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 5:01:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 5:01:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 5:01:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3933112211
Lab Order:	1111219	**Collection Date:**	11/22/2011 2:15:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-13	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 5:01:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 5:01:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 5:01:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Naphthalene	6.17	1.00		µg/L	1	11/28/2011 5:01:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 5:01:00 PM
Surr: 1,2-Dichloroethane-d4	95.1	72.2-129		%REC	1	11/28/2011 5:01:00 PM
Surr: 4-Bromofluorobenzene	101	73.5-125		%REC	1	11/28/2011 5:01:00 PM
Surr: Dibromofluoromethane	96.2	58.8-148		%REC	1	11/28/2011 5:01:00 PM
Surr: Toluene-d8	101	79.8-137		%REC	1	11/28/2011 5:01:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3924112211
Lab Order:	1111219	**Collection Date:**	11/22/2011 2:55:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-14	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	8.69	0.0818	B,A1	mg/L	1	12/1/2011
Lube Oil	4.17	0.204	B,A2	mg/L	1	12/1/2011
Surr: o-Terphenyl	200	50-150	S,MI	%REC	1	12/1/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00950	0.00500		mg/L	1	11/28/2011 6:10:09 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 6:10:09 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 6:10:09 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	60.2	0.100		ug/L	1	11/29/2011 12:49:00 AM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
2,3,4,6-Tetrachlorophenol	9.23	0.984		ug/L	1	11/30/2011 11:28:00 PM
2,3,4-Trichlorophenol	2.12	0.984		ug/L	1	11/30/2011 11:28:00 PM
2,3,5,6-Tetrachlorophenol	9.47	0.984		ug/L	1	11/30/2011 11:28:00 PM
2,3,5-Trichlorophenol	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
2,3,6-Trichlorophenol	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
2,4,5-Trichlorophenol	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
2,4,6-Trichlorophenol	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
2-Methylnaphthalene	1.40	0.984		ug/L	1	11/30/2011 11:28:00 PM
3,4,5-Trichlorophenol	15.8	0.984		ug/L	1	11/30/2011 11:28:00 PM
Acenaphthene	1.97	0.984		ug/L	1	11/30/2011 11:28:00 PM
Acenaphthylene	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Anthracene	11.2	0.984		ug/L	1	11/30/2011 11:28:00 PM
Benz(a)anthracene	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Benzo(a)pyrene	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Benzo(b)fluoranthene	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Benzo(g,h,i)perylene	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Benzo(k)fluoranthene	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Carbazole	14.8	0.984		ug/L	1	11/30/2011 11:28:00 PM
Chrysene	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Dibenz(a,h)anthracene	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Dibenzofuran	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Fluoranthene	12.1	0.984		ug/L	1	11/30/2011 11:28:00 PM
Fluorene	4.23	0.984		ug/L	1	11/30/2011 11:28:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.984		ug/L	1	11/30/2011 11:28:00 PM
Naphthalene	5.22	0.984		ug/L	1	11/30/2011 11:28:00 PM
Pentachlorophenol	98.2	1.48		ug/L	1	11/30/2011 11:28:00 PM
Phenanthrene	4.97	0.984		ug/L	1	11/30/2011 11:28:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3924112211
Lab Order:	1111219	**Collection Date:**	11/22/2011 2:55:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-14	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	14.8	0.984		ug/L	1	11/30/2011 11:28:00 PM
Surr: 2,4,6-Tribromophenol	75.0	33.1-99.7		%REC	1	11/30/2011 11:28:00 PM
Surr: 2-Fluorobiphenyl	65.2	33.1-96.2		%REC	1	11/30/2011 11:28:00 PM
Surr: 2-Fluorophenol	25.6	13.4-57.1		%REC	1	11/30/2011 11:28:00 PM
Surr: 4-Terphenyl-d14	67.5	41-122		%REC	1	11/30/2011 11:28:00 PM
Surr: Nitrobenzene-d5	66.4	28.9-99.9		%REC	1	11/30/2011 11:28:00 PM
Surr: Phenol-d6	16.8	10.6-38.5		%REC	1	11/30/2011 11:28:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 5:24:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 5:24:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 5:24:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 5:24:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 5:24:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 5:24:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3924112211
Lab Order:	1111219	**Collection Date:**	11/22/2011 2:55:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-14	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 5:24:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 5:24:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 5:24:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Naphthalene	7.31	1.00		µg/L	1	11/28/2011 5:24:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 5:24:00 PM
Surr: 1,2-Dichloroethane-d4	86.4	72.2-129		%REC	1	11/28/2011 5:24:00 PM
Surr: 4-Bromofluorobenzene	102	73.5-125		%REC	1	11/28/2011 5:24:00 PM
Surr: Dibromofluoromethane	95.7	58.8-148		%REC	1	11/28/2011 5:24:00 PM
Surr: Toluene-d8	102	79.8-137		%REC	1	11/28/2011 5:24:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3647112311
Lab Order:	1111219	**Collection Date:**	11/23/2011 10:30:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-15	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	9.58	0.0813	B,A1	mg/L	1	12/1/2011
Lube Oil	1.03	0.203	A2,M	mg/L	1	12/5/2011
Surr: o-Terphenyl	217	50-150	S,MI	%REC	1	12/1/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00770	0.00500		mg/L	1	11/28/2011 6:15:14 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 6:15:14 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 6:15:14 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	1.26	0.100		ug/L	1	11/29/2011 12:56:00 AM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	1.90	0.963		ug/L	1	11/30/2011 11:54:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
2,3,4-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
2,3,5-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
2,3,6-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
2,4,5-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
2,4,6-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
2-Methylnaphthalene	3.40	0.963		ug/L	1	11/30/2011 11:54:00 PM
3,4,5-Trichlorophenol	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
Acenaphthene	20.7	0.963		ug/L	1	11/30/2011 11:54:00 PM
Acenaphthylene	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
Anthracene	10.2	0.963		ug/L	1	11/30/2011 11:54:00 PM
Benz(a)anthracene	8.99	0.963		ug/L	1	11/30/2011 11:54:00 PM
Benzo(a)pyrene	2.20	0.963		ug/L	1	11/30/2011 11:54:00 PM
Benzo(b)fluoranthene	4.80	0.963		ug/L	1	11/30/2011 11:54:00 PM
Benzo(g,h,i)perylene	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
Benzo(k)fluoranthene	1.97	0.963		ug/L	1	11/30/2011 11:54:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
Carbazole	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
Chrysene	9.79	0.963		ug/L	1	11/30/2011 11:54:00 PM
Dibenz(a,h)anthracene	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
Dibenzofuran	8.10	0.963		ug/L	1	11/30/2011 11:54:00 PM
Fluoranthene	51.2	0.963		ug/L	1	11/30/2011 11:54:00 PM
Fluorene	2.92	0.963		ug/L	1	11/30/2011 11:54:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.963		ug/L	1	11/30/2011 11:54:00 PM
Naphthalene	3.61	0.963		ug/L	1	11/30/2011 11:54:00 PM
Pentachlorophenol	2.34	1.45		ug/L	1	11/30/2011 11:54:00 PM
Phenanthrene	38.0	0.963		ug/L	1	11/30/2011 11:54:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3647112311
Lab Order:	1111219	**Collection Date:**	11/23/2011 10:30:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-15	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	45.8	0.963		ug/L	1	11/30/2011 11:54:00 PM
Surr: 2,4,6-Tribromophenol	77.6	33.1-99.7		%REC	1	11/30/2011 11:54:00 PM
Surr: 2-Fluorobiphenyl	58.0	33.1-96.2		%REC	1	11/30/2011 11:54:00 PM
Surr: 2-Fluorophenol	22.8	13.4-57.1		%REC	1	11/30/2011 11:54:00 PM
Surr: 4-Terphenyl-d14	68.4	41-122		%REC	1	11/30/2011 11:54:00 PM
Surr: Nitrobenzene-d5	66.0	28.9-99.9		%REC	1	11/30/2011 11:54:00 PM
Surr: Phenol-d6	14.8	10.6-38.5		%REC	1	11/30/2011 11:54:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,2,4-Trimethylbenzene	2.50	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
2-Butanone	ND	10.0		µg/L	1	11/28/2011 5:47:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 5:47:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 5:47:00 PM
Acetone	ND	50.0		µg/L	1	11/28/2011 5:47:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 5:47:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 5:47:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3647112311
Lab Order:	1111219	**Collection Date:**	11/23/2011 10:30:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-15	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 5:47:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 5:47:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 5:47:00 PM
n-Butylbenzene	1.06	1.00		µg/L	1	11/28/2011 5:47:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Naphthalene	4.79	1.00		µg/L	1	11/28/2011 5:47:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 5:47:00 PM
Surr: 1,2-Dichloroethane-d4	87.0	72.2-129		%REC	1	11/28/2011 5:47:00 PM
Surr: 4-Bromofluorobenzene	102	73.5-125		%REC	1	11/28/2011 5:47:00 PM
Surr: Dibromofluoromethane	95.3	58.8-148		%REC	1	11/28/2011 5:47:00 PM
Surr: Toluene-d8	92.2	79.8-137		%REC	1	11/28/2011 5:47:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3625112311
Lab Order:	1111219	**Collection Date:**	11/23/2011 11:10:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-16	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	10.7	0.0810	B,A1	mg/L	1	12/1/2011
Lube Oil	3.68	0.203	B,A2	mg/L	1	12/1/2011
Surr: o-Terphenyl	207	50-150	S,MI	%REC	1	12/1/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00860	0.00500		mg/L	1	11/28/2011 6:20:19 PM
Copper	ND	0.0100		mg/L	1	11/28/2011 6:20:19 PM
Zinc	ND	0.0100		mg/L	1	11/28/2011 6:20:19 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **cmt**
Arsenic	11.5	0.100		ug/L	1	11/29/2011 1:16:00 AM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	11.7	0.965		ug/L	1	12/1/2011 12:20:00 AM
2,3,4,6-Tetrachlorophenol	6.03	0.965		ug/L	1	12/1/2011 12:20:00 AM
2,3,4-Trichlorophenol	3.36	0.965		ug/L	1	12/1/2011 12:20:00 AM
2,3,5,6-Tetrachlorophenol	16.1	0.965		ug/L	1	12/1/2011 12:20:00 AM
2,3,5-Trichlorophenol	1.28	0.965		ug/L	1	12/1/2011 12:20:00 AM
2,3,6-Trichlorophenol	ND	0.965		ug/L	1	12/1/2011 12:20:00 AM
2,4,5-Trichlorophenol	ND	0.965		ug/L	1	12/1/2011 12:20:00 AM
2,4,6-Trichlorophenol	ND	0.965		ug/L	1	12/1/2011 12:20:00 AM
2-Methylnaphthalene	19.4	0.965		ug/L	1	12/1/2011 12:20:00 AM
3,4,5-Trichlorophenol	20.3	0.965		ug/L	1	12/1/2011 12:20:00 AM
Acenaphthene	27.8	0.965		ug/L	1	12/1/2011 12:20:00 AM
Acenaphthylene	ND	0.965		ug/L	1	12/1/2011 12:20:00 AM
Anthracene	12.9	0.965		ug/L	1	12/1/2011 12:20:00 AM
Benz(a)anthracene	10.6	0.965		ug/L	1	12/1/2011 12:20:00 AM
Benzo(a)pyrene	3.34	0.965		ug/L	1	12/1/2011 12:20:00 AM
Benzo(b)fluoranthene	11.4	0.965		ug/L	1	12/1/2011 12:20:00 AM
Benzo(g,h,i)perylene	1.41	0.965		ug/L	1	12/1/2011 12:20:00 AM
Benzo(k)fluoranthene	3.20	0.965		ug/L	1	12/1/2011 12:20:00 AM
Bis(2-ethylhexyl)phthalate	ND	0.965		ug/L	1	12/1/2011 12:20:00 AM
Carbazole	7.12	0.965		ug/L	1	12/1/2011 12:20:00 AM
Chrysene	13.5	0.965		ug/L	1	12/1/2011 12:20:00 AM
Dibenz(a,h)anthracene	ND	0.965		ug/L	1	12/1/2011 12:20:00 AM
Dibenzofuran	15.3	0.965		ug/L	1	12/1/2011 12:20:00 AM
Fluoranthene	59.2	0.965		ug/L	1	12/1/2011 12:20:00 AM
Fluorene	13.0	0.965		ug/L	1	12/1/2011 12:20:00 AM
Indeno(1,2,3-cd)pyrene	1.43	0.965		ug/L	1	12/1/2011 12:20:00 AM
Naphthalene	67.1	0.965		ug/L	1	12/1/2011 12:20:00 AM
Pentachlorophenol	62.2	5.79		ug/L	4	12/5/2011 7:07:00 PM
Phenanthrene	40.9	0.965		ug/L	1	12/1/2011 12:20:00 AM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3625112311
Lab Order:	1111219	**Collection Date:**	11/23/2011 11:10:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-16	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	53.2	0.965		ug/L	1	12/1/2011 12:20:00 AM
Surr: 2,4,6-Tribromophenol	94.9	33.1-99.7		%REC	1	12/1/2011 12:20:00 AM
Surr: 2-Fluorobiphenyl	66.0	33.1-96.2		%REC	1	12/1/2011 12:20:00 AM
Surr: 2-Fluorophenol	25.1	13.4-57.1		%REC	1	12/1/2011 12:20:00 AM
Surr: 4-Terphenyl-d14	75.9	41-122		%REC	1	12/1/2011 12:20:00 AM
Surr: Nitrobenzene-d5	72.6	28.9-99.9		%REC	1	12/1/2011 12:20:00 AM
Surr: Phenol-d6	16.7	10.6-38.5		%REC	1	12/1/2011 12:20:00 AM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,2,4-Trimethylbenzene	14.0	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,3,5-Trimethylbenzene	2.13	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
2-Butanone	33.4	10.0		µg/L	1	11/28/2011 6:09:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
2-Hexanone	ND	10.0		µg/L	1	11/28/2011 6:09:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
4-Isopropyltoluene	1.02	1.00		µg/L	1	11/28/2011 6:09:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	11/28/2011 6:09:00 PM
Acetone	227	50.0		µg/L	1	11/28/2011 6:09:00 PM
Acrylonitrile	ND	5.00		µg/L	1	11/28/2011 6:09:00 PM
Benzene	ND	0.300		µg/L	1	11/28/2011 6:09:00 PM
Bromobenzene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Bromochloromethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM

Specialty Analytical

Date: *06-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E3625112311
Lab Order:	1111219	**Collection Date:**	11/23/2011 11:10:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1111219-16	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Bromoform	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Bromomethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Carbon disulfide	ND	2.00		µg/L	1	11/28/2011 6:09:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Chlorobenzene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Chloroethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Chloroform	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Chloromethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Dibromomethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Ethylbenzene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Isopropylbenzene	1.14	1.00		µg/L	1	11/28/2011 6:09:00 PM
m,p-Xylene	ND	2.00		µg/L	1	11/28/2011 6:09:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Methylene chloride	ND	20.0		µg/L	1	11/28/2011 6:09:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
n-Propylbenzene	1.09	1.00		µg/L	1	11/28/2011 6:09:00 PM
Naphthalene	116	1.00		µg/L	1	11/28/2011 6:09:00 PM
o-Xylene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
sec-Butylbenzene	1.03	1.00		µg/L	1	11/28/2011 6:09:00 PM
Styrene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Toluene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Trichloroethene	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Vinyl chloride	ND	1.00		µg/L	1	11/28/2011 6:09:00 PM
Surr: 1,2-Dichloroethane-d4	92.6	72.2-129		%REC	1	11/28/2011 6:09:00 PM
Surr: 4-Bromofluorobenzene	103	73.5-125		%REC	1	11/28/2011 6:09:00 PM
Surr: Dibromofluoromethane	94.6	58.8-148		%REC	1	11/28/2011 6:09:00 PM
Surr: Toluene-d8	97.1	79.8-137		%REC	1	11/28/2011 6:09:00 PM

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDIS

Sample ID: **1111219-04CMS** SampType: **MS** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: **11/28/2011** Run ID: **TJA IRIS_111128D**
Client ID: **E2830111811** Batch ID: **30080** TestNo: **6010A** Analysis Date: **11/29/2011** SeqNo: **797173**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.28	0.00500	0.25	0.0082	109	93.4	112	0	0		
Copper	0.5593	0.0100	0.5	0.0082	110	92.7	114	0	0		
Zinc	0.5696	0.0100	0.5	0.0019	114	93	110	0	0		S,MI

Sample ID: **1111219-04CMSD** SampType: **MSD** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: **11/28/2011** Run ID: **TJA IRIS_111128D**
Client ID: **E2830111811** Batch ID: **30080** TestNo: **6010A** Analysis Date: **11/29/2011** SeqNo: **797174**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2865	0.00500	0.25	0.0082	111	93.4	112	0.2865	0	20	
Copper	0.5724	0.0100	0.5	0.0082	113	92.7	114	0.5724	0	20	
Zinc	0.5784	0.0100	0.5	0.0019	115	93	110	0.5784	0	20	S,MI

Sample ID: **1111219-04CDUP** SampType: **DUP** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: **11/28/2011** Run ID: **TJA IRIS_111128D**
Client ID: **E2830111811** Batch ID: **30080** TestNo: **6010A** Analysis Date: **11/28/2011** SeqNo: **796995**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.0102	0.00500	0	0	0	0	0	0.0089	13.6	20	
Copper	0.0069	0.0100	0	0	0	0	0	0.006	0	20	J
Zinc	0.0013	0.0100	0	0	0	0	0	0.001	0	20	J

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111128D**
Client ID: **ZZZZZ** Batch ID: **30080** TestNo: **6010A** Analysis Date: **11/28/2011** SeqNo: **797000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2585	0.00500	0.25	0	103	90	110	0	0		
Copper	0.4817	0.0100	0.5	0	96.3	90	110	0	0		
Zinc	0.5119	0.0100	0.5	0	102	90	110	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDIS

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111128D**
Client ID: **ZZZZZ** Batch ID: **30080** TestNo: **6010A** Analysis Date: **11/28/2011** SeqNo: **797010**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2536	0.00500	0.25	0	101	90	110	0	0		
Copper	0.4871	0.0100	0.5	0	97.4	90	110	0	0		
Zinc	0.5157	0.0100	0.5	0	103	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111128D**
Client ID: **ZZZZZ** Batch ID: **30080** TestNo: **6010A** Analysis Date: **11/28/2011** SeqNo: **797015**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2659	0.00500	0.25	0	106	90	110	0	0		
Copper	0.5013	0.0100	0.5	0	100	90	110	0	0		
Zinc	0.5247	0.0100	0.5	0	105	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111128D**
Client ID: **ZZZZZ** Batch ID: **30080** TestNo: **6010A** Analysis Date: **11/29/2011** SeqNo: **797161**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2601	0.00500	0.25	0	104	90	110	0	0		
Copper	0.5032	0.0100	0.5	0	101	90	110	0	0		
Zinc	0.5178	0.0100	0.5	0	104	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111128D**
Client ID: **ZZZZZ** Batch ID: **30080** TestNo: **6010A** Analysis Date: **11/29/2011** SeqNo: **797175**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2578	0.00500	0.25	0	103	90	110	0	0		
Copper	0.5066	0.0100	0.5	0	101	90	110	0	0		
Zinc	0.5238	0.0100	0.5	0	105	90	110	0	0		

Sample ID: **ICV** SampType: **ICV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111128D**
Client ID: **ZZZZZ** Batch ID: **30080** TestNo: **6010A** Analysis Date: **11/28/2011** SeqNo: **796992**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.255	0.00500	0.25	0	102	90	110	0	0		
Copper	0.4856	0.0100	0.5	0	97.1	90	110	0	0		
Zinc	0.5148	0.0100	0.5	0	103	90	110	0	0		

Sample ID: **ICV** SampType: **ICV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111128D**
Client ID: **ZZZZZ** Batch ID: **30080** TestNo: **6010A** Analysis Date: **11/29/2011** SeqNo: **797156**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2583	0.00500	0.25	0	103	90	110	0	0		
Copper	0.5052	0.0100	0.5	0	101	90	110	0	0		
Zinc	0.5155	0.0100	0.5	0	103	90	110	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_WDISS

Sample ID: **1111219-07CMS** SampType: **MS** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: **11/28/2011** Run ID: **ICPMS_111128C**
Client ID: **E2644111811** Batch ID: **30083** TestNo: **SW6020** Analysis Date: **11/28/2011** SeqNo: **796941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	98.66	0.100	50	1.664	194	70	130	0	0		S,MI

Sample ID: **1111219-07CMSD** SampType: **MSD** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: **11/28/2011** Run ID: **ICPMS_111128C**
Client ID: **E2644111811** Batch ID: **30083** TestNo: **SW6020** Analysis Date: **11/28/2011** SeqNo: **796942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	75.32	0.100	50	1.664	147	70	130	98.66	26.8	20	S,R,MI

Sample ID: **1111219-07CDUP** SampType: **DUP** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: **11/28/2011** Run ID: **ICPMS_111128C**
Client ID: **E2644111811** Batch ID: **30083** TestNo: **SW6020** Analysis Date: **11/28/2011** SeqNo: **796940**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	1.822	0.100	0	0	0	0	0	1.664	9.06	20	

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111128C**
Client ID: **ZZZZZ** Batch ID: **30083** TestNo: **SW6020** Analysis Date: **11/28/2011** SeqNo: **796937**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	46.72	0.100	50	0	93.4	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111128C**
Client ID: **ZZZZZ** Batch ID: **30083** TestNo: **SW6020** Analysis Date: **11/28/2011** SeqNo: **796947**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	47.85	0.100	50	0	95.7	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111128C**
Client ID: **ZZZZZ** Batch ID: **30083** TestNo: **SW6020** Analysis Date: **11/29/2011** SeqNo: **796958**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_WDISS

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111128C**
Client ID: **ZZZZZ** Batch ID: **30083** TestNo: **SW6020** Analysis Date: **11/29/2011** SeqNo: **796958**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	47.77	0.100	50	0	95.5	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111128C**
Client ID: **ZZZZZ** Batch ID: **30083** TestNo: **SW6020** Analysis Date: **11/29/2011** SeqNo: **796960**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	47.71	0.100	50	0	95.4	90	110	0	0		

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111128C**
Client ID: **ZZZZZ** Batch ID: **30083** TestNo: **SW6020** Analysis Date: **11/28/2011** SeqNo: **796936**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	48.27	0.100	50	0	96.5	90	110	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **MBLK-30097** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111128A**
Client ID: **ZZZZZ** Batch ID: **30097** TestNo: **SW8260B** Analysis Date: **11/28/2011** SeqNo: **797033**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1.00									
1,1,1-Trichloroethane	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,1-Dichloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
1,1-Dichloropropene	ND	1.00									
1,2,3-Trichlorobenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2-Dibromoethane	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dichloroethane	ND	1.00									
1,2-Dichloropropane	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,3-Dichloropropane	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
2,2-Dichloropropane	ND	1.00									
2-Butanone	0.37	10.0									J
2-Chlorotoluene	ND	1.00									
2-Hexanone	ND	10.0									
4-Chlorotoluene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
4-Methyl-2-pentanone	ND	20.0									
Acetone	ND	50.0									
Acrylonitrile	ND	5.00									
Benzene	ND	0.300									
Bromobenzene	ND	1.00									

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **MBLK-30097**	SampType: **MBLK**	TestCode: **8260_W**	Units: **µg/L**	Prep Date:		Run ID: **5975X_111128A**	
Client ID: **ZZZZZ**	Batch ID: **30097**	TestNo: **SW8260B**		Analysis Date: **11/28/2011**		SeqNo: **797033**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromochloromethane	ND	1.00									
Bromodichloromethane	ND	1.00									
Bromoform	ND	1.00									
Bromomethane	ND	1.00									
Carbon disulfide	ND	2.00									
Carbon tetrachloride	ND	1.00									
Chlorobenzene	ND	1.00									
Chloroethane	ND	1.00									
Chloroform	ND	1.00									
Chloromethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Dibromochloromethane	ND	1.00									
Dibromomethane	ND	1.00									
Dichlorodifluoromethane	ND	1.00									
Ethylbenzene	ND	1.00									
Hexachlorobutadiene	0.13	1.00									J
Isopropylbenzene	0.64	1.00									J
m,p-Xylene	ND	2.00									
Methyl tert-butyl ether	ND	1.00									
Methylene chloride	ND	20.0									
n-Butylbenzene	ND	1.00									
n-Propylbenzene	ND	1.00									
Naphthalene	ND	1.00									
o-Xylene	ND	1.00									
sec-Butylbenzene	ND	1.00									
Styrene	ND	1.00									
tert-Butylbenzene	ND	1.00									
Tetrachloroethene	ND	1.00									
Toluene	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **MBLK-30097** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111128A**
Client ID: **ZZZZZ** Batch ID: **30097** TestNo: **SW8260B** Analysis Date: **11/28/2011** SeqNo: **797033**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.00									
Trichloroethene	ND	1.00									
Trichlorofluoromethane	ND	1.00									
Vinyl chloride	ND	1.00									
Surr: 1,2-Dichloroethane-d4	88.42	0	100	0	88.4	72.2	129	0	0		
Surr: 4-Bromofluorobenzene	95.5	0	100	0	95.5	73.5	125	0	0		
Surr: Dibromofluoromethane	94.44	0	100	0	94.4	58.8	148	0	0		
Surr: Toluene-d8	97	0	100	0	97	79.8	137	0	0		

Sample ID: **LCS-30097** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111128A**
Client ID: **ZZZZZ** Batch ID: **30097** TestNo: **SW8260B** Analysis Date: **11/28/2011** SeqNo: **797032**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	44.96	1.00	40	0	112	69.9	130	0	0		
Benzene	35.76	0.300	40	0	89.4	77.9	125	0	0		
Chlorobenzene	38.09	1.00	40	0	95.2	82.5	114	0	0		
Toluene	40.89	1.00	40	0	102	74.6	119	0	0		
Trichloroethene	45.73	1.00	40	0	114	74.7	125	0	0		

Sample ID: **1111219-01DMS** SampType: **MS** TestCode: **8260_W** Units: **µg/L** Prep Date: **11/28/2011** Run ID: **5975X_111128A**
Client ID: **E3729111711** Batch ID: **30097** TestNo: **SW8260B** Analysis Date: **11/28/2011** SeqNo: **797050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.41	1.00	40	0	116	51.4	176	0	0		
Benzene	36.04	0.300	40	0.28	89.4	71.5	118	0	0		
Chlorobenzene	36.41	1.00	40	0	91	79.8	114	0	0		
Toluene	37.21	1.00	40	0	93	79.6	121	0	0		
Trichloroethene	45.46	1.00	40	0	114	73.6	120	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

Sample ID: **1111219-01DMSD** SampType: **MSD** TestCode: **8260_W** Units: **µg/L** Prep Date: **11/28/2011** Run ID: **5975X_111128A**
Client ID: **E3729111711** Batch ID: **30097** TestNo: **SW8260B** Analysis Date: **11/28/2011** SeqNo: **797051**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	44.99	1.00	40	0	112	51.4	176	46.41	3.11	20	
Benzene	35.1	0.300	40	0.28	87	71.5	118	36.04	2.64	20	
Chlorobenzene	37.61	1.00	40	0	94	79.8	114	36.41	3.24	20	
Toluene	38.81	1.00	40	0	97	79.6	121	37.21	4.21	20	
Trichloroethene	44.57	1.00	40	0	111	73.6	120	45.46	1.98	20	

Sample ID: **CCB-30097** SampType: **CCB** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111128A**
Client ID: **ZZZZZ** Batch ID: **30097** TestNo: **SW8260B** Analysis Date: **11/29/2011** SeqNo: **797070**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1.00	0	0	0	0	0	0	0		
1,1,1-Trichloroethane	ND	1.00	0	0	0	0	0	0	0		
1,1,2,2-Tetrachloroethane	0.11	1.00	0	0	0	0	0	0	0		
1,1,2-Trichloroethane	ND	1.00	0	0	0	0	0	0	0		
1,1-Dichloroethane	ND	1.00	0	0	0	0	0	0	0		
1,1-Dichloroethene	ND	1.00	0	0	0	0	0	0	0		
1,1-Dichloropropene	ND	1.00	0	0	0	0	0	0	0		
1,2,3-Trichlorobenzene	ND	1.00	0	0	0	0	0	0	0		
1,2,3-Trichloropropane	ND	1.00	0	0	0	0	0	0	0		
1,2,4-Trichlorobenzene	0.11	1.00	0	0	0	0	0	0	0		
1,2,4-Trimethylbenzene	ND	1.00	0	0	0	0	0	0	0		
1,2-Dibromo-3-chloropropane	ND	1.00	0	0	0	0	0	0	0		
1,2-Dibromoethane	ND	1.00	0	0	0	0	0	0	0		
1,2-Dichlorobenzene	ND	1.00	0	0	0	0	0	0	0		
1,2-Dichloroethane	ND	1.00	0	0	0	0	0	0	0		
1,2-Dichloropropane	ND	1.00	0	0	0	0	0	0	0		
1,3,5-Trimethylbenzene	ND	1.00	0	0	0	0	0	0	0		
1,3-Dichlorobenzene	ND	1.00	0	0	0	0	0	0	0		
1,3-Dichloropropane	ND	1.00	0	0	0	0	0	0	0		
1,4-Dichlorobenzene	ND	1.00	0	0	0	0	0	0	0		
2,2-Dichloropropane	ND	1.00	0	0	0	0	0	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **CCB-30097** SampType: **CCB** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111128A**
Client ID: **ZZZZZ** Batch ID: **30097** TestNo: **SW8260B** Analysis Date: **11/29/2011** SeqNo: **797070**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Butanone	0.16	10.0	0	0	0	0	0	0	0		
2-Chlorotoluene	ND	1.00	0	0	0	0	0	0	0		
2-Hexanone	ND	10.0	0	0	0	0	0	0	0		
4-Chlorotoluene	ND	1.00	0	0	0	0	0	0	0		
4-Isopropyltoluene	ND	1.00	0	0	0	0	0	0	0		
4-Methyl-2-pentanone	ND	20.0	0	0	0	0	0	0	0		
Acetone	ND	50.0	0	0	0	0	0	0	0		
Acrylonitrile	ND	5.00	0	0	0	0	0	0	0		
Benzene	0.11	0.300	0	0	0	0	0	0	0		
Bromobenzene	ND	1.00	0	0	0	0	0	0	0		
Bromochloromethane	ND	1.00	0	0	0	0	0	0	0		
Bromodichloromethane	ND	1.00	0	0	0	0	0	0	0		
Bromoform	ND	1.00	0	0	0	0	0	0	0		
Bromomethane	0.44	1.00	0	0	0	0	0	0	0		
Carbon disulfide	0.28	2.00	0	0	0	0	0	0	0		
Carbon tetrachloride	ND	1.00	0	0	0	0	0	0	0		
Chlorobenzene	0.1	1.00	0	0	0	0	0	0	0		
Chloroethane	ND	1.00	0	0	0	0	0	0	0		
Chloroform	ND	1.00	0	0	0	0	0	0	0		
Chloromethane	ND	1.00	0	0	0	0	0	0	0		
cis-1,2-Dichloroethene	ND	1.00	0	0	0	0	0	0	0		
cis-1,3-Dichloropropene	ND	1.00	0	0	0	0	0	0	0		
Dibromochloromethane	ND	1.00	0	0	0	0	0	0	0		
Dibromomethane	ND	1.00	0	0	0	0	0	0	0		
Dichlorodifluoromethane	ND	1.00	0	0	0	0	0	0	0		
Ethylbenzene	ND	1.00	0	0	0	0	0	0	0		
Hexachlorobutadiene	0.26	1.00	0	0	0	0	0	0	0		
Isopropylbenzene	0.66	1.00	0	0	0	0	0	0	0		
m,p-Xylene	0.1	2.00	0	0	0	0	0	0	0		
Methyl tert-butyl ether	ND	1.00	0	0	0	0	0	0	0		
Methylene chloride	ND	20.0	0	0	0	0	0	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

Sample ID: **CCB-30097** SampType: **CCB** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111128A**
Client ID: **ZZZZZ** Batch ID: **30097** TestNo: **SW8260B** Analysis Date: **11/29/2011** SeqNo: **797070**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Butylbenzene	ND	1.00	0	0	0	0	0	0	0		
n-Propylbenzene	ND	1.00	0	0	0	0	0	0	0		
Naphthalene	ND	1.00	0	0	0	0	0	0	0		
o-Xylene	ND	1.00	0	0	0	0	0	0	0		
sec-Butylbenzene	ND	1.00	0	0	0	0	0	0	0		
Styrene	ND	1.00	0	0	0	0	0	0	0		
tert-Butylbenzene	ND	1.00	0	0	0	0	0	0	0		
Tetrachloroethene	ND	1.00	0	0	0	0	0	0	0		
Toluene	ND	1.00	0	0	0	0	0	0	0		
trans-1,2-Dichloroethene	0.12	1.00	0	0	0	0	0	0	0		
trans-1,3-Dichloropropene	ND	1.00	0	0	0	0	0	0	0		
Trichloroethene	0.11	1.00	0	0	0	0	0	0	0		
Trichlorofluoromethane	ND	1.00	0	0	0	0	0	0	0		
Vinyl chloride	ND	1.00	0	0	0	0	0	0	0		
Surr: 1,2-Dichloroethane-d4	87.49	0	100	0	87.5	72.2	129	0	0		
Surr: 4-Bromofluorobenzene	99.22	0	100	0	99.2	73.5	125	0	0		
Surr: Dibromofluoromethane	95.37	0	100	0	95.4	58.8	148	0	0		
Surr: Toluene-d8	104.9	0	100	0	105	79.8	137	0	0		

Sample ID: **CCV-30097** SampType: **CCV** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111128A**
Client ID: **ZZZZZ** Batch ID: **30097** TestNo: **SW8260B** Analysis Date: **11/28/2011** SeqNo: **797031**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	44.96	1.00	40	0	112	80	120	0	0		
1,2-Dichloropropane	45.55	1.00	40	0	114	80	120	0	0		
Chloroform	38.36	1.00	40	0	95.9	80	120	0	0		
Ethylbenzene	41.64	1.00	40	0	104	80	120	0	0		
Toluene	40.89	1.00	40	0	102	80	120	0	0		
Vinyl chloride	45.66	1.00	40	0	114	80	120	0	0		

Sample ID: **CCV-30097** SampType: **CCV** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111128A**

Client ID: **ZZZZZ** Batch ID: **30097** TestNo: **SW8260B** Analysis Date: **11/29/2011** SeqNo: **797069**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	41.85	1.00	40	0	105	80	120	0	0		
1,2-Dichloropropane	44.18	1.00	40	0	110	80	120	0	0		
Chloroform	37.68	1.00	40	0	94.2	80	120	0	0		
Ethylbenzene	40.99	1.00	40	0	102	80	120	0	0		
Toluene	40.46	1.00	40	0	101	80	120	0	0		
Vinyl chloride	43.19	1.00	40	0	108	80	120	0	0		

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270POR_W

Sample ID: **MB-30078** SampType: **MBLK** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **11/28/2011** Run ID: **5973G_111130A**
Client ID: **ZZZZZ** Batch ID: **30078** TestNo: **SW8270D** Analysis Date: **11/30/2011** SeqNo: **797661**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	1.00									
2,3,4,6-Tetrachlorophenol	ND	1.00									
2,3,4-Trichlorophenol	ND	1.00									
2,3,5,6-Tetrachlorophenol	ND	1.00									
2,3,5-Trichlorophenol	ND	1.00									
2,3,6-Trichlorophenol	ND	1.00									
2,4,5-Trichlorophenol	ND	1.00									
2,4,6-Trichlorophenol	ND	1.00									
2-Methylnaphthalene	ND	1.00									
3,4,5-Trichlorophenol	ND	1.00									
Acenaphthene	ND	1.00									
Acenaphthylene	ND	1.00									
Anthracene	ND	1.00									
Benz(a)anthracene	0.49	1.00									J
Benzo(a)pyrene	0.69	1.00									J
Benzo(b)fluoranthene	0.59	1.00									J
Benzo(g,h,i)perylene	0.66	1.00									J
Benzo(k)fluoranthene	0.79	1.00									J
Bis(2-ethylhexyl)phthalate	ND	1.00									
Carbazole	ND	1.00									
Chrysene	0.47	1.00									J
Dibenz(a,h)anthracene	0.68	1.00									J
Dibenzofuran	ND	1.00									
Fluoranthene	ND	1.00									
Fluorene	ND	1.00									
Indeno(1,2,3-cd)pyrene	0.63	1.00									J
Naphthalene	ND	1.00									
Pentachlorophenol	ND	1.50									
Phenanthrene	ND	1.00									
Pyrene	ND	1.00									
Surr: 2,4,6-Tribromophenol	61.44	0	100	0	61.4	33.1	99.7	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Sample ID: **MB-30078** SampType: **MBLK** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **11/28/2011** Run ID: **5973G_111130A**
Client ID: **ZZZZZ** Batch ID: **30078** TestNo: **SW8270D** Analysis Date: **11/30/2011** SeqNo: **797661**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorobiphenyl	63.87	0	100	0	63.9	33.1	96.2	0	0		
Surr: 2-Fluorophenol	27.61	0	100	0	27.6	13.4	57.1	0	0		
Surr: 4-Terphenyl-d14	74.06	0	100	0	74.1	41	122	0	0		
Surr: Nitrobenzene-d5	65.64	0	100	0	65.6	28.9	99.9	0	0		
Surr: Phenol-d6	16.26	0	100	0	16.3	10.6	38.5	0	0		

Sample ID: **MB-30074** SampType: **MBLK** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **11/23/2011** Run ID: **5973G_111205A**
Client ID: **ZZZZZ** Batch ID: **30074** TestNo: **SW8270D** Analysis Date: **12/5/2011** SeqNo: **799026**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	1.00									
2,3,4,6-Tetrachlorophenol	ND	1.00									
2,3,4-Trichlorophenol	ND	1.00									
2,3,5,6-Tetrachlorophenol	ND	1.00									
2,3,5-Trichlorophenol	ND	1.00									
2,3,6-Trichlorophenol	ND	1.00									
2,4,5-Trichlorophenol	ND	1.00									
2,4,6-Trichlorophenol	ND	1.00									
2-Methylnaphthalene	ND	1.00									
3,4,5-Trichlorophenol	ND	1.00									
Acenaphthene	ND	1.00									
Acenaphthylene	ND	1.00									
Anthracene	ND	1.00									
Benz(a)anthracene	0.84	1.00									J
Benzo(a)pyrene	0.64	1.00									J
Benzo(b)fluoranthene	0.58	1.00									J
Benzo(g,h,i)perylene	ND	1.00									
Benzo(k)fluoranthene	0.74	1.00									J
Bis(2-ethylhexyl)phthalate	0.59	1.00									J
Carbazole	ND	1.00									
Chrysene	0.91	1.00									J

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

Sample ID: **MB-30074** SampType: **MBLK** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **11/23/2011** Run ID: **5973G_111205A**
Client ID: **ZZZZZ** Batch ID: **30074** TestNo: **SW8270D** Analysis Date: **12/5/2011** SeqNo: **799026**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenz(a,h)anthracene	0.55	1.00									J
Dibenzofuran	ND	1.00									
Fluoranthene	ND	1.00									
Fluorene	ND	1.00									
Indeno(1,2,3-cd)pyrene	0.51	1.00									J
Naphthalene	ND	1.00									
Pentachlorophenol	ND	1.50									
Phenanthrene	ND	1.00									
Pyrene	0.21	1.00									J
Surr: 2,4,6-Tribromophenol	76.58	0	100	0	76.6	33.1	99.7	0	0		
Surr: 2-Fluorobiphenyl	78.15	0	100	0	78.2	33.1	96.2	0	0		
Surr: 2-Fluorophenol	31.2	0	100	0	31.2	13.4	57.1	0	0		
Surr: 4-Terphenyl-d14	90.49	0	100	0	90.5	41	122	0	0		
Surr: Nitrobenzene-d5	80.97	0	100	0	81	28.9	99.9	0	0		
Surr: Phenol-d6	20.93	0	100	0	20.9	10.6	38.5	0	0		

Sample ID: **LCS-30078** SampType: **LCS** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **11/28/2011** Run ID: **5973G_111130A**
Client ID: **ZZZZZ** Batch ID: **30078** TestNo: **SW8270D** Analysis Date: **11/30/2011** SeqNo: **797659**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	34.91	1.00	50	0	69.8	27.5	88.1	0	0		
1,4-Dichlorobenzene	36.78	1.00	50	0	73.6	27.8	80.9	0	0		
2,4-Dinitrotoluene	38.03	1.00	50	0	76.1	52.9	97.6	0	0		
2-Chlorophenol	30.84	1.00	50	0	61.7	27.8	77.9	0	0		
4-Chloro-3-methylphenol	31.4	1.00	50	0	62.8	33.5	88.5	0	0		
4-Nitrophenol	11.48	5.00	50	0	23	11.4	49.1	0	0		
Acenaphthene	36.11	1.00	50	0	72.2	39.8	94.2	0	0		
N-Nitrosodi-n-propylamine	37.17	1.00	50	0	74.3	33.9	92.1	0	0		
Pentachlorophenol	26.82	1.50	50	0	53.6	43.3	113	0	0		
Phenol	12.8	1.00	50	0	25.6	13.4	40.9	0	0		
Pyrene	35.58	1.00	50	0	71.2	59.4	119	0	0		

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270POR_W

Sample ID: **LCS-30074** SampType: **LCS** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **11/23/2011** Run ID: **5973G_111205A**
Client ID: **ZZZZZ** Batch ID: **30074** TestNo: **SW8270D** Analysis Date: **12/5/2011** SeqNo: **799024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	40.27	1.00	50	0	80.5	27.5	88.1	0	0		
1,4-Dichlorobenzene	39.5	1.00	50	0	79	27.8	80.9	0	0		
2,4-Dinitrotoluene	43.82	1.00	50	0	87.6	52.9	97.6	0	0		
2-Chlorophenol	34.06	1.00	50	0	68.1	27.8	77.9	0	0		
4-Chloro-3-methylphenol	37.62	1.00	50	0	75.2	33.5	88.5	0	0		
4-Nitrophenol	8.37	5.00	50	0	16.7	11.4	49.1	0	0		
Acenaphthene	42.32	1.00	50	0	84.6	39.8	94.2	0	0		
N-Nitrosodi-n-propylamine	40.55	1.00	50	0	81.1	33.9	92.1	0	0		
Pentachlorophenol	24.17	1.50	50	0	48.3	43.3	113	0	0		
Phenol	13.36	1.00	50	0	26.7	13.4	40.9	0	0		
Pyrene	43.71	1.00	50	0	87.4	59.4	119	0	0		

Sample ID: **LCSD-30078** SampType: **LCSD** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **11/28/2011** Run ID: **5973G_111130A**
Client ID: **ZZZZZ** Batch ID: **30078** TestNo: **SW8270D** Analysis Date: **11/30/2011** SeqNo: **797660**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	35.83	1.00	50	0	71.7	27.5	88.1	34.91	2.60	20	
1,4-Dichlorobenzene	35.79	1.00	50	0	71.6	27.8	80.9	36.78	2.73	20	
2,4-Dinitrotoluene	40.07	1.00	50	0	80.1	52.9	97.6	38.03	5.22	20	
2-Chlorophenol	27.22	1.00	50	0	54.4	27.8	77.9	30.84	12.5	20	
4-Chloro-3-methylphenol	30.91	1.00	50	0	61.8	33.5	88.5	31.4	1.57	20	
4-Nitrophenol	9.93	5.00	50	0	19.9	11.4	49.1	11.48	14.5	20	
Acenaphthene	38.78	1.00	50	0	77.6	39.8	94.2	36.11	7.13	20	
N-Nitrosodi-n-propylamine	34.42	1.00	50	0	68.8	33.9	92.1	37.17	7.68	20	
Pentachlorophenol	26.08	1.50	50	0	52.2	43.3	113	26.82	2.80	20	
Phenol	10.65	1.00	50	0	21.3	13.4	40.9	12.8	18.3	20	
Pyrene	39.93	1.00	50	0	79.9	59.4	119	35.58	11.5	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270POR_W

Sample ID: **LCSD-30074** SampType: **LCSD** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **11/23/2011** Run ID: **5973G_111205A**
Client ID: **ZZZZZ** Batch ID: **30074** TestNo: **SW8270D** Analysis Date: **12/5/2011** SeqNo: **799025**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	33.33	1.00	50	0	66.7	27.5	88.1	40.27	18.9	20	
1,4-Dichlorobenzene	33.21	1.00	50	0	66.4	27.8	80.9	39.5	17.3	20	
2,4-Dinitrotoluene	39.7	1.00	50	0	79.4	52.9	97.6	43.82	9.87	20	
2-Chlorophenol	28.63	1.00	50	0	57.3	27.8	77.9	34.06	17.3	20	
4-Chloro-3-methylphenol	32.09	1.00	50	0	64.2	33.5	88.5	37.62	15.9	20	
4-Nitrophenol	8.7	5.00	50	0	17.4	11.4	49.1	8.37	3.87	20	
Acenaphthene	37.8	1.00	50	0	75.6	39.8	94.2	42.32	11.3	20	
N-Nitrosodi-n-propylamine	34.47	1.00	50	0	68.9	33.9	92.1	40.55	16.2	20	
Pentachlorophenol	23.56	1.50	50	0	47.1	43.3	113	24.17	2.56	20	
Phenol	12.4	1.00	50	0	24.8	13.4	40.9	13.36	7.45	20	
Pyrene	41.29	1.00	50	0	82.6	59.4	119	43.71	5.69	20	

Sample ID: **CCV-30078** SampType: **CCV** TestCode: **8270POR_W** Units: **ug/L** Prep Date: Run ID: **5973G_111130A**
Client ID: **ZZZZZ** Batch ID: **30078** TestNo: **SW8270D** Analysis Date: **11/30/2011** SeqNo: **797658**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	37.79	1.00	40	0	94.5	80	120	0	0		
2,4,6-Trichlorophenol	42.72	1.00	40	0	107	80	120	0	0		
2,4-Dichlorophenol	43.6	1.00	40	0	109	80	120	0	0		
2-Nitrophenol	42.79	5.00	40	0	107	80	120	0	0		
4-Chloro-3-methylphenol	43	1.00	40	0	108	80	120	0	0		
Acenaphthene	42.1	1.00	40	0	105	80	120	0	0		
Benzo(a)pyrene	41.7	1.00	40	0	104	80	120	0	0		
Di-n-octyl phthalate	43.15	1.00	40	0	108	80	120	0	0		
Fluoranthene	42.35	1.00	40	0	106	80	120	0	0		
Hexachlorobutadiene	40.15	1.00	40	0	100	80	120	0	0		
N-Nitrosodiphenylamine	43.87	1.00	40	0	110	80	120	0	0		
Pentachlorophenol	39.59	1.50	40	0	99	80	120	0	0		
Phenol	42.1	1.00	40	0	105	80	120	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270POR_W

Sample ID: **CCV-30074** SampType: **CCV** TestCode: **8270POR_W** Units: **ug/L** Prep Date: Run ID: **5973G_111205A**
Client ID: **ZZZZZ** Batch ID: **30074** TestNo: **SW8270D** Analysis Date: **12/5/2011** SeqNo: **799023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	41.37	1.00	40	0	103	80	120	0	0		
2,4,6-Trichlorophenol	42.4	1.00	40	0	106	80	120	0	0		
2,4-Dichlorophenol	43.78	1.00	40	0	109	80	120	0	0		
2-Nitrophenol	43.26	5.00	40	0	108	80	120	0	0		
4-Chloro-3-methylphenol	44.22	1.00	40	0	111	80	120	0	0		
Acenaphthene	40.85	1.00	40	0	102	80	120	0	0		
Benzo(a)pyrene	42.74	1.00	40	0	107	80	120	0	0		
Di-n-octyl phthalate	42.05	1.00	40	0	105	80	120	0	0		
Fluoranthene	41.53	1.00	40	0	104	80	120	0	0		
Hexachlorobutadiene	38.65	1.00	40	0	96.6	80	120	0	0		
N-Nitrosodiphenylamine	35.6	1.00	40	0	89	80	120	0	0		
Pentachlorophenol	32.16	1.50	40	0	80.4	80	120	0	0		
Phenol	41.83	1.00	40	0	105	80	120	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: **MB-30096** SampType: **MBLK** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **11/29/2011** Run ID: **GC-M_111130A**
Client ID: **ZZZZZ** Batch ID: **30096** TestNo: **NWTPH-Dx** Analysis Date: **11/30/2011** SeqNo: **797711**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.07062	0.0800									J
Lube Oil	0.1965	0.200									J
Surr: o-Terphenyl	0.2147	0	0.2	0	107	50	150	0	0		

Sample ID: **MB-30101** SampType: **MBLK** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **11/29/2011** Run ID: **GC-M_111201A**
Client ID: **ZZZZZ** Batch ID: **30101** TestNo: **NWTPH-Dx** Analysis Date: **12/1/2011** SeqNo: **798141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.08172	0.0800									
Lube Oil	0.2092	0.200									
Surr: o-Terphenyl	0.1869	0	0.2	0	93.4	50	150	0	0		

Sample ID: **LCS-30096** SampType: **LCS** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **11/29/2011** Run ID: **GC-M_111130A**
Client ID: **ZZZZZ** Batch ID: **30096** TestNo: **NWTPH-Dx** Analysis Date: **11/30/2011** SeqNo: **797712**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.142	0.0800	1	0	114	60.7	121	0	0		
Lube Oil	1.179	0.200	1	0	118	64	126	0	0		

Sample ID: **LCS-30101** SampType: **LCS** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **11/29/2011** Run ID: **GC-M_111201A**
Client ID: **ZZZZZ** Batch ID: **30101** TestNo: **NWTPH-Dx** Analysis Date: **12/1/2011** SeqNo: **798142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.093	0.0800	1	0	109	60.7	121	0	0		B
Lube Oil	1.139	0.200	1	0	114	64	126	0	0		B

Sample ID: **LCSD-30096** SampType: **LCSD** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **11/29/2011** Run ID: **GC-M_111130A**
Client ID: **ZZZZZ** Batch ID: **30096** TestNo: **NWTPH-Dx** Analysis Date: **11/30/2011** SeqNo: **797713**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Maul, Foster & Alongi
Work Order: 1111219
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: **LCSD-30096** SampType: **LCSD** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **11/29/2011** Run ID: **GC-M_111130A**
Client ID: **ZZZZZ** Batch ID: **30096** TestNo: **NWTPH-Dx** Analysis Date: **11/30/2011** SeqNo: **797713**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.137	0.0800	1	0	114	60.7	121	1.142	0.437	20	

Sample ID: **LCSD-30101** SampType: **LCSD** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **11/29/2011** Run ID: **GC-M_111201A**
Client ID: **ZZZZZ** Batch ID: **30101** TestNo: **NWTPH-Dx** Analysis Date: **12/1/2011** SeqNo: **798143**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.089	0.0800	1	0	109	60.7	121	1.093	0.438	20	B
Lube Oil	1.228	0.200	1	0	123	64	126	1.139	7.52	20	B

Sample ID: **CCB-30096** SampType: **CCB** TestCode: **NWTPHDXLL** Units: **mg/Kg** Prep Date: Run ID: **GC-M_111130A**
Client ID: **ZZZZZ** Batch ID: **30096** TestNo: **NWTPH-Dx** Analysis Date: **12/1/2011** SeqNo: **798131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.07004	15.0	0	0	0	0	0	0	0		
Lube Oil	0.2754	50.0	0	0	0	0	0	0	0		
Surr: o-Terphenyl	0.1684	0	0.2	0	84.2	50	150	0	0		

Sample ID: **CCB-30101** SampType: **CCB** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111201A**
Client ID: **ZZZZZ** Batch ID: **30101** TestNo: **NWTPH-Dx** Analysis Date: **12/5/2011** SeqNo: **798824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.08544	0.0800	0	0	0	0	0	0	0		
Lube Oil	0.1814	0.200	0	0	0	0	0	0	0		
o-Terphenyl	0.3095	0	0.2	0	155	50	150	0	0		S

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111130A**
Client ID: **ZZZZZ** Batch ID: **30096** TestNo: **NWTPH-Dx** Analysis Date: **11/30/2011** SeqNo: **797710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	8.831	0.0800	8.21	0	108	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

TestCode: **NWTPHDXLL_W**

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111130A**
Client ID: **ZZZZZ** Batch ID: **30096** TestNo: **NWTPH-Dx** Analysis Date: **11/30/2011** SeqNo: **797710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lube Oil	4.54	0.200	4.227	0	107	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111130A**
Client ID: **ZZZZZ** Batch ID: **30096** TestNo: **NWTPH-Dx** Analysis Date: **11/30/2011** SeqNo: **797722**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.667	0.0800	6.158	0	108	85	115	0	0		
Lube Oil	3.568	0.200	3.17	0	113	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111130A**
Client ID: **ZZZZZ** Batch ID: **30096** TestNo: **NWTPH-Dx** Analysis Date: **11/30/2011** SeqNo: **797735**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	9.271	0.0800	8.21	0	113	85	115	0	0		
Lube Oil	4.819	0.200	4.227	0	114	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/Kg** Prep Date: Run ID: **GC-M_111130A**
Client ID: **ZZZZZ** Batch ID: **30096** TestNo: **NWTPH-Dx** Analysis Date: **12/1/2011** SeqNo: **798130**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	5.742	15.0	6.158	0	93.2	85	115	0	0		
Lube Oil	2.714	50.0	3.17	0	85.6	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111201A**
Client ID: **ZZZZZ** Batch ID: **30101** TestNo: **NWTPH-Dx** Analysis Date: **12/1/2011** SeqNo: **798140**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	7.539	0.0800	8.21	0	91.8	85	115	0	0		B
Lube Oil	3.904	0.200	4.227	0	92.4	85	115	0	0		B

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDXLL**	Units: **mg/L**	Prep Date:		Run ID: **GC-M_111201A**	
Client ID: **ZZZZZ**	Batch ID: **30101**	TestNo: **NWTPH-Dx**		Analysis Date: **12/1/2011**		SeqNo: **798148**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.272	0.0800	6.158	0	102	85	115	0	0		B
Lube Oil	3.189	0.200	3.17	0	101	85	115	0	0		B

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDXLL**	Units: **mg/L**	Prep Date:		Run ID: **GC-M_111130A**	
Client ID: **ZZZZZ**	Batch ID: **30096**	TestNo: **NWTPH-Dx**		Analysis Date: **12/1/2011**		SeqNo: **798265**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	7.539	0.0800	8.21	0	91.8	85	115	0	0		
Lube Oil	3.904	0.200	4.227	0	92.4	85	115	0	0		

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDXLL**	Units: **mg/L**	Prep Date:		Run ID: **GC-M_111201A**	
Client ID: **ZZZZZ**	Batch ID: **30101**	TestNo: **NWTPH-Dx**		Analysis Date: **12/5/2011**		SeqNo: **798823**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.379	0.0800	6.158	0	104	85	115	0	0		
Lube Oil	3.254	0.200	3.17	0	103	85	115	0	0		

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDXLL**	Units: **mg/L**	Prep Date:		Run ID: **GC-M_111201A**	
Client ID: **ZZZZZ**	Batch ID: **30101**	TestNo: **NWTPH-Dx**		Analysis Date: **12/5/2011**		SeqNo: **798826**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	8.547	0.0800	8.21	0	104	85	115	0	0		B
Lube Oil	4.153	0.200	4.227	0	98.2	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page 1 of 2

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager ALAN HUGHES
Company MAUL FOSTER & ALONGI
Address 7223 NE HAZEL DELL AVE SUITE B
VANC. WA. 98665
Phone 360 694 2691 Fax 360 906-1958
Project No. 9003.01.29 Project Name SER MONITORING DEC-11
Project Site Location OR ____ WA X Other ____
Invoice To PORT OF RIDGEFIELD P.O. No. ____

Collected By:
Signature Pat Kirby
Printed PAT KIRBY

Signature ____
Printed KEVIN OLDHAM

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush ____
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1111219
Shipped Via ____
Air Bill No. ____
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

					Analyses											
Date	Time	Sample I.D.	Matrix	No. of Containers	SVOCs (PORT LIST)	NWTPH-DX	DISSOLVED METALS (ARSENIC CHROMIUM COPPER ZINC)	VOCS (LOW LEVEL)							Comments	Lab I.D.
11-17-11	14:20	E3729111711	WATER	6	X	X	X	X								
	15:05	E3724111711														
11-18-11	10:50	E3228111811														
	11:35	E2830111811														
	12:15	E2825111811														
	14:40	E2427111811														
	15:40	E2644111811														
	16:20	E2626111811														
11-21-11	10:35	E4224112111														
	11:35	E4324112111														
	14:20	E4532112111														
	15:20	E4522112111														

Relinquished By: PAT KIRBY Company: PORT OF RIDGEFIELD	Date 11-23-11	Time 1400	Received By: Company: Specialty	Relinquished By: Company: Specialty	Date 11/23/11 Time 1600
Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt. Samples held beyond 60 days subject to storage fee(s)				Received For Lab By: Cindy Hollgard	Date 11/23/11 Time 16:00

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Page 2 of 2

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager ALAN HUGHES
Company MAUL FOSTER & ALONGI
Address 7223 NE HAZEL DELL AVE SUITE B
VANC WA 98665
Phone 360 694 2691 Fax 360 906-1958
Project No. 9003-01-29 Project Name SER Monitoring DEC 11
Project Site Location OR ___ WA ✓ Other ___
Invoice To PORT OF RIDGEFIELD P.O. No. ___

Collected By:
Signature Pat Kirby
Printed PAT KIRBY

Signature ___
Printed KEVIN OLDHAM

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush ___
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1111219
Shipped Via ___
Air Bill No. ___
Temperature On Receipt ___ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

					Analyses											
Date	Time	Sample I.D.	Matrix	No. of Containers	SVOC's (PORT LIST)	NWTPH-DX	DISSOLVED/CHROMIUM METALS (ARSENIC COPPER ZINC)	VOC's (LOW LEVEL)							Comments	Lab I.D.
11-22-11	14:15	E3933112211	WATER	6	X	X	X	X								
	14:55	E3924112211														
11-23-11	10:30	E3647112311														
	11:10	E3625112311														

Relinquished By: PAT KIRBY
Company: PORT OF RIDGEFIELD
Date 11-23-11 Time 1400

Received By:
Company: Specialty

Relinquished By:
Company: Specialty
Date 11/23/11 Time 1600

Received For Lab By: Cindy Hillgard
Date 11/23/11 Time 16:00

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

December 19, 2011

Alan Hughes
Maul, Foster & Alongi
400 East Mill Plain Blvd
Suite 400
Vancouver, WA 98660

TEL: (360) 694-2691
FAX: (360) 906-1958

RE: SER Monitoring Dec-11 / 9003.01.29

Dear Alan Hughes: Order No.: 1112014

Specialty Analytical received 17 samples on 12/1/2011 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Cindy Hillyard

Cindy Hillyard
Project Manager

Technical Review

Date: *19-Dec-11*

CLIENT: Maul, Foster & Alongi
Project: SER Monitoring Dec-11 / 9003.01.29
Lab Order: 1112014

CASE NARRATIVE

The Laboratory Control Sample recoveries of Diesel and Lube Oil and the Laboratory Control Sample Duplicate recovery of Lube Oil were outside control limits (high). The Relative Percent Differences for both products were within laboratory control limits (<20%). Due to lack of available sample volume, re-extraction and re-analysis was not possible.

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E45112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 10:30:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-01	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.734	0.0806	A1	mg/L	1	12/6/2011
Lube Oil	0.549	0.201	A2	mg/L	1	12/6/2011
Surr: o-Terphenyl	124	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00880	0.00500		mg/L	1	12/2/2011 9:09:55 PM
Copper	0.0103	0.0100		mg/L	1	12/2/2011 9:09:55 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 9:09:55 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	2.57	0.100		ug/L	1	12/2/2011 4:17:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
2,3,4-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
2,3,5-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
2,3,6-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
2,4,5-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
2,4,6-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
2-Methylnaphthalene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
3,4,5-Trichlorophenol	1.67	0.957		ug/L	1	12/7/2011 3:40:00 PM
Acenaphthene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Acenaphthylene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Anthracene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Benz(a)anthracene	1.91	0.957		ug/L	1	12/7/2011 3:40:00 PM
Benzo(a)pyrene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Benzo(b)fluoranthene	1.80	0.957		ug/L	1	12/7/2011 3:40:00 PM
Benzo(g,h,i)perylene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Benzo(k)fluoranthene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Carbazole	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Chrysene	2.31	0.957		ug/L	1	12/7/2011 3:40:00 PM
Dibenz(a,h)anthracene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Dibenzofuran	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Fluoranthene	12.4	0.957		ug/L	1	12/7/2011 3:40:00 PM
Fluorene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Naphthalene	ND	0.957		ug/L	1	12/7/2011 3:40:00 PM
Pentachlorophenol	8.59	1.44		ug/L	1	12/7/2011 3:40:00 PM
Phenanthrene	1.00	0.957		ug/L	1	12/7/2011 3:40:00 PM

Date: *19-Dec-11*

CLIENT: Maul, Foster & Alongi
Client Sample ID: E45112811
Lab Order: 1112014
Collection Date: 11/28/2011 10:30:00 AM
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-01
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	9.60	0.957		ug/L	1	12/7/2011 3:40:00 PM
Surr: 2,4,6-Tribromophenol	76.5	33.1-99.7		%REC	1	12/7/2011 3:40:00 PM
Surr: 2-Fluorobiphenyl	70.0	33.1-96.2		%REC	1	12/7/2011 3:40:00 PM
Surr: 2-Fluorophenol	28.1	13.4-57.1		%REC	1	12/7/2011 3:40:00 PM
Surr: 4-Terphenyl-d14	87.2	41-122		%REC	1	12/7/2011 3:40:00 PM
Surr: Nitrobenzene-d5	74.7	28.9-99.9		%REC	1	12/7/2011 3:40:00 PM
Surr: Phenol-d6	18.4	10.6-38.5		%REC	1	12/7/2011 3:40:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 12:31:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 12:31:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 12:31:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 12:31:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 12:31:00 PM
Benzene	ND	0.300		µg/L	1	12/2/2011 12:31:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E45112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 10:30:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-01	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 12:31:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 12:31:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 12:31:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Naphthalene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 12:31:00 PM
Surr: 1,2-Dichloroethane-d4	98.3	72.2-129		%REC	1	12/2/2011 12:31:00 PM
Surr: 4-Bromofluorobenzene	103	73.5-125		%REC	1	12/2/2011 12:31:00 PM
Surr: Dibromofluoromethane	109	58.8-148		%REC	1	12/2/2011 12:31:00 PM
Surr: Toluene-d8	96.6	79.8-137		%REC	1	12/2/2011 12:31:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-02

Client Sample ID: E424112811
Collection Date: 11/28/2011 11:10:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	2.17	0.0806	A1	mg/L	1	12/6/2011
Lube Oil	1.35	0.201	A2	mg/L	1	12/6/2011
Surr: o-Terphenyl	150	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00740	0.00500		mg/L	1	12/2/2011 9:15:04 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 9:15:04 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 9:15:04 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	4.59	0.100		ug/L	1	12/2/2011 4:23:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
2,3,4,6-Tetrachlorophenol	10.0	0.957		ug/L	1	12/7/2011 4:33:00 PM
2,3,4-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
2,3,5,6-Tetrachlorophenol	2.16	0.957		ug/L	1	12/7/2011 4:33:00 PM
2,3,5-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
2,3,6-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
2,4,5-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
2,4,6-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
2-Methylnaphthalene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
3,4,5-Trichlorophenol	3.61	0.957		ug/L	1	12/7/2011 4:33:00 PM
Acenaphthene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Acenaphthylene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Anthracene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Benz(a)anthracene	2.61	0.957		ug/L	1	12/7/2011 4:33:00 PM
Benzo(a)pyrene	0.967	0.957		ug/L	1	12/7/2011 4:33:00 PM
Benzo(b)fluoranthene	3.38	0.957		ug/L	1	12/7/2011 4:33:00 PM
Benzo(g,h,i)perylene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Benzo(k)fluoranthene	1.08	0.957		ug/L	1	12/7/2011 4:33:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Carbazole	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Chrysene	3.78	0.957		ug/L	1	12/7/2011 4:33:00 PM
Dibenz(a,h)anthracene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Dibenzofuran	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Fluoranthene	12.2	0.957		ug/L	1	12/7/2011 4:33:00 PM
Fluorene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Naphthalene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM
Pentachlorophenol	52.1	7.18		ug/L	5	12/8/2011 4:23:00 PM
Phenanthrene	ND	0.957		ug/L	1	12/7/2011 4:33:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E424112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 11:10:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-02	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	8.78	0.957		ug/L	1	12/7/2011 4:33:00 PM
Surr: 2,4,6-Tribromophenol	80.5	33.1-99.7		%REC	1	12/7/2011 4:33:00 PM
Surr: 2-Fluorobiphenyl	71.7	33.1-96.2		%REC	1	12/7/2011 4:33:00 PM
Surr: 2-Fluorophenol	27.6	13.4-57.1		%REC	1	12/7/2011 4:33:00 PM
Surr: 4-Terphenyl-d14	88.0	41-122		%REC	1	12/7/2011 4:33:00 PM
Surr: Nitrobenzene-d5	74.2	28.9-99.9		%REC	1	12/7/2011 4:33:00 PM
Surr: Phenol-d6	16.3	10.6-38.5		%REC	1	12/7/2011 4:33:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 12:54:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 12:54:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 12:54:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 12:54:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 12:54:00 PM
Benzene	ND	0.300		µg/L	1	12/2/2011 12:54:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E424112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 11:10:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-02	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 12:54:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 12:54:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 12:54:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Naphthalene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 12:54:00 PM
Surr: 1,2-Dichloroethane-d4	99.9	72.2-129		%REC	1	12/2/2011 12:54:00 PM
Surr: 4-Bromofluorobenzene	107	73.5-125		%REC	1	12/2/2011 12:54:00 PM
Surr: Dibromofluoromethane	111	58.8-148		%REC	1	12/2/2011 12:54:00 PM
Surr: Toluene-d8	96.0	79.8-137		%REC	1	12/2/2011 12:54:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E241112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 12:00:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-03	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	1.17	0.0810	A1	mg/L	1	12/6/2011
Lube Oil	1.04	0.203	A2	mg/L	1	12/6/2011
Surr: o-Terphenyl	91.0	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00720	0.00500		mg/L	1	12/2/2011 9:20:13 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 9:20:13 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 9:20:13 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	64.6	0.100		ug/L	1	12/2/2011 4:30:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
2,3,4-Trichlorophenol	1.31	0.963		ug/L	1	12/7/2011 5:00:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
2,3,5-Trichlorophenol	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
2,3,6-Trichlorophenol	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
2,4,5-Trichlorophenol	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
2,4,6-Trichlorophenol	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
2-Methylnaphthalene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
3,4,5-Trichlorophenol	10.1	0.963		ug/L	1	12/7/2011 5:00:00 PM
Acenaphthene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Acenaphthylene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Anthracene	1.02	0.963		ug/L	1	12/7/2011 5:00:00 PM
Benz(a)anthracene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Benzo(a)pyrene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Benzo(b)fluoranthene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Benzo(g,h,i)perylene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Benzo(k)fluoranthene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Carbazole	3.23	0.963		ug/L	1	12/7/2011 5:00:00 PM
Chrysene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Dibenz(a,h)anthracene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Dibenzofuran	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Fluoranthene	1.53	0.963		ug/L	1	12/7/2011 5:00:00 PM
Fluorene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM
Naphthalene	5.83	0.963		ug/L	1	12/7/2011 5:00:00 PM
Pentachlorophenol	2.82	1.45		ug/L	1	12/7/2011 5:00:00 PM
Phenanthrene	ND	0.963		ug/L	1	12/7/2011 5:00:00 PM

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-03

Client Sample ID: E241112811
Collection Date: 11/28/2011 12:00:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	1.53	0.963		ug/L	1	12/7/2011 5:00:00 PM
Surr: 2,4,6-Tribromophenol	74.5	33.1-99.7		%REC	1	12/7/2011 5:00:00 PM
Surr: 2-Fluorobiphenyl	63.8	33.1-96.2		%REC	1	12/7/2011 5:00:00 PM
Surr: 2-Fluorophenol	24.9	13.4-57.1		%REC	1	12/7/2011 5:00:00 PM
Surr: 4-Terphenyl-d14	80.1	41-122		%REC	1	12/7/2011 5:00:00 PM
Surr: Nitrobenzene-d5	62.1	28.9-99.9		%REC	1	12/7/2011 5:00:00 PM
Surr: Phenol-d6	14.9	10.6-38.5		%REC	1	12/7/2011 5:00:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 1:16:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 1:16:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 1:16:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 1:16:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 1:16:00 PM
Benzene	0.440	0.300		µg/L	1	12/2/2011 1:16:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E241112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 12:00:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-03	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 1:16:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 1:16:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 1:16:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Naphthalene	6.53	1.00		µg/L	1	12/2/2011 1:16:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 1:16:00 PM
Surr: 1,2-Dichloroethane-d4	100	72.2-129		%REC	1	12/2/2011 1:16:00 PM
Surr: 4-Bromofluorobenzene	107	73.5-125		%REC	1	12/2/2011 1:16:00 PM
Surr: Dibromofluoromethane	110	58.8-148		%REC	1	12/2/2011 1:16:00 PM
Surr: Toluene-d8	96.4	79.8-137		%REC	1	12/2/2011 1:16:00 PM

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-04

Client Sample ID: E223112811
Collection Date: 11/28/2011 12:40:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	1.34	0.0810	A1	mg/L	1	12/6/2011
Lube Oil	1.16	0.202	A2	mg/L	1	12/6/2011
Surr: o-Terphenyl	84.3	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00730	0.00500		mg/L	1	12/2/2011 9:25:23 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 9:25:23 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 9:25:23 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	79.4	0.100		ug/L	1	12/2/2011 4:37:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
2,3,4,6-Tetrachlorophenol	1.16	0.961		ug/L	1	12/7/2011 5:26:00 PM
2,3,4-Trichlorophenol	1.84	0.961		ug/L	1	12/7/2011 5:26:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
2,3,5-Trichlorophenol	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
2,3,6-Trichlorophenol	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
2,4,5-Trichlorophenol	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
2,4,6-Trichlorophenol	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
2-Methylnaphthalene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
3,4,5-Trichlorophenol	13.5	0.961		ug/L	1	12/7/2011 5:26:00 PM
Acenaphthene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Acenaphthylene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Anthracene	1.06	0.961		ug/L	1	12/7/2011 5:26:00 PM
Benz(a)anthracene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Benzo(a)pyrene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Benzo(b)fluoranthene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Benzo(g,h,i)perylene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Benzo(k)fluoranthene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Carbazole	4.44	0.961		ug/L	1	12/7/2011 5:26:00 PM
Chrysene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Dibenz(a,h)anthracene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Dibenzofuran	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Fluoranthene	1.16	0.961		ug/L	1	12/7/2011 5:26:00 PM
Fluorene	0.980	0.961		ug/L	1	12/7/2011 5:26:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM
Naphthalene	9.80	0.961		ug/L	1	12/7/2011 5:26:00 PM
Pentachlorophenol	3.65	1.44		ug/L	1	12/7/2011 5:26:00 PM
Phenanthrene	ND	0.961		ug/L	1	12/7/2011 5:26:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E223112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 12:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-04	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	1.06	0.961		ug/L	1	12/7/2011 5:26:00 PM
Surr: 2,4,6-Tribromophenol	82.8	33.1-99.7		%REC	1	12/7/2011 5:26:00 PM
Surr: 2-Fluorobiphenyl	70.6	33.1-96.2		%REC	1	12/7/2011 5:26:00 PM
Surr: 2-Fluorophenol	29.0	13.4-57.1		%REC	1	12/7/2011 5:26:00 PM
Surr: 4-Terphenyl-d14	83.2	41-122		%REC	1	12/7/2011 5:26:00 PM
Surr: Nitrobenzene-d5	79.5	28.9-99.9		%REC	1	12/7/2011 5:26:00 PM
Surr: Phenol-d6	16.5	10.6-38.5		%REC	1	12/7/2011 5:26:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 1:39:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 1:39:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 1:39:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 1:39:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 1:39:00 PM
Benzene	0.530	0.300		µg/L	1	12/2/2011 1:39:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E223112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 12:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-04	**Matrix:**	AQUEOUS

Analyses	**Result**	**Limit**	**Qual**	**Units**	**DF**	**Date Analyzed**
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 1:39:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 1:39:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 1:39:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Naphthalene	8.64	1.00		µg/L	1	12/2/2011 1:39:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 1:39:00 PM
Surr: 1,2-Dichloroethane-d4	99.5	72.2-129		%REC	1	12/2/2011 1:39:00 PM
Surr: 4-Bromofluorobenzene	105	73.5-125		%REC	1	12/2/2011 1:39:00 PM
Surr: Dibromofluoromethane	110	58.8-148		%REC	1	12/2/2011 1:39:00 PM
Surr: Toluene-d8	95.2	79.8-137		%REC	1	12/2/2011 1:39:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E5838112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 3:05:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-05	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.504	0.0810	A1	mg/L	1	12/6/2011
Lube Oil	0.653	0.202	A2	mg/L	1	12/6/2011
Surr: o-Terphenyl	120	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00800	0.00500		mg/L	1	12/2/2011 9:30:31 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 9:30:31 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 9:30:31 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	6.54	0.100		ug/L	1	12/2/2011 5:04:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
2,3,4-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
2,3,5-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
2,3,6-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
2,4,5-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
2,4,6-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
2-Methylnaphthalene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
3,4,5-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Acenaphthene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Acenaphthylene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Anthracene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Benz(a)anthracene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Benzo(a)pyrene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Benzo(b)fluoranthene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Benzo(g,h,i)perylene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Benzo(k)fluoranthene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Carbazole	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Chrysene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Dibenz(a,h)anthracene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Dibenzofuran	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Fluoranthene	1.51	0.962		ug/L	1	12/7/2011 5:52:00 PM
Fluorene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Naphthalene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM
Pentachlorophenol	ND	1.44		ug/L	1	12/7/2011 5:52:00 PM
Phenanthrene	ND	0.962		ug/L	1	12/7/2011 5:52:00 PM

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-05

Client Sample ID: E5838112811
Collection Date: 11/28/2011 3:05:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	1.44	0.962		ug/L	1	12/7/2011 5:52:00 PM
Surr: 2,4,6-Tribromophenol	77.5	33.1-99.7		%REC	1	12/7/2011 5:52:00 PM
Surr: 2-Fluorobiphenyl	66.9	33.1-96.2		%REC	1	12/7/2011 5:52:00 PM
Surr: 2-Fluorophenol	25.9	13.4-57.1		%REC	1	12/7/2011 5:52:00 PM
Surr: 4-Terphenyl-d14	88.4	41-122		%REC	1	12/7/2011 5:52:00 PM
Surr: Nitrobenzene-d5	75.7	28.9-99.9		%REC	1	12/7/2011 5:52:00 PM
Surr: Phenol-d6	16.7	10.6-38.5		%REC	1	12/7/2011 5:52:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 2:02:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 2:02:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 2:02:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 2:02:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 2:02:00 PM
Benzene	ND	0.300		µg/L	1	12/2/2011 2:02:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E5838112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 3:05:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-05	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 2:02:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 2:02:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 2:02:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Naphthalene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 2:02:00 PM
Surr: 1,2-Dichloroethane-d4	98.2	72.2-129		%REC	1	12/2/2011 2:02:00 PM
Surr: 4-Bromofluorobenzene	104	73.5-125		%REC	1	12/2/2011 2:02:00 PM
Surr: Dibromofluoromethane	109	58.8-148		%REC	1	12/2/2011 2:02:00 PM
Surr: Toluene-d8	95.4	79.8-137		%REC	1	12/2/2011 2:02:00 PM

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-06

Client Sample ID: E5823112811
Collection Date: 11/28/2011 3:45:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.456	0.0810	A1	mg/L	1	12/6/2011
Lube Oil	0.663	0.202	A2	mg/L	1	12/6/2011
Surr: o-Terphenyl	143	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00890	0.00500		mg/L	1	12/2/2011 9:51:02 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 9:51:02 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 9:51:02 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	8.27	0.100		ug/L	1	12/2/2011 3:49:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
2,3,4-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
2,3,5-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
2,3,6-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
2,4,5-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
2,4,6-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
2-Methylnaphthalene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
3,4,5-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Acenaphthene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Acenaphthylene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Anthracene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Benz(a)anthracene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Benzo(a)pyrene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Benzo(b)fluoranthene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Benzo(g,h,i)perylene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Benzo(k)fluoranthene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Carbazole	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Chrysene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Dibenz(a,h)anthracene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Dibenzofuran	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Fluoranthene	1.20	0.962		ug/L	1	12/7/2011 6:18:00 PM
Fluorene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Naphthalene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM
Pentachlorophenol	ND	1.44		ug/L	1	12/7/2011 6:18:00 PM
Phenanthrene	ND	0.962		ug/L	1	12/7/2011 6:18:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E5823112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 3:45:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-06	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	0.981	0.962		ug/L	1	12/7/2011 6:18:00 PM
Surr: 2,4,6-Tribromophenol	73.3	33.1-99.7		%REC	1	12/7/2011 6:18:00 PM
Surr: 2-Fluorobiphenyl	63.8	33.1-96.2		%REC	1	12/7/2011 6:18:00 PM
Surr: 2-Fluorophenol	24.2	13.4-57.1		%REC	1	12/7/2011 6:18:00 PM
Surr: 4-Terphenyl-d14	82.6	41-122		%REC	1	12/7/2011 6:18:00 PM
Surr: Nitrobenzene-d5	73.2	28.9-99.9		%REC	1	12/7/2011 6:18:00 PM
Surr: Phenol-d6	15.7	10.6-38.5		%REC	1	12/7/2011 6:18:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 2:25:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 2:25:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 2:25:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 2:25:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 2:25:00 PM
Benzene	ND	0.300		µg/L	1	12/2/2011 2:25:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E5823112811
Lab Order:	1112014	**Collection Date:**	11/28/2011 3:45:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-06	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 2:25:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 2:25:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 2:25:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Naphthalene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 2:25:00 PM
Surr: 1,2-Dichloroethane-d4	98.2	72.2-129		%REC	1	12/2/2011 2:25:00 PM
Surr: 4-Bromofluorobenzene	103	73.5-125		%REC	1	12/2/2011 2:25:00 PM
Surr: Dibromofluoromethane	109	58.8-148		%REC	1	12/2/2011 2:25:00 PM
Surr: Toluene-d8	97.7	79.8-137		%REC	1	12/2/2011 2:25:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2742112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 10:00:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-07	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.558	0.0807	A1	mg/L	1	12/6/2011
Lube Oil	0.628	0.202	A2	mg/L	1	12/6/2011
Surr: o-Terphenyl	120	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00880	0.00500		mg/L	1	12/2/2011 9:56:07 PM
Copper	0.0100	0.0100		mg/L	1	12/2/2011 9:56:07 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 9:56:07 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	3.99	0.100		ug/L	1	12/2/2011 5:11:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
2,3,4-Trichlorophenol	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
2,3,5-Trichlorophenol	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
2,3,6-Trichlorophenol	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
2,4,5-Trichlorophenol	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
2,4,6-Trichlorophenol	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
2-Methylnaphthalene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
3,4,5-Trichlorophenol	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Acenaphthene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Acenaphthylene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Anthracene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Benz(a)anthracene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Benzo(a)pyrene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Benzo(b)fluoranthene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Benzo(g,h,i)perylene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Benzo(k)fluoranthene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Carbazole	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Chrysene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Dibenz(a,h)anthracene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Dibenzofuran	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Fluoranthene	3.05	0.960		ug/L	1	12/7/2011 6:45:00 PM
Fluorene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Naphthalene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM
Pentachlorophenol	ND	1.44		ug/L	1	12/7/2011 6:45:00 PM
Phenanthrene	ND	0.960		ug/L	1	12/7/2011 6:45:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2742112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 10:00:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-07	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	2.82	0.960		ug/L	1	12/7/2011 6:45:00 PM
Surr: 2,4,6-Tribromophenol	76.3	33.1-99.7		%REC	1	12/7/2011 6:45:00 PM
Surr: 2-Fluorobiphenyl	65.8	33.1-96.2		%REC	1	12/7/2011 6:45:00 PM
Surr: 2-Fluorophenol	25.4	13.4-57.1		%REC	1	12/7/2011 6:45:00 PM
Surr: 4-Terphenyl-d14	86.1	41-122		%REC	1	12/7/2011 6:45:00 PM
Surr: Nitrobenzene-d5	80.6	28.9-99.9		%REC	1	12/7/2011 6:45:00 PM
Surr: Phenol-d6	14.9	10.6-38.5		%REC	1	12/7/2011 6:45:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 2:47:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 2:47:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 2:47:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 2:47:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 2:47:00 PM
Benzene	ND	0.300		µg/L	1	12/2/2011 2:47:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2742112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 10:00:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-07	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 2:47:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 2:47:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 2:47:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Naphthalene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 2:47:00 PM
Surr: 1,2-Dichloroethane-d4	100	72.2-129		%REC	1	12/2/2011 2:47:00 PM
Surr: 4-Bromofluorobenzene	105	73.5-125		%REC	1	12/2/2011 2:47:00 PM
Surr: Dibromofluoromethane	110	58.8-148		%REC	1	12/2/2011 2:47:00 PM
Surr: Toluene-d8	93.9	79.8-137		%REC	1	12/2/2011 2:47:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-08

Client Sample ID: E2725112911
Collection Date: 11/29/2011 10:45:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.450	0.0804	A1,K	mg/L	1	12/6/2011
Lube Oil	1.47	0.201		mg/L	1	12/6/2011
Surr: o-Terphenyl	123	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00850	0.00500		mg/L	1	12/2/2011 10:01:15 PM
Copper	0.0105	0.0100		mg/L	1	12/2/2011 10:01:15 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 10:01:15 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	6.22	0.100		ug/L	1	12/2/2011 5:18:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
2,3,4-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
2,3,5-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
2,3,6-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
2,4,5-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
2,4,6-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
2-Methylnaphthalene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
3,4,5-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Acenaphthene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Acenaphthylene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Anthracene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Benz(a)anthracene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Benzo(a)pyrene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Benzo(b)fluoranthene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Benzo(g,h,i)perylene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Benzo(k)fluoranthene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Carbazole	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Chrysene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Dibenz(a,h)anthracene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Dibenzofuran	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Fluoranthene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Fluorene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Naphthalene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Pentachlorophenol	ND	1.44		ug/L	1	12/7/2011 7:11:00 PM
Phenanthrene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2725112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 10:45:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-08	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.959		ug/L	1	12/7/2011 7:11:00 PM
Surr: 2,4,6-Tribromophenol	71.1	33.1-99.7		%REC	1	12/7/2011 7:11:00 PM
Surr: 2-Fluorobiphenyl	56.9	33.1-96.2		%REC	1	12/7/2011 7:11:00 PM
Surr: 2-Fluorophenol	19.9	13.4-57.1		%REC	1	12/7/2011 7:11:00 PM
Surr: 4-Terphenyl-d14	73.2	41-122		%REC	1	12/7/2011 7:11:00 PM
Surr: Nitrobenzene-d5	63.4	28.9-99.9		%REC	1	12/7/2011 7:11:00 PM
Surr: Phenol-d6	12.4	10.6-38.5		%REC	1	12/7/2011 7:11:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 3:10:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 3:10:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 3:10:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 3:10:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 3:10:00 PM
Benzene	ND	0.300		µg/L	1	12/2/2011 3:10:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E2725112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 10:45:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-08	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 3:10:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 3:10:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 3:10:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Naphthalene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 3:10:00 PM
Surr: 1,2-Dichloroethane-d4	101	72.2-129		%REC	1	12/2/2011 3:10:00 PM
Surr: 4-Bromofluorobenzene	106	73.5-125		%REC	1	12/2/2011 3:10:00 PM
Surr: Dibromofluoromethane	111	58.8-148		%REC	1	12/2/2011 3:10:00 PM
Surr: Toluene-d8	93.5	79.8-137		%REC	1	12/2/2011 3:10:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E1633112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 11:55:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-09	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.269	0.0809	A1	mg/L	1	12/6/2011
Lube Oil	0.615	0.202		mg/L	1	12/6/2011
Surr: o-Terphenyl	108	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00680	0.00500		mg/L	1	12/2/2011 10:06:22 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 10:06:22 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 10:06:22 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	8.37	0.100		ug/L	1	12/2/2011 5:25:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
2,3,4-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
2,3,5-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
2,3,6-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
2,4,5-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
2,4,6-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
2-Methylnaphthalene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
3,4,5-Trichlorophenol	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Acenaphthene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Acenaphthylene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Anthracene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Benz(a)anthracene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Benzo(a)pyrene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Benzo(b)fluoranthene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Benzo(g,h,i)perylene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Benzo(k)fluoranthene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Carbazole	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Chrysene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Dibenz(a,h)anthracene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Dibenzofuran	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Fluoranthene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Fluorene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Naphthalene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Pentachlorophenol	ND	1.44		ug/L	1	12/7/2011 7:37:00 PM
Phenanthrene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E1633112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 11:55:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-09	**Matrix:**	AQUEOUS

Analyses	**Result**	**Limit**	**Qual**	**Units**	**DF**	**Date Analyzed**
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.959		ug/L	1	12/7/2011 7:37:00 PM
Surr: 2,4,6-Tribromophenol	79.0	33.1-99.7		%REC	1	12/7/2011 7:37:00 PM
Surr: 2-Fluorobiphenyl	65.6	33.1-96.2		%REC	1	12/7/2011 7:37:00 PM
Surr: 2-Fluorophenol	23.0	13.4-57.1		%REC	1	12/7/2011 7:37:00 PM
Surr: 4-Terphenyl-d14	87.1	41-122		%REC	1	12/7/2011 7:37:00 PM
Surr: Nitrobenzene-d5	77.3	28.9-99.9		%REC	1	12/7/2011 7:37:00 PM
Surr: Phenol-d6	14.2	10.6-38.5		%REC	1	12/7/2011 7:37:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 3:33:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 3:33:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 3:33:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 3:33:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 3:33:00 PM
Benzene	0.300	0.300		µg/L	1	12/2/2011 3:33:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E1633112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 11:55:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-09	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 3:33:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 3:33:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 3:33:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Naphthalene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 3:33:00 PM
Surr: 1,2-Dichloroethane-d4	101	72.2-129		%REC	1	12/2/2011 3:33:00 PM
Surr: 4-Bromofluorobenzene	105	73.5-125		%REC	1	12/2/2011 3:33:00 PM
Surr: Dibromofluoromethane	111	58.8-148		%REC	1	12/2/2011 3:33:00 PM
Surr: Toluene-d8	97.6	79.8-137		%REC	1	12/2/2011 3:33:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-10

Client Sample ID: E1622112911
Collection Date: 11/29/2011 12:35:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.254	0.0807	A1	mg/L	1	12/6/2011
Lube Oil	0.781	0.202	A2	mg/L	1	12/6/2011
Surr: o-Terphenyl	93.9	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00770	0.00500		mg/L	1	12/2/2011 10:11:28 PM
Copper	0.0101	0.0100		mg/L	1	12/2/2011 10:11:28 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 10:11:28 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	8.17	0.100		ug/L	1	12/2/2011 5:32:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
2,3,4-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
2,3,5-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
2,3,6-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
2,4,5-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
2,4,6-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
2-Methylnaphthalene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
3,4,5-Trichlorophenol	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Acenaphthene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Acenaphthylene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Anthracene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Benz(a)anthracene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Benzo(a)pyrene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Benzo(b)fluoranthene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Benzo(g,h,i)perylene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Benzo(k)fluoranthene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Carbazole	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Chrysene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Dibenz(a,h)anthracene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Dibenzofuran	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Fluoranthene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Fluorene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Naphthalene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Pentachlorophenol	ND	1.44		ug/L	1	12/7/2011 8:03:00 PM
Phenanthrene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E1622112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 12:35:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-10	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.957		ug/L	1	12/7/2011 8:03:00 PM
Surr: 2,4,6-Tribromophenol	61.6	33.1-99.7		%REC	1	12/7/2011 8:03:00 PM
Surr: 2-Fluorobiphenyl	57.6	33.1-96.2		%REC	1	12/7/2011 8:03:00 PM
Surr: 2-Fluorophenol	33.3	13.4-57.1		%REC	1	12/7/2011 8:03:00 PM
Surr: 4-Terphenyl-d14	62.9	41-122		%REC	1	12/7/2011 8:03:00 PM
Surr: Nitrobenzene-d5	67.5	28.9-99.9		%REC	1	12/7/2011 8:03:00 PM
Surr: Phenol-d6	19.0	10.6-38.5		%REC	1	12/7/2011 8:03:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 3:56:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 3:56:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 3:56:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 3:56:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 3:56:00 PM
Benzene	ND	0.300		µg/L	1	12/2/2011 3:56:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E1622112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 12:35:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-10	**Matrix:**	AQUEOUS

Analyses	**Result**	**Limit**	**Qual**	**Units**	**DF**	**Date Analyzed**
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 3:56:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 3:56:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 3:56:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Naphthalene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 3:56:00 PM
Surr: 1,2-Dichloroethane-d4	98.7	72.2-129		%REC	1	12/2/2011 3:56:00 PM
Surr: 4-Bromofluorobenzene	105	73.5-125		%REC	1	12/2/2011 3:56:00 PM
Surr: Dibromofluoromethane	110	58.8-148		%REC	1	12/2/2011 3:56:00 PM
Surr: Toluene-d8	96.1	79.8-137		%REC	1	12/2/2011 3:56:00 PM

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-11

Client Sample ID: DEW451112911
Collection Date: 11/29/2011 3:00:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	4.59	0.0807	A1	mg/L	1	12/6/2011
Lube Oil	9.50	0.202	A2	mg/L	1	12/6/2011
Surr: o-Terphenyl	141	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.0113	0.00500		mg/L	1	12/2/2011 10:16:34 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 10:16:34 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 10:16:34 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	39.8	0.100		ug/L	1	12/2/2011 5:39:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	3.61	0.958		ug/L	1	12/7/2011 8:29:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
2,3,4-Trichlorophenol	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
2,3,5-Trichlorophenol	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
2,3,6-Trichlorophenol	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
2,4,5-Trichlorophenol	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
2,4,6-Trichlorophenol	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
2-Methylnaphthalene	4.00	0.958		ug/L	1	12/7/2011 8:29:00 PM
3,4,5-Trichlorophenol	4.28	0.958		ug/L	1	12/7/2011 8:29:00 PM
Acenaphthene	8.19	0.958		ug/L	1	12/7/2011 8:29:00 PM
Acenaphthylene	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
Anthracene	2.14	0.958		ug/L	1	12/7/2011 8:29:00 PM
Benz(a)anthracene	2.72	0.958		ug/L	1	12/7/2011 8:29:00 PM
Benzo(a)pyrene	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
Benzo(b)fluoranthene	2.08	0.958		ug/L	1	12/7/2011 8:29:00 PM
Benzo(g,h,i)perylene	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
Benzo(k)fluoranthene	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
Carbazole	7.37	0.958		ug/L	1	12/7/2011 8:29:00 PM
Chrysene	2.67	0.958		ug/L	1	12/7/2011 8:29:00 PM
Dibenz(a,h)anthracene	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
Dibenzofuran	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
Fluoranthene	9.01	0.958		ug/L	1	12/7/2011 8:29:00 PM
Fluorene	1.72	0.958		ug/L	1	12/7/2011 8:29:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.958		ug/L	1	12/7/2011 8:29:00 PM
Naphthalene	48.7	0.958		ug/L	1	12/7/2011 8:29:00 PM
Pentachlorophenol	ND	1.44		ug/L	1	12/7/2011 8:29:00 PM
Phenanthrene	3.62	0.958		ug/L	1	12/7/2011 8:29:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	DEW451112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 3:00:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-11	**Matrix:**	AQUEOUS

Analyses	**Result**	**Limit**	**Qual**	**Units**	**DF**	**Date Analyzed**
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	8.88	0.958		ug/L	1	12/7/2011 8:29:00 PM
Surr: 2,4,6-Tribromophenol	71.5	33.1-99.7		%REC	1	12/7/2011 8:29:00 PM
Surr: 2-Fluorobiphenyl	61.8	33.1-96.2		%REC	1	12/7/2011 8:29:00 PM
Surr: 2-Fluorophenol	20.6	13.4-57.1		%REC	1	12/7/2011 8:29:00 PM
Surr: 4-Terphenyl-d14	71.0	41-122		%REC	1	12/7/2011 8:29:00 PM
Surr: Nitrobenzene-d5	60.9	28.9-99.9		%REC	1	12/7/2011 8:29:00 PM
Surr: Phenol-d6	14.1	10.6-38.5		%REC	1	12/7/2011 8:29:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,2,4-Trimethylbenzene	2.44	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 4:20:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 4:20:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 4:20:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 4:20:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 4:20:00 PM
Benzene	0.650	0.300		µg/L	1	12/2/2011 4:20:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	DEW451112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 3:00:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-11	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 4:20:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Ethylbenzene	1.28	1.00		µg/L	1	12/2/2011 4:20:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 4:20:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 4:20:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Naphthalene	64.8	1.00		µg/L	1	12/2/2011 4:20:00 PM
o-Xylene	2.12	1.00		µg/L	1	12/2/2011 4:20:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Toluene	1.10	1.00		µg/L	1	12/2/2011 4:20:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 4:20:00 PM
Surr: 1,2-Dichloroethane-d4	100	72.2-129		%REC	1	12/2/2011 4:20:00 PM
Surr: 4-Bromofluorobenzene	109	73.5-125		%REC	1	12/2/2011 4:20:00 PM
Surr: Dibromofluoromethane	112	58.8-148		%REC	1	12/2/2011 4:20:00 PM
Surr: Toluene-d8	92.5	79.8-137		%REC	1	12/2/2011 4:20:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	DEW423112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 3:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-12	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	19.1	0.811	A1	mg/L	10	12/6/2011
Lube Oil	55.3	2.03	A2	mg/L	10	12/6/2011
Surr: o-Terphenyl	243	50-150	S,MI	%REC	10	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.0115	0.00500		mg/L	1	12/2/2011 10:21:38 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 10:21:38 PM
Zinc	0.0131	0.0100		mg/L	1	12/2/2011 10:21:38 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	99.2	0.100		ug/L	1	12/2/2011 5:45:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	28.1	0.962		ug/L	1	12/7/2011 8:55:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.962		ug/L	1	12/7/2011 8:55:00 PM
2,3,4-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 8:55:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.962		ug/L	1	12/7/2011 8:55:00 PM
2,3,5-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 8:55:00 PM
2,3,6-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 8:55:00 PM
2,4,5-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 8:55:00 PM
2,4,6-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 8:55:00 PM
2-Methylnaphthalene	36.8	0.962		ug/L	1	12/7/2011 8:55:00 PM
3,4,5-Trichlorophenol	ND	0.962		ug/L	1	12/7/2011 8:55:00 PM
Acenaphthene	84.3	0.962		ug/L	1	12/7/2011 8:55:00 PM
Acenaphthylene	2.46	0.962		ug/L	1	12/7/2011 8:55:00 PM
Anthracene	16.1	0.962		ug/L	1	12/7/2011 8:55:00 PM
Benz(a)anthracene	23.4	0.962		ug/L	1	12/7/2011 8:55:00 PM
Benzo(a)pyrene	12.9	0.962		ug/L	1	12/7/2011 8:55:00 PM
Benzo(b)fluoranthene	13.8	0.962		ug/L	1	12/7/2011 8:55:00 PM
Benzo(g,h,i)perylene	3.94	0.962		ug/L	1	12/7/2011 8:55:00 PM
Benzo(k)fluoranthene	10.7	0.962		ug/L	1	12/7/2011 8:55:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.962		ug/L	1	12/7/2011 8:55:00 PM
Carbazole	19.5	0.962		ug/L	1	12/7/2011 8:55:00 PM
Chrysene	25.6	0.962		ug/L	1	12/7/2011 8:55:00 PM
Dibenz(a,h)anthracene	ND	0.962		ug/L	1	12/7/2011 8:55:00 PM
Dibenzofuran	10.4	0.962		ug/L	1	12/7/2011 8:55:00 PM
Fluoranthene	80.4	0.962		ug/L	1	12/7/2011 8:55:00 PM
Fluorene	22.1	0.962		ug/L	1	12/7/2011 8:55:00 PM
Indeno(1,2,3-cd)pyrene	3.81	0.962		ug/L	1	12/7/2011 8:55:00 PM
Naphthalene	254	3.85		ug/L	4	12/8/2011 4:49:00 PM
Pentachlorophenol	3.45	1.44		ug/L	1	12/7/2011 8:55:00 PM
Phenanthrene	38.9	0.962		ug/L	1	12/7/2011 8:55:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	DEW423112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 3:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-12	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	84.7	0.962		ug/L	1	12/7/2011 8:55:00 PM
Surr: 2,4,6-Tribromophenol	105	33.1-99.7	S	%REC	1	12/7/2011 8:55:00 PM
Surr: 2-Fluorobiphenyl	91.1	33.1-96.2		%REC	1	12/7/2011 8:55:00 PM
Surr: 2-Fluorophenol	28.4	13.4-57.1		%REC	1	12/7/2011 8:55:00 PM
Surr: 4-Terphenyl-d14	96.1	41-122		%REC	1	12/7/2011 8:55:00 PM
Surr: Nitrobenzene-d5	83.5	28.9-99.9		%REC	1	12/7/2011 8:55:00 PM
Surr: Phenol-d6	20.7	10.6-38.5		%REC	1	12/7/2011 8:55:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,2,4-Trimethylbenzene	38.2	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,3,5-Trimethylbenzene	2.71	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 4:43:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 4:43:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
4-Isopropyltoluene	2.56	1.00		µg/L	1	12/2/2011 4:43:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 4:43:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 4:43:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 4:43:00 PM
Benzene	1.38	0.300		µg/L	1	12/2/2011 4:43:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	DEW423112911
Lab Order:	1112014	**Collection Date:**	11/29/2011 3:40:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-12	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 4:43:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
cis-1,2-Dichloroethene	1.59	1.00		µg/L	1	12/2/2011 4:43:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Ethylbenzene	8.13	1.00		µg/L	1	12/2/2011 4:43:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Isopropylbenzene	5.76	1.00		µg/L	1	12/2/2011 4:43:00 PM
m,p-Xylene	11.0	2.00		µg/L	1	12/2/2011 4:43:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 4:43:00 PM
n-Butylbenzene	1.19	1.00		µg/L	1	12/2/2011 4:43:00 PM
n-Propylbenzene	3.37	1.00		µg/L	1	12/2/2011 4:43:00 PM
Naphthalene	344	2.00		µg/L	2	12/6/2011 5:28:00 PM
o-Xylene	16.6	1.00		µg/L	1	12/2/2011 4:43:00 PM
sec-Butylbenzene	3.19	1.00		µg/L	1	12/2/2011 4:43:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Toluene	3.90	1.00		µg/L	1	12/2/2011 4:43:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 4:43:00 PM
Surr: 1,2-Dichloroethane-d4	101	72.2-129		%REC	1	12/2/2011 4:43:00 PM
Surr: 4-Bromofluorobenzene	108	73.5-125		%REC	1	12/2/2011 4:43:00 PM
Surr: Dibromofluoromethane	113	58.8-148		%REC	1	12/2/2011 4:43:00 PM
Surr: Toluene-d8	90.2	79.8-137		%REC	1	12/2/2011 4:43:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E5139113011
Lab Order:	1112014	**Collection Date:**	11/30/2011 10:25:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-13	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	8.19	0.0815	A1,K	mg/L	1	12/6/2011
Lube Oil	52.1	1.94		mg/L	10	12/6/2011
Surr: o-Terphenyl	167	50-150	S	%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00610	0.00500		mg/L	1	12/2/2011 10:26:42 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 10:26:42 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 10:26:42 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	47.7	0.100		ug/L	1	12/2/2011 5:52:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
2,3,4,6-Tetrachlorophenol	14.3	0.971		ug/L	1	12/7/2011 9:21:00 PM
2,3,4-Trichlorophenol	12.8	0.971		ug/L	1	12/7/2011 9:21:00 PM
2,3,5,6-Tetrachlorophenol	33.2	0.971		ug/L	1	12/7/2011 9:21:00 PM
2,3,5-Trichlorophenol	4.87	0.971		ug/L	1	12/7/2011 9:21:00 PM
2,3,6-Trichlorophenol	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
2,4,5-Trichlorophenol	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
2,4,6-Trichlorophenol	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
2-Methylnaphthalene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
3,4,5-Trichlorophenol	43.4	0.971		ug/L	1	12/7/2011 9:21:00 PM
Acenaphthene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Acenaphthylene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Anthracene	4.09	0.971		ug/L	1	12/7/2011 9:21:00 PM
Benz(a)anthracene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Benzo(a)pyrene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Benzo(b)fluoranthene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Benzo(g,h,i)perylene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Benzo(k)fluoranthene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Carbazole	21.2	0.971		ug/L	1	12/7/2011 9:21:00 PM
Chrysene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Dibenz(a,h)anthracene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Dibenzofuran	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Fluoranthene	2.00	0.971		ug/L	1	12/7/2011 9:21:00 PM
Fluorene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Naphthalene	9.66	0.971		ug/L	1	12/7/2011 9:21:00 PM
Pentachlorophenol	61.5	1.46		ug/L	1	12/7/2011 9:21:00 PM
Phenanthrene	2.61	0.971		ug/L	1	12/7/2011 9:21:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E5139113011
Lab Order:	1112014	**Collection Date:**	11/30/2011 10:25:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-13	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.971		ug/L	1	12/7/2011 9:21:00 PM
Surr: 2,4,6-Tribromophenol	89.7	33.1-99.7		%REC	1	12/7/2011 9:21:00 PM
Surr: 2-Fluorobiphenyl	91.2	33.1-96.2		%REC	1	12/7/2011 9:21:00 PM
Surr: 2-Fluorophenol	27.7	13.4-57.1		%REC	1	12/7/2011 9:21:00 PM
Surr: 4-Terphenyl-d14	82.9	41-122		%REC	1	12/7/2011 9:21:00 PM
Surr: Nitrobenzene-d5	83.0	28.9-99.9		%REC	1	12/7/2011 9:21:00 PM
Surr: Phenol-d6	16.6	10.6-38.5		%REC	1	12/7/2011 9:21:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
2-Butanone	28.7	10.0		µg/L	1	12/2/2011 5:06:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 5:06:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 5:06:00 PM
Acetone	152	50.0		µg/L	1	12/2/2011 5:06:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 5:06:00 PM
Benzene	0.340	0.300		µg/L	1	12/2/2011 5:06:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-13

Client Sample ID: E5139113011
Collection Date: 11/30/2011 10:25:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 5:06:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 5:06:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 5:06:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Naphthalene	5.89	1.00		µg/L	1	12/6/2011 4:38:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 5:06:00 PM
Surr: 1,2-Dichloroethane-d4	99.6	72.2-129		%REC	1	12/2/2011 5:06:00 PM
Surr: 4-Bromofluorobenzene	105	73.5-125		%REC	1	12/2/2011 5:06:00 PM
Surr: Dibromofluoromethane	110	58.8-148		%REC	1	12/2/2011 5:06:00 PM
Surr: Toluene-d8	94.0	79.8-137		%REC	1	12/2/2011 5:06:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-14

Client Sample ID: E5120113011
Collection Date: 11/30/2011 11:15:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	5.80	0.0816	A1,K	mg/L	1	12/6/2011
Lube Oil	30.1	1.94		mg/L	10	12/6/2011
Surr: o-Terphenyl	145	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00680	0.00500		mg/L	1	12/2/2011 10:31:47 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 10:31:47 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 10:31:47 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	44.9	0.100		ug/L	1	12/2/2011 5:59:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
2,3,4,6-Tetrachlorophenol	13.9	0.966		ug/L	1	12/8/2011 3:57:00 PM
2,3,4-Trichlorophenol	12.0	0.966		ug/L	1	12/8/2011 3:57:00 PM
2,3,5,6-Tetrachlorophenol	31.7	0.966		ug/L	1	12/8/2011 3:57:00 PM
2,3,5-Trichlorophenol	4.80	0.966		ug/L	1	12/8/2011 3:57:00 PM
2,3,6-Trichlorophenol	0.995	0.966		ug/L	1	12/8/2011 3:57:00 PM
2,4,5-Trichlorophenol	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
2,4,6-Trichlorophenol	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
2-Methylnaphthalene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
3,4,5-Trichlorophenol	40.3	0.966		ug/L	1	12/8/2011 3:57:00 PM
Acenaphthene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Acenaphthylene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Anthracene	3.79	0.966		ug/L	1	12/8/2011 3:57:00 PM
Benz(a)anthracene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Benzo(a)pyrene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Benzo(b)fluoranthene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Benzo(g,h,i)perylene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Benzo(k)fluoranthene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Carbazole	21.0	0.966		ug/L	1	12/8/2011 3:57:00 PM
Chrysene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Dibenz(a,h)anthracene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Dibenzofuran	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Fluoranthene	1.58	0.966		ug/L	1	12/8/2011 3:57:00 PM
Fluorene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Naphthalene	11.1	0.966		ug/L	1	12/8/2011 3:57:00 PM
Pentachlorophenol	64.5	1.45		ug/L	1	12/8/2011 3:57:00 PM
Phenanthrene	2.71	0.966		ug/L	1	12/8/2011 3:57:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E5120113011
Lab Order:	1112014	**Collection Date:**	11/30/2011 11:15:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-14	**Matrix:**	AQUEOUS

Analyses	**Result**	**Limit**	**Qual**	**Units**	**DF**	**Date Analyzed**
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.966		ug/L	1	12/8/2011 3:57:00 PM
Surr: 2,4,6-Tribromophenol	84.0	33.1-99.7		%REC	1	12/8/2011 3:57:00 PM
Surr: 2-Fluorobiphenyl	80.2	33.1-96.2		%REC	1	12/8/2011 3:57:00 PM
Surr: 2-Fluorophenol	29.3	13.4-57.1		%REC	1	12/8/2011 3:57:00 PM
Surr: 4-Terphenyl-d14	78.5	41-122		%REC	1	12/8/2011 3:57:00 PM
Surr: Nitrobenzene-d5	78.8	28.9-99.9		%REC	1	12/8/2011 3:57:00 PM
Surr: Phenol-d6	18.5	10.6-38.5		%REC	1	12/8/2011 3:57:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
2-Butanone	27.1	10.0		µg/L	1	12/2/2011 5:29:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 5:29:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 5:29:00 PM
Acetone	143	50.0		µg/L	1	12/2/2011 5:29:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 5:29:00 PM
Benzene	0.370	0.300		µg/L	1	12/2/2011 5:29:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E5120113011
Lab Order:	1112014	**Collection Date:**	11/30/2011 11:15:00 AM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-14	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 5:29:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 5:29:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 5:29:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Naphthalene	13.9	1.00		µg/L	1	12/6/2011 5:01:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 5:29:00 PM
Surr: 1,2-Dichloroethane-d4	97.9	72.2-129		%REC	1	12/2/2011 5:29:00 PM
Surr: 4-Bromofluorobenzene	105	73.5-125		%REC	1	12/2/2011 5:29:00 PM
Surr: Dibromofluoromethane	110	58.8-148		%REC	1	12/2/2011 5:29:00 PM
Surr: Toluene-d8	94.1	79.8-137		%REC	1	12/2/2011 5:29:00 PM

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E1020113011
Lab Order:	1112014	**Collection Date:**	11/30/2011 12:10:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-15	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	0.184	0.0771	A1	mg/L	1	12/6/2011
Lube Oil	0.515	0.193	A2	mg/L	1	12/6/2011
Surr: o-Terphenyl	111	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.0101	0.00500		mg/L	1	12/2/2011 8:49:37 PM
Copper	0.0150	0.0100		mg/L	1	12/2/2011 8:49:37 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 8:49:37 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	23.9	0.100		ug/L	1	12/2/2011 6:26:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
2,3,4-Trichlorophenol	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
2,3,5-Trichlorophenol	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
2,3,6-Trichlorophenol	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
2,4,5-Trichlorophenol	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
2,4,6-Trichlorophenol	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
2-Methylnaphthalene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
3,4,5-Trichlorophenol	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Acenaphthene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Acenaphthylene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Anthracene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Benz(a)anthracene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Benzo(a)pyrene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Benzo(b)fluoranthene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Benzo(g,h,i)perylene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Benzo(k)fluoranthene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Carbazole	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Chrysene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Dibenz(a,h)anthracene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Dibenzofuran	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Fluoranthene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Fluorene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Naphthalene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Pentachlorophenol	ND	1.43		ug/L	1	12/8/2011 3:30:00 PM
Phenanthrene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-15

Client Sample ID: E1020113011
Collection Date: 11/30/2011 12:10:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.955		ug/L	1	12/8/2011 3:30:00 PM
Surr: 2,4,6-Tribromophenol	62.2	33.1-99.7		%REC	1	12/8/2011 3:30:00 PM
Surr: 2-Fluorobiphenyl	62.4	33.1-96.2		%REC	1	12/8/2011 3:30:00 PM
Surr: 2-Fluorophenol	23.1	13.4-57.1		%REC	1	12/8/2011 3:30:00 PM
Surr: 4-Terphenyl-d14	70.1	41-122		%REC	1	12/8/2011 3:30:00 PM
Surr: Nitrobenzene-d5	58.4	28.9-99.9		%REC	1	12/8/2011 3:30:00 PM
Surr: Phenol-d6	14.6	10.6-38.5		%REC	1	12/8/2011 3:30:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 5:52:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 5:52:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 5:52:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 5:52:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 5:52:00 PM
Benzene	ND	0.300		µg/L	1	12/2/2011 5:52:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E1020113011
Lab Order:	1112014	**Collection Date:**	11/30/2011 12:10:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-15	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 5:52:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 5:52:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 5:52:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Naphthalene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 5:52:00 PM
Surr: 1,2-Dichloroethane-d4	99.7	72.2-129		%REC	1	12/2/2011 5:52:00 PM
Surr: 4-Bromofluorobenzene	104	73.5-125		%REC	1	12/2/2011 5:52:00 PM
Surr: Dibromofluoromethane	109	58.8-148		%REC	1	12/2/2011 5:52:00 PM
Surr: Toluene-d8	97.1	79.8-137		%REC	1	12/2/2011 5:52:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-16

Client Sample ID: E497113011
Collection Date: 11/30/2011 2:25:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	1.66	0.0802	A1	mg/L	1	12/6/2011
Lube Oil	0.851	0.201		mg/L	1	12/6/2011
Surr: o-Terphenyl	127	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00630	0.00500		mg/L	1	12/2/2011 10:36:53 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 10:36:53 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 10:36:53 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	18.6	0.100		ug/L	1	12/2/2011 6:33:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	1.91	0.952		ug/L	1	12/7/2011 10:40:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
2,3,4-Trichlorophenol	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
2,3,5-Trichlorophenol	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
2,3,6-Trichlorophenol	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
2,4,5-Trichlorophenol	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
2,4,6-Trichlorophenol	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
2-Methylnaphthalene	1.56	0.952		ug/L	1	12/7/2011 10:40:00 PM
3,4,5-Trichlorophenol	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Acenaphthene	12.8	0.952		ug/L	1	12/7/2011 10:40:00 PM
Acenaphthylene	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Anthracene	1.85	0.952		ug/L	1	12/7/2011 10:40:00 PM
Benz(a)anthracene	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Benzo(a)pyrene	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Benzo(b)fluoranthene	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Benzo(g,h,i)perylene	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Benzo(k)fluoranthene	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Carbazole	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Chrysene	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Dibenz(a,h)anthracene	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Dibenzofuran	1.38	0.952		ug/L	1	12/7/2011 10:40:00 PM
Fluoranthene	12.6	0.952		ug/L	1	12/7/2011 10:40:00 PM
Fluorene	4.13	0.952		ug/L	1	12/7/2011 10:40:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.952		ug/L	1	12/7/2011 10:40:00 PM
Naphthalene	2.37	0.952		ug/L	1	12/7/2011 10:40:00 PM
Pentachlorophenol	ND	1.43		ug/L	1	12/7/2011 10:40:00 PM
Phenanthrene	7.33	0.952		ug/L	1	12/7/2011 10:40:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E497113011
Lab Order:	1112014	**Collection Date:**	11/30/2011 2:25:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-16	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	11.7	0.952		ug/L	1	12/7/2011 10:40:00 PM
Surr: 2,4,6-Tribromophenol	77.9	33.1-99.7		%REC	1	12/7/2011 10:40:00 PM
Surr: 2-Fluorobiphenyl	62.7	33.1-96.2		%REC	1	12/7/2011 10:40:00 PM
Surr: 2-Fluorophenol	22.3	13.4-57.1		%REC	1	12/7/2011 10:40:00 PM
Surr: 4-Terphenyl-d14	81.2	41-122		%REC	1	12/7/2011 10:40:00 PM
Surr: Nitrobenzene-d5	58.4	28.9-99.9		%REC	1	12/7/2011 10:40:00 PM
Surr: Phenol-d6	12.9	10.6-38.5		%REC	1	12/7/2011 10:40:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 6:14:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 6:14:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 6:14:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 6:14:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 6:14:00 PM
Benzene	1.12	0.300		µg/L	1	12/2/2011 6:14:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E497113011
Lab Order:	1112014	**Collection Date:**	11/30/2011 2:25:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-16	**Matrix:**	AQUEOUS

Analyses	**Result**	**Limit**	**Qual**	**Units**	**DF**	**Date Analyzed**
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 6:14:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 6:14:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 6:14:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Naphthalene	2.95	1.00		µg/L	1	12/2/2011 6:14:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 6:14:00 PM
Surr: 1,2-Dichloroethane-d4	99.5	72.2-129		%REC	1	12/2/2011 6:14:00 PM
Surr: 4-Bromofluorobenzene	105	73.5-125		%REC	1	12/2/2011 6:14:00 PM
Surr: Dibromofluoromethane	110	58.8-148		%REC	1	12/2/2011 6:14:00 PM
Surr: Toluene-d8	89.8	79.8-137		%REC	1	12/2/2011 6:14:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT: Maul, Foster & Alongi
Lab Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29
Lab ID: 1112014-17

Client Sample ID: E5412113011
Collection Date: 11/30/2011 3:15:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	2.12	0.0807	A1	mg/L	1	12/6/2011
Lube Oil	1.92	0.202		mg/L	1	12/6/2011
Surr: o-Terphenyl	107	50-150		%REC	1	12/6/2011
DISSOLVED METALS BY ICP		**6010A**				Analyst: **zau**
Chromium	0.00880	0.00500		mg/L	1	12/2/2011 10:57:20 PM
Copper	ND	0.0100		mg/L	1	12/2/2011 10:57:20 PM
Zinc	ND	0.0100		mg/L	1	12/2/2011 10:57:20 PM
DISSOLVED METALS BY ICP/MS		**SW6020**				Analyst: **zau**
Arsenic	298	0.500		ug/L	5	12/5/2011 5:06:00 PM
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	1.32	0.963		ug/L	1	12/7/2011 11:06:00 PM
2,3,4,6-Tetrachlorophenol	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
2,3,4-Trichlorophenol	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
2,3,5,6-Tetrachlorophenol	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
2,3,5-Trichlorophenol	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
2,3,6-Trichlorophenol	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
2,4,5-Trichlorophenol	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
2,4,6-Trichlorophenol	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
2-Methylnaphthalene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
3,4,5-Trichlorophenol	9.67	0.963		ug/L	1	12/7/2011 11:06:00 PM
Acenaphthene	5.50	0.963		ug/L	1	12/7/2011 11:06:00 PM
Acenaphthylene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Anthracene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Benz(a)anthracene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Benzo(a)pyrene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Benzo(b)fluoranthene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Benzo(g,h,i)perylene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Benzo(k)fluoranthene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Bis(2-ethylhexyl)phthalate	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Carbazole	5.76	0.963		ug/L	1	12/7/2011 11:06:00 PM
Chrysene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Dibenz(a,h)anthracene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Dibenzofuran	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Fluoranthene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Fluorene	3.42	0.963		ug/L	1	12/7/2011 11:06:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Naphthalene	52.4	0.963		ug/L	1	12/7/2011 11:06:00 PM
Pentachlorophenol	ND	1.45		ug/L	1	12/7/2011 11:06:00 PM
Phenanthrene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E5412113011
Lab Order:	1112014	**Collection Date:**	11/30/2011 3:15:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-17	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY GC/MS		**SW8270D**				Analyst: **bda**
Pyrene	ND	0.963		ug/L	1	12/7/2011 11:06:00 PM
Surr: 2,4,6-Tribromophenol	78.8	33.1-99.7		%REC	1	12/7/2011 11:06:00 PM
Surr: 2-Fluorobiphenyl	69.7	33.1-96.2		%REC	1	12/7/2011 11:06:00 PM
Surr: 2-Fluorophenol	27.1	13.4-57.1		%REC	1	12/7/2011 11:06:00 PM
Surr: 4-Terphenyl-d14	73.3	41-122		%REC	1	12/7/2011 11:06:00 PM
Surr: Nitrobenzene-d5	65.8	28.9-99.9		%REC	1	12/7/2011 11:06:00 PM
Surr: Phenol-d6	15.2	10.6-38.5		%REC	1	12/7/2011 11:06:00 PM
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,1,1-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
2,2-Dichloropropane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
2-Butanone	ND	10.0		µg/L	1	12/2/2011 6:37:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
2-Hexanone	ND	10.0		µg/L	1	12/2/2011 6:37:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
4-Methyl-2-pentanone	ND	20.0		µg/L	1	12/2/2011 6:37:00 PM
Acetone	ND	50.0		µg/L	1	12/2/2011 6:37:00 PM
Acrylonitrile	ND	5.00		µg/L	1	12/2/2011 6:37:00 PM
Benzene	0.860	0.300		µg/L	1	12/2/2011 6:37:00 PM
Bromobenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Bromochloromethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM

Specialty Analytical

Date: *19-Dec-11*

CLIENT:	Maul, Foster & Alongi	**Client Sample ID:**	E5412113011
Lab Order:	1112014	**Collection Date:**	11/30/2011 3:15:00 PM
Project:	SER Monitoring Dec-11 / 9003.01.29		
Lab ID:	1112014-17	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS BY GC/MS		**SW8260B**				Analyst: **rkg**
Bromodichloromethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Bromoform	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Bromomethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Carbon disulfide	ND	2.00		µg/L	1	12/2/2011 6:37:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Chlorobenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Chloroethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Chloroform	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Chloromethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Dibromomethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Dichlorodifluoromethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Ethylbenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Hexachlorobutadiene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
m,p-Xylene	ND	2.00		µg/L	1	12/2/2011 6:37:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Methylene chloride	ND	20.0		µg/L	1	12/2/2011 6:37:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Naphthalene	87.0	1.00		µg/L	1	12/2/2011 6:37:00 PM
o-Xylene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Styrene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Tetrachloroethene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Toluene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Trichloroethene	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Trichlorofluoromethane	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Vinyl chloride	ND	1.00		µg/L	1	12/2/2011 6:37:00 PM
Surr: 1,2-Dichloroethane-d4	99.2	72.2-129		%REC	1	12/2/2011 6:37:00 PM
Surr: 4-Bromofluorobenzene	108	73.5-125		%REC	1	12/2/2011 6:37:00 PM
Surr: Dibromofluoromethane	110	58.8-148		%REC	1	12/2/2011 6:37:00 PM
Surr: Toluene-d8	90.3	79.8-137		%REC	1	12/2/2011 6:37:00 PM

Specialty Analytical **Date:** *19-Dec-11*

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDIS

Sample ID: **1112014-15CMS** SampType: **MS** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: **12/2/2011** Run ID: **TJA IRIS_111202E**
Client ID: **E1020113011** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/5/2011** SeqNo: **798894**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2761	0.00500	0.25	0.0101	106	93.4	112	0	0		
Copper	0.5209	0.0100	0.5	0.015	101	92.7	114	0	0		
Zinc	0.5534	0.0100	0.5	0.0043	110	93	110	0	0		

Sample ID: **1112014-15CMSD** SampType: **MSD** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: **12/2/2011** Run ID: **TJA IRIS_111202E**
Client ID: **E1020113011** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/5/2011** SeqNo: **798895**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2729	0.00500	0.25	0.0101	105	93.4	112	0.2761	1.17	20	
Copper	0.5193	0.0100	0.5	0.015	101	92.7	114	0.5209	0.308	20	
Zinc	0.5472	0.0100	0.5	0.0043	109	93	110	0.5534	1.13	20	

Sample ID: **1112014-15CDUP** SampType: **DUP** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: **12/2/2011** Run ID: **TJA IRIS_111202E**
Client ID: **E1020113011** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/2/2011** SeqNo: **798700**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.0116	0.00500	0	0	0	0	0	0.0101	13.8	20	
Copper	0.011	0.0100	0	0	0	0	0	0.015	30.8	20	R
Zinc	0.0044	0.0100	0	0	0	0	0	0.0043	0	20	J

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111202E**
Client ID: **ZZZZZ** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/2/2011** SeqNo: **798697**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2285	0.00500	0.25	0	91.4	90	110	0	0		
Copper	0.4872	0.0100	0.5	0	97.4	90	110	0	0		
Zinc	0.4736	0.0100	0.5	0	94.7	90	110	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDIS

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111202E**
Client ID: **ZZZZZ** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/2/2011** SeqNo: **798708**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.227	0.00500	0.25	0	90.8	90	110	0	0		
Copper	0.4842	0.0100	0.5	0	96.8	90	110	0	0		
Zinc	0.4717	0.0100	0.5	0	94.3	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111202E**
Client ID: **ZZZZZ** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/2/2011** SeqNo: **798719**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2265	0.00500	0.25	0	90.6	90	110	0	0		
Copper	0.4927	0.0100	0.5	0	98.5	90	110	0	0		
Zinc	0.4709	0.0100	0.5	0	94.2	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111202E**
Client ID: **ZZZZZ** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/2/2011** SeqNo: **798721**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2338	0.00500	0.25	0	93.5	90	110	0	0		
Copper	0.4869	0.0100	0.5	0	97.4	90	110	0	0		
Zinc	0.4705	0.0100	0.5	0	94.1	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111202E**
Client ID: **ZZZZZ** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/5/2011** SeqNo: **798893**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2568	0.00500	0.25	0	103	90	110	0	0		
Copper	0.4856	0.0100	0.5	0	97.1	90	110	0	0		
Zinc	0.5089	0.0100	0.5	0	102	90	110	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WDIS

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111202E**
Client ID: **ZZZZZ** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/5/2011** SeqNo: **798896**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2425	0.00500	0.25	0	97	90	110	0	0		
Copper	0.4656	0.0100	0.5	0	93.1	90	110	0	0		
Zinc	0.4947	0.0100	0.5	0	98.9	90	110	0	0		

Sample ID: **ICV** SampType: **ICV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111202E**
Client ID: **ZZZZZ** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/2/2011** SeqNo: **798696**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2518	0.00500	0.25	0	101	90	110	0	0		
Copper	0.4915	0.0100	0.5	0	98.3	90	110	0	0		
Zinc	0.4974	0.0100	0.5	0	99.5	90	110	0	0		

Sample ID: **ICV** SampType: **ICV** TestCode: **6010_WDIS** Units: **mg/L** Prep Date: Run ID: **TJA IRIS_111202E**
Client ID: **ZZZZZ** Batch ID: **30140** TestNo: **6010A** Analysis Date: **12/5/2011** SeqNo: **798892**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2523	0.00500	0.25	0	101	90	110	0	0		
Copper	0.495	0.0100	0.5	0	99	90	110	0	0		
Zinc	0.5148	0.0100	0.5	0	103	90	110	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_WDISS

Sample ID: **1112014-06CMS** SampType: **MS** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: **12/2/2011** Run ID: **ICPMS_111202A**
Client ID: **E5823112811** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/2/2011** SeqNo: **798795**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	59.14	0.100	50	8.274	102	70	130	0	0		

Sample ID: **1112014-06CMSD** SampType: **MSD** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: **12/2/2011** Run ID: **ICPMS_111202A**
Client ID: **E5823112811** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/6/2011** SeqNo: **799674**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	58.87	0.100	50	8.274	101	70	130	59.14	0.458	20	

Sample ID: **1112014-06CDUP** SampType: **DUP** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: **12/2/2011** Run ID: **ICPMS_111202A**
Client ID: **E5823112811** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/2/2011** SeqNo: **798794**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.252	0.100	0	0	0	0	0	8.274	0.266	20	

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/2/2011** SeqNo: **798791**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	49.22	0.100	50	0	98.4	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/2/2011** SeqNo: **798801**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	48.24	0.100	50	0	96.5	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/2/2011** SeqNo: **798811**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_WDISS

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/2/2011** SeqNo: **798811**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	48.67	0.100	50	0	97.3	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/2/2011** SeqNo: **798815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	48.79	0.100	50	0	97.6	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/5/2011** SeqNo: **799300**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.4	0.100	50	0	101	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/5/2011** SeqNo: **799302**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.48	0.100	50	0	101	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/6/2011** SeqNo: **799673**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.63	0.100	50	0	101	90	110	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/6/2011** SeqNo: **799675**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/6/2011** SeqNo: **799675**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	49.93	0.100	50	0	99.9	90	110	0	0		

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/2/2011** SeqNo: **798790**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	49.37	0.100	50	0	98.7	90	110	0	0		

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/5/2011** SeqNo: **799299**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.74	0.100	50	0	101	90	110	0	0		

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_WDISS** Units: **ug/L** Prep Date: Run ID: **ICPMS_111202A**
Client ID: **ZZZZZ** Batch ID: **30139** TestNo: **SW6020** Analysis Date: **12/6/2011** SeqNo: **799672**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.96	0.100	50	0	102	90	110	0	0		

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: **8260_W**

Sample ID: **MBLK-30176** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: **12/2/2011** Run ID: **5975X_111202A**
Client ID: **ZZZZZ** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/2/2011** SeqNo: **799347**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1.00									
1,1,1-Trichloroethane	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,1-Dichloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
1,1-Dichloropropene	ND	1.00									
1,2,3-Trichlorobenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2-Dibromoethane	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dichloroethane	ND	1.00									
1,2-Dichloropropane	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,3-Dichloropropane	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
2,2-Dichloropropane	ND	1.00									
2-Butanone	ND	10.0									
2-Chlorotoluene	ND	1.00									
2-Hexanone	ND	10.0									
4-Chlorotoluene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
4-Methyl-2-pentanone	ND	20.0									
Acetone	ND	50.0									
Acrylonitrile	ND	5.00									
Benzene	0.23	0.300									J
Bromobenzene	ND	1.00									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Sample ID: **MBLK-30176** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: **12/2/2011** Run ID: **5975X_111202A**
Client ID: **ZZZZZ** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/2/2011** SeqNo: **799347**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromochloromethane	ND	1.00									
Bromodichloromethane	ND	1.00									
Bromoform	ND	1.00									
Bromomethane	ND	1.00									
Carbon disulfide	ND	2.00									
Carbon tetrachloride	ND	1.00									
Chlorobenzene	ND	1.00									
Chloroethane	ND	1.00									
Chloroform	ND	1.00									
Chloromethane	ND	1.00									
cis-1,2-Dichloroethene	0.23	1.00									J
cis-1,3-Dichloropropene	ND	1.00									
Dibromochloromethane	ND	1.00									
Dibromomethane	ND	1.00									
Dichlorodifluoromethane	ND	1.00									
Ethylbenzene	ND	1.00									
Hexachlorobutadiene	ND	1.00									
Isopropylbenzene	ND	1.00									
m,p-Xylene	ND	2.00									
Methyl tert-butyl ether	ND	1.00									
Methylene chloride	ND	20.0									
n-Butylbenzene	ND	1.00									
n-Propylbenzene	0.17	1.00									J
Naphthalene	ND	1.00									
o-Xylene	ND	1.00									
sec-Butylbenzene	ND	1.00									
Styrene	ND	1.00									
tert-Butylbenzene	ND	1.00									
Tetrachloroethene	ND	1.00									
Toluene	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **MBLK-30176** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: **12/2/2011** Run ID: **5975X_111202A**
Client ID: **ZZZZZ** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/2/2011** SeqNo: **799347**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.00									
Trichloroethene	ND	1.00									
Trichlorofluoromethane	ND	1.00									
Vinyl chloride	ND	1.00									
Surr: 1,2-Dichloroethane-d4	99.81	0	100	0	99.8	72.2	129	0	0		
Surr: 4-Bromofluorobenzene	104.9	0	100	0	105	73.5	125	0	0		
Surr: Dibromofluoromethane	110.3	0	100	0	110	58.8	148	0	0		
Surr: Toluene-d8	98.82	0	100	0	98.8	79.8	137	0	0		

Sample ID: **LCS-30176** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: **12/2/2011** Run ID: **5975X_111202A**
Client ID: **ZZZZZ** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/2/2011** SeqNo: **799346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	44.32	1.00	40	0	111	69.9	130	0	0		
Benzene	40.18	0.300	40	0	100	77.9	125	0	0		
Chlorobenzene	40.92	1.00	40	0	102	82.5	114	0	0		
Toluene	38.9	1.00	40	0	97.3	74.6	119	0	0		
Trichloroethene	41.55	1.00	40	0	104	74.7	125	0	0		

Sample ID: **1112014-17DMS** SampType: **MS** TestCode: **8260_W** Units: **µg/L** Prep Date: **12/2/2011** Run ID: **5975X_111202A**
Client ID: **E5412113011** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/2/2011** SeqNo: **799365**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	42.07	1.00	40	0	105	51.4	176	0	0		
Benzene	41.98	0.300	40	0.86	103	71.5	118	0	0		
Chlorobenzene	41.13	1.00	40	0	103	79.8	114	0	0		
Toluene	38.42	1.00	40	0.53	94.7	79.6	121	0	0		
Trichloroethene	42.17	1.00	40	0	105	73.6	120	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

Sample ID: **1112014-17DMSD** SampType: **MSD** TestCode: **8260_W** Units: **µg/L** Prep Date: **12/2/2011** Run ID: **5975X_111202A**
Client ID: **E5412113011** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/2/2011** SeqNo: **799366**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	44.73	1.00	40	0	112	51.4	176	42.07	6.13	20	
Benzene	41.99	0.300	40	0.86	103	71.5	118	41.98	0.0238	20	
Chlorobenzene	41.28	1.00	40	0	103	79.8	114	41.13	0.364	20	
Toluene	38.99	1.00	40	0.53	96.2	79.6	121	38.42	1.47	20	
Trichloroethene	42.63	1.00	40	0	107	73.6	120	42.17	1.08	20	

Sample ID: **CCB-30176** SampType: **CCB** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111202A**
Client ID: **ZZZZZ** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/6/2011** SeqNo: **799636**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1.00	0	0	0	0	0	0	0		
1,1,1-Trichloroethane	ND	1.00	0	0	0	0	0	0	0		
1,1,2,2-Tetrachloroethane	0.12	1.00	0	0	0	0	0	0	0		
1,1,2-Trichloroethane	ND	1.00	0	0	0	0	0	0	0		
1,1-Dichloroethane	ND	1.00	0	0	0	0	0	0	0		
1,1-Dichloroethene	0.11	1.00	0	0	0	0	0	0	0		
1,1-Dichloropropene	ND	1.00	0	0	0	0	0	0	0		
1,2,3-Trichlorobenzene	ND	1.00	0	0	0	0	0	0	0		
1,2,3-Trichloropropane	ND	1.00	0	0	0	0	0	0	0		
1,2,4-Trichlorobenzene	ND	1.00	0	0	0	0	0	0	0		
1,2,4-Trimethylbenzene	ND	1.00	0	0	0	0	0	0	0		
1,2-Dibromo-3-chloropropane	ND	1.00	0	0	0	0	0	0	0		
1,2-Dibromoethane	ND	1.00	0	0	0	0	0	0	0		
1,2-Dichlorobenzene	ND	1.00	0	0	0	0	0	0	0		
1,2-Dichloroethane	ND	1.00	0	0	0	0	0	0	0		
1,2-Dichloropropane	ND	1.00	0	0	0	0	0	0	0		
1,3,5-Trimethylbenzene	ND	1.00	0	0	0	0	0	0	0		
1,3-Dichlorobenzene	ND	1.00	0	0	0	0	0	0	0		
1,3-Dichloropropane	ND	1.00	0	0	0	0	0	0	0		
1,4-Dichlorobenzene	0.14	1.00	0	0	0	0	0	0	0		
2,2-Dichloropropane	ND	1.00	0	0	0	0	0	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **CCB-30176** SampType: **CCB** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111202A**
Client ID: **ZZZZZ** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/6/2011** SeqNo: **799636**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Butanone	ND	10.0	0	0	0	0	0	0	0		
2-Chlorotoluene	ND	1.00	0	0	0	0	0	0	0		
2-Hexanone	ND	10.0	0	0	0	0	0	0	0		
4-Chlorotoluene	ND	1.00	0	0	0	0	0	0	0		
4-Isopropyltoluene	ND	1.00	0	0	0	0	0	0	0		
4-Methyl-2-pentanone	ND	20.0	0	0	0	0	0	0	0		
Acetone	ND	50.0	0	0	0	0	0	0	0		
Acrylonitrile	ND	5.00	0	0	0	0	0	0	0		
Benzene	0.23	0.300	0	0	0	0	0	0	0		
Bromobenzene	ND	1.00	0	0	0	0	0	0	0		
Bromochloromethane	ND	1.00	0	0	0	0	0	0	0		
Bromodichloromethane	ND	1.00	0	0	0	0	0	0	0		
Bromoform	ND	1.00	0	0	0	0	0	0	0		
Bromomethane	ND	1.00	0	0	0	0	0	0	0		
Carbon disulfide	0.21	2.00	0	0	0	0	0	0	0		
Carbon tetrachloride	ND	1.00	0	0	0	0	0	0	0		
Chlorobenzene	ND	1.00	0	0	0	0	0	0	0		
Chloroethane	ND	1.00	0	0	0	0	0	0	0		
Chloroform	ND	1.00	0	0	0	0	0	0	0		
Chloromethane	ND	1.00	0	0	0	0	0	0	0		
cis-1,2-Dichloroethene	0.18	1.00	0	0	0	0	0	0	0		
cis-1,3-Dichloropropene	ND	1.00	0	0	0	0	0	0	0		
Dibromochloromethane	ND	1.00	0	0	0	0	0	0	0		
Dibromomethane	ND	1.00	0	0	0	0	0	0	0		
Dichlorodifluoromethane	ND	1.00	0	0	0	0	0	0	0		
Ethylbenzene	ND	1.00	0	0	0	0	0	0	0		
Hexachlorobutadiene	0.16	1.00	0	0	0	0	0	0	0		
Isopropylbenzene	ND	1.00	0	0	0	0	0	0	0		
m,p-Xylene	ND	2.00	0	0	0	0	0	0	0		
Methyl tert-butyl ether	ND	1.00	0	0	0	0	0	0	0		
Methylene chloride	0.55	20.0	0	0	0	0	0	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **CCB-30176** SampType: **CCB** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111202A**
Client ID: **ZZZZZ** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/6/2011** SeqNo: **799636**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Butylbenzene	ND	1.00	0	0	0	0	0	0	0		
n-Propylbenzene	ND	1.00	0	0	0	0	0	0	0		
Naphthalene	0.15	1.00	0	0	0	0	0	0	0		
o-Xylene	ND	1.00	0	0	0	0	0	0	0		
sec-Butylbenzene	ND	1.00	0	0	0	0	0	0	0		
Styrene	ND	1.00	0	0	0	0	0	0	0		
tert-Butylbenzene	ND	1.00	0	0	0	0	0	0	0		
Tetrachloroethene	ND	1.00	0	0	0	0	0	0	0		
Toluene	ND	1.00	0	0	0	0	0	0	0		
trans-1,2-Dichloroethene	0.13	1.00	0	0	0	0	0	0	0		
trans-1,3-Dichloropropene	ND	1.00	0	0	0	0	0	0	0		
Trichloroethene	ND	1.00	0	0	0	0	0	0	0		
Trichlorofluoromethane	ND	1.00	0	0	0	0	0	0	0		
Vinyl chloride	ND	1.00	0	0	0	0	0	0	0		
Surr: 1,2-Dichloroethane-d4	101.8	0	100	0	102	72.2	129	0	0		
Surr: 4-Bromofluorobenzene	108.2	0	100	0	108	73.5	125	0	0		
Surr: Dibromofluoromethane	110.5	0	100	0	110	58.8	148	0	0		
Surr: Toluene-d8	102.1	0	100	0	102	79.8	137	0	0		

Sample ID: **CCV-30176** SampType: **CCV** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111202A**
Client ID: **ZZZZZ** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/2/2011** SeqNo: **799345**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	47.84	1.00	40	0	120	80	120	0	0		
1,2-Dichloropropane	39.93	1.00	40	0	99.8	80	120	0	0		
Chloroform	46.99	1.00	40	0	117	80	120	0	0		
Ethylbenzene	44.61	1.00	40	0	112	80	120	0	0		
Toluene	41.99	1.00	40	0	105	80	120	0	0		
Vinyl chloride	46.68	1.00	40	0	117	80	120	0	0		

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **CCV-30176** SampType: **CCV** TestCode: **8260_W** Units: **µg/L** Prep Date: Run ID: **5975X_111202A**
Client ID: **ZZZZZ** Batch ID: **30176** TestNo: **SW8260B** Analysis Date: **12/6/2011** SeqNo: **799634**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	45.62	1.00	40	0	114	80	120	0	0		
1,2-Dichloropropane	43.11	1.00	40	0	108	80	120	0	0		
Chloroform	44.9	1.00	40	0	112	80	120	0	0		
Ethylbenzene	44.9	1.00	40	0	112	80	120	0	0		
Toluene	39.81	1.00	40	0	99.5	80	120	0	0		
Vinyl chloride	44.46	1.00	40	0	111	80	120	0	0		

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270POR_W

Sample ID: **MB-30147** SampType: **MBLK** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **12/5/2011** Run ID: **5973G_111207A**
Client ID: **ZZZZZ** Batch ID: **30147** TestNo: **SW8270D** Analysis Date: **12/7/2011** SeqNo: **799993**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	1.00									
2,3,4,6-Tetrachlorophenol	ND	1.00									
2,3,4-Trichlorophenol	ND	1.00									
2,3,5,6-Tetrachlorophenol	ND	1.00									
2,3,5-Trichlorophenol	ND	1.00									
2,3,6-Trichlorophenol	ND	1.00									
2,4,5-Trichlorophenol	ND	1.00									
2,4,6-Trichlorophenol	ND	1.00									
2-Methylnaphthalene	ND	1.00									
3,4,5-Trichlorophenol	ND	1.00									
Acenaphthene	ND	1.00									
Acenaphthylene	ND	1.00									
Anthracene	ND	1.00									
Benz(a)anthracene	0.55	1.00									J
Benzo(a)pyrene	0.43	1.00									J
Benzo(b)fluoranthene	0.39	1.00									J
Benzo(g,h,i)perylene	ND	1.00									
Benzo(k)fluoranthene	0.64	1.00									J
Bis(2-ethylhexyl)phthalate	0.29	1.00									J
Carbazole	ND	1.00									
Chrysene	0.55	1.00									J
Dibenz(a,h)anthracene	ND	1.00									
Dibenzofuran	ND	1.00									
Fluoranthene	0.21	1.00									J
Fluorene	ND	1.00									
Indeno(1,2,3-cd)pyrene	ND	1.00									
Naphthalene	ND	1.00									
Pentachlorophenol	ND	1.50									
Phenanthrene	ND	1.00									
Pyrene	0.26	1.00									J
Surr: 2,4,6-Tribromophenol	67.85	0	100	0	67.8	33.1	99.7	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

Sample ID: **MB-30147** SampType: **MBLK** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **12/5/2011** Run ID: **5973G_111207A**
Client ID: **ZZZZZ** Batch ID: **30147** TestNo: **SW8270D** Analysis Date: **12/7/2011** SeqNo: **799993**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorobiphenyl	70.48	0	100	0	70.5	33.1	96.2	0	0		
Surr: 2-Fluorophenol	28.22	0	100	0	28.2	13.4	57.1	0	0		
Surr: 4-Terphenyl-d14	82	0	100	0	82	41	122	0	0		
Surr: Nitrobenzene-d5	75.16	0	100	0	75.2	28.9	99.9	0	0		
Surr: Phenol-d6	18.07	0	100	0	18.1	10.6	38.5	0	0		

Sample ID: **LCS-30147** SampType: **LCS** TestCode: **8270POR_W** Units: **ug/L** Prep Date: **12/5/2011** Run ID: **5973G_111207A**
Client ID: **ZZZZZ** Batch ID: **30147** TestNo: **SW8270D** Analysis Date: **12/7/2011** SeqNo: **799991**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	37.47	1.00	50	0	74.9	27.5	88.1	0	0		
1,4-Dichlorobenzene	34.73	1.00	50	0	69.5	27.8	80.9	0	0		
2,4-Dinitrotoluene	40.38	1.00	50	0	80.8	52.9	97.6	0	0		
2-Chlorophenol	29.89	1.00	50	0	59.8	27.8	77.9	0	0		
4-Chloro-3-methylphenol	34.54	1.00	50	0	69.1	33.5	88.5	0	0		
4-Nitrophenol	17.22	5.00	50	0	34.4	11.4	49.1	0	0		
Acenaphthene	40.36	1.00	50	0	80.7	39.8	94.2	0	0		
N-Nitrosodi-n-propylamine	39.56	1.00	50	0	79.1	33.9	92.1	0	0		
Pentachlorophenol	26.23	1.50	50	0	52.5	43.3	113	0	0		
Phenol	12.43	1.00	50	0	24.9	13.4	40.9	0	0		
Pyrene	41.52	1.00	50	0	83	59.4	119	0	0		

Sample ID: **LCSD-30147** SampType: **LCSD** TestCode: **8270POR_W** Units: **ug/L** Prep Date: Run ID: **5973G_111207A**
Client ID: **ZZZZZ** Batch ID: **30147** TestNo: **SW8270D** Analysis Date: **12/7/2011** SeqNo: **799992**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	45.17	1.00	50	0	90.3	27.5	88.1	37.47	18.6	20	S,O
1,4-Dichlorobenzene	44.82	1.00	50	0	89.6	27.8	80.9	34.73	25.4	20	S,O,R
2,4-Dinitrotoluene	47.24	1.00	50	0	94.5	52.9	97.6	40.38	15.7	20	
2-Chlorophenol	38.46	1.00	50	0	76.9	27.8	77.9	29.89	25.1	20	R
4-Chloro-3-methylphenol	41.14	1.00	50	0	82.3	33.5	88.5	34.54	17.4	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270POR_W

Sample ID: **LCSD-30147** SampType: **LCSD** TestCode: **8270POR_W** Units: **ug/L** Prep Date: Run ID: **5973G_111207A**
Client ID: **ZZZZZ** Batch ID: **30147** TestNo: **SW8270D** Analysis Date: **12/7/2011** SeqNo: **799992**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Nitrophenol	20.07	5.00	50	0	40.1	11.4	49.1	17.22	15.3	20	
Acenaphthene	46.38	1.00	50	0	92.8	39.8	94.2	40.36	13.9	20	
N-Nitrosodi-n-propylamine	48.21	1.00	50	0	96.4	33.9	92.1	39.56	19.7	20	S,O
Pentachlorophenol	26.56	1.50	50	0	53.1	43.3	113	26.23	1.25	20	
Phenol	16.23	1.00	50	0	32.5	13.4	40.9	12.43	26.5	20	R
Pyrene	50.07	1.00	50	0	100	59.4	119	41.52	18.7	20	

Sample ID: **CCV-30147** SampType: **CCV** TestCode: **8270POR_W** Units: **ug/L** Prep Date: Run ID: **5973G_111207A**
Client ID: **ZZZZZ** Batch ID: **30147** TestNo: **SW8270D** Analysis Date: **12/7/2011** SeqNo: **799990**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	40.56	1.00	40	0	101	80	120	0	0		
2,4,6-Trichlorophenol	42.54	1.00	40	0	106	80	120	0	0		
2,4-Dichlorophenol	43.27	1.00	40	0	108	80	120	0	0		
2-Nitrophenol	43	5.00	40	0	108	80	120	0	0		
4-Chloro-3-methylphenol	44.44	1.00	40	0	111	80	120	0	0		
Acenaphthene	41.14	1.00	40	0	103	80	120	0	0		
Benzo(a)pyrene	41.88	1.00	40	0	105	80	120	0	0		
Di-n-octyl phthalate	42.23	1.00	40	0	106	80	120	0	0		
Fluoranthene	41.87	1.00	40	0	105	80	120	0	0		
Hexachlorobutadiene	38.47	1.00	40	0	96.2	80	120	0	0		
N-Nitrosodiphenylamine	41.98	1.00	40	0	105	80	120	0	0		
Pentachlorophenol	35.7	1.50	40	0	89.2	80	120	0	0		
Phenol	43.43	1.00	40	0	109	80	120	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

CLIENT: Maul, Foster & Alongi
Work Order: 1112014
Project: SER Monitoring Dec-11 / 9003.01.29

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: **MB-30138** SampType: **MBLK** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **12/2/2011** Run ID: **GC-M_111206A**
Client ID: **ZZZZZ** Batch ID: **30138** TestNo: **NWTPH-Dx** Analysis Date: **12/6/2011** SeqNo: **799680**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.05732	0.0800									J
Lube Oil	0.1765	0.200									J
Surr: o-Terphenyl	0.2128	0	0.2	0	106	50	150	0	0		

Sample ID: **LCS-30138** SampType: **LCS** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **12/2/2011** Run ID: **GC-M_111206A**
Client ID: **ZZZZZ** Batch ID: **30138** TestNo: **NWTPH-Dx** Analysis Date: **12/6/2011** SeqNo: **799681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.222	0.0800	1	0	122	60.7	121	0	0		S,CN
Lube Oil	1.268	0.200	1	0	127	64	126	0	0		S,CN

Sample ID: **LCSD-30138** SampType: **LCSD** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **12/2/2011** Run ID: **GC-M_111206A**
Client ID: **ZZZZZ** Batch ID: **30138** TestNo: **NWTPH-Dx** Analysis Date: **12/6/2011** SeqNo: **799682**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.189	0.0800	1	0	119	60.7	121	1.222	2.75	20	
Lube Oil	1.354	0.200	1	0	135	64	126	1.268	6.53	20	S,CN

Sample ID: **CCB** SampType: **CCB** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **12/2/2011** Run ID: **GC-M_111206A**
Client ID: **ZZZZZ** Batch ID: **30138** TestNo: **NWTPH-Dx** Analysis Date: **12/6/2011** SeqNo: **800678**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.05904	0.0800	0	0	0	0	0	0	0		
Lube Oil	0.1572	0.200	0	0	0	0	0	0	0		
o-Terphenyl	0.1858	0	0.2	0	92.9	50	150	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111206A**
Client ID: **ZZZZZ** Batch ID: **30138** TestNo: **NWTPH-Dx** Analysis Date: **12/6/2011** SeqNo: **799679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: ND - Not Detected at the Reporting Limit
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

TestCode: **NWTPHDXLL_W**

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111206A**
Client ID: **ZZZZZ** Batch ID: **30138** TestNo: **NWTPH-Dx** Analysis Date: **12/6/2011** SeqNo: **799679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.515	0.0800	6.158	0	106	85	115	0	0		
Lube Oil	3.073	0.200	3.17	0	96.9	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111206A**
Client ID: **ZZZZZ** Batch ID: **30138** TestNo: **NWTPH-Dx** Analysis Date: **12/6/2011** SeqNo: **799701**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	9.11	0.0800	8.21	0	111	85	115	0	0		
Lube Oil	4.793	0.200	4.227	0	113	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111206A**
Client ID: **ZZZZZ** Batch ID: **30138** TestNo: **NWTPH-Dx** Analysis Date: **12/6/2011** SeqNo: **800677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	8.442	0.0800	8.21	0	103	85	115	0	0		
Lube Oil	4.702	0.200	4.227	0	111	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_111206A**
Client ID: **ZZZZZ** Batch ID: **30138** TestNo: **NWTPH-Dx** Analysis Date: **12/6/2011** SeqNo: **800682**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.793	0.0800	6.158	0	110	85	115	0	0		
Lube Oil	3.179	0.200	3.17	0	100	85	115	0	0		

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page 1 of 2

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager ALAN HUGHES
Company MAUL FOSTER & ALONGI
Address 7223 NE HAZEL DELL AVE SUITE B
VANC. WA. 98665
Phone 360 694 2691 Fax 360 906 1958
Project No. 9003.01.29 Project Name SER MONITORING DEC. 11
Project Site Location OR ____ WA X Other ____
Invoice To PORT OF RIDGEFIELD P.O. No. ____

Collected By:
Signature Pat Kirby
Printed PAT KIRBY

Signature ____
Printed KEVIN OLDHAM

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush ____
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use

Lab Job No. 1112014
Shipped Via Specialty
Air Bill No. —
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: SVOC's (PORT LIST)	NWTPH-DX	DISSOLVED METALS (ARSENIC CHROMIUM COPPER ZINC)	VOC's (LOW LEVEL)							Comments	Lab I.D.
11-28-11	10:30	E45112811	WATER	6	X	X	X	X								
	11:10	E424112811														
	12:00	E241112811														
	12:40	E223112811													Btl: E222112811	
	15:05	E5838112911														
	15:45	E5823112811														
11-29-11	10:00	E2742112811														
	10:45	E2725112811														
	11:55	E1633112911														
	12:35	E1622112911														
	15:00	DEW451112911														
	15:40	DEW423112911														

Relinquished By: PAT KIRBY
Company: PORT OF RIDGEFIELD
Date 12-1-11 Time 1210

Received By:
Company: Specialty

Relinquished By:
Company: Specialty
Date 12/1/11 Time 1430

Received For Lab By: Nikki Bipper
Date 12/1/11 Time 1430

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Page 2 of 2

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager ALAN HUGHES
Company MAUL FOSTER & ALONGI
Address 7223 NE HAZEL DELL AVE SUITE B
VANC. WA. 98665
Phone 360 694-2691 Fax 360 906 1958
Project No. 9003.01.29 Project Name SER Monitoring Dec 11
Project Site Location OR ___ WA X Other ___
Invoice To PORT OF RIDGEFIELD P.O. No. ___

Collected By:
Signature Pat Kirby
Printed PAT KIRBY

Signature ___
Printed KEVIN OLDHAM

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush ___
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1112014
Shipped Via Specialty
Air Bill No. ___
Temperature On Receipt ___ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	SVOC's (PORT LIST)	NWTPH - DX	DISSOLVED METALS (CHROMIUM ARSENIC COPPER, ZINC)	VOC's (LOW LEVEL)	Comments	Lab I.D.
11-30-11	10:25	E5139113011	WATER	6	X	X	X	X		
	11:15	E5120113011								
	12:10	E1020113011								
	14:25	F497113011								
	15:15	E5412113011							BH: E5512113011	

Relinquished By: PAT KIRBY Company: PORT OF RIDGEFIELD	Date 12-1-11	Time 1210	Received By: Company: Specialty	Relinquished By: Company: Specialty	Date 12/1/11	Time 1430
Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt. Samples held beyond 60 days subject to storage fee(s)				Received For Lab By: Nikki Brippes	Date 12/1/11	Time 1430

Copies: White-Original Yellow-Project File Pink-Customer Copy

www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Report Prepared for:

Alan Hughes
Maul Foster & Alongi
7223 NE Hazel Dell Avenue
Suite B
Vancouver WA 98665

REPORT OF LABORATORY ANALYSIS FOR PCDD/PCDF

Report Prepared Date:

December 16, 2011

Report Information:

Pace Project #: 10176664
Sample Receipt Date: 11/23/2011
Client Project #: 9003.01.29
Client Sub PO #: N/A
State Cert #: C755

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PCDD/PCDF Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

December 16, 2011
Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report of Laboratory Analysis

DISCUSSION

This report presents the results from the analysis performed on one sample submitted by a representative of Maul Foster & Alongi. The sample was analyzed for the presence or absence of polychlorodibenzo-p-dioxins (PCDDs) and polychlorodibenzofurans (PCDFs) using a modified version of USEPA Method 8290. Reporting limits were based on signal-to-noise measurements. Estimated Maximum Possible Concentration (EMPC) values were treated as positives in the toxic equivalence (TEQ) calculations. The sample was received above the recommended temperature range of 0-6 degrees Celsius.

The recoveries of the isotopically-labeled PCDD/PCDF internal standards in the sample extract ranged from 67-99%. Except for four low values, which were flagged "R" on the results table, the labeled standard recoveries obtained for this project were within the 40-135% target range specified in Method 8290. Also, since the quantification of the native 2,3,7,8-substituted congeners was based on isotope dilution, the data were automatically corrected for variation in recovery and accurate values were obtained.

In some cases, interfering substances impacted the determinations of PCDF congeners; the affected values were flagged "P" where polychlorinated diphenyl ethers were present. Values above the calibration range were flagged "E" and should be regarded as estimates. The 2,3,7,8-TCDD concentration reported for the field sample was obtained from a separate analysis of the sample extract; the value was flagged "N2" on the results table. The high concentration of OCDD in the field sample saturated the detector signal of the mass spectrometer, even upon analysis of a dilution of the sample extract; the value was flagged "S" and should be regarded as the minimum possible concentration.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to contain background levels of selected congeners. With the exception of the OCDD, these levels were below the calibration range of the method. The levels reported for the affected congeners in the field sample were higher than the corresponding blank levels by one or more orders of magnitude. These results indicate that the sample processing steps did not contribute significantly to the levels reported for the field sample.

A laboratory spike sample was also prepared with the sample batch using clean sand that had been fortified with native standard materials. The results show that the spiked native compounds were recovered at 96-120%, indicating a high degree of accuracy for these determinations. Matrix spikes were prepared with the sample batch using sample material from a separate project; results from these analyses will be provided upon request.

Minnesota Laboratory Certifications

Authority	**Certificate #**	**Authority**	**Certificate #**
Alabama	40770	Montana	92
Alaska	MN00064	Nebraska	
Arizona	AZ0014	Nevada	MN_00064_200
Arkansas	88-0680	New Jersey (NE	MN002
California	01155CA	New Mexico	MN00064
Colorado	MN00064	New York (NEL	11647
Connecticut	PH-0256	North Carolina	27700
EPA Region 5	WD-15J	North Dakota	R-036
EPA Region 8	8TMS-Q	Ohio	4150
Florida (NELAP	E87605	Ohio VAP	CL101 9507
Georgia (DNR)	959	Oklahoma	D9922
Guam	959	Oregon (ELAP)	MN200001-005
Hawaii	SLD	Oregon (OREL	MN300001-001
Idaho	MN00064	Pennsylvania	68-00563
Illinois	200012	Saipan	MP0003
Indiana	C-MN-01	South Carolina	74003001
Indiana	C-MN-01	Tennesee	2818
Iowa	368	Tennessee	02818
Kansas	E-10167	Texas	T104704192-08
Kentucky	90062	Utah (NELAP)	PAM
Louisiana	LA0900015	Virginia	00251
Maine	2007029	Washington	C755
Maryland	322	West Virginia	9952C
Michigan	9909	Wisconsin	999407970
Minnesota	027-053-137	Wyoming	8TMS-Q
Mississippi	MN00064		

Appendix A

Sample Management

Pace Analytical™
www.pacelabs.com

1137

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10176664

Page: 1 of 1

Section A
Required Client Information:

Company: MAUL, FOSTER & ALONGI
Address: 2001 NW 19th AVC #200
PORTLAND, OR 97209
Email To: ahughes@maulfoster.com
Phone: 360 4330217
Fax:
Requested Due Date/TAT: Standard

Section B
Required Project Information:

Report To: ALAN HUGHES
Copy To: KERRY GALLAGHER
gallagher.kerry@gmail.com
Purchase Order No.: /
Project Name: PORT OF RIDGEFIELD
Project Number: 9003.01.29

Section C
Invoice Information:

Attention: ACCOUNTING
Company Name: MFA
Address: 400 Mill Plain Blvd., Suite 400
Vancouver, WA 98660
Pace Quote Reference: /
Pace Project Manager: SCOTT
Pace Profile #: /

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

SITE LOCATION: ☐ GA ☐ IL ☐ IN ☐ MI ☐ NC ☐ OH ☐ SC ☐ WI ☐ OTHER WA

Section D Required Client Information

SAMPLE ID
One Character per box.
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Filtered (Y/N) Requested Analysis: Dioxins (8290)	Residual Chlorine (Y/N)	Pace Project No. Lab I.D.
1	B322-S-2.5	SL		11/17/11	1200				1	X								X		001
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
KGallagher / MFA	11/22/11	09:47	JS Pace	11/23/11	906	15.2	[✓ Y]/N	Y/[✓ N]	[✓ Y]/N
							Y/N	Y/N	Y/N
							Y/N	Y/N	Y/N
							Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: KERRY GALLAGHER
SIGNATURE of SAMPLER: KGallagher
DATE Signed (MM / DD / YY): 11/21/11

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Revised Date: 02Jun2011 Page 1 of 1
	Document Number: **F-L-213 Rev.01**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: MAUL FOSTER **Project #** 10176664

Optional
Proj. Due Date:
Proj. Name:

Courier: ☐ Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other ______

Tracking #: 12 87V 5210193627409

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other ______ Temp Blank: Yes ____ No ✓

Thermometer Used [✓ 80344042] or 80512447 **Type of Ice:** [✓ Wet] Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 15.2 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 11 23 11

Comments:

Chain of Custody Present:	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out:	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished:	☑ Yes	☐ No	☐ N/A	3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume:	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used:	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used:	☐ Yes	☑ No	☐ N/A	
Containers Intact:	☑ Yes	☐ No	☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes	☑ No	☐ N/A	11.
Sample Labels match COC:	☑ Yes	☐ No	☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: SL				
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐ Yes	☐ No	☑ N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ HCl Samp #
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes	☐ No	☑ N/A	
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	☐ Yes	☑ No		Initial when completed ______ Lot # of added preservative ______
Samples checked for dechlorination:	☐ Yes	☐ No	☑ N/A	14.
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☑ N/A	15.
Trip Blank Present:	☐ Yes	☐ No	☑ N/A	16.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if purchased): ______				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Kerry G. Date/Time: 11/28/11

Comments/ Resolution:

Proceed with analysis.

Project Manager Review: **Date:** 11/28/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Reporting Flags

A = Reporting Limit based on signal to noise

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interference present

J = Estimated value

Nn = Value obtained from additional analysis

P = PCDE Interference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = See Discussion

Appendix B

Sample Analysis Summary

Method 8290 Sample Analysis Results

Client - Maul Foster & Alongi

Client's Sample ID	B322-S-2.5		
Lab Sample ID	10176664001		
Filename	F111216A_05		
Injected By	ACE		
Total Amount Extracted	13.3 g	Matrix	Solid
% Moisture	12.6	Dilution	20
Dry Weight Extracted	11.6 g	Collected	11/17/2011 12:00
ICAL ID	F110926	Received	11/23/2011 09:06
CCal Filename(s)	F111215A_19 & F111216A_07	Extracted	12/08/2011 18:30
Method Blank ID	BLANK-31004	Analyzed	12/16/2011 09:09

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	
2,3,7,8-TCDF	220.0	-----	9.10	D
Total TCDF	620.0	-----	9.10	D
2,3,7,8-TCDD	4.5	-----	0.17	N2
Total TCDD	360.0	-----	11.00	D
1,2,3,7,8-PeCDF	-----	2200	27.00	P
2,3,4,7,8-PeCDF	-----	3000	18.00	P
Total PeCDF	12000.0	-----	22.00	D
1,2,3,7,8-PeCDD	100.0	-----	12.00	D
Total PeCDD	950.0	-----	12.00	D
1,2,3,4,7,8-HxCDF	5900.0	-----	33.00	D
1,2,3,6,7,8-HxCDF	1300.0	-----	37.00	D
2,3,4,6,7,8-HxCDF	1100.0	-----	27.00	D
1,2,3,7,8,9-HxCDF	2000.0	-----	29.00	D
Total HxCDF	71000.0	-----	31.00	ED
1,2,3,4,7,8-HxCDD	220.0	-----	34.00	D
1,2,3,6,7,8-HxCDD	11000.0	-----	42.00	D
1,2,3,7,8,9-HxCDD	1200.0	-----	43.00	D
Total HxCDD	41000.0	-----	40.00	D
1,2,3,4,6,7,8-HpCDF	24000.0	-----	11.00	D
1,2,3,4,7,8,9-HpCDF	1500.0	-----	31.00	D
Total HpCDF	83000.0	-----	21.00	ED
1,2,3,4,6,7,8-HpCDD	380000.0	-----	13.00	ED
Total HpCDD	840000.0	-----	13.00	ED
OCDF	31000.0	-----	15.00	D
OCDD	3700000.0	-----	13.00	ESD

Internal Standards	ng's Added	Percent Recovery	
2,3,7,8-TCDF-13C	2.00	82	D
2,3,7,8-TCDD-13C	2.00	96	D
1,2,3,7,8-PeCDF-13C	2.00	86	D
2,3,4,7,8-PeCDF-13C	2.00	85	D
1,2,3,7,8-PeCDD-13C	2.00	99	D
1,2,3,4,7,8-HxCDF-13C	2.00	72	D
1,2,3,6,7,8-HxCDF-13C	2.00	78	D
2,3,4,6,7,8-HxCDF-13C	2.00	80	D
1,2,3,7,8,9-HxCDF-13C	2.00	87	D
1,2,3,4,7,8-HxCDD-13C	2.00	80	D
1,2,3,6,7,8-HxCDD-13C	2.00	69	D
1,2,3,4,6,7,8-HpCDF-13C	2.00	67	D
1,2,3,4,7,8,9-HpCDF-13C	2.00	87	D
1,2,3,4,6,7,8-HpCDD-13C	2.00	72	D
OCDD-13C	4.00	82	D
1,2,3,4-TCDD-13C	2.00	NA	
1,2,3,7,8,9-HxCDD-13C	2.00	NA	
2,3,7,8-TCDD-37Cl4	0.20	86	D

Total 2,3,7,8-TCDD
Equivalence: 8500 ng/Kg
(Using 2005 WHO Factors - Using PRL/2 where ND)

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
P = PCDE Interference
E = Exceeds calibration range
S = Peak saturated
D = Result obtained from analysis of diluted sample
Nn = Value obtained from additional analysis

Method 8290 Blank Analysis Results

Lab Sample ID	BLANK-31004	Matrix	Solid
Filename	F111213B_09	Dilution	NA
Total Amount Extracted	20.1 g	Extracted	12/08/2011 18:30
ICAL ID	F110926	Analyzed	12/13/2011 22:59
CCal Filename(s)	F111213B_01 & F111213B_18	Injected By	ACE

Native Isomers	**Conc** ng/Kg	**EMPC** ng/Kg	**RL** ng/Kg		**Internal Standards**	**ng's Added**	**Percent Recovery**
2,3,7,8-TCDF	ND	-----	0.099		2,3,7,8-TCDF-13C	2.00	93
Total TCDF	0.15	-----	0.099	J	2,3,7,8-TCDD-13C	2.00	87
					1,2,3,7,8-PeCDF-13C	2.00	110
2,3,7,8-TCDD	ND	-----	0.130		2,3,4,7,8-PeCDF-13C	2.00	105
Total TCDD	ND	-----	0.130		1,2,3,7,8-PeCDD-13C	2.00	100
					1,2,3,4,7,8-HxCDF-13C	2.00	100
1,2,3,7,8-PeCDF	ND	-----	0.130		1,2,3,6,7,8-HxCDF-13C	2.00	93
2,3,4,7,8-PeCDF	ND	-----	0.098		2,3,4,6,7,8-HxCDF-13C	2.00	97
Total PeCDF	ND	-----	0.110		1,2,3,7,8,9-HxCDF-13C	2.00	90
					1,2,3,4,7,8-HxCDD-13C	2.00	85
1,2,3,7,8-PeCDD	ND	-----	0.160		1,2,3,6,7,8-HxCDD-13C	2.00	83
Total PeCDD	ND	-----	0.160		1,2,3,4,6,7,8-HpCDF-13C	2.00	29 R
					1,2,3,4,7,8,9-HpCDF-13C	2.00	24 R
1,2,3,4,7,8-HxCDF	ND	-----	0.240		1,2,3,4,6,7,8-HpCDD-13C	2.00	19 R
1,2,3,6,7,8-HxCDF	ND	-----	0.230		OCDD-13C	4.00	19 R
2,3,4,6,7,8-HxCDF	ND	-----	0.170				
1,2,3,7,8,9-HxCDF	ND	-----	0.230		1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	-----	0.220		1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	-----	0.180		2,3,7,8-TCDD-37Cl4	0.20	90
1,2,3,6,7,8-HxCDD	ND	-----	0.190				
1,2,3,7,8,9-HxCDD	ND	-----	0.180				
Total HxCDD	ND	-----	0.180				
1,2,3,4,6,7,8-HpCDF	ND	-----	0.700				
1,2,3,4,7,8,9-HpCDF	ND	-----	0.850				
Total HpCDF	ND	-----	0.780				
1,2,3,4,6,7,8-HpCDD	0.95	-----	0.540	J			
Total HpCDD	1.70	-----	0.540	J			
OCDF	ND	-----	1.100				
OCDD	10.00	-----	1.800				

Total 2,3,7,8-TCDD
Equivalence: 0.26 ng/Kg
(Using 2005 WHO Factors - Using PRL/2 where ND)

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
R = Recovery outside target range

Method 8290 Laboratory Control Spike Results

Lab Sample ID	LCS-31005		
Filename	F111213A_08	Matrix	Solid
Total Amount Extracted	20.3 g	Dilution	NA
ICAL ID	F110926	Extracted	12/08/2011 18:30
CCal Filename(s)	F111213A_01 & F111213A_09	Analyzed	12/13/2011 15:07
Method Blank ID	BLANK-31004	Injected By	SMT

Native Isomers	**Qs** (ng)	**Qm** (ng)	% Rec.
2,3,7,8-TCDF	0.20	0.22	111
Total TCDF			
2,3,7,8-TCDD	0.20	0.19	97
Total TCDD			
1,2,3,7,8-PeCDF	1.0	1.1	114
2,3,4,7,8-PeCDF	1.0	1.1	108
Total PeCDF			
1,2,3,7,8-PeCDD	1.0	0.96	96
Total PeCDD			
1,2,3,4,7,8-HxCDF	1.0	1.0	103
1,2,3,6,7,8-HxCDF	1.0	1.1	113
2,3,4,6,7,8-HxCDF	1.0	1.1	109
1,2,3,7,8,9-HxCDF	1.0	1.1	111
Total HxCDF			
1,2,3,4,7,8-HxCDD	1.0	1.0	104
1,2,3,6,7,8-HxCDD	1.0	1.0	102
1,2,3,7,8,9-HxCDD	1.0	1.0	102
Total HxCDD			
1,2,3,4,6,7,8-HpCDF	1.0	1.1	112
1,2,3,4,7,8,9-HpCDF	1.0	1.1	110
Total HpCDF			
1,2,3,4,6,7,8-HpCDD	1.0	1.0	102
Total HpCDD			
OCDF	2.0	2.4	118
OCDD	2.0	2.4	120

Internal Standards	**ng's Added**	**Percent Recovery**	
2,3,7,8-TCDF-13C	2.0	71	
2,3,7,8-TCDD-13C	2.0	78	
1,2,3,7,8-PeCDF-13C	2.0	85	
2,3,4,7,8-PeCDF-13C	2.0	86	
1,2,3,7,8-PeCDD-13C	2.0	96	
1,2,3,4,7,8-HxCDF-13C	2.0	86	
1,2,3,6,7,8-HxCDF-13C	2.0	83	
2,3,4,6,7,8-HxCDF-13C	2.0	83	
1,2,3,7,8,9-HxCDF-13C	2.0	79	
1,2,3,4,7,8-HxCDD-13C	2.0	79	
1,2,3,6,7,8-HxCDD-13C	2.0	86	
1,2,3,4,6,7,8-HpCDF-13C	2.0	52	
1,2,3,4,7,8,9-HpCDF-13C	2.0	42	
1,2,3,4,6,7,8-HpCDD-13C	2.0	53	
OCDD-13C	4.0	45	Y
1,2,3,4-TCDD-13C	2.0	NA	
1,2,3,7,8,9-HxCDD-13C	2.0	NA	
2,3,7,8-TCDD-37Cl4	0.20	78	

Qs = Quantity Spiked
Qm = Quantity Measured
Rec. = Recovery (Expressed as Percent)
R = Recovery outside of target range

Y = RF averaging used in calculations
Nn = Value obtained from additional analysis
NA = Not Applicable
* = See Discussion

APPENDIX E

LRIS SUMMARY OF SOIL ANALYTICAL RESULTS

APPENDIX E LRIS SUMMARY OF SOIL ANALYTICAL RESULTS CONTENTS

The tables in this appendix have been pulled from other reports previously submitted to and approved by the Washington State Department of Ecology. Tables are numbered with an E- prefix preceding their number in the original reports. The dioxin tables (E-I-6, E-3-1, and E-5-6) presented in the draft RI/FS are not included. Instead, the supplemental Table E-1 presents all updated dioxin congener and TEQ data and an updated notes page, which fully explains all abbreviations and qualifiers in the tables. The analytical results range in dates from 1991 to 2009.

The dioxin data has been updated to ensure consistent treatment of interferences and non-detects during data qualification and calculation of TEQs. Updated TEQs are calculated according to the methodology developed in coordination with Ecology and are described in Appendix F.

All dioxin data previously presented in the draft RI/FS Appendix E is included in Table E-1, with the exception of samples SS-31, SS-32, and SS-33. These samples are located in the off-property area and not in Cell 4. The dioxin TEQs in the original dioxin tables and Table E-1 are compared to the Model Toxics Control Act (MTCA) Method B and C Cleanup Levels; Ecology Natural Background Concentration; and MTCA Wildlife Ecological Indicator Concentration. In all cases the original and updated TEQs either both exceed or both do not exceed the screening criteria. Therefore, updating the dioxin TEQ calculation method does not change the interpretation of the dioxin data presented in the original reports.

All other tables are presented exactly as shown in the original reports, with the exception that titles and notes pages have been updated, which fully explain all abbreviations and qualifiers in the tables. As such, it is important to note that what has previously been referred to as "carcinogenic polycyclic aromatic hydrocarbons toxicity equivalent concentration" ("cPAH TEC") is the same as what is currently referred to as "carcinogenic polycyclic aromatic hydrocarbons toxicity equivalent" ("cPAH TEQ"). That is to say, the cPAH TEC is the sum of the cPAH compounds multiplied by their respective toxicity equivalent factors. In cases where all cPAHs for a sample were non-detect, the calculated cPAH TEQ is reported as "ND." Additionally, what was previously referred to as "Fuels" is the same as what is currently referred to as "Petroleum Hydrocarbons."

Full citations for the original reports are as follows:

MFA. 2007. Cell 3 remedial investigation and risk assessment report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc. February 23 and November 2 Amendment.

MFA. 2010. Final Cell 4 remedial investigation and feasibility study report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. November 29.

MFA. 2011. Draft Cells 1 and 2 remedial investigation and feasibility study report. Prepared for Port of Ridgefield. Prepared by Maul Foster & Alongi, Inc. January 19.

MFA. 2011. Cell 3 feasibility study report, Port of Ridgefield, Lake River industrial site. Maul Foster & Alongi, Inc. June 3.

TABLE

Table E-1
Updated Dioxin Data (ng/kg)
Former PWT Site RI/FS

Sample ID	Location Name	Date	Cell	Original Table Location	OCDF	OCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDD	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDD	1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDD	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDF	2,3,7,8-TCDD	Dioxin TEQ
MTCA Method B Soil Cleanup Level																						11
MTCA Method C Soil Cleanup Level																						1500
Ecology Natural Background Concentration[a]																						5.2
MTCA Wildlife Ecological Indicator Concentration																						2
B306-S-15.0	B-306	3/11/2009	Cells 1 & 2	E-I-6	17000	2100000	4000	400000	210	1200 U	1100	250	10000	40 U	4500	110	180	140	220	38	7.9 U	**6600**
B306-S-2.5	B-306	3/11/2009	Cells 1 & 2	E-I-6	53000	4200000	18000	280000	1300	6600 J	440	800	10000 J	150	1800	620	170	710	850	120 U	0.18 U	**6800**
B308-S-0.5	B-308	3/11/2009	Cells 1 & 2	E-I-6	1400	120000	1700	13000	110	820 U	130	130	690 J	0.91 U	210	69	84	88	160	23	8.5 U	**490**
B308-S-15.0	B-308	3/11/2009	Cells 1 & 2	E-I-6	13000	910000	9600	92000	670	4900 U	710	540	4900 J	0.91 U	1800	180	440	430	360	110	0.18 U	**2900**
B308-S-2.5	B-308	3/11/2009	Cells 1 & 2	E-I-6	3900	400000	3200	27000	220	1800 U	79	210	1100 J	51	260	95	0.91 U	130	220	44	0.18 U	**770**
B313-S-10.0	B-313	5/21/2009	Cells 1 & 2	E-I-6	1.5 J	67	0.76 J	5	0.088 J	0.084 J	0.19 U	0.11 J	0.21 J	0.078 U	0.12 U	0.17 U	0.092 U	0.11 U	0.1 J	0.13 J	0.16 U	0.32
B313-S-15.0	B-313	5/21/2009	Cells 1 & 2	E-I-6	0.12 J	45	0.59 J	4.8 J	0.079 U	0.077 J	0.12 U	0.095 U	0.17 U	0.092 U	0.16 U	0.13 U	0.11 U	0.086 J	0.096 J	0.23 J	0.18 U	0.31
B313-S-2.5	B-313	5/21/2009	Cells 1 & 2	E-I-6	1.7 J	120	0.86 J	8.7	0.14 U	0.21 U	0.15 U	0.24 U	0.36 J	0.078 J	0.13 U	0.18 U	0.13 U	0.083 U	0.11 U	0.19 U	0.24 U	0.43
B313-S-5.0	B-313	5/21/2009	Cells 1 & 2	E-I-6	0.99 J	59	1 J	6.1	0.076 U	0.35 J	0.11 U	0.092 U	0.31 J	0.097 U	0.14 U	0.14 U	0.085 U	0.16 U	0.2 J	0.11 J	0.11 U	0.36
GP11-S-1.5	GP11	5/21/2009	Cells 1 & 2	E-I-6	1300	120000	1300	11000	94	210	35	120	460	130	96	71	11 J	150	230	21	0.96 U	**370**
GP11-S-10.0	GP11	5/21/2009	Cells 1 & 2	E-I-6	0.63 J	38	0.34 J	3.4 J	0.24 U	0.24 U	0.25 U	0.24 U	0.27 U	0.3 U	0.26 U	0.17 U	0.16 U	0.19 U	0.15 U	0.14 U	0.18 U	0.34
GP11-S-15.0	GP11	5/21/2009	Cells 1 & 2	E-I-6	0.16 J	2.5 J	0.088 U	0.21 J	0.11 U	0.081 U	0.093 U	0.089 U	0.1 U	0.1 U	0.075 U	0.088 U	0.1 U	0.071 U	0.064 U	0.22 J	0.16 U	0.20
GP11-S-5.0	GP11	5/21/2009	Cells 1 & 2	E-I-6	70	5100	64	530	1 U	0.83 U	1.5 U	1.1 U	22 J	5.4 J	5.5 J	3.9 J	1.2 U	7.5 J	11 J	1.8 J	1.3 U	**17**
GP8-S-1.4	GP8	5/22/2009	Cells 1 & 2	E-I-6	1900	160000	1700	12000	93	360	52	140	500	110	110	78	14 J	160	240	29	6.9 U	**420**
GP8-S-11.0	GP8	5/22/2009	Cells 1 & 2	E-I-6	34	2800	21	270	1.1 J	4.5 J	0.34 U	1.4 J	12	1.3 J	5.2	0.9 J	1.2 J	2 J	2.4 J	0.59 J	0.21 U	**8.5**
GP8-S-15.0	GP8	5/22/2009	Cells 1 & 2	E-I-6	0.32 J	7.1 J	0.18 J	0.16 U	0.071 U	0.055 U	0.13 U	0.059 U	0.11 U	0.07 U	0.14 U	0.089 U	0.075 U	0.057 U	0.044 U	0.22 J	0.11 U	0.16
GP8-S-5.0	GP8	5/22/2009	Cells 1 & 2	E-I-6	0.7 J	170	1.5 J	16	0.32 U	0.45 J	0.45 U	0.38 U	0.85 J	0.38 U	0.37 U	0.35 U	0.35 U	0.31 U	0.35 U	0.29 U	0.49 U	0.94
SS13-S-0.5	SS-13	2/26/2009	Cells 1 & 2	E-I-6	200	21000	120	2600	14	13	13	9.8	130	2.3	32	11	4.3	11	15	4.9	0.37 U	**65**
SS14-S-0.5	SS-14	2/26/2009	Cells 1 & 2	E-I-6	12000	1900000	5000	130000	190	660	42	280	6900	88	410	810	18	560	690	240	0.37 U	**3100**
SS15-S-0.5	SS-15	2/26/2009	Cells 1 & 2	E-I-6	650	86000	960	8200	74	240	45	98	400	16	110	53	15	62	89	16	0.97 U	**260**
SS16-S-0.5	SS-16	2/26/2009	Cells 1 & 2	E-I-6	1300	61000	810	9200	76	58	94	61	560	11	220	49	51	58	44	11	5.3	**300**
SS17-S-0.5	SS-17	2/26/2009	Cells 1 & 2	E-I-6	65	5400	89 U	590	8.3 U	9.1	3.5	5.7	28	0.94 U	9.8	3.6 U	2	3.9	7	0.97	0.35 U	**18**
SS18-S-0.5	SS-18	2/26/2009	Cells 1 & 2	E-I-6	6.7	1700	8.3 U	48	2 U	2.6 U	0.94 U	1 U	2.5	1.2 U	1.1 U	1.4 U	0.94 U	0.98 U	1.4 U	0.28 U	0.4 U	2.6
SS19-S-0.5	SS-19	2/26/2009	Cells 1 & 2	E-I-6	5000	250000	1400	28000	280	250	220	200	1600	41	470	520 U	80	170	200	38	3.8 U	**820**
SS-3	SS-3B	7/16/2008	Cells 1 & 2	E-I-6	6400	230000	3200	29000	230	560	56	180	1600	220	200	140 U	24	360	300	85 U	3.4 U	**830**
SS-9	SS-9	7/17/2008	Cells 1 & 2	E-I-6	4200	170000	4400	31000	400	910	360	480 U	2100	340	950	140	180	560	400	33	4.8 U	**1300**
B307-S-2.5	B-307	2/26/2009	Cell 3	E-3-1	1700	110000	1300	9600	100	1900 U	41	120	460	25	99	44	20 U	72	120	12	4 U	**370**
B307-S-20.0	B-307	2/26/2009	Cell 3	E-3-1	31	430	6	32	0.98 U	3.2 U	0.91 U	0.91 U	2 J	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.18 U	0.18 U	1.8
SS10-S-0.5	SS-10	2/26/2009	Cell 3	E-3-1	2600	190000	4100	28000	380	1300	42	560	1500	87	170	580	13	310	740	43	0.42	**1000**
SS11-S-0.5	SS-11	2/26/2009	Cell 3	E-3-1	8200	240000	4500 U	28000	260	300	120	140	1800	26	220	200	29	120	56	16	0.78 U	**710**
SS12-S-0.5	SS-12	2/26/2009	Cell 3	E-3-1	650	69000	410	7700	64	69	64	63	390	7 U	150	75 U	26	39	74	8	0.93 U	**230**
SS-7	SS-7	7/17/2008	Cell 3	E-3-1	59000	590000	39000	210000	4400	3500	1500	1400	18000	1500	3300	49000 U	490	2200	3900 U	2400 U	11 U	**7800**
SS-8	SS-8	7/17/2008	Cell 3	E-3-1	41	3400	60	390	4.6	28	2.5	9.2	20	6.8	4.7	3 U	1 U	12	13	1.2	0.64 U	**19**

Table E-1
Updated Dioxin Data (ng/kg)
Former PWT Site RI/FS

Sample ID	Location Name	Date	Cell	Original Table Location	OCDF	OCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDD	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDD	1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDD	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDF	2,3,7,8-TCDD	Dioxin TEQ
MTCA Method B Soil Cleanup Level																						11
MTCA Method C Soil Cleanup Level																						1500
Ecology Natural Background Concentration[a]																						5.2
MTCA Wildlife Ecological Indicator Concentration																						2
B309-S-5.0	B-309	2/26/2009	Cell 4	E-5-6	410	42000	280	4000	19	65	21	28 U	230	23	65	17	6.8	34	33	6.5	0.72 J	**120**
B310-S-5.0	B-310	2/27/2009	Cell 4	E-5-6	210	42000	170	3100	13	38	16	18 U	170	15	38	12	4.7 J	26	22	5.7	0.21 U	**89**
SS20-S-0.5	SS-20	2/18/2009	Cell 4	E-5-6	9.2	320	4.6	38	0.84 U	0.85 J	0.84 U	0.84 U	1.8 J	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.17 U	0.17 U	**1.7**
SS21-S-0.5	SS-21	2/18/2009	Cell 4	E-5-6	3700	46000	800	5300	58	49	29	46	260	23	67	14	11	43	27	5.2	0.62 J	**150**
SS21-S-1.5	SS-21	2/18/2009	Cell 4	E-5-6	330	27000	300	3000	18	43	11	23	150	16	27	14	3.7 J	25	27	6.1	0.19 U	**84**
SS22-S-0.5	SS-22	2/18/2009	Cell 4	E-5-6	120	2200	39	270	3.6 J	6	2.4 J	4.3	12	1.8 J	5.2	1.1 J	0.93 J	3.5 J	2.9 J	0.32 J	0.18 U	**9.3**
SS23-S-0.5	SS-23	2/18/2009	Cell 4	E-5-6	570	24000	250	2500	16	25	18	14	140	11	41	7.1	6.8	19	15	2.5	0.41 J	**74**
SS23-S-1.5	SS-23	2/18/2009	Cell 4	E-5-6	18	1000	16	110	1 J	2.8 J	0.96 U	1.2 J	5.6	1.2 J	1.3 J	0.96 U	0.96 U	1.5 J	2 J	0.31 U	0.26 U	4.2
SS24-S-0.5	SS-24	2/18/2009	Cell 4	E-5-6	1900	240000	2500	34000	91	170	440	75	1900	130	490	89	76	110	200	53	1.6	**920**
SS24-S-1.5	SS-24	2/18/2009	Cell 4	E-5-6	30	3400	44	450	2.7 J	11	2.9 J	4.2 J	25	3.2 J	6.1	2.8 J	1.2 J	5.2	8.1	1.7	0.2 U	**16**
SS25-S-0.5	SS-25	2/18/2009	Cell 4	E-5-6	2200	15000	470	1600	41	33	13	11	79	15	19	6	3.3	8.6	19	2.1	0.19 J	**54**
SS25-S-1.5	SS-25	2/18/2009	Cell 4	E-5-6	47	890	12	89	0.99 U	1.8 J	0.99 U	1.5 U	4.3 J	0.99 U	1.5 J	0.99 U	0.99 U	1 J	1 J	0.31 U	0.24 U	3.3
SS26-S-0.5	SS-26	2/18/2009	Cell 4	E-5-6	290	20000	270	2400	19	28	13	20	120	12	33	8.1	6.1	20	15	3.5	0.52 J	**69**
SS26-S-1.5	SS-26	2/18/2009	Cell 4	E-5-6	1000	120000	1400	14000	81	200	75	100	940	77	200	65	28	130	130	29	1 U	**440**
SS27-S-0.5	SS-27	2/18/2009	Cell 4	E-5-6	250	18000	170	2000	8.2	21 U	21	11	110	9.2	32	7.2	6	14	12	2.5	0.26 U	**58**
SS27-S-1.5	SS-27	2/18/2009	Cell 4	E-5-6	40	3600	41	510	2.1 U	5.6 U	4 J	2.5 J	33	1.9 J	9.2	2.3 J	1.7 J	4 J	4.1 J	1.1	0.29 U	**16**
SS28-S-0.5	SS-28	2/18/2009	Cell 4	E-5-6	930	44000	480	4600	38	85	19	23	210	31	47	13	6.8	51	44	1	0.19 U	**130**
SS28-S-1.5	SS-28	2/18/2009	Cell 4	E-5-6	480	100000	1500	9300	100	510	39	150	560	120	110	78	12	200	250	23	0.37 J	**400**
SS29-S-0.5	SS-29	2/19/2009	Cell 4	E-5-6	140	9700	130	1200	8.2	35	8.3	10	61	8.9	21	5.1	3.5 J	15	17	1.5	0.2 J	**41**
SS29-S-1.5	SS-29	2/18/2009	Cell 4	E-5-6	15	1400	18	150	1.1 J	5.3	1 J	2.1 J	8.2	1.8 J	3 J	1 J	0.93 U	2 U	3.2 U	0.4 U	0.26 U	**5.5**
SS30-S-0.5	SS-30	2/19/2009	Cell 4	E-5-6	16000	490000	7000	61000	420	380	370	330	3200	230	710	140	110	210	330	43	5	**1600**
SS30-S-1.5	SS-30	2/18/2009	Cell 4	E-5-6	1000	7500	480	1300	34	18	16	54 U	56	2.8 J	36	1.9 J	3.6 U	24	3.9 J	0.25 U	0.32 U	**42**
SS-4	SS-4B	7/16/2008	Cell 4	E-5-6	6600	250000	7200	47000	520	1200	320	420	3100	310	680	510 U	100	590	390	83	4.1	**1500**
SS-5	SS-5	7/16/2008	Cell 4	E-5-6	2200	26000	640	3400	67	67	21	32 U	150	20	53	4.1 U	11	54	16	2.5	0.86	**100**

NOTES:

Bold number indicates a TEQ that exceeds the Ecology Natural Background Concentration.

Highlighted cell indicates a TEQ that exceeds the MTCA Wildlife Ecological Indicator Concentration.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

ng/kg = nanograms per kilogram (parts per trillion).

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

OCDD = octachloro dibenzo-p-dioxin.

OCDF = octachloro dibenzofuran.

PeCDD = pentachloro dibenzo-p-dioxin.

PeCDF = pentachloro dibenzofuran.

TCDD = tetrachloro dibenzo-p-dioxin.

TCDF = tetrachloro dibenzofuran.

TEQ = toxicity equivalent.

WAC = Washington Administrative Code

Soil sample locations previously excavated not evaluated against CULs or Wildlife Indicator Concentration.

J = estimated concentration.

U = not detected.

UJ = estimated nondetect; half the value used in calculations.

[a] = Ecology. 2010c. Natural background of dioxins/furans in WA soil. Technical memorandum No. 8. Washington State Department of Ecology. August 9.

CELLS 1 AND 2

Table E-I-1 through E-I-5 Notes
Lake River Industrial Site

MTCA Method B CUL value compared to detected soil concentrations for samples collected from 0 feet to 15 feet bgs.

Wildlife Indicator Soil Concentration compared to detected soil concentrations for samples collected from 0 feet to 6 feet bgs.

Metals soil concentrations compared against Clark County 90th Percentile Background Concentration if higher than Method B CUL or Wildlife Indicator Soil Concentration.

Petroleum hydrocarbon detected concentrations compared to MTCA Method A CUL.

Soil sample locations previously excavated, or not located at Cell 1 or Cell 2, not evaluated against CULs.

Bold number indicates detected concentration that exceeds MTCA Method B Cleanup Level.

Highlighted number indicates detected concentration that exceeds the Wildlife Indicator Soil Concentration.

-- = not analyzed.

bgs = below ground surface.

C = MRL is elevated because sample required diluting.

cPAH TEQ = carcinogenic polycyclic aromatic hydrocarbons toxicity equivalent.

ft = feet.

J = result for this analyte is estimated concentration.

mg/kg = milligrams per kilogram.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

ng/kg = nanograms per kilogram.

ND = The cPAH analytes were not detected at or above their respective method reporting limits.

Non-PHC = chemicals identified in the PHC range that did not match a typical TPH chromatograph

NV = No value listed by Washington Department of Ecology for analyte.

PAH = polycyclic aromatic hydrocarbon.

PHC = petroleum hydrocarbon.

Q = elevated method reporting limit caused by sample matrix.

TPH = Total petroleum hydrocarbon.

U = not detected at or above method reporting limit. half the value used in calculations.

UF = positive result for this hydrocarbon is due to a single component contamination. The product does not match any hydrocarbons in the fuels library. Desired analyte not detected at or above the method reporting limit.

UJ = compound analyzed, but not detected above estimated detection limit.

UQ = not detected at or above an elevated method reporting limit caused by sample matrix.

[a]Benzo(a)pyrene evaluated as component of sum under cPAH TEQ calculations.

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
Clark County 90th Percentile Background Concentration				52,276	NV	5.8	NV	2.1	0.93	NV	27	NV	34	NV	24
MTCA Method B Cleanup Level				NV	32	0.67	16,000	160	80	NV	240 (CrVI)	NV	3,000	NV	NV
MTCA Method C Cleanup Level				NV	1,400	8.8	700,000	7,000	3,500	NV	11,000 (CrVI)	NV	130,000	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	7.0 (As III)	102	NV	14	NV	67 (Total)	NV	217	NV	118
B-9	B9-S-2.5	04/06/2000	2.5	--	--	3.8	118	--	0.2 U	--	18.2	--	--	--	27.4
B-18	B18-5	05/03/1993	5	--	--	4.6	--	--	--	--	16	--	20.1	--	--
	B18-15	05/03/1993	15	--	--	3.7	--	--	--	--	25.1	--	16.8	--	--
	B18-25	05/03/1993	25	--	--	2.7	--	--	--	--	16.9	--	17.4	--	--
B-20	B20-5	05/03/1993	5	--	--	**7.9**	--	--	--	--	15.7	--	30	--	--
	B20-20	05/03/1993	20	--	--	3.1	--	--	--	--	7.4	--	16.5	--	--
B-31	CELL 3-3.5/5.0	11/26/1997	3.5	--	--	1 U	--	--	--	--	6	--	15	--	--
	CELL 3-8/9.5	11/26/1997	8	--	--	1	--	--	--	--	6	--	17	--	--
	CELL 3-15.5/17	11/26/1997	15.5	--	--	1	--	--	--	--	10	--	22	--	--
B-32	CELL 5-S-6.5	12/05/1997	6.5	--	--	12	--	--	--	--	13	--	23	--	--
	CELL 5-S-14	12/08/1997	14	--	--	1	--	--	--	--	7	--	20	--	--
B-33	CELL 7 3.5-5.0	12/04/1997	3.5	--	--	**18**	--	--	--	--	24	--	33	--	--
	CELL 7 9.5-11.0	12/04/1997	9.5	--	--	6	--	--	--	--	22	--	28	--	--
	CELL 7 15.5-17.	12/04/1997	15.5	--	--	1	--	--	--	--	7	--	17	--	--
B-34	CELL 9-3.5/5.0	11/26/1997	3.5	--	--	**10**	--	--	--	--	14	--	19	--	--
	CELL 9-8.0/9.5	11/26/1997	8	--	--	2	--	--	--	--	12	--	20	--	--
	CELL 9-17.0/18.	11/26/1997	17	--	--	1 U	--	--	--	--	6	--	16	--	--
B-35	CELL 11-3.5-5.0	12/02/1997	3.5	--	--	**10**	--	--	--	--	37	--	32	--	--
	CELL 11-11.0-12	12/02/1997	11	--	--	2	--	--	--	--	10	--	25	--	--
	CELL 11-14.0-15	12/02/1997	14	--	--	1	--	--	--	--	8	--	33	--	--
B-36	CELL 13 5.0-6.5	12/03/1997	5	--	--	2	--	--	--	--	22	--	16	--	--
	CELL 13 9.5-11.	12/03/1997	9.5	--	--	2	--	--	--	--	9	--	25	--	--
	CELL 13 15.5-17	12/03/1997	15.5	--	--	1	--	--	--	--	10	--	19	--	--
B-37	CELL 16-5.0-6.5	12/02/1997	5	--	--	**25**	--	--	--	--	28	--	22	--	--
	CELL 16-15.5-17	12/03/1997	15.5	--	--	1	--	--	--	--	9	--	18	--	--
B-38	CELL 19-S-3.5	12/05/1997	3.5	--	--	**12**	--	--	--	--	27	--	18	--	--
	CELL 19-S-9.5	12/05/1997	9.5	--	--	2	--	--	--	--	12	--	28	--	--
	CELL 19-S-15.5	12/05/1997	15.5	--	--	2	--	--	--	--	12	--	22	--	--
B-39	CELL 21-6.5	01/19/1998	6.5	--	--	3	--	--	--	--	27	--	22	--	--
	CELL 21-12.5	01/19/1998	12.5	--	--	2	--	--	--	--	12	--	23	--	--
B-40	CELL 24-S-6.5	12/11/1997	6.5	--	--	8	--	--	--	--	95	--	22	--	--
	CELL 24-S-14	12/11/1997	14	--	--	3	--	--	--	--	14	--	17	--	--
B-41	CELL 27-S-5	12/10/1997	5	--	--	**11**	--	--	--	--	110	--	21	--	--
	CELL 27-S-14	12/10/1997	14	--	--	1	--	--	--	--	7	--	17	--	--

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
Clark County 90th Percentile Background Concentration				52,276	NV	5.8	NV	2.1	0.93	NV	27	NV	34	NV	24
MTCA Method B Cleanup Level				NV	32	0.67	16,000	160	80	NV	240 (CrVI)	NV	3,000	NV	NV
MTCA Method C Cleanup Level				NV	1,400	8.8	700,000	7,000	3,500	NV	11,000 (CrVI)	NV	130,000	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	7.0 (As III)	102	NV	14	NV	67 (Total)	NV	217	NV	118
B-42	CELL 30-S-8	12/09/1997	8	--	--	3	--	--	--	--	12	--	28	--	--
	CELL 30-S-12.5	12/09/1997	12.5	--	--	1	--	--	--	--	9	--	18	--	--
	CELL 30-S-15.5	12/09/1997	15.5	--	--	1	--	--	--	--	10	--	23	--	--
B-43	CELL 31-S-3.5	11/20/1997	3.5	--	--	**6**	--	--	--	--	13	--	13	--	--
	CELL 31-S-9.5	11/20/1997	9.5	--	--	3	--	--	--	--	11	--	25	--	--
B-44	CELL 33-S-6.5	11/20/1997	6.5	--	--	6	--	--	--	--	13	--	16	--	--
	CELL 33-S-12.5	11/20/1997	12.5	--	--	17	--	--	--	--	26	--	20	--	--
B-45	CELL 34-S-3.5	11/19/1997	3.5	--	--	**8**	--	--	--	--	19	--	14	--	--
	CELL 34-S-5	11/19/1997	5	--	--	**7**	--	--	--	--	18	--	18	--	--
	CELL 34-S-8.0	11/19/1997	8	--	--	9	--	--	--	--	28	--	17	--	--
B-46	CELL 35-S-5	11/19/1997	5	--	--	**8**	--	--	--	--	18	--	13	--	--
	CELL 35-S-9.5	11/19/1997	9.5	--	--	2	--	--	--	--	13	--	22	--	--
B-47	CELL 36-S-3.5	11/18/1997	3.5	--	--	**6**	--	--	--	--	14	--	15	--	--
	CELL 36-S-9.5	11/18/1997	9.5	--	--	2	--	--	--	--	8	--	32	--	--
	CELL 36-S-15.5	11/18/1997	15.5	--	--	2	--	--	--	--	11	--	26	--	--
B-48	CELL 37-S-3.5	11/20/1997	3.5	--	--	**9**	--	--	--	--	17	--	15	--	--
	CELL 37-S-12.5	11/20/1997	12.5	--	--	2	--	--	--	--	6	--	17	--	--
B-49	CELL 38-S-5	11/25/1997	5	--	--	**7**	--	--	--	--	16	--	11	--	--
	CELL 38-S-9.5	11/25/1997	9.5	--	--	4	--	--	--	--	8	--	22	--	--
B-50	CELL 39-S-3.5	11/21/1997	3.5	--	--	**15**	--	--	--	--	22	--	14	--	--
	CELL 39-S-8	11/21/1997	8	--	--	5	--	--	--	--	11	--	24	--	--
B-51	CELL 40-S-3.5	11/24/1997	3.5	--	--	**7**	--	--	--	--	16	--	14	--	--
	CELL 40-S-9.5	11/24/1997	9.5	--	--	5	--	--	--	--	16	--	30	--	--
B-52	CELL 42-S-3.5	11/20/1997	3.5	--	--	**101**	--	--	--	--	37	--	20	--	--
	CELL 42-S-9.5	11/20/1997	9.5	--	--	3	--	--	--	--	7	--	19	--	--
B-53	CELL 43-9.5	01/14/1998	9.5	--	--	4	--	--	--	--	14	--	30	--	--
	CELL 43-15.5	01/14/1998	15.5	--	--	2	--	--	--	--	10	--	39	--	--
B-54	CELL 44-8.0	01/14/1998	8	--	--	7	--	--	--	--	22	--	18	--	--
	CELL 44-15.5	01/14/1998	15.5	--	--	1	--	--	--	--	9	--	16	--	--
B-55	CELL 45-8.0	01/15/1998	8	--	--	6	--	--	--	--	20	--	14	--	--
	CELL 45-17	01/15/1998	17	--	--	4	--	--	--	--	12	--	14	--	--
B-56	CELL 46-6.5	01/15/1998	6.5	--	--	8	--	--	--	--	20	--	13	--	--
	CELL 46-12.5	01/15/1998	12.5	--	--	3	--	--	--	--	8	--	22	--	--
B-57	CELL 47-8.0	01/16/1998	8	--	--	8	--	--	--	--	20	--	15	--	--
	CELL 47-14.0	01/16/1998	14	--	--	2	--	--	--	--	13	--	24	--	--

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
Clark County 90th Percentile Background Concentration				52,276	NV	5.8	NV	2.1	0.93	NV	27	NV	34	NV	24
MTCA Method B Cleanup Level				NV	32	0.67	16,000	160	80	NV	240 (CrVI)	NV	3,000	NV	NV
MTCA Method C Cleanup Level				NV	1,400	8.8	700,000	7,000	3,500	NV	11,000 (CrVI)	NV	130,000	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	7.0 (As III)	102	NV	14	NV	67 (Total)	NV	217	NV	118
B-58	CELL 48-6.5	01/16/1998	6.5	--	--	2	--	--	--	--	12	--	21	--	--
	CELL 48-14.0	01/16/1998	14	--	--	2	--	--	--	--	14	--	21	--	--
B-69	B-12-S-0.5	06/16/1998	0.5	--	--	**19**	--	--	--	--	26	--	33	--	--
	B-12-S-2.5	06/16/1998	2.5	--	--	4	--	--	--	--	19	--	19	--	--
	B-12-S-5.0	06/16/1998	5	--	--	4	--	--	--	--	18	--	24	--	--
	B-12-S-10.0	06/16/1998	10	--	--	1	--	--	--	--	8	--	19	--	--
	B-12-S-17.0	06/16/1998	17	--	--	2	--	--	--	--	8	--	17	--	--
B-72	B-15-S-0.5	06/17/1998	0.5	--	--	**22**	--	--	--	--	36	--	50	--	--
	B-15-S-5.0	06/17/1998	5	--	--	3	--	--	--	--	15	--	16	--	--
	B-15-S-10.0	06/17/1998	10	--	--	2	--	--	--	--	16	--	25	--	--
	B-15-S-17.0	06/17/1998	17	--	--	2	--	--	--	--	8	--	19	--	--
B-140	B140-S-10.0	10/06/1999	10	--	--	14	--	--	--	--	29	--	27	--	--
B-141	B141-S-2.5	10/06/1999	2.5	--	--	**14**	--	--	--	--	133	--	19	--	--
B-142	B142-S-10.0	10/07/1999	10	--	--	9	--	--	--	--	29	--	29	--	--
B-147	B147-S-10.0	10/08/1999	10	--	--	22	--	--	--	--	30	--	26	--	--
B-148	B148-S-10.0	10/08/1999	10	--	--	6	--	--	--	--	27	--	30	--	--
	B148-S-15.0	10/08/1999	15	--	--	11	--	--	--	--	21	--	25	--	--
B-149	B149-S-3.0	10/08/1999	3	--	--	3	--	--	--	--	8	--	5	--	--
	B149-S-10.0	10/08/1999	10	--	--	13	--	--	--	--	33	--	24	--	--
B-150	B150-S-10.5	10/11/1999	10.5	--	--	6	--	--	--	--	26	--	28	--	--
B-153	B153-S-10.0	10/11/1999	10	--	--	8	--	--	--	--	31	--	20	--	--
B-155	B155-S-5.0	10/12/1999	5	--	--	**6**	--	--	--	--	22	--	21	--	--
	B155-S-9.0	10/12/1999	9	--	--	6	--	--	--	--	43	--	28	--	--
B-191	B191-S-5.0	10/25/1999	5	--	--	2	--	--	--	--	9	--	5	--	--
B-192	B192-S-2.5	10/25/1999	2.5	--	--	2	--	--	--	--	13	--	5	--	--
B-193	B193-S-2.5	10/25/1999	2.5	--	--	2	--	--	--	--	11	--	17	--	--
	B193-S-5.0	10/25/1999	5	--	--	**14**	--	--	--	--	31	--	20	--	--
	B193-S-10.0	10/25/1999	10	--	--	2	--	--	--	--	22	--	24	--	--
B-194	B194-S-2.5	10/25/1999	2.5	--	--	**7**	--	--	--	--	23	--	16	--	--
	B194-S-5.0	10/25/1999	5	--	--	3	--	--	--	--	22	--	24	--	--
	B194-S-10.0	10/25/1999	10	--	--	3	--	--	--	--	31	--	27	--	--
B-195	B195-S-2.5	10/26/1999	2.5	--	--	**33**	--	--	--	--	129	--	53	--	--
	B195-S-5.0	10/26/1999	5	--	--	4	--	--	--	--	25	--	8	--	--
	B195-S-10.0	10/26/1999	10	--	--	4	--	--	--	--	29	--	34	--	--
B-196	B196-S-3.0	10/26/1999	3	--	--	1 U	--	--	--	--	2	--	11	--	--
	B196-S-9.0	10/26/1999	9	--	--	2	--	--	--	--	19	--	22	--	--

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
Clark County 90th Percentile Background Concentration				52,276	NV	5.8	NV	2.1	0.93	NV	27	NV	34	NV	24
MTCA Method B Cleanup Level				NV	32	0.67	16,000	160	80	NV	240 (CrVI)	NV	3,000	NV	NV
MTCA Method C Cleanup Level				NV	1,400	8.8	700,000	7,000	3,500	NV	11,000 (CrVI)	NV	130,000	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	7.0 (As III)	102	NV	14	NV	67 (Total)	NV	217	NV	118
B-197	B197-S-2.5	10/26/1999	2.5	--	--	**13**	--	--	--	--	18	--	31	--	--
	B197-S-5.0	10/26/1999	5	--	--	4	--	--	--	--	18	--	13	--	--
	B197-S-10.0	10/26/1999	10	--	--	5	--	--	--	--	29	--	30	--	--
B-198	B198-S-2.5	10/27/1999	2.5	--	--	3	--	--	--	--	9	--	5	--	--
	B198-S-5.0	10/27/1999	5	--	--	2	--	--	--	--	9	--	6	--	--
B-199	B199-S-2.5	10/27/1999	2.5	--	--	3	--	--	--	--	10	--	7	--	--
	B199-S-5.0	10/27/1999	5	--	--	3	--	--	--	--	8	--	8	--	--
	B199-S-10.0	10/27/1999	10	--	--	7	--	--	--	--	17	--	13	--	--
	B199-S-15.0	10/27/1999	15	--	--	5	--	--	--	--	15	--	20	--	--
B-200	B200-S-2.5	10/27/1999	2.5	--	--	4	--	--	--	--	12	--	8	--	--
	B200-S-5.0	10/27/1999	5	--	--	3	--	--	--	--	10	--	6	--	--
B-201	B201-S-2.5	10/28/1999	2.5	--	--	**8**	--	--	--	--	12	--	10	--	--
	B201-S-5.0	10/28/1999	5	--	--	3	--	--	--	--	10	--	6	--	--
	B201-S-15.0	10/28/1999	15	--	--	7	--	--	--	--	34	--	30	--	--
	B201-S-20.0	10/28/1999	20	--	--	4	--	--	--	--	17	--	24	--	--
B-202	B202-S-2.5	10/28/1999	2.5	--	--	**8**	--	--	--	--	18	--	7	--	--
	B202-S-5.0	10/28/1999	5	--	--	3	--	--	--	--	12	--	8	--	--
B-203	B203-S-2.5	10/28/1999	2.5	--	--	4	--	--	--	--	12	--	7	--	--
	B203-S-5.0	10/28/1999	5	--	--	2	--	--	--	--	9	--	6	--	--
	B203-S-10.0	10/28/1999	10	--	--	4	--	--	--	--	23	--	12	--	--
B-221	B221-S-2.5	11/09/1999	2.5	--	--	5	--	--	--	--	19	--	24	--	--
	B221-S-7.5	11/09/1999	7.5	--	--	3	--	--	--	--	15	--	21	--	--
B-222	B222-S-5.0	11/10/1999	5	--	--	3	--	--	--	--	15	--	17	--	--
	B222-S-10.0	11/10/1999	10	--	--	5	--	--	--	--	25	--	24	--	--
B-223	B223-S-5.0	11/10/1999	5	--	--	3	--	--	--	--	17	--	18	--	--
	B223-S-10.0	11/10/1999	10	--	--	5	--	--	--	--	22	--	24	--	--
B-224	B224-S-2.5	11/10/1999	2.5	--	--	**11**	--	--	--	--	24	--	27	--	--
B-226	B226-S-5.0	11/11/1999	5	--	--	2	--	--	--	--	11	--	6	--	--
B-227	B227-S-5.0	11/11/1999	5	--	--	3	--	--	--	--	23	--	21	--	--
B-228	B228-S-1.5	11/11/1999	1.5	--	--	6	--	--	--	--	48	--	26	--	--
	B228-S-5.0	11/11/1999	5	--	--	1	--	--	--	--	8	--	5	--	--
B-230	B230-S-2.5	11/12/1999	2.5	--	--	2	--	--	--	--	10	--	5	--	--
B-231	B231-S-7.0	11/12/1999	7	--	--	2 U	--	--	--	--	11	--	7	--	--
B-233	B233-S-15.0	12/07/1999	15	--	--	7	--	--	--	--	29	--	30	--	--
B-234	B234-S-10.0	12/07/1999	10	--	--	47	--	--	--	--	35	--	48	--	--
	B234-S-15.0	12/07/1999	15	--	--	9	--	--	--	--	32	--	33	--	--

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
Clark County 90th Percentile Background Concentration				52,276	NV	5.8	NV	2.1	0.93	NV	27	NV	34	NV	24
MTCA Method B Cleanup Level				NV	32	0.67	16,000	160	80	NV	240 (CrVI)	NV	3,000	NV	NV
MTCA Method C Cleanup Level				NV	1,400	8.8	700,000	7,000	3,500	NV	11,000 (CrVI)	NV	130,000	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	7.0 (As III)	102	NV	14	NV	67 (Total)	NV	217	NV	118
B-235	B235-S-10.0	12/08/1999	10	--	--	6	--	--	--	--	28	--	34	--	--
	B235-S-15.0	12/08/1999	15	--	--	10	--	--	--	--	25	--	28	--	--
	B235-S-25.0	12/08/1999	25	--	--	6	--	--	--	--	23	--	26	--	--
B-236	B236-S-10.0	12/08/1999	10	--	--	35	--	--	--	--	35	--	27	--	--
	B236-S-15.0	12/08/1999	15	--	--	2	--	--	--	--	28	--	27	--	--
B-238	B238-S-10.0	12/09/1999	10	--	--	5	--	--	--	--	25	--	26	--	--
	B238-S-15.0	12/09/1999	15	--	--	5	--	--	--	--	24	--	30	--	--
B-239	B239-S-10.0	12/09/1999	10	--	--	6	--	--	--	--	32	--	33	--	--
	B239-S-15.0	12/09/1999	15	--	--	9	--	--	--	--	28	--	31	--	--
B-240	B240-S-15.0	12/10/1999	15	--	--	6	--	--	--	--	25	--	25	--	--
B-241	B241-S-5.0	12/10/1999	5	--	--	**9**	--	--	--	--	39	--	22	--	--
	B241-S-15.0	12/10/1999	15	--	--	5	--	--	--	--	24	--	25	--	--
B-247	B247-S-5.0	12/17/1999	5	--	--	4	--	--	--	--	15	--	20	--	--
B-250	B250-S-20.0	12/21/1999	20	--	--	7	--	--	--	--	18	--	27	--	--
	B250-S-25.0	12/21/1999	25	--	--	3	--	--	--	--	11	--	17	--	--
	B250-S-35.0	12/21/1999	35	--	--	2 U	--	--	--	--	9	--	14	--	--
B-252	B252-S-15.0	12/22/1999	15	--	--	3	--	--	--	--	28	--	30	--	--
	B252-S-20.0	12/22/1999	20	--	--	2	--	--	--	--	27	--	31	--	--
	B252-S-25.0	12/22/1999	25	--	--	3	--	--	--	--	30	--	34	--	--
B-253	B253-S-25.0	12/23/1999	25	--	--	5	--	--	--	--	27	--	36	--	--
B-255	B255-S-10.0	01/14/2000	10	--	--	20	--	--	--	--	14	--	14	--	--
	B255-S-15.0	01/14/2000	15	--	--	4	--	--	--	--	26	--	33	--	--
B-256	B256-S-5.0	01/14/2000	5	--	--	4	--	--	--	--	21	--	17	--	--
	B256-S-10.0	01/14/2000	10	--	--	5	--	--	--	--	25	--	37	--	--
B-261	B261-S-10.0	01/20/2000	10	--	--	2	--	--	--	--	12	--	17	--	--
	B261-S-15.0	01/20/2000	15	--	--	2	--	--	--	--	13	--	18	--	--
	B261-S-30.0	01/20/2000	30	--	--	1	--	--	--	--	7	--	15	--	--
B-264	B264-S-2.5	08/17/2001	2.5	--	--	4.9	--	--	--	--	25.4	--	21.8	--	--
	B264-S-10.0	08/17/2001	10	--	--	2.2	--	--	--	--	21.9	--	20.6	--	--
B-265	B265-S-5.0	08/17/2001	5	--	--	2.5	--	--	--	--	24.5	--	18.5	--	--
B-266	B266-S-5.0	08/17/2001	5	--	--	5.3	--	--	--	--	22.4	--	23.4	--	--
B-272	B272-S-5.0	08/17/2001	5	--	--	**14.4**	--	--	--	--	45.5	--	11.8	--	--
B-273	B273-S-5.0	08/20/2001	5	--	--	3.8	--	--	--	--	26	--	27.4	--	--
B-274	B274-S-5.0	08/20/2001	5	--	--	2.6	--	--	--	--	19.9	--	17.1	--	--
B-304	B304-S-10.0	06/12/2008	10	--	--	38.2	--	--	--	--	68.7	--	24.3	--	--
	B304-S-19.5	06/12/2008	19.5	--	--	2.28 U	--	--	--	--	21	--	16.8	--	--

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
Clark County 90th Percentile Background Concentration				52,276	NV	5.8	NV	2.1	0.93	NV	27	NV	34	NV	24
MTCA Method B Cleanup Level				NV	32	0.67	16,000	160	80	NV	240 (CrVI)	NV	3,000	NV	NV
MTCA Method C Cleanup Level				NV	1,400	8.8	700,000	7,000	3,500	NV	11,000 (CrVI)	NV	130,000	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	7.0 (As III)	102	NV	14	NV	67 (Total)	NV	217	NV	118
B-305	B305-S-10.0	06/12/2008	10	--	--	2.31 U	--	--	--	--	17.8	--	45.8	--	--
	B305-S-19.0	06/12/2008	19	--	--	2.55 U	--	--	--	--	34.1	--	22.8	--	--
B-306	B306-S-2.5	03/11/2009	2.5	--	--	**592**	--	1.06	4.58	--	**367**	--	348	--	9.76
	B306-S-18.0	03/11/2009	18	--	--	2.31	--	1.11	0.109 U	--	18.2	--	24.3	--	2.17 U
B-308	B308-S-0.5	03/11/2009	0.5	--	--	**11.3**	--	0.636	0.136	--	20.7	--	47.5	--	3.8
	B308-S-2.5	03/11/2009	2.5	--	--	4.93	--	0.621	0.105 U	--	16.7	--	7.16	--	2.1 U
	B308-S-15.0	03/11/2009	15	--	--	47.5	--	1.09	0.646	--	57.2	--	20.5	--	8.97
B-313	B313-S-2.5	05/21/2009	2.5	--	--	1.53	--	--	--	--	7.73	--	2.74	--	--
	B313-S-5.0	05/21/2009	5	--	--	1.56	--	--	--	--	8.05	--	3.06	--	--
	B313-S-10.0	05/21/2009	10	--	--	2.22	--	--	--	--	12.6	--	9.53	--	--
	B313-S-15.0	05/21/2009	15	--	--	3.57	--	--	--	--	21.1	--	16.8	--	--
DS-E	Dry Shed-East-0	06/18/1997	0	--	--	**10**	--	--	--	--	24	--	34	--	--
DS-N	Dry Shed-North-	06/18/1997	0	--	--	6	--	--	--	--	57	--	23	--	--
DS-S	Dry Shed-South-	06/18/1997	0	--	--	8	--	--	--	--	22	--	32	--	--
DS-W	Dry Shed-West-0	06/18/1997	0	--	--	**40**	--	--	--	--	54	--	38	--	--
GP8	GP8-S-1.4	05/22/2009	1.4	--	--	2.57	--	--	--	--	11.3	--	8	--	--
	GP8-S-5.0	05/22/2009	5	--	--	1.36	--	--	--	--	13.5	--	9.38	--	--
	GP8-S-11.0	05/22/2009	11	--	--	13.1	--	--	--	--	38.1	--	30.8	--	--
	GP8-S-15.0	05/22/2009	15	--	--	3.31	--	--	--	--	25.6	--	17.3	--	--
GP11	GP11-S-1.5	05/21/2009	1.5	--	--	**6.88**	--	--	--	--	13	--	4.42	--	--
	GP11-S-5.0	05/21/2009	5	--	--	2.3	--	--	--	--	23.8	--	17.7	--	--
	GP11-S-10.0	05/21/2009	10	--	--	3.68	--	--	--	--	21.4	--	17	--	--
	GP11-S-15.0	05/21/2009	15	--	--	3.38	--	--	--	--	25	--	17.1	--	--
MW-11S	PR11S,PR11D	10/23/1997	0	--	--	0.4	--	--	--	--	106	--	1.4	--	--
MW-13	MW13-5	05/03/1993	5	--	--	1.8	--	--	--	--	6.4	--	3.7	--	--
	MW13-15	05/03/1993	15	--	--	5.6	--	--	--	--	10.2	--	20 U	--	--
	MW13-20	05/03/1993	20	--	--	2.5	--	--	--	--	9.2	--	16.4	--	--
MW-14	MW14-5	05/03/1993	5	--	--	4.2	--	--	--	--	14.6	--	19.1	--	--
	MW14-20	05/03/1993	20	--	--	4	--	--	--	--	27.6	--	17	--	--
MW-15	MW15-10	05/03/1993	10	--	--	2.2	--	--	--	--	11.1	--	7.3	--	--
	MW15-20	05/03/1993	20	--	--	5.1	--	--	--	--	22.3	--	22.7	--	--
MW-17	MW17-5	05/03/1993	5	--	--	4.9	--	--	--	--	17.4	--	11.7	--	--
	MW17-12.5	05/03/1993	12.5	--	--	5.4	--	--	--	--	19.5	--	21.7	--	--
MW-18	MW18-10	05/03/1993	10	--	--	7	--	--	--	--	26	--	20.5	--	--
	MW18-15	05/03/1993	15	--	--	5.9	--	--	--	--	21.6	--	22.7	--	--

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
Clark County 90th Percentile Background Concentration				52,276	NV	5.8	NV	2.1	0.93	NV	27	NV	34	NV	24
MTCA Method B Cleanup Level				NV	32	0.67	16,000	160	80	NV	240 (CrVI)	NV	3,000	NV	NV
MTCA Method C Cleanup Level				NV	1,400	8.8	700,000	7,000	3,500	NV	11,000 (CrVI)	NV	130,000	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	7.0 (As III)	102	NV	14	NV	67 (Total)	NV	217	NV	118
MW-22	MW22-10	05/03/1993	10	--	--	3.6	--	--	--	--	25.3	--	16.3	--	--
	MW22-15	05/03/1993	15	--	--	3	--	--	--	--	24.3	--	12.3	--	--
MW-24	T5070224	04/02/1996	11	11500	6.7 U	11.9	135	1.2	0.87 U	2290	--	20	16.1	22400	9.5
MW-25	T5070003	04/02/1996	36	5190	12.9 U	2.1	69.5	0.62	0.69 U	3460	--	10.8	18	14500	2.5
MW-26	T5070204	04/02/1996	8.5	11100	7.7 U	14	115	1	0.41 U	2090	--	13.9	13.9	17900	8.5
MW-27	T5070212	04/02/1996	6	13200	12.8 U	**6.8**	137	1.2	0.68 U	4190	--	17.3	18.8	23900	6.5
MW-30	T5070235	04/02/1996	6	18000	14.9 U	2.9	187	1.6	0.8 U	6010	--	22.3	27.9	31600	10.4
	T5070236	04/02/1996	11	18400	15.4 U	3.6	178	1.6	0.82 U	6150	--	19	29.7	26700	10.6
MW-31	T5070230	04/02/1996	16	14400	13.3 U	14.3	100	1.3	0.71 U	2360	--	19.4	12.1	26300	9.3
MW-32	T5070244	04/02/1996	21	20500	13.1 U	9.8	127	1.6	0.7 U	2630	--	27.1	20.3	38500	9
	T5070245	04/02/1996	26	14200	14.8 U	3.6	146	1.5	0.79 U	5900	--	18.5	26.2	29200	9.4
MW-40	MW40-S-55.0	07/18/2002	55	--	--	0.9 U	--	--	0.9 U	--	19.2	--	--	--	--
	MW40-S-61.0	07/19/2002	61	--	--	0.9 U	--	--	0.9 U	--	6.8	--	--	--	--
	MW40-S-66.0	07/19/2002	66	--	--	1.1 U	--	--	1.1 U	--	8.3	--	--	--	--
MW-55	MW55-S-10.0	06/10/2008	10	--	--	2.74	--	--	--	--	18.3	--	16	--	--
	MW55-S-20.0	06/10/2008	20	--	--	2.6 U	--	--	--	--	32.4	--	24	--	--
MW-58D	MW58D-S-10.0	06/18/2008	10	--	--	15	--	--	--	--	27	--	18.8	--	--
	MW58D-S-13.5	06/18/2008	13.5	--	--	4.47	--	--	--	--	23.5	--	32.5	--	--
PP	Press Pit-10 In	06/18/1997	0	--	--	**12**	--	--	--	--	62	--	32	--	--
SS-2	T5070258	04/02/1996	8.5	10300	13.3 U	5.3	165	0.97	0.8	4800	--	16.2	20.2	21800	5.6
SS-3B	SS-3	07/16/2008	1.5	--	--	**294**	--	--	--	--	**540**	--	197	--	--
SS-4B	SS-4	07/16/2008	0.3	--	--	**20.3**	--	--	--	--	33.3	--	43	--	--
SS-9	SS-9	07/17/2008	0.3	--	--	**8.25**	--	--	--	--	--	--	--	--	--
SS-13	SS13-S-0.5	02/26/2009	0.5	--	--	2.59	--	--	--	--	16.1	--	5.41	--	--
SS-14	SS14-S-0.5	02/26/2009	0.5	--	--	**7.72**	--	--	--	--	56.7	--	5.79	--	--
SS-15	SS15-S-0.5	02/26/2009	0.5	--	--	**8.32**	--	--	--	--	18.1	--	13.4	--	--
SS-16	SS16-S-0.5	02/26/2009	0.5	--	--	**22.9**	--	--	--	--	46.7	--	30.7	--	--
SS-17	SS17-S-0.5	02/26/2009	0.5	--	--	1.63	--	--	--	--	11.4	--	10.1	--	--
SS-18	SS18-S-0.5	02/26/2009	0.5	--	--	2.44	--	--	--	--	21.2	--	10.2	--	--
SS-19	SS19-S-0.5	02/26/2009	0.5	--	--	**39.5**	--	--	--	--	57.4	--	51.7	--	--
T-4	T4-S-C	07/21/2000	0	--	--	**6**	--	--	--	--	17	--	19	--	--
	T4-S-E	07/21/2000	1.5	--	--	5	--	--	--	--	15	--	24	--	--
	T4-S-N	07/21/2000	1.5	--	--	**8**	--	--	--	--	20	--	17	--	--
	T4-S-W	07/21/2000	1.75	--	--	**6**	--	--	--	--	20	--	18	--	--
	T4-S	07/21/2000	2	--	--	5	--	--	--	--	16	--	19	--	--
	T4-S-S	07/21/2000	2	--	--	**6**	--	--	--	--	16	--	23	--	--

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
Clark County 90th Percentile Background Concentration				52,276	NV	5.8	NV	2.1	0.93	NV	27	NV	34	NV	24
MTCA Method B Cleanup Level				NV	32	0.67	16,000	160	80	NV	240 (CrVI)	NV	3,000	NV	NV
MTCA Method C Cleanup Level				NV	1,400	8.8	700,000	7,000	3,500	NV	11,000 (CrVI)	NV	130,000	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	7.0 (As III)	102	NV	14	NV	67 (Total)	NV	217	NV	118
TP-01	TP01-0.3	05/03/1993	0.3	--	--	**32.4**	--	--	--	--	43	--	38.2	--	--
	TP01-9.5	05/03/1993	9.5	--	--	4.2	--	--	--	--	13.1	--	7.6	--	--
TP-02	TP02-0.2	05/03/1993	0.2	--	--	**6.2**	--	--	--	--	10.4	--	35	--	--
	TP02-5	05/03/1993	5	--	--	**8**	--	--	--	--	18	--	10.8	--	--
	TP02-9	05/03/1993	9	--	--	7.1	--	--	--	--	23	--	11	--	--
TP-03	TP03-0.3	05/03/1993	0.3	--	--	3.7	--	--	--	--	28.9	--	33.7	--	--
	TP03-10	05/03/1993	10	--	--	2.2	--	--	--	--	8.3	--	4.4	--	--
TP-04	TP04-0.5	05/03/1993	0.5	--	--	2.4	--	--	--	--	13.2	--	21.8	--	--
	TP04-5	05/03/1993	5	--	--	1.2	--	--	--	--	0.45	--	0.32	--	--
	TP04-10	05/03/1993	10	--	--	0.5	--	--	--	--	8.9	--	5.9	--	--
TP-05	TP05-0.5	05/03/1993	0.5	--	--	**11.3**	--	--	--	--	24.5	--	4	--	--
	TP05-8	05/03/1993	8	--	--	2.2	--	--	--	--	16.9	--	7.5	--	--
TP-06	TP06-0.3	05/03/1993	0.3	--	--	3.7	--	--	--	--	10.9	--	4.2	--	--
	TP06-3	05/03/1993	3	--	--	**13.1**	--	--	--	--	26.1	--	6.6	--	--
	TP06-10	05/03/1993	10	--	--	2.5	--	--	--	--	20.9	--	10.3	--	--
TP-07	TP07-0.5	05/03/1993	0.5	--	--	4.8	--	--	--	--	11.3	--	40.7	--	--
	TP07-9	05/03/1993	9	--	--	7.1	--	--	--	--	16.2	--	12.4	--	--
TP-08	TP08-0.1	05/03/1993	0.1	--	--	1.1	--	--	--	--	5.3	--	10	--	--
	TP08-4	05/03/1993	4	--	--	0.84	--	--	--	--	11	--	7.7	--	--
TP-09	TP09-0.3	05/03/1993	0.3	--	--	**79.6**	--	--	--	--	52.5	--	54.6	--	--
	TP09-4	05/03/1993	4	--	--	4.8	--	--	--	--	14.6	--	12.1	--	--
	TP09-9	05/03/1993	9	--	--	61	--	--	--	--	123	--	16.2	--	--
TP-10	TP10-0.2	05/03/1993	0.2	--	--	**18.5**	--	--	--	--	18.8	--	36.6	--	--
	TP10-5	05/03/1993	5	--	--	1.2	--	--	--	--	15.9	--	19.2	--	--
	TP10-8.5	05/03/1993	8.5	16900	6 U	622	97.4	0.51	0.5 U	1380	520	8.9	20.5	25500	--
TP-12	TP12-0.3	05/03/1993	0.3	--	--	2.4	--	--	--	--	15	--	11.6	--	--
	TP12-6.5	05/03/1993	6.5	--	--	6.9	--	--	--	--	16.3	--	11.3	--	--
TP-13	TP13-0.2	05/03/1993	0.2	14700	6 U	**122**	45.7	0.31	0.5 U	10300	149	12.3	102	23000	--
	TP13-5.5	05/03/1993	5.5	--	--	**32.7**	--	--	--	--	9	--	9.2	--	--
	TP13-7.5	05/03/1993	7.5	--	--	10.6	--	--	--	--	14.8	--	17	--	--
TP-14	TP14-0.5	05/03/1993	0.5	--	--	**50.1**	--	--	--	--	55.4	--	32.2	--	--
	TP14-5	05/03/1993	5	--	--	2.8	--	--	--	--	9.1	--	5.2	--	--
TP-15	TP15-0.2	05/03/1993	0.2	--	--	**22**	--	--	--	--	34.1	--	29.6	--	--
	TP15-6	05/03/1993	6	--	--	**51.5**	--	--	--	--	12.1	--	7.5	--	--
TP-16	TP16-0.3	05/03/1993	0.3	--	--	**41.2**	--	--	--	--	40.7	--	55.1	--	--
	TP16-7	05/03/1993	7	--	--	7.6	--	--	--	--	11.1	--	11.1	--	--

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Clark County 90th Percentile Background Concentration				NV	1,511	0.04	21.0	NV	NV	NV	NV	NV	NV	95.5
MTCA Method B Cleanup Level				NV	11,000	24	1,600	NV	400	400	NV	NV	560	24,000
MTCA Method C Cleanup Level				NV	490,000	1,100	70,000	NV	18,000	18,000	NV	NV	25,000	110,000
Wildlife Ecological Indicator Concentration				NV	1,500	5.5	980	NV	0.3	NV	NV	NV	NV	360
B-9	B9-S-2.5	04/06/2000	2.5	--	--	0.1 U	--	--	1 U	0.3 U	--	--	--	--
B-18	B18-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--	--
	B18-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--	--
	B18-25	05/03/1993	25	--	--	--	--	--	--	--	--	--	--	--
B-20	B20-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--	--
	B20-20	05/03/1993	20	--	--	--	--	--	--	--	--	--	--	--
B-31	CELL 3-3.5/5.0	11/26/1997	3.5	--	--	--	--	--	--	--	--	--	--	30
	CELL 3-8/9.5	11/26/1997	8	--	--	--	--	--	--	--	--	--	--	28
	CELL 3-15.5/17	11/26/1997	15.5	--	--	--	--	--	--	--	--	--	--	38
B-32	CELL 5-S-6.5	12/05/1997	6.5	--	--	--	--	--	--	--	--	--	--	39
	CELL 5-S-14	12/08/1997	14	--	--	--	--	--	--	--	--	--	--	38
B-33	CELL 7 3.5-5.0	12/04/1997	3.5	--	--	--	--	--	--	--	--	--	--	69
	CELL 7 9.5-11.0	12/04/1997	9.5	--	--	--	--	--	--	--	--	--	--	48
	CELL 7 15.5-17.	12/04/1997	15.5	--	--	--	--	--	--	--	--	--	--	26
B-34	CELL 9-3.5/5.0	11/26/1997	3.5	--	--	--	--	--	--	--	--	--	--	43
	CELL 9-8.0/9.5	11/26/1997	8	--	--	--	--	--	--	--	--	--	--	40
	CELL 9-17.0/18.	11/26/1997	17	--	--	--	--	--	--	--	--	--	--	25
B-35	CELL 11-3.5-5.0	12/02/1997	3.5	--	--	--	--	--	--	--	--	--	--	107
	CELL 11-11.0-12	12/02/1997	11	--	--	--	--	--	--	--	--	--	--	42
	CELL 11-14.0-15	12/02/1997	14	--	--	--	--	--	--	--	--	--	--	32
B-36	CELL 13 5.0-6.5	12/03/1997	5	--	--	--	--	--	--	--	--	--	--	39
	CELL 13 9.5-11.	12/03/1997	9.5	--	--	--	--	--	--	--	--	--	--	45
	CELL 13 15.5-17	12/03/1997	15.5	--	--	--	--	--	--	--	--	--	--	35
B-37	CELL 16-5.0-6.5	12/02/1997	5	--	--	--	--	--	--	--	--	--	--	86
	CELL 16-15.5-17	12/03/1997	15.5	--	--	--	--	--	--	--	--	--	--	40
B-38	CELL 19-S-3.5	12/05/1997	3.5	--	--	--	--	--	--	--	--	--	--	188
	CELL 19-S-9.5	12/05/1997	9.5	--	--	--	--	--	--	--	--	--	--	126
	CELL 19-S-15.5	12/05/1997	15.5	--	--	--	--	--	--	--	--	--	--	43
B-39	CELL 21-6.5	01/19/1998	6.5	--	--	--	--	--	--	--	--	--	--	48
	CELL 21-12.5	01/19/1998	12.5	--	--	--	--	--	--	--	--	--	--	32
B-40	CELL 24-S-6.5	12/11/1997	6.5	--	--	--	--	--	--	--	--	--	--	116
	CELL 24-S-14	12/11/1997	14	--	--	--	--	--	--	--	--	--	--	39
B-41	CELL 27-S-5	12/10/1997	5	--	--	--	--	--	--	--	--	--	--	411
	CELL 27-S-14	12/10/1997	14	--	--	--	--	--	--	--	--	--	--	30

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Clark County 90th Percentile Background Concentration				NV	1,511	0.04	21.0	NV	NV	NV	NV	NV	NV	95.5
MTCA Method B Cleanup Level				NV	11,000	24	1,600	NV	400	400	NV	NV	560	24,000
MTCA Method C Cleanup Level				NV	490,000	1,100	70,000	NV	18,000	18,000	NV	NV	25,000	110,000
Wildlife Ecological Indicator Concentration				NV	1,500	5.5	980	NV	0.3	NV	NV	NV	NV	360
B-42	CELL 30-S-8	12/09/1997	8	--	--	--	--	--	--	--	--	--	--	48
	CELL 30-S-12.5	12/09/1997	12.5	--	--	--	--	--	--	--	--	--	--	38
	CELL 30-S-15.5	12/09/1997	15.5	--	--	--	--	--	--	--	--	--	--	40
B-43	CELL 31-S-3.5	11/20/1997	3.5	--	--	--	--	--	--	--	--	--	--	58
	CELL 31-S-9.5	11/20/1997	9.5	--	--	--	--	--	--	--	--	--	--	39
B-44	CELL 33-S-6.5	11/20/1997	6.5	--	--	--	--	--	--	--	--	--	--	43
	CELL 33-S-12.5	11/20/1997	12.5	--	--	--	--	--	--	--	--	--	--	138
B-45	CELL 34-S-3.5	11/19/1997	3.5	--	--	--	--	--	--	--	--	--	--	56
	CELL 34-S-5	11/19/1997	5	--	--	--	--	--	--	--	--	--	--	51
	CELL 34-S-8.0	11/19/1997	8	--	--	--	--	--	--	--	--	--	--	49
B-46	CELL 35-S-5	11/19/1997	5	--	--	--	--	--	--	--	--	--	--	42
	CELL 35-S-9.5	11/19/1997	9.5	--	--	--	--	--	--	--	--	--	--	40
B-47	CELL 36-S-3.5	11/18/1997	3.5	--	--	--	--	--	--	--	--	--	--	52
	CELL 36-S-9.5	11/18/1997	9.5	--	--	--	--	--	--	--	--	--	--	73
	CELL 36-S-15.5	11/18/1997	15.5	--	--	--	--	--	--	--	--	--	--	38
B-48	CELL 37-S-3.5	11/20/1997	3.5	--	--	--	--	--	--	--	--	--	--	62
	CELL 37-S-12.5	11/20/1997	12.5	--	--	--	--	--	--	--	--	--	--	30
B-49	CELL 38-S-5	11/25/1997	5	--	--	--	--	--	--	--	--	--	--	55
	CELL 38-S-9.5	11/25/1997	9.5	--	--	--	--	--	--	--	--	--	--	40
B-50	CELL 39-S-3.5	11/21/1997	3.5	--	--	--	--	--	--	--	--	--	--	62
	CELL 39-S-8	11/21/1997	8	--	--	--	--	--	--	--	--	--	--	44
B-51	CELL 40-S-3.5	11/24/1997	3.5	--	--	--	--	--	--	--	--	--	--	55
	CELL 40-S-9.5	11/24/1997	9.5	--	--	--	--	--	--	--	--	--	--	48
B-52	CELL 42-S-3.5	11/20/1997	3.5	--	--	--	--	--	--	--	--	--	--	153
	CELL 42-S-9.5	11/20/1997	9.5	--	--	--	--	--	--	--	--	--	--	36
B-53	CELL 43-9.5	01/14/1998	9.5	--	--	--	--	--	--	--	--	--	--	38
	CELL 43-15.5	01/14/1998	15.5	--	--	--	--	--	--	--	--	--	--	48
B-54	CELL 44-8.0	01/14/1998	8	--	--	--	--	--	--	--	--	--	--	59
	CELL 44-15.5	01/14/1998	15.5	--	--	--	--	--	--	--	--	--	--	33
B-55	CELL 45-8.0	01/15/1998	8	--	--	--	--	--	--	--	--	--	--	59
	CELL 45-17	01/15/1998	17	--	--	--	--	--	--	--	--	--	--	37
B-56	CELL 46-6.5	01/15/1998	6.5	--	--	--	--	--	--	--	--	--	--	53
	CELL 46-12.5	01/15/1998	12.5	--	--	--	--	--	--	--	--	--	--	36
B-57	CELL 47-8.0	01/16/1998	8	--	--	--	--	--	--	--	--	--	--	63
	CELL 47-14.0	01/16/1998	14	--	--	--	--	--	--	--	--	--	--	44

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Clark County 90th Percentile Background Concentration				NV	1,511	0.04	21.0	NV	NV	NV	NV	NV	NV	95.5
MTCA Method B Cleanup Level				NV	11,000	24	1,600	NV	400	400	NV	NV	560	24,000
MTCA Method C Cleanup Level				NV	490,000	1,100	70,000	NV	18,000	18,000	NV	NV	25,000	110,000
Wildlife Ecological Indicator Concentration				NV	1,500	5.5	980	NV	0.3	NV	NV	NV	NV	360
B-58	CELL 48-6.5	01/16/1998	6.5	--	--	--	--	--	--	--	--	--	--	38
	CELL 48-14.0	01/16/1998	14	--	--	--	--	--	--	--	--	--	--	23
B-69	B-12-S-0.5	06/16/1998	0.5	--	--	--	--	--	--	--	--	--	--	63
	B-12-S-2.5	06/16/1998	2.5	--	--	--	--	--	--	--	--	--	--	52
	B-12-S-5.0	06/16/1998	5	--	--	--	--	--	--	--	--	--	--	44
	B-12-S-10.0	06/16/1998	10	--	--	--	--	--	--	--	--	--	--	34
	B-12-S-17.0	06/16/1998	17	--	--	--	--	--	--	--	--	--	--	32
B-72	B-15-S-0.5	06/17/1998	0.5	--	--	--	--	--	--	--	--	--	--	111
	B-15-S-5.0	06/17/1998	5	--	--	--	--	--	--	--	--	--	--	32
	B-15-S-10.0	06/17/1998	10	--	--	--	--	--	--	--	--	--	--	41
	B-15-S-17.0	06/17/1998	17	--	--	--	--	--	--	--	--	--	--	34
B-140	B140-S-10.0	10/06/1999	10	--	--	--	--	--	--	--	--	--	--	89
B-141	B141-S-2.5	10/06/1999	2.5	--	--	--	--	--	--	--	--	--	--	631
B-142	B142-S-10.0	10/07/1999	10	--	--	--	--	--	--	--	--	--	--	83
B-147	B147-S-10.0	10/08/1999	10	--	--	--	--	--	--	--	--	--	--	85
B-148	B148-S-10.0	10/08/1999	10	--	--	--	--	--	--	--	--	--	--	76
	B148-S-15.0	10/08/1999	15	--	--	--	--	--	--	--	--	--	--	80
B-149	B149-S-3.0	10/08/1999	3	--	--	--	--	--	--	--	--	--	--	77
	B149-S-10.0	10/08/1999	10	--	--	--	--	--	--	--	--	--	--	197
B-150	B150-S-10.5	10/11/1999	10.5	--	--	--	--	--	--	--	--	--	--	93
B-153	B153-S-10.0	10/11/1999	10	--	--	--	--	--	--	--	--	--	--	73
B-155	B155-S-5.0	10/12/1999	5	--	--	--	--	--	--	--	--	--	--	83
	B155-S-9.0	10/12/1999	9	--	--	--	--	--	--	--	--	--	--	92
B-191	B191-S-5.0	10/25/1999	5	--	--	--	--	--	--	--	--	--	--	25
B-192	B192-S-2.5	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--	26
B-193	B193-S-2.5	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--	46
	B193-S-5.0	10/25/1999	5	--	--	--	--	--	--	--	--	--	--	191
	B193-S-10.0	10/25/1999	10	--	--	--	--	--	--	--	--	--	--	59
B-194	B194-S-2.5	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--	85
	B194-S-5.0	10/25/1999	5	--	--	--	--	--	--	--	--	--	--	85
	B194-S-10.0	10/25/1999	10	--	--	--	--	--	--	--	--	--	--	68
B-195	B195-S-2.5	10/26/1999	2.5	--	--	--	--	--	--	--	--	--	--	626
	B195-S-5.0	10/26/1999	5	--	--	--	--	--	--	--	--	--	--	72
	B195-S-10.0	10/26/1999	10	--	--	--	--	--	--	--	--	--	--	79
B-196	B196-S-3.0	10/26/1999	3	--	--	--	--	--	--	--	--	--	--	11
	B196-S-9.0	10/26/1999	9	--	--	--	--	--	--	--	--	--	--	60

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Clark County 90th Percentile Background Concentration				NV	1,511	0.04	21.0	NV	NV	NV	NV	NV	NV	95.5
MTCA Method B Cleanup Level				NV	11,000	24	1,600	NV	400	400	NV	NV	560	24,000
MTCA Method C Cleanup Level				NV	490,000	1,100	70,000	NV	18,000	18,000	NV	NV	25,000	110,000
Wildlife Ecological Indicator Concentration				NV	1,500	5.5	980	NV	0.3	NV	NV	NV	NV	360
B-197	B197-S-2.5	10/26/1999	2.5	--	--	--	--	--	--	--	--	--	--	73
	B197-S-5.0	10/26/1999	5	--	--	--	--	--	--	--	--	--	--	72
	B197-S-10.0	10/26/1999	10	--	--	--	--	--	--	--	--	--	--	72
B-198	B198-S-2.5	10/27/1999	2.5	--	--	--	--	--	--	--	--	--	--	24
	B198-S-5.0	10/27/1999	5	--	--	--	--	--	--	--	--	--	--	26
B-199	B199-S-2.5	10/27/1999	2.5	--	--	--	--	--	--	--	--	--	--	27
	B199-S-5.0	10/27/1999	5	--	--	--	--	--	--	--	--	--	--	23
	B199-S-10.0	10/27/1999	10	--	--	--	--	--	--	--	--	--	--	64
	B199-S-15.0	10/27/1999	15	--	--	--	--	--	--	--	--	--	--	41
B-200	B200-S-2.5	10/27/1999	2.5	--	--	--	--	--	--	--	--	--	--	40
	B200-S-5.0	10/27/1999	5	--	--	--	--	--	--	--	--	--	--	27
B-201	B201-S-2.5	10/28/1999	2.5	--	--	--	--	--	--	--	--	--	--	101
	B201-S-5.0	10/28/1999	5	--	--	--	--	--	--	--	--	--	--	27
	B201-S-15.0	10/28/1999	15	--	--	--	--	--	--	--	--	--	--	82
	B201-S-20.0	10/28/1999	20	--	--	--	--	--	--	--	--	--	--	43
B-202	B202-S-2.5	10/28/1999	2.5	--	--	--	--	--	--	--	--	--	--	101
	B202-S-5.0	10/28/1999	5	--	--	--	--	--	--	--	--	--	--	37
B-203	B203-S-2.5	10/28/1999	2.5	--	--	--	--	--	--	--	--	--	--	40
	B203-S-5.0	10/28/1999	5	--	--	--	--	--	--	--	--	--	--	28
	B203-S-10.0	10/28/1999	10	--	--	--	--	--	--	--	--	--	--	81
B-221	B221-S-2.5	11/09/1999	2.5	--	--	--	--	--	--	--	--	--	--	75
	B221-S-7.5	11/09/1999	7.5	--	--	--	--	--	--	--	--	--	--	51
B-222	B222-S-5.0	11/10/1999	5	--	--	--	--	--	--	--	--	--	--	58
	B222-S-10.0	11/10/1999	10	--	--	--	--	--	--	--	--	--	--	74
B-223	B223-S-5.0	11/10/1999	5	--	--	--	--	--	--	--	--	--	--	55
	B223-S-10.0	11/10/1999	10	--	--	--	--	--	--	--	--	--	--	79
B-224	B224-S-2.5	11/10/1999	2.5	--	--	--	--	--	--	--	--	--	--	71
B-226	B226-S-5.0	11/11/1999	5	--	--	--	--	--	--	--	--	--	--	39
B-227	B227-S-5.0	11/11/1999	5	--	--	--	--	--	--	--	--	--	--	61
B-228	B228-S-1.5	11/11/1999	1.5	--	--	--	--	--	--	--	--	--	--	62
	B228-S-5.0	11/11/1999	5	--	--	--	--	--	--	--	--	--	--	26
B-230	B230-S-2.5	11/12/1999	2.5	--	--	--	--	--	--	--	--	--	--	26
B-231	B231-S-7.0	11/12/1999	7	--	--	--	--	--	--	--	--	--	--	30
B-233	B233-S-15.0	12/07/1999	15	--	--	--	--	--	--	--	--	--	--	76
B-234	B234-S-10.0	12/07/1999	10	--	--	--	--	--	--	--	--	--	--	103
	B234-S-15.0	12/07/1999	15	--	--	--	--	--	--	--	--	--	--	115

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Clark County 90th Percentile Background Concentration				NV	1,511	0.04	21.0	NV	NV	NV	NV	NV	NV	95.5
MTCA Method B Cleanup Level				NV	11,000	24	1,600	NV	400	400	NV	NV	560	24,000
MTCA Method C Cleanup Level				NV	490,000	1,100	70,000	NV	18,000	18,000	NV	NV	25,000	110,000
Wildlife Ecological Indicator Concentration				NV	1,500	5.5	980	NV	0.3	NV	NV	NV	NV	360
B-235	B235-S-10.0	12/08/1999	10	--	--	--	--	--	--	--	--	--	--	83
	B235-S-15.0	12/08/1999	15	--	--	--	--	--	--	--	--	--	--	75
	B235-S-25.0	12/08/1999	25	--	--	--	--	--	--	--	--	--	--	69
B-236	B236-S-10.0	12/08/1999	10	--	--	--	--	--	--	--	--	--	--	184
	B236-S-15.0	12/08/1999	15	--	--	--	--	--	--	--	--	--	--	64
B-238	B238-S-10.0	12/09/1999	10	--	--	--	--	--	--	--	--	--	--	67
	B238-S-15.0	12/09/1999	15	--	--	--	--	--	--	--	--	--	--	67
B-239	B239-S-10.0	12/09/1999	10	--	--	--	--	--	--	--	--	--	--	99
	B239-S-15.0	12/09/1999	15	--	--	--	--	--	--	--	--	--	--	93
B-240	B240-S-15.0	12/10/1999	15	--	--	--	--	--	--	--	--	--	--	68
B-241	B241-S-5.0	12/10/1999	5	--	--	--	--	--	--	--	--	--	--	162
	B241-S-15.0	12/10/1999	15	--	--	--	--	--	--	--	--	--	--	67
B-247	B247-S-5.0	12/17/1999	5	--	--	--	--	--	--	--	--	--	--	52
B-250	B250-S-20.0	12/21/1999	20	--	--	--	--	--	--	--	--	--	--	42
	B250-S-25.0	12/21/1999	25	--	--	--	--	--	--	--	--	--	--	27
	B250-S-35.0	12/21/1999	35	--	--	--	--	--	--	--	--	--	--	22
B-252	B252-S-15.0	12/22/1999	15	--	--	--	--	--	--	--	--	--	--	78
	B252-S-20.0	12/22/1999	20	--	--	--	--	--	--	--	--	--	--	75
	B252-S-25.0	12/22/1999	25	--	--	--	--	--	--	--	--	--	--	87
B-253	B253-S-25.0	12/23/1999	25	--	--	--	--	--	--	--	--	--	--	84
B-255	B255-S-10.0	01/14/2000	10	--	--	--	--	--	--	--	--	--	--	64
	B255-S-15.0	01/14/2000	15	--	--	--	--	--	--	--	--	--	--	199
B-256	B256-S-5.0	01/14/2000	5	--	--	--	--	--	--	--	--	--	--	45
	B256-S-10.0	01/14/2000	10	--	--	--	--	--	--	--	--	--	--	58
B-261	B261-S-10.0	01/20/2000	10	--	--	--	--	--	--	--	--	--	--	61
	B261-S-15.0	01/20/2000	15	--	--	--	--	--	--	--	--	--	--	37
	B261-S-30.0	01/20/2000	30	--	--	--	--	--	--	--	--	--	--	30
B-264	B264-S-2.5	08/17/2001	2.5	--	--	--	--	--	--	--	--	--	--	--
	B264-S-10.0	08/17/2001	10	--	--	--	--	--	--	--	--	--	--	--
B-265	B265-S-5.0	08/17/2001	5	--	--	--	--	--	--	--	--	--	--	--
B-266	B266-S-5.0	08/17/2001	5	--	--	--	--	--	--	--	--	--	--	--
B-272	B272-S-5.0	08/17/2001	5	--	--	--	--	--	--	--	--	--	--	--
B-273	B273-S-5.0	08/20/2001	5	--	--	--	--	--	--	--	--	--	--	--
B-274	B274-S-5.0	08/20/2001	5	--	--	--	--	--	--	--	--	--	--	--
B-304	B304-S-10.0	06/12/2008	10	--	--	--	--	--	--	--	--	--	--	324
	B304-S-19.5	06/12/2008	19.5	--	--	--	--	--	--	--	--	--	--	56.3

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Clark County 90th Percentile Background Concentration				NV	1,511	0.04	21.0	NV	NV	NV	NV	NV	NV	95.5
MTCA Method B Cleanup Level				NV	11,000	24	1,600	NV	400	400	NV	NV	560	24,000
MTCA Method C Cleanup Level				NV	490,000	1,100	70,000	NV	18,000	18,000	NV	NV	25,000	110,000
Wildlife Ecological Indicator Concentration				NV	1,500	5.5	980	NV	0.3	NV	NV	NV	NV	360
B-305	B305-S-10.0	06/12/2008	10	--	--	--	--	--	--	--	--	--	--	82.6
	B305-S-19.0	06/12/2008	19	--	--	--	--	--	--	--	--	--	--	78.3
B-306	B306-S-2.5	03/11/2009	2.5	--	--	--	12.3	--	2.06 U	--	--	2.58 U	--	669
	B306-S-18.0	03/11/2009	18	--	--	--	11.2	--	2.17 U	--	--	2.72 U	--	63.5
B-308	B308-S-0.5	03/11/2009	0.5	--	--	--	8.15	--	2.1 U	--	--	2.62 U	--	72
	B308-S-2.5	03/11/2009	2.5	--	--	--	8.21	--	2.1 U	--	--	2.62 U	--	81
	B308-S-15.0	03/11/2009	15	--	--	--	13.5	--	2.69 U	--	--	6.24	--	842
B-313	B313-S-2.5	05/21/2009	2.5	--	--	--	--	--	--	--	--	--	--	32.8
	B313-S-5.0	05/21/2009	5	--	--	--	--	--	--	--	--	--	--	47.2
	B313-S-10.0	05/21/2009	10	--	--	--	--	--	--	--	--	--	--	59
	B313-S-15.0	05/21/2009	15	--	--	--	--	--	--	--	--	--	--	59
DS-E	Dry Shed-East-0	06/18/1997	0	--	--	--	--	--	--	--	--	--	--	131
DS-N	Dry Shed-North-	06/18/1997	0	--	--	--	--	--	--	--	--	--	--	123
DS-S	Dry Shed-South-	06/18/1997	0	--	--	--	--	--	--	--	--	--	--	79
DS-W	Dry Shed-West-0	06/18/1997	0	--	--	--	--	--	--	--	--	--	--	150
GP8	GP8-S-1.4	05/22/2009	1.4	--	--	--	--	--	--	--	--	--	--	117
	GP8-S-5.0	05/22/2009	5	--	--	--	--	--	--	--	--	--	--	49.5
	GP8-S-11.0	05/22/2009	11	--	--	--	--	--	--	--	--	--	--	132
	GP8-S-15.0	05/22/2009	15	--	--	--	--	--	--	--	--	--	--	95.2
GP11	GP11-S-1.5	05/21/2009	1.5	--	--	--	--	--	--	--	--	--	--	45.4
	GP11-S-5.0	05/21/2009	5	--	--	--	--	--	--	--	--	--	--	131
	GP11-S-10.0	05/21/2009	10	--	--	--	--	--	--	--	--	--	--	58.2
	GP11-S-15.0	05/21/2009	15	--	--	--	--	--	--	--	--	--	--	80.8
MW-11S	PR11S,PR11D	10/23/1997	0	--	--	--	--	--	--	--	--	--	--	0.3
MW-13	MW13-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--	--
	MW13-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--	--
	MW13-20	05/03/1993	20	--	--	--	--	--	--	--	--	--	--	--
MW-14	MW14-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--	--
	MW14-20	05/03/1993	20	--	--	--	--	--	--	--	--	--	--	--
MW-15	MW15-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--	--
	MW15-20	05/03/1993	20	--	--	--	--	--	--	--	--	--	--	--
MW-17	MW17-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--	--
	MW17-12.5	05/03/1993	12.5	--	--	--	--	--	--	--	--	--	--	--
MW-18	MW18-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--	--
	MW18-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--	--

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Clark County 90th Percentile Background Concentration				NV	1,511	0.04	21.0	NV	NV	NV	NV	NV	NV	95.5
MTCA Method B Cleanup Level				NV	11,000	24	1,600	NV	400	400	NV	NV	560	24,000
MTCA Method C Cleanup Level				NV	490,000	1,100	70,000	NV	18,000	18,000	NV	NV	25,000	110,000
Wildlife Ecological Indicator Concentration				NV	1,500	5.5	980	NV	0.3	NV	NV	NV	NV	360
MW-22	MW22-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--	--
	MW22-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--	--
MW-24	T5070224	04/02/1996	11	3310	408	--	15.6	809	0.79	1.6 U	88 U	0.5 U	60.2	60.2
MW-25	T5070003	04/02/1996	36	3030	290	0.12 U	10.1	660 U	0.49 U	2 U	240	2.5 U	38.5	32
MW-26	T5070204	04/02/1996	8.5	1860	258	--	13	630	0.44 U	1.2 U	186	0.18	49.3	94.7
MW-27	T5070212	04/02/1996	6	4780	389	0.12 U	18.6	688 U	0.49 U	2 U	193	0.24 U	55.1	47.1
MW-30	T5070235	04/02/1996	6	6960	675	0.14 U	27.9	1520	0.57 U	2.5	326	0.28 U	63.4	74
	T5070236	04/02/1996	11	7250	248	0.15 U	22.1	1370	0.59 U	2.4 U	398	0.29 U	73.4	77.2
MW-31	T5070230	04/02/1996	16	4090	545	0.13 U	12.2	1150	0.51 U	2.1 U	83.3	0.25 U	72.9	54.9
MW-32	T5070244	04/02/1996	21	5100	517	0.12 U	18.3	1080	0.5 U	2.5	149	0.25 U	96.9	64.8
	T5070245	04/02/1996	26	6780	334	0.14 U	23.5	1500	0.56 U	2.3 U	374	0.28 U	67.2	68.1
MW-40	MW40-S-55.0	07/18/2002	55	--	--	--	--	--	--	--	--	--	--	272
	MW40-S-61.0	07/19/2002	61	--	--	--	--	--	--	--	--	--	--	24.9
	MW40-S-66.0	07/19/2002	66	--	--	--	--	--	--	--	--	--	--	29.9
MW-55	MW55-S-10.0	06/10/2008	10	--	--	--	--	--	--	--	--	--	--	103
	MW55-S-20.0	06/10/2008	20	--	--	--	--	--	--	--	--	--	--	72.7
MW-58D	MW58D-S-10.0	06/18/2008	10	--	--	--	--	--	--	--	--	--	--	117
	MW58D-S-13.5	06/18/2008	13.5	--	--	--	--	--	--	--	--	--	--	162
PP	Press Pit-10 In	06/18/1997	0	--	--	--	--	--	--	--	--	--	--	125
SS-2	T5070258	04/02/1996	8.5	5350	286	0.13 U	18.7	1300	0.51 U	2.1 U	821	0.25 U	44.8	70.4
SS-3B	SS-3	07/16/2008	1.5	--	--	--	--	--	--	--	--	--	--	365
SS-4B	SS-4	07/16/2008	0.3	--	--	--	--	--	--	--	--	--	--	242
SS-9	SS-9	07/17/2008	0.3	--	--	--	--	--	--	--	--	--	--	--
SS-13	SS13-S-0.5	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--	43.7
SS-14	SS14-S-0.5	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--	80.6
SS-15	SS15-S-0.5	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--	64.9
SS-16	SS16-S-0.5	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--	107
SS-17	SS17-S-0.5	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--	38.1
SS-18	SS18-S-0.5	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--	39
SS-19	SS19-S-0.5	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--	119
T-4	T4-S-C	07/21/2000	0	--	--	--	--	--	--	--	--	--	--	51
	T4-S-E	07/21/2000	1.5	--	--	--	--	--	--	--	--	--	--	52
	T4-S-N	07/21/2000	1.5	--	--	--	--	--	--	--	--	--	--	57
	T4-S-W	07/21/2000	1.75	--	--	--	--	--	--	--	--	--	--	57
	T4-S	07/21/2000	2	--	--	--	--	--	--	--	--	--	--	45
	T4-S-S	07/21/2000	2	--	--	--	--	--	--	--	--	--	--	51

Table E-I-1
Summary of Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Clark County 90th Percentile Background Concentration				NV	1,511	0.04	21.0	NV	NV	NV	NV	NV	NV	95.5
MTCA Method B Cleanup Level				NV	11,000	24	1,600	NV	400	400	NV	NV	560	24,000
MTCA Method C Cleanup Level				NV	490,000	1,100	70,000	NV	18,000	18,000	NV	NV	25,000	110,000
Wildlife Ecological Indicator Concentration				NV	1,500	5.5	980	NV	0.3	NV	NV	NV	NV	360
TP-01	TP01-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--	--
	TP01-9.5	05/03/1993	9.5	--	--	--	--	--	--	--	--	--	--	--
TP-02	TP02-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--	--
	TP02-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--	--
	TP02-9	05/03/1993	9	--	--	--	--	--	--	--	--	--	--	--
TP-03	TP03-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--	--
	TP03-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--	--
TP-04	TP04-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--	--
	TP04-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--	--
	TP04-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--	--
TP-05	TP05-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--	--
	TP05-8	05/03/1993	8	--	--	--	--	--	--	--	--	--	--	--
TP-06	TP06-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--	--
	TP06-3	05/03/1993	3	--	--	--	--	--	--	--	--	--	--	--
	TP06-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--	--
TP-07	TP07-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--	--
	TP07-9	05/03/1993	9	--	--	--	--	--	--	--	--	--	--	--
TP-08	TP08-0.1	05/03/1993	0.1	--	--	--	--	--	--	--	--	--	--	--
	TP08-4	05/03/1993	4	--	--	--	--	--	--	--	--	--	--	--
TP-09	TP09-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--	--
	TP09-4	05/03/1993	4	--	--	--	--	--	--	--	--	--	--	--
	TP09-9	05/03/1993	9	--	--	--	--	--	--	--	--	--	--	--
TP-10	TP10-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--	--
	TP10-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--	--
	TP10-8.5	05/03/1993	8.5	3540	379	--	10.7	922	--	1 U	500 U	--	74.7	1570
TP-12	TP12-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--	--
	TP12-6.5	05/03/1993	6.5	--	--	--	--	--	--	--	--	--	--	--
TP-13	TP13-0.2	05/03/1993	0.2	6250	293	--	13.7	500 U	--	1 U	3730	--	69.9	794
	TP13-5.5	05/03/1993	5.5	--	--	--	--	--	--	--	--	--	--	--
	TP13-7.5	05/03/1993	7.5	--	--	--	--	--	--	--	--	--	--	--
TP-14	TP14-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--	--
	TP14-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--	--
TP-15	TP15-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--	--
	TP15-6	05/03/1993	6	--	--	--	--	--	--	--	--	--	--	--
TP-16	TP16-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--	--
	TP16-7	05/03/1993	7	--	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-1	L15788-1	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
	L15788-3	04/06/2000	10	--	--	--	--	--	--	--	--	--	--
B-2		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	11	--	--	--	--	--	--	--	--	--	--
	L15788-8	04/06/2000	0	--	--	--	--	--	--	--	--	--	--
	L15788-6	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
B-3		02/04/1991	5.5	--	--	--	--	--	--	--	--	--	--
		02/04/1991	15	--	--	--	--	--	--	--	--	--	--
B-4		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	12.5	--	--	--	--	--	--	--	--	--	--
B-5		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	18.5	--	--	--	--	--	--	--	--	--	--
	L15788-22	04/06/2000	10	--	--	--	--	--	--	--	--	--	--
B-6		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	33	--	--	--	--	--	--	--	--	--	--
	L15788-23	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
	L15788-25	04/06/2000	10	--	--	--	--	--	--	--	--	--	--
B-7		02/04/1991	5.5	--	--	--	--	--	--	--	--	--	--
		02/04/1991	13.5	--	--	--	--	--	--	--	--	--	--
	L15788-26	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
	L15788-28	04/06/2000	10	--	--	--	--	--	--	--	--	--	--
B-8		02/04/1991	11	--	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--	--
	L15788-29	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
	L15788-31	04/06/2000	10	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-9		02/04/1991	5.5	--	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--	--
	L15788-32	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
	L15788-33	04/06/2000	5	--	--	--	--	--	--	--	--	--	--
	L15788-34	04/06/2000	10	--	--	--	--	--	--	--	--	--	--
B-10		02/04/1991	0	--	--	--	--	--	--	--	--	--	--
		02/04/1991	10.5	--	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--	--
B-11		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	13.5	--	--	--	--	--	--	--	--	--	--
B-12		02/05/1991	3	--	--	--	--	--	--	--	--	--	--
		02/05/1991	13	--	--	--	--	--	--	--	--	--	--
B-13		02/05/1991	15.5	--	--	--	--	--	--	--	--	--	--
B-14		02/05/1991	8	--	--	--	--	--	--	--	--	--	--
		02/05/1991	13	--	--	--	--	--	--	--	--	--	--
B-15		02/05/1991	3	--	--	--	--	--	--	--	--	--	--
		02/05/1991	15.5	--	--	--	--	--	--	--	--	--	--
B-19	B19-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
B-20	B20-20	05/03/1993	20	--	--	--	--	--	--	--	--	--	--
B-31	K9708881-014	11/26/1997	3.5	--	--	--	--	--	--	--	--	--	--
	K9708881-013	11/26/1997	8	--	--	--	--	--	--	--	--	--	--
	K9708881-012	11/26/1997	15.5	--	--	--	--	--	--	--	--	--	--
B-32	K9709176-011	12/05/1997	6.5	--	--	--	--	--	--	--	--	--	--
	K9709176-012	12/08/1997	14	--	--	--	--	--	--	--	--	--	--
B-33	K9709014-004	12/04/1997	3.5	--	--	--	--	--	--	--	--	--	--
	K9709014-005	12/04/1997	9.5	--	--	--	--	--	--	--	--	--	--
		12/04/1997	15.5	--	--	--	--	--	--	--	--	--	--
B-34	K9708881-015	11/26/1997	3.5	--	--	--	--	--	--	--	--	--	--
	K9708881-016	11/26/1997	8	--	--	--	--	--	--	--	--	--	--
		11/26/1997	17	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-35	K9708926-006	12/02/1997	3.5	--	--	--	--	--	--	--	--	--	--
		12/02/1997	11	--	--	--	--	--	--	--	--	--	--
		12/02/1997	14	--	--	--	--	--	--	--	--	--	--
B-36	K9709014-001	12/03/1997	5	--	--	--	--	--	--	--	--	--	--
		12/03/1997	9.5	--	--	--	--	--	--	--	--	--	--
		12/03/1997	15.5	--	--	--	--	--	--	--	--	--	--
B-37	K9708926-001	12/02/1997	5	--	--	--	--	--	--	--	--	--	--
		12/03/1997	15.5	--	--	--	--	--	--	--	--	--	--
B-38	K9709176-008	12/05/1997	3.5	--	--	--	--	--	--	--	--	--	--
B-39	K9800342-007	01/19/1998	6.5	--	--	--	--	--	--	--	--	--	--
	K9800342-008	01/19/1998	12.5	--	--	--	--	--	--	--	--	--	--
B-42	K9709176-013	12/09/1997	8	--	--	--	--	--	--	--	--	--	--
	K9709176-014	12/09/1997	12.5	--	--	--	--	--	--	--	--	--	--
B-43	K9708705-007	11/20/1997	3.5	--	--	--	--	--	--	--	--	--	--
B-44	K9708705-009	11/20/1997	6.5	--	--	--	--	--	--	--	--	--	--
B-45	K9708655-012	11/19/1997	5	--	--	--	--	--	--	--	--	--	--
B-46	K9708655-007	11/19/1997	5	--	--	--	--	--	--	--	--	--	--
	K9708655-008	11/19/1997	9.5	--	--	--	--	--	--	--	--	--	--
B-47	K9708655-014	11/18/1997	9.5	--	--	--	--	--	--	--	--	--	--
B-48	K9708705-005	11/20/1997	3.5	--	--	--	--	--	--	--	--	--	--
B-49	K9708815-004	11/25/1997	5	--	--	--	--	--	--	--	--	--	--
B-50	K9708704-008	11/21/1997	8	--	--	--	--	--	--	--	--	--	--
B-51	K9708815-003	11/24/1997	9.5	--	--	--	--	--	--	--	--	--	--
B-52	K9708704-005	11/20/1997	3.5	--	--	--	--	--	--	--	--	--	--
B-53	K9800300-013	01/14/1998	9.5	--	--	--	--	--	--	--	--	--	--
	K9800300-014	01/14/1998	15.5	--	--	--	--	--	--	--	--	--	--
B-54	K9800300-015	01/14/1998	8	--	--	--	--	--	--	--	--	--	--
B-55	K9800300-017	01/15/1998	8	--	--	--	--	--	--	--	--	--	--
B-56	K9800342-001	01/15/1998	6.5	--	--	--	--	--	--	--	--	--	--
B-57	K9800342-003	01/16/1998	8	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-58	K9800342-005	01/16/1998	6.5	--	--	--	--	--	--	--	--	--	--
B-58A	K9803817-001	06/12/1998	5	--	--	--	--	--	--	--	--	--	--
	K9803817-002	06/12/1998	17	--	--	--	--	--	--	--	--	--	--
B-62	K9803817-005	06/12/1998	5	--	--	--	--	--	--	--	--	--	--
	K9803817-006	06/12/1998	17	--	--	--	--	--	--	--	--	--	--
B-63	K9803817-007	06/12/1998	5	--	--	--	--	--	--	--	--	--	--
	K9803817-008	06/12/1998	17	--	--	--	--	--	--	--	--	--	--
B-66	K9803817-009	06/12/1998	5	--	--	--	--	--	--	--	--	--	--
	K9803817-010	06/12/1998	17	--	--	--	--	--	--	--	--	--	--
B-69	K9803927-011	06/16/1998	0.5	--	--	--	--	--	--	--	--	--	--
	K9803927-001	06/16/1998	2.5	--	--	--	--	--	--	--	--	--	--
	K9803927-012	06/16/1998	5	--	--	--	--	--	--	--	--	--	--
	K9803927-013	06/16/1998	10	--	--	--	--	--	--	--	--	--	--
	K9803927-002	06/16/1998	17	--	--	--	--	--	--	--	--	--	--
B-72	K9803927-003	06/17/1998	0.5	--	--	--	--	--	--	--	--	--	--
	K9803927-004	06/17/1998	5	--	--	--	--	--	--	--	--	--	--
	K9803927-005	06/17/1998	10	--	--	--	--	--	--	--	--	--	--
	K9803927-006	06/17/1998	17	--	--	--	--	--	--	--	--	--	--
B-73	K9803927-008	06/17/1998	17	--	--	--	--	--	--	--	--	--	--
B-74	K9803927-009	06/17/1998	2.5	--	--	--	--	--	--	--	--	--	--
	K9803927-010	06/17/1998	17	--	--	--	--	--	--	--	--	--	--
B-75	K9803927-014	06/17/1998	2.5	--	--	--	--	--	--	--	--	--	--
	K9803927-015	06/17/1998	17	--	--	--	--	--	--	--	--	--	--
B-76	K9803927-016	06/17/1998	10	--	--	--	--	--	--	--	--	--	--
	K9803927-017	06/17/1998	27	--	--	--	--	--	--	--	--	--	--
B-77	K9803927-018	06/17/1998	2.5	--	--	--	--	--	--	--	--	--	--
	K9803927-019	06/17/1998	5	--	--	--	--	--	--	--	--	--	--
	K9803927-020	06/17/1998	17	--	--	--	--	--	--	--	--	--	--
B-78	K9803979-001	06/18/1998	0.5	--	--	--	--	--	--	--	--	--	--
	K9803979-002	06/18/1998	17	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-79	K9803979-004	06/18/1998	2.5	--	--	--	--	--	--	--	--	--	--
	K9803979-006	06/18/1998	10	--	--	--	--	--	--	--	--	--	--
	K9803979-007	06/18/1998	17	--	--	--	--	--	--	--	--	--	--
B-80	K9803995-001	06/19/1998	2.5	--	--	--	--	--	--	--	--	--	--
	K9803995-002	06/19/1998	15	--	--	--	--	--	--	--	--	--	--
	K9803995-003	06/19/1998	25	--	--	--	--	--	--	--	--	--	--
B-81	K9803995-004	06/19/1998	2.5	--	--	--	--	--	--	--	--	--	--
B-82	K9803995-005	06/19/1998	10	--	--	--	--	--	--	--	--	--	--
	K9803995-006	06/19/1998	20	--	--	--	--	--	--	--	--	--	--
B-83	K9804079-001	06/23/1998	5	--	--	--	--	--	--	--	--	--	--
	K9804079-002	06/23/1998	17	--	--	--	--	--	--	--	--	--	--
B-84	K9804079-003	06/23/1998	10	--	--	--	--	--	--	--	--	--	--
	K9804079-004	06/23/1998	35	--	--	--	--	--	--	--	--	--	--
B-85	K9804079-005	06/23/1998	5	--	--	--	--	--	--	--	--	--	--
	K9804079-006	06/23/1998	10	--	--	--	--	--	--	--	--	--	--
B-86	K9804079-007	06/23/1998	5	--	--	--	--	--	--	--	--	--	--
	K9804079-008	06/23/1998	15	--	--	--	--	--	--	--	--	--	--
B-87	K9804079-009	06/23/1998	5	--	--	--	--	--	--	--	--	--	--
	K9804079-010	06/23/1998	15	--	--	--	--	--	--	--	--	--	--
B-88	K9804079-011	06/23/1998	5	--	--	--	--	--	--	--	--	--	--
	K9804079-012	06/23/1998	15	--	--	--	--	--	--	--	--	--	--
B-89	K9804079-013	06/23/1998	5	--	--	--	--	--	--	--	--	--	--
	K9804079-014	06/23/1998	15	--	--	--	--	--	--	--	--	--	--
B-90	K9804079-015	06/23/1998	0.5	--	--	--	--	--	--	--	--	--	--
	K9804079-016	06/23/1998	17.5	--	--	--	--	--	--	--	--	--	--
B-91	K9804079-017	06/23/1998	0.5	--	--	--	--	--	--	--	--	--	--
	K9804079-018	06/23/1998	15	--	--	--	--	--	--	--	--	--	--
B-92	K9804079-019	06/23/1998	10	--	--	--	--	--	--	--	--	--	--
	K9804079-020	06/23/1998	30	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-93	K9804129-001	06/24/1998	25	--	--	--	--	--	--	--	--	--	--
	K9804129-002	06/24/1998	40	--	--	--	--	--	--	--	--	--	--
B-94	K9804129-003	06/24/1998	10	--	--	--	--	--	--	--	--	--	--
	K9804129-004	06/24/1998	35	--	--	--	--	--	--	--	--	--	--
B-95	K9804129-005	06/24/1998	10	--	--	--	--	--	--	--	--	--	--
	K9804129-006	06/24/1998	25	--	--	--	--	--	--	--	--	--	--
	K9804129-007	06/24/1998	32.5	--	--	--	--	--	--	--	--	--	--
B-96	K9804470-002	07/08/1998	30	--	--	--	--	--	--	--	--	--	--
B-97	K9804470-003	07/08/1998	2.5	--	--	--	--	--	--	--	--	--	--
B-98	K9804470-005	07/08/1998	17	--	--	--	--	--	--	--	--	--	--
B-99	K9804470-007	07/08/1998	45	--	--	--	--	--	--	--	--	--	--
	K9804470-008	07/08/1998	64	--	--	--	--	--	--	--	--	--	--
B-100	K9804470-010	07/08/1998	45	--	--	--	--	--	--	--	--	--	--
	K9804470-011	07/08/1998	65	--	--	--	--	--	--	--	--	--	--
B-101	K9804470-012	07/08/1998	10	--	--	--	--	--	--	--	--	--	--
	K9804470-013	07/08/1998	33	--	--	--	--	--	--	--	--	--	--
B-103	K9804470-014	07/08/1998	2.5	--	--	--	--	--	--	--	--	--	--
B-104	K9903514-001	06/03/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903514-002	06/03/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903514-005	06/03/1999	25	--	--	--	--	--	--	--	--	--	--
B-105	K9903514-010	06/03/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903514-011	06/03/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903514-013	06/03/1999	25	--	--	--	--	--	--	--	--	--	--
B-106	K9903553-001	06/04/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903553-002	06/04/1999	15	--	--	--	--	--	--	--	--	--	--
B-107	K9903553-007	06/04/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903553-009	06/04/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903584-002	06/07/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903584-005	06/07/1999	45	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-108	K9903584-008	06/07/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903584-009	06/07/1999	10	--	--	--	--	--	--	--	--	--	--
B-109	K9903616-007	06/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903616-008	06/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903616-010	06/08/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903616-011	06/08/1999	40	--	--	--	--	--	--	--	--	--	--
B-110	K9903665-001	06/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903665-002	06/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903665-004	06/08/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903665-009	06/08/1999	43	--	--	--	--	--	--	--	--	--	--
B-111	K9903711-001	06/09/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903711-002	06/09/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903711-004	06/10/1999	30	--	--	--	--	--	--	--	--	--	--
B-112	K9903711-009	06/10/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903711-013	06/10/1999	30	--	--	--	--	--	--	--	--	--	--
B-113	K9903723-001	06/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903723-002	06/11/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903723-003	06/11/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903723-005	06/11/1999	25	--	--	--	--	--	--	--	--	--	--
B-114	K9903794-002	06/11/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903794-003	06/11/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903794-007	06/14/1999	30	--	--	--	--	--	--	--	--	--	--
B-115	K9903794-011	06/14/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903794-012	06/14/1999	15	--	--	--	--	--	--	--	--	--	--
B-116	K9903826-002	06/14/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903826-007	06/15/1999	40	--	--	--	--	--	--	--	--	--	--
	K9903826-018	06/15/1999	95	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-117	K9903826-021	06/15/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903826-023	06/15/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903871-004	06/16/1999	65	--	--	--	--	--	--	--	--	--	--
	K9903871-008	06/16/1999	90	--	--	--	--	--	--	--	--	--	--
B-118	K9903871-009	06/16/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903871-010	06/16/1999	10	--	--	--	--	--	--	--	--	--	--
B-119	K9903915-001	06/17/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9903915-002	06/17/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903915-004	06/17/1999	15	--	--	--	--	--	--	--	--	--	--
B-139	K9907039-005	10/04/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907039-009	10/04/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907039-006	10/04/1999	20	--	--	--	--	--	--	--	--	--	--
B-140	K9907141-001	10/06/1999	10	--	--	--	--	--	--	--	--	--	--
B-141	K9907141-002	10/06/1999	2.5	--	--	--	--	--	--	--	--	--	--
B-142	K9907141-003	10/07/1999	10	--	--	--	--	--	--	--	--	--	--
B-147	K9907141-004	10/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9907141-005	10/08/1999	20	--	--	--	--	--	--	--	--	--	--
B-148	K9907141-006	10/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9907141-007	10/08/1999	15	--	--	--	--	--	--	--	--	--	--
B-149	K9907141-008	10/08/1999	3	--	--	--	--	--	--	--	--	--	--
	K9907141-009	10/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9907141-010	10/08/1999	20	--	--	--	--	--	--	--	--	--	--
B-150	K9907223-003	10/11/1999	10.5	--	--	--	--	--	--	--	--	--	--
B-153	K9907223-007	10/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907223-008	10/11/1999	10	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-155	K9907223-009	10/12/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907223-016	10/12/1999	9	--	--	--	--	--	--	--	--	--	--
B-160	K9907379-011	10/13/1999	10	--	--	--	--	--	--	--	--	--	--
B-161	K9907379-010	10/13/1999	10	--	--	--	--	--	--	--	--	--	--
B-162	K9907379-009	10/13/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-165	K9907379-008	10/13/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-167	K9907379-006	10/14/1999	20	--	--	--	--	--	--	--	--	--	--
B-170	K9907379-017	10/15/1999	7.5	--	--	--	--	--	--	--	--	--	--
B-187	K9907559-010	10/21/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-188	K9907559-011	10/21/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907559-012	10/21/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-189	K9907607-001	10/22/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907607-002	10/22/1999	12	--	--	--	--	--	--	--	--	--	--
B-190	K9907700-001	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907700-002	10/25/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907700-003	10/25/1999	10	--	--	--	--	--	--	--	--	--	--
B-191	K9907700-004	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907700-005	10/25/1999	5	--	--	--	--	--	--	--	--	--	--
B-192	K9907700-006	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907700-007	10/25/1999	5	--	--	--	--	--	--	--	--	--	--
B-193	K9907700-008	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907700-009	10/25/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907700-010	10/25/1999	10	--	--	--	--	--	--	--	--	--	--
B-194	K9907700-011	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907700-012	10/25/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907700-013	10/25/1999	10	--	--	--	--	--	--	--	--	--	--
B-195	K9907700-014	10/26/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907700-015	10/26/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907700-016	10/26/1999	10	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-196	K9907700-017	10/26/1999	3	--	--	--	--	--	--	--	--	--	--
	K9907700-018	10/26/1999	9	--	--	--	--	--	--	--	--	--	--
B-197	K9907767-001	10/26/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907767-002	10/26/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907767-003	10/26/1999	10	--	--	--	--	--	--	--	--	--	--
B-198	K9907767-004	10/27/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907767-005	10/27/1999	5	--	--	--	--	--	--	--	--	--	--
B-199	K9907767-007	10/27/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907767-008	10/27/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907767-009	10/27/1999	10	--	--	--	--	--	--	--	--	--	--
	K9907767-010	10/27/1999	15	--	--	--	--	--	--	--	--	--	--
B-200	K9907767-012	10/27/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907767-013	10/27/1999	5	--	--	--	--	--	--	--	--	--	--
B-201	K9907767-014	10/28/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907767-015	10/28/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907767-016	10/28/1999	10	--	--	--	--	--	--	--	--	--	--
	K9907767-017	10/28/1999	15	--	--	--	--	--	--	--	--	--	--
	K9907767-018	10/28/1999	20	--	--	--	--	--	--	--	--	--	--
B-202	K9907767-019	10/28/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907767-020	10/28/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907767-021	10/28/1999	15	--	--	--	--	--	--	--	--	--	--
B-203	K9907788-009	10/28/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907788-010	10/28/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907788-011	10/28/1999	10	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-221	K9908093-005	11/09/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908093-006	11/09/1999	7.5	--	--	--	--	--	--	--	--	--	--
B-222	K9908120-001	11/10/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908120-002	11/10/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908120-003	11/10/1999	10	--	--	--	--	--	--	--	--	--	--
B-223	K9908120-005	11/10/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908120-006	11/10/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908120-007	11/10/1999	10	--	--	--	--	--	--	--	--	--	--
B-224	K9908120-008	11/10/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908120-009	11/10/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908120-010	11/10/1999	10	--	--	--	--	--	--	--	--	--	--
B-225	K9908120-012	11/10/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908120-013	11/10/1999	5	--	--	--	--	--	--	--	--	--	--
B-226	K9908186-001	11/11/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908186-002	11/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908186-003	11/11/1999	10	--	--	--	--	--	--	--	--	--	--
B-227	K9908186-005	11/11/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908186-006	11/11/1999	5	--	--	--	--	--	--	--	--	--	--
B-228	K9908186-008	11/11/1999	1.5	--	--	--	--	--	--	--	--	--	--
	K9908186-010	11/11/1999	5	--	--	--	--	--	--	--	--	--	--
B-230	K9908189-001	11/12/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908189-003	11/12/1999	5	--	--	--	--	--	--	--	--	--	--
B-231	K9908189-005	11/12/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908189-006	11/12/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908189-007	11/12/1999	7	--	--	--	--	--	--	--	--	--	--
B-232	K9908806-003	12/07/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908806-007	12/07/1999	25	--	--	--	--	--	--	--	--	--	--
B-233	K9908806-009	12/07/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908806-011	12/07/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908806-013	12/07/1999	25	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-234	K9908806-015	12/07/1999	10	--	--	--	--	--	--	--	--	--	--
	K9908806-016	12/07/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908806-018	12/07/1999	25	--	--	--	--	--	--	--	--	--	--
B-235	K9908924-016	12/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9908924-017	12/08/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908924-019	12/08/1999	25	--	--	--	--	--	--	--	--	--	--
B-236	K9908924-023	12/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9908924-024	12/08/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908924-026	12/08/1999	25	--	--	--	--	--	--	--	--	--	--
B-237	K9908924-028	12/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908924-030	12/08/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908924-032	12/08/1999	25	--	--	--	--	--	--	--	--	--	--
B-238	K9908924-003	12/09/1999	10	--	--	--	--	--	--	--	--	--	--
	K9908924-004	12/09/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908924-006	12/09/1999	25	--	--	--	--	--	--	--	--	--	--
B-239	K9908924-009	12/09/1999	10	--	--	--	--	--	--	--	--	--	--
	K9908924-010	12/09/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908924-012	12/09/1999	25	--	--	--	--	--	--	--	--	--	--
B-240	K9908924-034	12/10/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908924-036	12/10/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908924-038	12/10/1999	25	--	--	--	--	--	--	--	--	--	--
B-241	K9908924-039	12/10/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908924-041	12/10/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908924-043	12/10/1999	25	--	--	--	--	--	--	--	--	--	--
B-242	K9908973-007	12/13/1999	25	--	--	--	--	--	--	--	--	--	--
B-243	K9909023-005	12/14/1999	25	--	--	--	--	--	--	--	--	--	--
B-244	K9909069-002	12/15/1999	25	--	--	--	--	--	--	--	--	--	--
	K9909069-005	12/15/1999	35	--	--	--	--	--	--	--	--	--	--
B-245	K9909069-009	12/15/1999	15	--	--	--	--	--	--	--	--	--	--
	K9909069-012	12/15/1999	30	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-246	K9909069-015	12/16/1999	5	--	--	--	--	--	--	--	--	--	--
	K9909069-016	12/16/1999	10	--	--	--	--	--	--	--	--	--	--
	K9909069-018	12/16/1999	20	--	--	--	--	--	--	--	--	--	--
B-247	K9909148-001	12/17/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909148-002	12/17/1999	5	--	--	--	--	--	--	--	--	--	--
	K9909148-004	12/17/1999	16	--	--	--	--	--	--	--	--	--	--
B-248	K9909181-001	12/20/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909181-004	12/20/1999	15	--	--	--	--	--	--	--	--	--	--
	K9909181-006	12/20/1999	25	--	--	--	--	--	--	--	--	--	--
B-249	K9909181-008	12/20/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909181-012	12/20/1999	20	--	--	--	--	--	--	--	--	--	--
	K9909181-013	12/20/1999	25	--	--	--	--	--	--	--	--	--	--
B-250	K9909223-005	12/21/1999	20	--	--	--	--	--	--	--	--	--	--
	K9909223-006	12/21/1999	25	--	--	--	--	--	--	--	--	--	--
	K9909223-004	12/21/1999	35	--	--	--	--	--	--	--	--	--	--
B-251	K9909277-001	12/22/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909277-003	12/22/1999	10	--	--	--	--	--	--	--	--	--	--
	K9909277-005	12/22/1999	25	--	--	--	--	--	--	--	--	--	--
B-252	K9909277-012	12/22/1999	15	--	--	--	--	--	--	--	--	--	--
	K9909277-013	12/22/1999	20	--	--	--	--	--	--	--	--	--	--
	K9909277-014	12/22/1999	25	--	--	--	--	--	--	--	--	--	--
B-253	K9909277-021	12/23/1999	25	--	--	--	--	--	--	--	--	--	--
B-255	K2000354-003	01/14/2000	10	--	--	--	--	--	--	--	--	--	--
	K2000354-004	01/14/2000	15	--	--	--	--	--	--	--	--	--	--
	K2000354-006	01/14/2000	25	--	--	--	--	--	--	--	--	--	--
B-256	K2000354-010	01/14/2000	5	--	--	--	--	--	--	--	--	--	--
	K2000354-011	01/14/2000	10	--	--	--	--	--	--	--	--	--	--
	K2000354-013	01/14/2000	20	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-261	K2000528-003	01/20/2000	10	--	--	--	--	--	--	--	--	--	--
	K2000528-004	01/20/2000	15	--	--	--	--	--	--	--	--	--	--
	K2000528-006	01/20/2000	30	--	--	--	--	--	--	--	--	--	--
B-264	K2106063-001	08/17/2001	2.5	--	--	--	--	--	--	--	--	--	--
	K2106063-003	08/17/2001	10	--	--	--	--	--	--	--	--	--	--
B-265	K2106063-005	08/17/2001	5	--	--	--	--	--	--	--	--	--	--
B-266	K2106063-008	08/17/2001	5	--	--	--	--	--	--	--	--	--	--
B-272	K2106063-023	08/17/2001	5	--	--	--	--	--	--	--	--	--	--
B-273	K2106063-025	08/20/2001	5	--	--	--	--	--	--	--	--	--	--
B-274	K2106063-030	08/20/2001	5	--	--	--	--	--	--	--	--	--	--
B-304	0806067-07A	06/12/2008	10	--	--	--	--	0.16	--	--	--	--	--
	0806067-09A	06/12/2008	19.5	--	--	--	--	0.0762	--	--	--	--	--
B-305	0806067-12A	06/12/2008	10	--	--	--	--	0.0463 U	--	--	--	--	--
	0806067-14A	06/12/2008	19	--	--	--	--	0.374	--	--	--	--	--
B-306	1091024001	03/11/2009	2.5	--	--	--	--	--	--	--	--	--	--
	1091029003	03/11/2009	18	--	--	--	--	--	--	--	--	--	--
B-308	1091024002	03/11/2009	0.5	--	--	--	--	--	--	--	--	--	--
	1091024003	03/11/2009	2.5	--	--	--	--	--	--	--	--	--	--
	1091024004	03/11/2009	15	--	--	--	--	--	--	--	--	--	--
B-313	0905143-06A	05/21/2009	2.5	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.353 U U	0.0353 U	--	0.0353 U
	0905143-07B	05/21/2009	5	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.358 U U	0.0358 U	--	0.0358 U
	0905143-08B	05/21/2009	10	0.043 U U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.43 U U	0.043 U	--	0.043 U
	0905143-09B	05/21/2009	15	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.443 U U	0.0443 U	--	0.0443 U
CT		02/07/1991	0	--	--	--	--	--	--	--	--	--	--
		02/07/1991	0	--	--	--	--	--	--	--	--	--	--
DS-E		06/18/1997	0	0.3 U	0.3 U	0.3 U	0.3 U	--	0.3 U	2 U	0.3 U	0.3 U	0.3 U
DS-N		06/18/1997	0	3 U	3 U	3 U	3 U	--	3 U	20 U	3 U	3 U	3 U
DS-S		06/18/1997	0	1.5 U	1.5 U	1.5 U	1.5 U	--	1.5 U	10 U	1.5 U	1.5 U	1.5 U
DS-W		06/18/1997	0	0.3 U	0.3 U	0.3 U	0.3 U	--	0.3 U	2 U	0.3 U	0.3 U	0.3 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
GP8	0905163-05B	05/22/2009	1.4	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	1.75 U	0.175 U	--	0.175 U
	0905163-06B	05/22/2009	5	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.257	0.0392 U	0.392 U	0.0392 U	--	0.0392 U
	0905163-07B	05/22/2009	11	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	2.1 U	0.21 U	--	0.21 U
	0905163-08B	05/22/2009	15	0.043 U	0.043 U	0.043 U	0.043 U	0.232	0.043 U	0.43 U	0.043 U	--	0.043 U
GP11	0905143-10B	05/21/2009	1.5	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.382 U	0.0382 U	--	0.0382 U
	0905143-11A	05/21/2009	5	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.422 U	0.0422 U	--	0.0422 U
	0905143-12A	05/21/2009	10	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.455 U	0.0455 U	--	0.0455 U
	0905143-13B	05/21/2009	15	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.439 U	0.0439 U	--	0.0439 U
MFP-01	K9708818-001	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-002	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
	K9708818-003	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
	K9708818-004	11/25/1997	9	--	--	--	--	--	--	--	--	--	--
MFP-02	K9708818-008R	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
MFP-04	K9708818-011	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-012R	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
MFP-05	K9708818-014R	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-015	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
	K9708818-016	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
	K9708818-018	11/25/1997	9	--	--	--	--	--	--	--	--	--	--
MW-10		02/05/1991	0	--	--	--	--	--	--	--	--	--	--
		02/05/1991	0	--	--	--	--	--	--	--	--	--	--
		02/05/1991	0	--	--	--	--	--	--	--	--	--	--
MW-11S	K9707902-003	10/23/1997	0	100 U	100 U	100 U	100 U	--	100 U	250 U	100 U	100 U	100 U
MW-13	MW13-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
	MW13-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--
MW-14	MW14-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
MW-17	MW17-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
MW-18	MW18-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
	MW18-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MW-22	MW22-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--
MW-24	T5070221	04/02/1996	0.5	--	--	--	--	--	--	--	--	--	--
	T5070224	04/02/1996	11	--	--	--	--	--	--	--	--	--	--
	T5070226	04/02/1996	21	--	--	--	--	--	--	--	--	--	--
MW-25	T5060415	04/02/1996	3	--	--	--	--	--	--	--	--	--	--
MW-26	T5070204	04/02/1996	8.5	--	--	--	--	--	--	--	--	--	--
	T5070207	04/02/1996	21	--	--	--	--	--	--	--	--	--	--
MW-30	T5070239	04/02/1996	26	--	--	--	--	--	--	--	--	--	--
MW-31	T5070231	04/02/1996	21	--	--	--	--	--	--	--	--	--	--
	T5070232	04/02/1996	26	--	--	--	--	--	--	--	--	--	--
	T5070233	04/02/1996	31	--	--	--	--	--	--	--	--	--	--
MW-32	T5070241	04/02/1996	6	--	--	--	--	--	--	--	--	--	--
MW-40	K2204940-001	07/18/2002	55	--	--	--	--	--	--	--	--	--	--
	K2204940-002	07/19/2002	61	--	--	--	--	--	--	--	--	--	--
	K2204940-003	07/19/2002	66	--	--	--	--	--	--	--	--	--	--
MW-55	0806067-02A	06/10/2008	10	--	--	--	--	0.0457 U	--	--	--	--	--
	0806067-04A	06/10/2008	20	--	--	--	--	0.258	--	--	--	--	--
MW-58D	0806103-03A	06/18/2008	10	--	--	--	--	0.0363 U	--	--	--	--	--
	0806103-04A	06/18/2008	13.5	--	--	--	--	1.09	--	--	--	--	--
NPY-03		02/06/1991	0	--	--	--	--	--	--	--	--	--	--
NPY-04		02/06/1991	0	--	--	--	--	--	--	--	--	--	--
P-01	HC-P/01	02/06/1991	0	--	--	--	--	--	--	--	--	--	--
P-02	HC-P/02	02/06/1991	0	--	--	--	--	--	--	--	--	--	--
PP		06/18/1997	0	3 U	3 U	3 U	3 U	--	3 U	20 U	3 U	3 U	3 U
SS-01		02/06/1991	0	--	--	--	--	--	--	--	--	--	--
SS-3B	0807092-01A	07/16/2008	1.5	--	--	--	--	40.5	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
SS-4B	0807092-02A	07/16/2008	0.3	--	--	--	--	0.0284	--	--	--	--	--
SS-9	0807092-07A	07/17/2008	0.3	--	--	--	--	0.00706 U	--	--	--	--	--
SS-13	0903005-07A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-14	0903005-08A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-15	0903005-09A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-16	0903005-10A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-17	0903005-11A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-18	0903005-12A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-19	0903005-13A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
T-4	K2005541-003	07/21/2000	1.5	--	--	--	--	--	--	--	--	--	--
	K2005541-002	07/21/2000	1.5	--	--	--	--	--	--	--	--	--	--
	K2005541-005	07/21/2000	1.75	--	--	--	--	--	--	--	--	--	--
	K2005541-001	07/21/2000	2	--	--	--	--	--	--	--	--	--	--
	K2005541-004	07/21/2000	2	--	--	--	--	--	--	--	--	--	--
TP-01	TP01-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP01-9.5	05/03/1993	9.5	--	--	--	--	--	--	--	--	--	--
TP-02	TP02-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
	TP02-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
TP-03	TP03-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP03-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-04	TP04-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
	TP04-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-05	TP05-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	--	--	--	--	--	--	--	--	--	--
TP-09	TP09-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP09-4	05/03/1993	4	--	--	--	--	--	--	--	--	--	--
	TP09-9	05/03/1993	9	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1-Methyl-naphthalene	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene
MTCA Method B Cleanup Level				800	7,200	NV	42	NV	1,600	160	160	80	NV
MTCA Method C Cleanup Level				35,000	320,000	NV	5,500	NV	70,000	7,000	7,000	3,500	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
TP-10	TP10-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
	TP10-8.5	05/03/1993	8.5	--	--	--	--	--	--	--	--	--	--
TP-12	TP12-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP12-3	05/03/1993	3	--	--	--	--	--	--	--	--	--	--
	TP12-6.5	05/03/1993	6.5	--	--	--	--	--	--	--	--	--	--
TP-13	TP13-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
	TP13-5.5	05/03/1993	5.5	--	--	--	--	--	--	--	--	--	--
TP-14	TP14-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--
TP-15	TP15-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
TP-16	TP16-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP16-7	05/03/1993	7	--	--	--	--	--	--	--	--	--	--
TP-27	TP27-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-28	TP28-7	05/03/1993	7	--	--	--	--	--	--	--	--	--	--
	TP28-9.5	05/03/1993	9.5	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-1	L15788-1	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
	L15788-3	04/06/2000	10	--	--	--	--	--	--	--	--	--	--
B-2		02/04/1991	3	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/04/1991	11	--	2.5 U	--	--	--	--	--	--	2.5 U	--
	L15788-8	04/06/2000	0	--	--	--	--	--	--	--	--	--	--
	L15788-6	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
B-3		02/04/1991	5.5	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/04/1991	15	--	2.5 U	--	--	--	--	--	--	2.5 U	--
B-4		02/04/1991	3	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/04/1991	12.5	--	2.5 U	--	--	--	--	--	--	2.5 U	--
B-5		02/04/1991	3	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/04/1991	18.5	--	35 U	--	--	--	--	--	--	35 U	--
	L15788-22	04/06/2000	10	--	--	--	--	--	--	--	--	--	--
B-6		02/04/1991	3	--	7.5 U	--	--	--	--	--	--	7.5 U	--
		02/04/1991	33	--	2.5 U	--	--	--	--	--	--	2.5 U	--
	L15788-23	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
	L15788-25	04/06/2000	10	--	--	--	--	--	--	--	--	--	--
B-7		02/04/1991	5.5	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/04/1991	13.5	--	2.5 U	--	--	--	--	--	--	2.5 U	--
	L15788-26	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
	L15788-28	04/06/2000	10	--	--	--	--	--	--	--	--	--	--
B-8		02/04/1991	11	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/04/1991	16	--	2.5 U	--	--	--	--	--	--	2.5 U	--
	L15788-29	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
	L15788-31	04/06/2000	10	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-9		02/04/1991	5.5	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/04/1991	16	--	2.5 U	--	--	--	--	--	--	2.5 U	--
	L15788-32	04/06/2000	2.5	--	--	--	--	--	--	--	--	--	--
	L15788-33	04/06/2000	5	--	--	--	--	--	--	--	--	--	--
	L15788-34	04/06/2000	10	--	--	--	--	--	--	--	--	--	--
B-10		02/04/1991	0	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/04/1991	10.5	0.003 U	2.5 U	--	--	--	0.3 U	--	--	2.5 U	--
		02/04/1991	16	--	2.5 U	--	--	--		--	--	2.5 U	--
B-11		02/04/1991	3	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/04/1991	13.5	--	2.5 U	--	--	--	--	--	--	2.5 U	--
B-12		02/05/1991	3	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/05/1991	13	--	2.5 U	--	--	--	--	--	--	2.5 U	--
B-13		02/05/1991	15.5	--	2.5 U	--	--	--	--	--	--	2.5 U	--
B-14		02/05/1991	8	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/05/1991	13	--	2.5 U	--	--	--	--	--	--	2.5 U	--
B-15		02/05/1991	3	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/05/1991	15.5	--	2.5 U	--	--	--	--	--	--	2.5 U	--
B-19	B19-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
B-20	B20-20	05/03/1993	20	130	--	--	--	--	--	--	--	--	--
B-31	K9708881-014	11/26/1997	3.5	0.005 U	0.3 U	--	--	--	0.3 U	--	--	--	--
	K9708881-013	11/26/1997	8	0.005 U	0.3 U	--	--	--	0.3 U	--	--	--	--
	K9708881-012	11/26/1997	15.5	14	0.3 U	--	--	--	0.3 U	--	--	--	--
B-32	K9709176-011	12/05/1997	6.5	0.005 U	--	--	--	--	--	--	--	--	--
	K9709176-012	12/08/1997	14	--	0.3 U	--	--	--	0.3 U	--	--	--	--
B-33	K9709014-004	12/04/1997	3.5	4.1	0.3 U	--	--	--	0.3 U	--	--	--	--
	K9709014-005	12/04/1997	9.5	0.053	0.3 U	--	--	--	0.3 U	--	--	--	--
		12/04/1997	15.5	--	0.3 U	--	--	--	0.3 U	--	--	--	--
B-34	K9708881-015	11/26/1997	3.5	0.067	0.3 U	--	--	--	0.3 U	--	--	--	--
	K9708881-016	11/26/1997	8	--	0.3 U	--	--	--	0.3 U	--	--	--	--
		11/26/1997	17	--	0.3 U	--	--	--	0.3 U	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-35	K9708926-006	12/02/1997	3.5	--	3 U	--	--	--	3 U	--	--	--	--
		12/02/1997	11	--	3 U	--	--	--	3 U	--	--	--	--
		12/02/1997	14	--	3 U	--	--	--	3 U	--	--	--	--
B-36	K9709014-001	12/03/1997	5	--	0.3 U	--	--	--	0.3 U	--	--	--	--
		12/03/1997	9.5	59	0.3 U	--	--	--	0.3 U	--	--	--	--
		12/03/1997	15.5	--	0.3 U	--	--	--	0.3 U	--	--	--	--
B-37	K9708926-001	12/02/1997	5	--	3 U	--	--	--	3 U	--	--	--	--
		12/03/1997	15.5	0.005 U	0.3 U	--	--	--	0.3 U	--	--	--	--
B-38	K9709176-008	12/05/1997	3.5	0.677	--	--	--	--	--	--	--	--	--
B-39	K9800342-007	01/19/1998	6.5	--	--	--	--	--	--	--	--	--	--
	K9800342-008	01/19/1998	12.5	--	--	--	--	--	--	--	--	--	--
B-42	K9709176-013	12/09/1997	8	0.087	--	--	--	--	--	--	--	--	--
	K9709176-014	12/09/1997	12.5	--	0.3 U	--	--	--	0.3 U	--	--	--	--
B-43	K9708705-007	11/20/1997	3.5	0.682	0.0003 U	--	--	--	0.0003 U	--	--	--	--
B-44	K9708705-009	11/20/1997	6.5	1.72	0.0003 U	--	--	--	0.0003 U	--	--	--	--
B-45	K9708655-012	11/19/1997	5	0.096	0.3 U	--	--	--	0.3 U	--	--	--	--
B-46	K9708655-007	11/19/1997	5	0.017	0.3 U	--	--	--	0.3 U	--	--	--	--
	K9708655-008	11/19/1997	9.5	0.005 U	0.3 U	--	--	--	0.3 U	--	--	--	--
B-47	K9708655-014	11/18/1997	9.5	0.005 U	0.3 U	--	--	--	0.3 U	--	--	--	--
B-48	K9708705-005	11/20/1997	3.5	1.09	0.0003 U	--	--	--	0.0003 U	--	--	--	--
B-49	K9708815-004	11/25/1997	5	--	--	--	--	--	--	--	--	--	--
B-50	K9708704-008	11/21/1997	8	0.014	0.3 U	--	--	--	0.3 U	--	--	--	--
B-51	K9708815-003	11/24/1997	9.5	--	0.3 U	--	--	--	0.3 U	--	--	--	--
B-52	K9708704-005	11/20/1997	3.5	0.174	0.3 U	--	--	--	0.3 U	--	--	--	--
B-53	K9800300-013	01/14/1998	9.5	0.005 U	0.3 U	--	--	--	0.3 U	--	--	--	--
	K9800300-014	01/14/1998	15.5	0.115	0.3 U	--	--	--	0.3 U	--	--	--	--
B-54	K9800300-015	01/14/1998	8	0.005 U	0.3 U	--	--	--	0.3 U	--	--	--	--
B-55	K9800300-017	01/15/1998	8	0.035	0.3 U	--	--	--	0.3 U	--	--	--	--
B-56	K9800342-001	01/15/1998	6.5	0.072	0.3 U	--	--	--	0.3 U	--	--	--	--
B-57	K9800342-003	01/16/1998	8	0.005 U	0.3 U	--	--	--	0.3 U	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-58	K9800342-005	01/16/1998	6.5	0.005 U	0.3 U	--	--	--	0.3 U	--	--	--	--
B-58A	K9803817-001	06/12/1998	5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803817-002	06/12/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-62	K9803817-005	06/12/1998	5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803817-006	06/12/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-63	K9803817-007	06/12/1998	5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803817-008	06/12/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-66	K9803817-009	06/12/1998	5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803817-010	06/12/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-69	K9803927-011	06/16/1998	0.5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-001	06/16/1998	2.5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-012	06/16/1998	5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-013	06/16/1998	10	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-002	06/16/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-72	K9803927-003	06/17/1998	0.5	120	--	--	--	--	--	--	10 U	--	--
	K9803927-004	06/17/1998	5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-005	06/17/1998	10	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-006	06/17/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-73	K9803927-008	06/17/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-74	K9803927-009	06/17/1998	2.5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-010	06/17/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-75	K9803927-014	06/17/1998	2.5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-015	06/17/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-76	K9803927-016	06/17/1998	10	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-017	06/17/1998	27	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-77	K9803927-018	06/17/1998	2.5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-019	06/17/1998	5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803927-020	06/17/1998	17	130	--	--	--	--	--	--	25 U	--	--
B-78	K9803979-001	06/18/1998	0.5	1.1	--	--	--	--	--	--	0.05 U	--	--
	K9803979-002	06/18/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-79	K9803979-004	06/18/1998	2.5	3.3	--	--	--	--	--	--	0.5 U	--	--
	K9803979-006	06/18/1998	10	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803979-007	06/18/1998	17	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-80	K9803995-001	06/19/1998	2.5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803995-002	06/19/1998	15	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9803995-003	06/19/1998	25	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-81	K9803995-004	06/19/1998	2.5	0.04	--	--	--	--	--	--	0.35	--	--
B-82	K9803995-005	06/19/1998	10	0.017	--	--	--	--	--	--	0.05 U	--	--
	K9803995-006	06/19/1998	20	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-83	K9804079-001	06/23/1998	5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9804079-002	06/23/1998	17	100	--	--	--	--	--	--	1 U	--	--
B-84	K9804079-003	06/23/1998	10	0.19	--	--	--	--	--	--	0.05 U	--	--
	K9804079-004	06/23/1998	35	0.014	--	--	--	--	--	--	0.05 U	--	--
B-85	K9804079-005	06/23/1998	5	0.37	--	--	--	--	--	--	0.05 U	--	--
	K9804079-006	06/23/1998	10	**550**	--	--	--	--	--	--	5 U	--	--
B-86	K9804079-007	06/23/1998	5	0.059	--	--	--	--	--	--	0.05 U	--	--
	K9804079-008	06/23/1998	15	190	--	--	--	--	--	--	1 U	--	--
B-87	K9804079-009	06/23/1998	5	0.034	--	--	--	--	--	--	0.05 U	--	--
	K9804079-010	06/23/1998	15	1.5	--	--	--	--	--	--	0.05 U	--	--
B-88	K9804079-011	06/23/1998	5	0.024	--	--	--	--	--	--	0.05 U	--	--
	K9804079-012	06/23/1998	15	0.024	--	--	--	--	--	--	0.05 U	--	--
B-89	K9804079-013	06/23/1998	5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9804079-014	06/23/1998	15	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-90	K9804079-015	06/23/1998	0.5	0.38	--	--	--	--	--	--	1 U	--	--
	K9804079-016	06/23/1998	17.5	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-91	K9804079-017	06/23/1998	0.5	0.96	--	--	--	--	--	--	0.05 U	--	--
	K9804079-018	06/23/1998	15	0.005 U	--	--	--	--	--	--	0.05 U	--	--
B-92	K9804079-019	06/23/1998	10	0.005 U	--	--	--	--	--	--	0.05 U	--	--
	K9804079-020	06/23/1998	30	0.005 U	--	--	--	--	--	--	0.05 U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene		2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol		3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320		NV	NV	NV	NV	NV	2.2	NV		NV	NV
MTCA Method C Cleanup Level				14,000		NV	NV	NV	NV	NV	290	NV		NV	NV
Wildlife Ecological Indicator Concentration				NV		NV	NV	NV	NV	NV	NV	NV		NV	NV
B-93	K9804129-001	06/24/1998	25	0.35		--	--	--	--	--	--	0.05	U	--	--
	K9804129-002	06/24/1998	40	0.22		--	--	--	--	--	--	0.05	U	--	--
B-94	K9804129-003	06/24/1998	10	9.4		--	--	--	--	--	--	0.05	U	--	--
	K9804129-004	06/24/1998	35	0.005	U	--	--	--	--	--	--	0.05	U	--	--
B-95	K9804129-005	06/24/1998	10	26		--	--	--	--	--	--	0.05	U	--	--
	K9804129-006	06/24/1998	25	0.06		--	--	--	--	--	--	0.05	U	--	--
	K9804129-007	06/24/1998	32.5	0.01		--	--	--	--	--	--	0.05	U	--	--
B-96	K9804470-002	07/08/1998	30	0.005	U	--	--	--	--	--	--	0.05	U	--	--
B-97	K9804470-003	07/08/1998	2.5	0.007		--	--	--	--	--	--	0.05	U	--	--
B-98	K9804470-005	07/08/1998	17	0.005	U	--	--	--	--	--	--	0.05	U	--	--
B-99	K9804470-007	07/08/1998	45	0.005	U	--	--	--	--	--	--	0.05	U	--	--
	K9804470-008	07/08/1998	64	0.005	U	--	--	--	--	--	--	0.05	U	--	--
B-100	K9804470-010	07/08/1998	45	0.005	U	--	--	--	--	--	--	0.05	U	--	--
	K9804470-011	07/08/1998	65	0.005	U	--	--	--	--	--	--	0.05	U	--	--
B-101	K9804470-012	07/08/1998	10	0.005	U	--	--	--	--	--	--	0.05	U	--	--
	K9804470-013	07/08/1998	33	0.005	U	--	--	--	--	--	--	0.05	U	--	--
B-103	K9804470-014	07/08/1998	2.5	0.005	U	--	--	--	--	--	--	0.05	U	--	--
B-104	K9903514-001	06/03/1999	5	--		--	--	--	--	--	--	--		--	--
	K9903514-002	06/03/1999	10	--		--	--	--	--	--	--	--		--	--
	K9903514-005	06/03/1999	25	--		--	--	--	--	--	--	--		--	--
B-105	K9903514-010	06/03/1999	5	--		--	--	--	--	--	--	--		--	--
	K9903514-011	06/03/1999	10	--		--	--	--	--	--	--	--		--	--
	K9903514-013	06/03/1999	25	--		--	--	--	--	--	--	--		--	--
B-106	K9903553-001	06/04/1999	5	--		--	--	--	--	--	--	--		--	--
	K9903553-002	06/04/1999	15	--		--	--	--	--	--	--	--		--	--
B-107	K9903553-007	06/04/1999	5	--		--	--	--	--	--	--	--		--	--
	K9903553-009	06/04/1999	15	--		--	--	--	--	--	--	--		--	--
	K9903584-002	06/07/1999	25	--		--	--	--	--	--	--	--		--	--
	K9903584-005	06/07/1999	45	--		--	--	--	--	--	--	--		--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-108	K9903584-008	06/07/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903584-009	06/07/1999	10	--	--	--	--	--	--	--	--	--	--
B-109	K9903616-007	06/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903616-008	06/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903616-010	06/08/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903616-011	06/08/1999	40	--	--	--	--	--	--	--	--	--	--
B-110	K9903665-001	06/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903665-002	06/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903665-004	06/08/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903665-009	06/08/1999	43	--	--	--	--	--	--	--	--	--	--
B-111	K9903711-001	06/09/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903711-002	06/09/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903711-004	06/10/1999	30	--	--	--	--	--	--	--	--	--	--
B-112	K9903711-009	06/10/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903711-013	06/10/1999	30	--	--	--	--	--	--	--	--	--	--
B-113	K9903723-001	06/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903723-002	06/11/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903723-003	06/11/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903723-005	06/11/1999	25	--	--	--	--	--	--	--	--	--	--
B-114	K9903794-002	06/11/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903794-003	06/11/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903794-007	06/14/1999	30	--	--	--	--	--	--	--	--	--	--
B-115	K9903794-011	06/14/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903794-012	06/14/1999	15	--	--	--	--	--	--	--	--	--	--
B-116	K9903826-002	06/14/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903826-007	06/15/1999	40	--	--	--	--	--	--	--	--	--	--
	K9903826-018	06/15/1999	95	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-117	K9903826-021	06/15/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903826-023	06/15/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903871-004	06/16/1999	65	--	--	--	--	--	--	--	--	--	--
	K9903871-008	06/16/1999	90	--	--	--	--	--	--	--	--	--	--
B-118	K9903871-009	06/16/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903871-010	06/16/1999	10	--	--	--	--	--	--	--	--	--	--
B-119	K9903915-001	06/17/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9903915-002	06/17/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903915-004	06/17/1999	15	--	--	--	--	--	--	--	--	--	--
B-139	K9907039-005	10/04/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907039-009	10/04/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907039-006	10/04/1999	20	--	--	--	--	--	--	--	--	--	--
B-140	K9907141-001	10/06/1999	10	1.3	--	--	--	--	--	--	0.05 U	--	--
B-141	K9907141-002	10/06/1999	2.5	0.011	--	--	--	--	--	--	0.05 U	--	--
B-142	K9907141-003	10/07/1999	10	54	--	--	--	--	--	--	0.96	--	--
B-147	K9907141-004	10/08/1999	10	86	--	--	--	--	--	--	0.5 U	--	--
	K9907141-005	10/08/1999	20	--	--	--	--	--	--	--	--	--	--
B-148	K9907141-006	10/08/1999	10	21	--	--	--	--	--	--	0.05 U	--	--
	K9907141-007	10/08/1999	15	20	--	--	--	--	--	--	0.32	--	--
B-149	K9907141-008	10/08/1999	3	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K9907141-009	10/08/1999	10	310	--	--	--	--	--	--	0.5 U	--	--
	K9907141-010	10/08/1999	20	--	--	--	--	--	--	--	--	--	--
B-150	K9907223-003	10/11/1999	10.5	25	--	--	--	--	--	--	0.05 U	--	--
B-153	K9907223-007	10/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907223-008	10/11/1999	10	0.012	--	--	--	--	--	--	0.05 U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene		2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol		3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320		NV	NV	NV	NV	NV	2.2	NV		NV	NV
MTCA Method C Cleanup Level				14,000		NV	NV	NV	NV	NV	290	NV		NV	NV
Wildlife Ecological Indicator Concentration				NV		NV	NV	NV	NV	NV	NV	NV		NV	NV
B-155	K9907223-009	10/12/1999	5	0.73		--	--	--	--	--	--	0.05	U	--	--
	K9907223-016	10/12/1999	9	0.018		--	--	--	--	--	--	0.05	U	--	--
B-160	K9907379-011	10/13/1999	10	0.04		--	--	--	--	--	--	0.05	U	--	--
B-161	K9907379-010	10/13/1999	10	--		--	--	--	--	--	--	--		--	--
B-162	K9907379-009	10/13/1999	11.5	--		--	--	--	--	--	--	--		--	--
B-165	K9907379-008	10/13/1999	11.5	--		--	--	--	--	--	--	--		--	--
B-167	K9907379-006	10/14/1999	20	--		--	--	--	--	--	--	--		--	--
B-170	K9907379-017	10/15/1999	7.5	--		--	--	--	--	--	--	--		--	--
B-187	K9907559-010	10/21/1999	11.5	--		--	--	--	--	--	--	--		--	--
B-188	K9907559-011	10/21/1999	5	--		--	--	--	--	--	--	--		--	--
	K9907559-012	10/21/1999	11.5	--		--	--	--	--	--	--	--		--	--
B-189	K9907607-001	10/22/1999	2.5	--		--	--	--	--	--	--	--		--	--
	K9907607-002	10/22/1999	12	--		--	--	--	--	--	--	--		--	--
B-190	K9907700-001	10/25/1999	2.5	--		--	--	--	--	--	--	--		--	--
	K9907700-002	10/25/1999	5	--		--	--	--	--	--	--	--		--	--
	K9907700-003	10/25/1999	10	--		--	--	--	--	--	--	--		--	--
B-191	K9907700-004	10/25/1999	2.5	--		--	--	--	--	--	--	--		--	--
	K9907700-005	10/25/1999	5	0	U	--	--	--	--	--	--	0.05	U	--	--
B-192	K9907700-006	10/25/1999	2.5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907700-007	10/25/1999	5	--		--	--	--	--	--	--	--		--	--
B-193	K9907700-008	10/25/1999	2.5	0.079		--	--	--	--	--	--	0.05	U	--	--
	K9907700-009	10/25/1999	5	0.054		--	--	--	--	--	--	0.05	U	--	--
	K9907700-010	10/25/1999	10	0.01	U	--	--	--	--	--	--	0.05	U	--	--
B-194	K9907700-011	10/25/1999	2.5	2.6		--	--	--	--	--	--	0.05	U	--	--
	K9907700-012	10/25/1999	5	0.042		--	--	--	--	--	--	0.05	U	--	--
	K9907700-013	10/25/1999	10	3.6		--	--	--	--	--	--	0.05	U	--	--
B-195	K9907700-014	10/26/1999	2.5	0.13		--	--	--	--	--	--	0.05	U	--	--
	K9907700-015	10/26/1999	5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907700-016	10/26/1999	10	0.01	U	--	--	--	--	--	--	0.05	U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene		2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol		3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320		NV	NV	NV	NV	NV	2.2	NV		NV	NV
MTCA Method C Cleanup Level				14,000		NV	NV	NV	NV	NV	290	NV		NV	NV
Wildlife Ecological Indicator Concentration				NV		NV	NV	NV	NV	NV	NV	NV		NV	NV
B-196	K9907700-017	10/26/1999	3	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907700-018	10/26/1999	9	0.77		--	--	--	--	--	--	0.05	U	--	--
B-197	K9907767-001	10/26/1999	2.5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907767-002	10/26/1999	5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907767-003	10/26/1999	10	0.01	U	--	--	--	--	--	--	0.05	U	--	--
B-198	K9907767-004	10/27/1999	2.5	0.011		--	--	--	--	--	--	0.05	U	--	--
	K9907767-005	10/27/1999	5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
B-199	K9907767-007	10/27/1999	2.5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907767-008	10/27/1999	5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907767-009	10/27/1999	10	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907767-010	10/27/1999	15	0.01	U	--	--	--	--	--	--	0.05	U	--	--
B-200	K9907767-012	10/27/1999	2.5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907767-013	10/27/1999	5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
B-201	K9907767-014	10/28/1999	2.5	0.024		--	--	--	--	--	--	0.05	U	--	--
	K9907767-015	10/28/1999	5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907767-016	10/28/1999	10	--		--	--	--	--	--	--	--		--	--
	K9907767-017	10/28/1999	15	25		--	--	--	--	--	--	0.056	UF	--	--
	K9907767-018	10/28/1999	20	0.031		--	--	--	--	--	--	0.094		--	--
B-202	K9907767-019	10/28/1999	2.5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907767-020	10/28/1999	5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907767-021	10/28/1999	15	--		--	--	--	--	--	--	--		--	--
B-203	K9907788-009	10/28/1999	2.5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907788-010	10/28/1999	5	0.01	U	--	--	--	--	--	--	0.05	U	--	--
	K9907788-011	10/28/1999	10	0.94		--	--	--	--	--	--	0.05	U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-221	K9908093-005	11/09/1999	2.5	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K9908093-006	11/09/1999	7.5	0.01 U	--	--	--	--	--	--	0.05 U	--	--
B-222	K9908120-001	11/10/1999	2.5	4.3	--	--	--	--	--	--	0.05 U	--	--
	K9908120-002	11/10/1999	5	0.51	--	--	--	--	--	--	0.05 U	--	--
	K9908120-003	11/10/1999	10	0.01 U	--	--	--	--	--	--	0.05 U	--	--
B-223	K9908120-005	11/10/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908120-006	11/10/1999	5	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K9908120-007	11/10/1999	10	0.01 U	--	--	--	--	--	--	0.05 U	--	--
B-224	K9908120-008	11/10/1999	2.5	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K9908120-009	11/10/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908120-010	11/10/1999	10	--	--	--	--	--	--	--	--	--	--
B-225	K9908120-012	11/10/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908120-013	11/10/1999	5	--	--	--	--	--	--	--	--	--	--
B-226	K9908186-001	11/11/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908186-002	11/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908186-003	11/11/1999	10	--	--	--	--	--	--	--	--	--	--
B-227	K9908186-005	11/11/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908186-006	11/11/1999	5	--	--	--	--	--	--	--	--	--	--
B-228	K9908186-008	11/11/1999	1.5	--	--	--	--	--	--	--	--	--	--
	K9908186-010	11/11/1999	5	--	--	--	--	--	--	--	--	--	--
B-230	K9908189-001	11/12/1999	2.5	0.097	--	--	--	--	--	--	0.05 U	--	--
	K9908189-003	11/12/1999	5	0.01 U	--	--	--	--	--	--	0.05 U	--	--
B-231	K9908189-005	11/12/1999	2.5	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K9908189-006	11/12/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908189-007	11/12/1999	7	0.18	--	--	--	--	--	--	0.05 U	--	--
B-232	K9908806-003	12/07/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908806-007	12/07/1999	25	--	--	--	--	--	--	--	--	--	--
B-233	K9908806-009	12/07/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908806-011	12/07/1999	15	0.15	--	--	--	--	--	--	0.05 U	--	--
	K9908806-013	12/07/1999	25	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-234	K9908806-015	12/07/1999	10	310	--	--	--	--	--	--	0.5 U	--	--
	K9908806-016	12/07/1999	15	0.5	--	--	--	--	--	--	0.05 U	--	--
	K9908806-018	12/07/1999	25	--	--	--	--	--	--	--	--	--	--
B-235	K9908924-016	12/08/1999	10	1	--	--	--	--	--	--	0.05 U	--	--
	K9908924-017	12/08/1999	15	0.052	--	--	--	--	--	--	0.05 U	--	--
	K9908924-019	12/08/1999	25	0.36	--	--	--	--	--	--	0.05 U	--	--
B-236	K9908924-023	12/08/1999	10	0.4	--	--	--	--	--	--	0.05 U	--	--
	K9908924-024	12/08/1999	15	0.95	--	--	--	--	--	--	0.05 U	--	--
	K9908924-026	12/08/1999	25	--	--	--	--	--	--	--	--	--	--
B-237	K9908924-028	12/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908924-030	12/08/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908924-032	12/08/1999	25	--	--	--	--	--	--	--	--	--	--
B-238	K9908924-003	12/09/1999	10	0.022	--	--	--	--	--	--	0.079	--	--
	K9908924-004	12/09/1999	15	0.4	--	--	--	--	--	--	0.17	--	--
	K9908924-006	12/09/1999	25	--	--	--	--	--	--	--	--	--	--
B-239	K9908924-009	12/09/1999	10	1.1	--	--	--	--	--	--	0.05 U	--	--
	K9908924-010	12/09/1999	15	0.29	--	--	--	--	--	--	0.05 U	--	--
	K9908924-012	12/09/1999	25	--	--	--	--	--	--	--	--	--	--
B-240	K9908924-034	12/10/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908924-036	12/10/1999	15	0.028	--	--	--	--	--	--	0.05 U	--	--
	K9908924-038	12/10/1999	25	--	--	--	--	--	--	--	--	--	--
B-241	K9908924-039	12/10/1999	5	1.5	--	--	--	--	--	--	0.05 U	--	--
	K9908924-041	12/10/1999	15	1.8	--	--	--	--	--	--	0.31	--	--
	K9908924-043	12/10/1999	25	--	--	--	--	--	--	--	--	--	--
B-242	K9908973-007	12/13/1999	25	--	--	--	--	--	--	--	--	--	--
B-243	K9909023-005	12/14/1999	25	--	--	--	--	--	--	--	--	--	--
B-244	K9909069-002	12/15/1999	25	--	--	--	--	--	--	--	--	--	--
	K9909069-005	12/15/1999	35	0.01 U	--	--	--	--	--	--	0.05 U	--	--
B-245	K9909069-009	12/15/1999	15	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K9909069-012	12/15/1999	30	0.055	--	--	--	--	--	--	0.05 U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-246	K9909069-015	12/16/1999	5	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K9909069-016	12/16/1999	10	--	--	--	--	--	--	--	--	--	--
	K9909069-018	12/16/1999	20	--	--	--	--	--	--	--	--	--	--
B-247	K9909148-001	12/17/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909148-002	12/17/1999	5	--	--	--	--	--	--	--	--	--	--
	K9909148-004	12/17/1999	16	--	--	--	--	--	--	--	--	--	--
B-248	K9909181-001	12/20/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909181-004	12/20/1999	15	--	--	--	--	--	--	--	--	--	--
	K9909181-006	12/20/1999	25	--	--	--	--	--	--	--	--	--	--
B-249	K9909181-008	12/20/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909181-012	12/20/1999	20	--	--	--	--	--	--	--	--	--	--
	K9909181-013	12/20/1999	25	--	--	--	--	--	--	--	--	--	--
B-250	K9909223-005	12/21/1999	20	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K9909223-006	12/21/1999	25	0.014	--	--	--	--	--	--	0.05 U	--	--
	K9909223-004	12/21/1999	35	0.01 U	--	--	--	--	--	--	0.05 U	--	--
B-251	K9909277-001	12/22/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909277-003	12/22/1999	10	--	--	--	--	--	--	--	--	--	--
	K9909277-005	12/22/1999	25	--	--	--	--	--	--	--	--	--	--
B-252	K9909277-012	12/22/1999	15	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K9909277-013	12/22/1999	20	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K9909277-014	12/22/1999	25	0.01 U	--	--	--	--	--	--	0.05 U	--	--
B-253	K9909277-021	12/23/1999	25	0.99	--	--	--	--	--	--	0.05 U	--	--
B-255	K2000354-003	01/14/2000	10	52	--	--	--	--	--	--	0.5 U	--	--
	K2000354-004	01/14/2000	15	0.034	--	--	--	--	--	--	0.05 U	--	--
	K2000354-006	01/14/2000	25	--	--	--	--	--	--	--	--	--	--
B-256	K2000354-010	01/14/2000	5	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K2000354-011	01/14/2000	10	0.01	--	--	--	--	--	--	0.05 U	--	--
	K2000354-013	01/14/2000	20	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
B-261	K2000528-003	01/20/2000	10	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K2000528-004	01/20/2000	15	1	--	--	--	--	--	--	0.05 U	--	--
	K2000528-006	01/20/2000	30	0.01 U	--	--	--	--	--	--	0.05 U	--	--
B-264	K2106063-001	08/17/2001	2.5	0.052	--	--	--	--	--	--	0.066 U	--	--
	K2106063-003	08/17/2001	10	0.013 U	--	--	--	--	--	--	0.065 U	--	--
B-265	K2106063-005	08/17/2001	5	0.013 U	--	--	--	--	--	--	0.062 U	--	--
B-266	K2106063-008	08/17/2001	5	0.016 U	--	--	--	--	--	--	0.08 U	--	--
B-272	K2106063-023	08/17/2001	5	0.7	--	--	--	--	--	--	0.058 U	--	--
B-273	K2106063-025	08/20/2001	5	0.95	--	--	--	--	--	--	0.074 U	--	--
B-274	K2106063-030	08/20/2001	5	0.014 U	--	--	--	--	--	--	0.07 U	--	--
B-304	0806067-07A	06/12/2008	10	0.152 U	--	--	--	--	--	--	0.152 U	--	--
	0806067-09A	06/12/2008	19.5	0.0456 U	--	--	--	--	--	--	0.0456 U	--	--
B-305	0806067-12A	06/12/2008	10	0.0463 U	--	--	--	--	--	--	0.0463 U	--	--
	0806067-14A	06/12/2008	19	0.0937	--	--	--	--	--	--	0.0459 U	--	--
B-306	1091024001	03/11/2009	2.5	--	--	--	--	--	--	--	--	--	--
	1091029003	03/11/2009	18	--	--	--	--	--	--	--	--	--	--
B-308	1091024002	03/11/2009	0.5	--	--	--	--	--	--	--	--	--	--
	1091024003	03/11/2009	2.5	--	--	--	--	--	--	--	--	--	--
	1091024004	03/11/2009	15	--	--	--	--	--	--	--	--	--	--
B-313	0905143-06A	05/21/2009	2.5	0.0353 U	0.0353 U	0.0353 U	0.177 U	0.0353 U	--	0.177 U	0.0353 U	--	0.0353 U
	0905143-07B	05/21/2009	5	0.0358 U	0.0358 U	0.0358 U	0.179 U	0.0358 U	--	0.179 U	0.0358 U	--	0.0358 U
	0905143-08B	05/21/2009	10	0.043 U	0.043 U	0.043 U	0.215 U	0.043 U	--	0.215 U	0.043 U	--	0.043 U
	0905143-09B	05/21/2009	15	0.0443 U	0.0443 U	0.0443 U	0.222 U	0.0443 U	--	0.222 U	0.0443 U	--	0.0443 U
CT		02/07/1991	0	--	25 U	--	--	--	--	--	--	25 U	--
		02/07/1991	0	--	25 U	--	--	--	--	--	--	25 U	--
DS-E		06/18/1997	0	0.3 U	0.3 U	2 U	0.3 U	--	--	2 U	--	--	2 U
DS-N		06/18/1997	0	3 U	3 U	20 U	3 U	--	--	20 U	--	--	20 U
DS-S		06/18/1997	0	1.5 U	1.5 U	10 U	1.5 U	--	--	10 U	--	--	10 U
DS-W		06/18/1997	0	0.3 U	0.3 U	2 U	0.3 U	--	--	2 U	--	--	2 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
GP8	0905163-05B	05/22/2009	1.4	0.175 U	0.175 U	0.175 U	0.877 U	0.175 U	--	0.877 U	0.175 U	--	0.175 U
	0905163-06B	05/22/2009	5	0.129	0.0392 U	0.0392 U	0.196 U	0.0392 U	--	0.196 U	0.0392 U	--	0.0392 U
	0905163-07B	05/22/2009	11	0.21 U	0.21 U	0.21 U	1.05 U	0.21 U	--	1.05 U	0.21 U	--	0.21 U
	0905163-08B	05/22/2009	15	0.117	0.043 U	0.043 U	0.215 U	0.043 U	--	0.215 U	0.043 U	--	0.043 U
GP11	0905143-10B	05/21/2009	1.5	0.0382 U	0.0382 U	0.0382 U	0.191 U	0.0382 U	--	0.191 U	0.0382 U	--	0.0382 U
	0905143-11A	05/21/2009	5	0.0422 U	0.0422 U	0.0422 U	0.211 U	0.0422 U	--	0.211 U	0.0422 U	--	0.0422 U
	0905143-12A	05/21/2009	10	0.0455 U	0.0455 U	0.0455 U	0.227 U	0.0455 U	--	0.227 U	0.0455 U	--	0.0455 U
	0905143-13B	05/21/2009	15	0.0439 U	0.0439 U	0.0439 U	0.22 U	0.0439 U	--	0.22 U	0.0439 U	--	0.0439 U
MFP-01	K9708818-001	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-002	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
	K9708818-003	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
	K9708818-004	11/25/1997	9	--	--	--	--	--	--	--	--	--	--
MFP-02	K9708818-008R	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
MFP-04	K9708818-011	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-012R	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
MFP-05	K9708818-014R	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-015	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
	K9708818-016	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
	K9708818-018	11/25/1997	9	--	--	--	--	--	--	--	--	--	--
MW-10		02/05/1991	0	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/05/1991	0	--	2.5 U	--	--	--	--	--	--	2.5 U	--
		02/05/1991	0	--	2.5 U	--	--	--	--	--	--	2.5 U	--
MW-11S	K9707902-003	10/23/1997	0	**18000**	100 U	250 U	100 U	--	--	250 U	--	100 U	250 U
MW-13	MW13-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
	MW13-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--
MW-14	MW14-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
MW-17	MW17-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
MW-18	MW18-10	05/03/1993	10	27	--	--	--	--	--	--	--	--	--
	MW18-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
MW-22	MW22-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--
MW-24	T5070221	04/02/1996	0.5	--	--	--	--	--	--	--	--	--	--
	T5070224	04/02/1996	11	33	--	--	--	--	--	--	--	--	--
	T5070226	04/02/1996	21	64	--	--	--	--	--	--	--	--	--
MW-25	T5060415	04/02/1996	3	0.37 U	--	--	--	--	--	--	--	--	--
MW-26	T5070204	04/02/1996	8.5	37	--	--	--	--	--	--	--	--	--
	T5070207	04/02/1996	21	15	--	--	--	--	--	--	--	--	--
MW-30	T5070239	04/02/1996	26	--	--	--	--	--	--	--	--	--	--
MW-31	T5070231	04/02/1996	21	--	--	--	--	--	--	--	--	--	--
	T5070232	04/02/1996	26	--	--	--	--	--	--	--	--	--	--
	T5070233	04/02/1996	31	--	--	--	--	--	--	--	--	--	--
MW-32	T5070241	04/02/1996	6	--	--	--	--	--	--	--	--	--	--
MW-40	K2204940-001	07/18/2002	55	15	--	--	--	--	--	--	--	--	--
	K2204940-002	07/19/2002	61	0.0056 U	--	--	--	--	--	--	--	--	--
	K2204940-003	07/19/2002	66	0.0065 U	--	--	--	--	--	--	--	--	--
MW-55	0806067-02A	06/10/2008	10	0.0457 U	--	--	--	--	--	--	0.0457 U	--	--
	0806067-04A	06/10/2008	20	0.0469 U	--	--	--	--	--	--	0.0469 U	--	--
MW-58D	0806103-03A	06/18/2008	10	0.0363 U	--	--	--	--	--	--	0.0363 U	--	--
	0806103-04A	06/18/2008	13.5	0.103	--	--	--	--	--	--	0.0497 U	--	--
NPY-03		02/06/1991	0	--	2.5 U	--	--	--	--	--	--	2.5 U	--
NPY-04		02/06/1991	0	--	2.5 U	--	--	--	--	--	--	2.5 U	--
P-01	HC-P/01	02/06/1991	0	--	2.5 U	--	--	--	--	--	--	2.5 U	--
P-02	HC-P/02	02/06/1991	0	--	2.5 U	--	--	--	--	--	--	2.5 U	--
PP		06/18/1997	0	4.7	3 U	20 U	3 U	--	--	20 U	--	--	20 U
SS-01		02/06/1991	0	--	2.5 U	--	--	--	--	--	--	2.5 U	--
SS-3B	0807092-01A	07/16/2008	1.5	54.3	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
SS-4B	0807092-02A	07/16/2008	0.3	0.061	--	--	--	--	--	--	--	--	--
SS-9	0807092-07A	07/17/2008	0.3	0.0113	--	--	--	--	--	--	--	--	--
SS-13	0903005-07A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-14	0903005-08A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-15	0903005-09A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-16	0903005-10A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-17	0903005-11A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-18	0903005-12A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
SS-19	0903005-13A	02/26/2009	0.5	--	--	--	--	--	--	--	--	--	--
T-4	K2005541-003	07/21/2000	1.5	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K2005541-002	07/21/2000	1.5	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K2005541-005	07/21/2000	1.75	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K2005541-001	07/21/2000	2	0.01 U	--	--	--	--	--	--	0.05 U	--	--
	K2005541-004	07/21/2000	2	0.01 U	--	--	--	--	--	--	0.05 U	--	--
TP-01	TP01-0.3	05/03/1993	0.3	3.3 U	--	--	--	--	--	--	--	--	--
	TP01-9.5	05/03/1993	9.5	--	--	--	--	--	--	--	--	--	--
TP-02	TP02-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
	TP02-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
TP-03	TP03-0.3	05/03/1993	0.3	4.2	--	--	--	--	--	--	--	--	--
	TP03-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-04	TP04-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
	TP04-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-05	TP05-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	0.67 U	--	--	--	--	--	--	--	--	--
TP-09	TP09-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP09-4	05/03/1993	4	0.3 U	--	--	--	--	--	--	--	--	--
	TP09-9	05/03/1993	9	86	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol	3- & 4-Methylphenol	3- and 4-Methylphenol Coelute	3,3-Dichloro-benzidine	3,4,5-Trichloro-phenol	3-Methyl-phenol	3-Nitro-aniline
MTCA Method B Cleanup Level				320	NV	NV	NV	NV	NV	2.2	NV	NV	NV
MTCA Method C Cleanup Level				14,000	NV	NV	NV	NV	NV	290	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
TP-10	TP10-0.2	05/03/1993	0.2	0.33 U	--	--	--	--	--	--	--	--	--
	TP10-8.5	05/03/1993	8.5	65	--	--	--	--	--	--	--	--	--
TP-12	TP12-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP12-3	05/03/1993	3	130	--	--	--	--	--	--	--	--	--
	TP12-6.5	05/03/1993	6.5	2.4	--	--	--	--	--	--	--	--	--
TP-13	TP13-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
	TP13-5.5	05/03/1993	5.5	--	--	--	--	--	--	--	--	--	--
TP-14	TP14-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--
TP-15	TP15-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
TP-16	TP16-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP16-7	05/03/1993	7	--	--	--	--	--	--	--	--	--	--
TP-27	TP27-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-28	TP28-7	05/03/1993	7	--	--	--	--	--	--	--	--	--	--
	TP28-9.5	05/03/1993	9.5	**340**	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-1	L15788-1	04/06/2000	2.5	--	--	--	--	--	--	--	--	0.01 U
	L15788-3	04/06/2000	10	--	--	--	--	--	--	--	--	0.01 U
B-2		02/04/1991	3	--	--	--	--	--	2.5 U	--	--	--
		02/04/1991	11	--	--	--	--	--	2.5 U	--	--	--
	L15788-8	04/06/2000	0	--	--	--	--	--	--	--	--	0.01 U
	L15788-6	04/06/2000	2.5	--	--	--	--	--	--	--	--	0.01 U
B-3		02/04/1991	5.5	--	--	--	--	--	2.5 U	--	--	--
		02/04/1991	15	--	--	--	--	--	2.5 U	--	--	--
B-4		02/04/1991	3	--	--	--	--	--	2.5 U	--	--	--
		02/04/1991	12.5	--	--	--	--	--	2.5 U	--	--	--
B-5		02/04/1991	3	--	--	--	--	--	2.5 U	--	--	--
		02/04/1991	18.5	--	--	--	--	--	35 U	--	--	--
	L15788-22	04/06/2000	10	--	--	--	--	--	--	--	--	0.01 U
B-6		02/04/1991	3	--	--	--	--	--	7.5 U	--	--	--
		02/04/1991	33	--	--	--	--	--	2.5 U	--	--	--
	L15788-23	04/06/2000	2.5	--	--	--	--	--	--	--	--	0.01 U
	L15788-25	04/06/2000	10	--	--	--	--	--	--	--	--	0.01 U
B-7		02/04/1991	5.5	--	--	--	--	--	2.5 U	--	--	--
		02/04/1991	13.5	--	--	--	--	--	2.5 U	--	--	--
	L15788-26	04/06/2000	2.5	--	--	--	--	--	--	--	--	0.01 U
	L15788-28	04/06/2000	10	--	--	--	--	--	--	--	--	0.01 U
B-8		02/04/1991	11	--	--	--	--	--	2.5 U	--	--	--
		02/04/1991	16	--	--	--	--	--	2.5 U	--	--	--
	L15788-29	04/06/2000	2.5	--	--	--	--	--	--	--	--	0.01 U
	L15788-31	04/06/2000	10	--	--	--	--	--	--	--	--	0.01 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-9		02/04/1991	5.5	--	--	--	--	--	2.5 U	--	--	--
		02/04/1991	16	--	--	--	--	--	2.5 U	--	--	--
	L15788-32	04/06/2000	2.5	--	--	--	--	--	--	--	--	0.01 U
	L15788-33	04/06/2000	5	--	--	--	--	--	--	--	--	0.01 U
	L15788-34	04/06/2000	10	--	--	--	--	--	--	--	--	0.01 U
B-10		02/04/1991	0	--	--	--	--	--	2.5 U	--	--	--
		02/04/1991	10.5	--	--	--	--	--	2.5 U	--	--	0.0025 U
		02/04/1991	16	--	--	--	--	--	2.5 U	--	--	--
B-11		02/04/1991	3	--	--	--	--	--	2.5 U	--	--	--
		02/04/1991	13.5	--	--	--	--	--	2.5 U	--	--	--
B-12		02/05/1991	3	--	--	--	--	--	2.5 U	--	--	--
		02/05/1991	13	--	--	--	--	--	2.5 U	--	--	--
B-13		02/05/1991	15.5	--	--	--	--	--	2.5 U	--	--	--
B-14		02/05/1991	8	--	--	--	--	--	2.5 U	--	--	--
		02/05/1991	13	--	--	--	--	--	2.5 U	--	--	--
B-15		02/05/1991	3	--	--	--	--	--	2.5 U	--	--	--
		02/05/1991	15.5	--	--	--	--	--	2.5 U	--	--	--
B-19	B19-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
B-20	B20-20	05/03/1993	20	--	--	--	--	--	--	--	--	200
B-31	K9708881-014	11/26/1997	3.5	--	--	--	--	--	--	--	--	0.005 U
	K9708881-013	11/26/1997	8	--	--	--	--	--	--	--	--	0.005 U
	K9708881-012	11/26/1997	15.5	--	--	--	--	--	--	--	--	19
B-32	K9709176-011	12/05/1997	6.5	--	--	--	--	--	--	--	--	0.005 U
	K9709176-012	12/08/1997	14	--	--	--	--	--	--	--	--	--
B-33	K9709014-004	12/04/1997	3.5	--	--	--	--	--	--	--	--	5
	K9709014-005	12/04/1997	9.5	--	--	--	--	--	--	--	--	0.537
		12/04/1997	15.5	--	--	--	--	--	--	--	--	--
B-34	K9708881-015	11/26/1997	3.5	--	--	--	--	--	--	--	--	0.621
	K9708881-016	11/26/1997	8	--	--	--	--	--	--	--	--	--
		11/26/1997	17	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene	
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800	
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000	
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	
B-35	K9708926-006	12/02/1997	3.5	--	--	--	--	--	--	--	--	--	
		12/02/1997	11	--	--	--	--	--	--	--	--	--	
		12/02/1997	14	--	--	--	--	--	--	--	--	--	
B-36	K9709014-001	12/03/1997	5	--	--	--	--	--	--	--	--	--	
		12/03/1997	9.5	--	--	--	--	--	--	--	--	46	
		12/03/1997	15.5	--	--	--	--	--	--	--	--	--	
B-37	K9708926-001	12/02/1997	5	--	--	--	--	--	--	--	--	--	
		12/03/1997	15.5	--	--	--	--	--	--	--	--	0.005	U
B-38	K9709176-008	12/05/1997	3.5	--	--	--	--	--	--	--	--	3.1	
B-39	K9800342-007	01/19/1998	6.5	--	--	--	--	--	--	--	--	--	
	K9800342-008	01/19/1998	12.5	--	--	--	--	--	--	--	--	--	
B-42	K9709176-013	12/09/1997	8	--	--	--	--	--	--	--	--	1.29	
	K9709176-014	12/09/1997	12.5	--	--	--	--	--	--	--	--	--	
B-43	K9708705-007	11/20/1997	3.5	--	--	--	--	--	--	--	--	0.057	
B-44	K9708705-009	11/20/1997	6.5	--	--	--	--	--	--	--	--	1.47	
B-45	K9708655-012	11/19/1997	5	--	--	--	--	--	--	--	--	0.116	
B-46	K9708655-007	11/19/1997	5	--	--	--	--	--	--	--	--	0.028	
	K9708655-008	11/19/1997	9.5	--	--	--	--	--	--	--	--	0.005	U
B-47	K9708655-014	11/18/1997	9.5	--	--	--	--	--	--	--	--	0.005	U
B-48	K9708705-005	11/20/1997	3.5	--	--	--	--	--	--	--	--	0.406	
B-49	K9708815-004	11/25/1997	5	--	--	--	--	--	--	--	--	--	
B-50	K9708704-008	11/21/1997	8	--	--	--	--	--	--	--	--	0.011	
B-51	K9708815-003	11/24/1997	9.5	--	--	--	--	--	--	--	--	0.1	U
B-52	K9708704-005	11/20/1997	3.5	--	--	--	--	--	--	--	--	0.136	
B-53	K9800300-013	01/14/1998	9.5	--	--	--	--	--	--	--	--	0.005	U
	K9800300-014	01/14/1998	15.5	--	--	--	--	--	--	--	--	0.224	
B-54	K9800300-015	01/14/1998	8	--	--	--	--	--	--	--	--	0.119	
B-55	K9800300-017	01/15/1998	8	--	--	--	--	--	--	--	--	0.069	
B-56	K9800342-001	01/15/1998	6.5	--	--	--	--	--	--	--	--	0.016	
B-57	K9800342-003	01/16/1998	8	--	--	--	--	--	--	--	--	0.005	U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene	
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800	
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000	
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	
B-58	K9800342-005	01/16/1998	6.5	--	--	--	--	--	--	--	--	0.005	U
B-58A	K9803817-001	06/12/1998	5	--	--	--	--	--	--	--	--	0.01	U
	K9803817-002	06/12/1998	17	--	--	--	--	--	--	--	--	0.01	U
B-62	K9803817-005	06/12/1998	5	--	--	--	--	--	--	--	--	0.01	U
	K9803817-006	06/12/1998	17	--	--	--	--	--	--	--	--	0.01	U
B-63	K9803817-007	06/12/1998	5	--	--	--	--	--	--	--	--	0.01	U
	K9803817-008	06/12/1998	17	--	--	--	--	--	--	--	--	0.01	U
B-66	K9803817-009	06/12/1998	5	--	--	--	--	--	--	--	--	0.01	U
	K9803817-010	06/12/1998	17	--	--	--	--	--	--	--	--	0.01	U
B-69	K9803927-011	06/16/1998	0.5	--	--	--	--	--	--	--	--	0.01	U
	K9803927-001	06/16/1998	2.5	--	--	--	--	--	--	--	--	0.01	U
	K9803927-012	06/16/1998	5	--	--	--	--	--	--	--	--	0.01	U
	K9803927-013	06/16/1998	10	--	--	--	--	--	--	--	--	0.01	U
	K9803927-002	06/16/1998	17	--	--	--	--	--	--	--	--	0.01	U
B-72	K9803927-003	06/17/1998	0.5	--	--	--	--	--	--	--	--	170	
	K9803927-004	06/17/1998	5	--	--	--	--	--	--	--	--	0.026	
	K9803927-005	06/17/1998	10	--	--	--	--	--	--	--	--	0.01	
	K9803927-006	06/17/1998	17	--	--	--	--	--	--	--	--	0.01	U
B-73	K9803927-008	06/17/1998	17	--	--	--	--	--	--	--	--	0.01	U
B-74	K9803927-009	06/17/1998	2.5	--	--	--	--	--	--	--	--	0.01	U
	K9803927-010	06/17/1998	17	--	--	--	--	--	--	--	--	0.01	U
B-75	K9803927-014	06/17/1998	2.5	--	--	--	--	--	--	--	--	0.01 U	U
	K9803927-015	06/17/1998	17	--	--	--	--	--	--	--	--	0.01 U	U
B-76	K9803927-016	06/17/1998	10	--	--	--	--	--	--	--	--	0.01 U	U
	K9803927-017	06/17/1998	27	--	--	--	--	--	--	--	--	0.01 U	U
B-77	K9803927-018	06/17/1998	2.5	--	--	--	--	--	--	--	--	0.01 U	U
	K9803927-019	06/17/1998	5	--	--	--	--	--	--	--	--	0.01 U	U
	K9803927-020	06/17/1998	17	--	--	--	--	--	--	--	--	83	
B-78	K9803979-001	06/18/1998	0.5	--	--	--	--	--	--	--	--	13	
	K9803979-002	06/18/1998	17	--	--	--	--	--	--	--	--	0.01 U	U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene	
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800	
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000	
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	
B-79	K9803979-004	06/18/1998	2.5	--	--	--	--	--	--	--	--	0.7 D	
	K9803979-006	06/18/1998	10	--	--	--	--	--	--	--	--	0.01 U	U
	K9803979-007	06/18/1998	17	--	--	--	--	--	--	--	--	0.01 U	U
B-80	K9803995-001	06/19/1998	2.5	--	--	--	--	--	--	--	--	0.01 U	U
	K9803995-002	06/19/1998	15	--	--	--	--	--	--	--	--	0.01 U	U
	K9803995-003	06/19/1998	25	--	--	--	--	--	--	--	--	0.01 U	U
B-81	K9803995-004	06/19/1998	2.5	--	--	--	--	--	--	--	--	0.01 U	U
B-82	K9803995-005	06/19/1998	10	--	--	--	--	--	--	--	--	0.031	
	K9803995-006	06/19/1998	20	--	--	--	--	--	--	--	--	0.01 U	U
B-83	K9804079-001	06/23/1998	5	--	--	--	--	--	--	--	--	0.01 U	U
	K9804079-002	06/23/1998	17	--	--	--	--	--	--	--	--	42	
B-84	K9804079-003	06/23/1998	10	--	--	--	--	--	--	--	--	0.38	
	K9804079-004	06/23/1998	35	--	--	--	--	--	--	--	--	0.01 U	U
B-85	K9804079-005	06/23/1998	5	--	--	--	--	--	--	--	--	0.097	
	K9804079-006	06/23/1998	10	--	--	--	--	--	--	--	--	180	
B-86	K9804079-007	06/23/1998	5	--	--	--	--	--	--	--	--	0.029	
	K9804079-008	06/23/1998	15	--	--	--	--	--	--	--	--	89	
B-87	K9804079-009	06/23/1998	5	--	--	--	--	--	--	--	--	0.01	U
	K9804079-010	06/23/1998	15	--	--	--	--	--	--	--	--	1.5	
B-88	K9804079-011	06/23/1998	5	--	--	--	--	--	--	--	--	0.01	U
	K9804079-012	06/23/1998	15	--	--	--	--	--	--	--	--	0.021	
B-89	K9804079-013	06/23/1998	5	--	--	--	--	--	--	--	--	0.01	U
	K9804079-014	06/23/1998	15	--	--	--	--	--	--	--	--	0.01	U
B-90	K9804079-015	06/23/1998	0.5	--	--	--	--	--	--	--	--	2.5	
	K9804079-016	06/23/1998	17.5	--	--	--	--	--	--	--	--	0.022	
B-91	K9804079-017	06/23/1998	0.5	--	--	--	--	--	--	--	--	0.085	
	K9804079-018	06/23/1998	15	--	--	--	--	--	--	--	--	0.01	U
B-92	K9804079-019	06/23/1998	10	--	--	--	--	--	--	--	--	0.15	
	K9804079-020	06/23/1998	30	--	--	--	--	--	--	--	--	0.01	U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-93	K9804129-001	06/24/1998	25	--	--	--	--	--	--	--	--	0.47
	K9804129-002	06/24/1998	40	--	--	--	--	--	--	--	--	0.22
B-94	K9804129-003	06/24/1998	10	--	--	--	--	--	--	--	--	4.9
	K9804129-004	06/24/1998	35	--	--	--	--	--	--	--	--	0.01 U
B-95	K9804129-005	06/24/1998	10	--	--	--	--	--	--	--	--	14
	K9804129-006	06/24/1998	25	--	--	--	--	--	--	--	--	0.037
	K9804129-007	06/24/1998	32.5	--	--	--	--	--	--	--	--	0.01 U
B-96	K9804470-002	07/08/1998	30	--	--	--	--	--	--	--	--	0.01 U
B-97	K9804470-003	07/08/1998	2.5	--	--	--	--	--	--	--	--	0.01 U
B-98	K9804470-005	07/08/1998	17	--	--	--	--	--	--	--	--	0.01 U
B-99	K9804470-007	07/08/1998	45	--	--	--	--	--	--	--	--	0.01 U
	K9804470-008	07/08/1998	64	--	--	--	--	--	--	--	--	0.01 U
B-100	K9804470-010	07/08/1998	45	--	--	--	--	--	--	--	--	0.01 U
	K9804470-011	07/08/1998	65	--	--	--	--	--	--	--	--	0.01 U
B-101	K9804470-012	07/08/1998	10	--	--	--	--	--	--	--	--	0.01 U
	K9804470-013	07/08/1998	33	--	--	--	--	--	--	--	--	0.01 U
B-103	K9804470-014	07/08/1998	2.5	--	--	--	--	--	--	--	--	0.01 U
B-104	K9903514-001	06/03/1999	5	--	--	--	--	--	--	--	--	--
	K9903514-002	06/03/1999	10	--	--	--	--	--	--	--	--	--
	K9903514-005	06/03/1999	25	--	--	--	--	--	--	--	--	--
B-105	K9903514-010	06/03/1999	5	--	--	--	--	--	--	--	--	--
	K9903514-011	06/03/1999	10	--	--	--	--	--	--	--	--	--
	K9903514-013	06/03/1999	25	--	--	--	--	--	--	--	--	--
B-106	K9903553-001	06/04/1999	5	--	--	--	--	--	--	--	--	--
	K9903553-002	06/04/1999	15	--	--	--	--	--	--	--	--	--
B-107	K9903553-007	06/04/1999	5	--	--	--	--	--	--	--	--	--
	K9903553-009	06/04/1999	15	--	--	--	--	--	--	--	--	--
	K9903584-002	06/07/1999	25	--	--	--	--	--	--	--	--	--
	K9903584-005	06/07/1999	45	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-108	K9903584-008	06/07/1999	5	--	--	--	--	--	--	--	--	--
	K9903584-009	06/07/1999	10	--	--	--	--	--	--	--	--	--
B-109	K9903616-007	06/08/1999	5	--	--	--	--	--	--	--	--	--
	K9903616-008	06/08/1999	10	--	--	--	--	--	--	--	--	--
	K9903616-010	06/08/1999	25	--	--	--	--	--	--	--	--	--
	K9903616-011	06/08/1999	40	--	--	--	--	--	--	--	--	--
B-110	K9903665-001	06/08/1999	5	--	--	--	--	--	--	--	--	--
	K9903665-002	06/08/1999	10	--	--	--	--	--	--	--	--	--
	K9903665-004	06/08/1999	25	--	--	--	--	--	--	--	--	--
	K9903665-009	06/08/1999	43	--	--	--	--	--	--	--	--	--
B-111	K9903711-001	06/09/1999	5	--	--	--	--	--	--	--	--	--
	K9903711-002	06/09/1999	10	--	--	--	--	--	--	--	--	--
	K9903711-004	06/10/1999	30	--	--	--	--	--	--	--	--	--
B-112	K9903711-009	06/10/1999	10	--	--	--	--	--	--	--	--	--
	K9903711-013	06/10/1999	30	--	--	--	--	--	--	--	--	--
B-113	K9903723-001	06/11/1999	5	--	--	--	--	--	--	--	--	--
	K9903723-002	06/11/1999	10	--	--	--	--	--	--	--	--	--
	K9903723-003	06/11/1999	15	--	--	--	--	--	--	--	--	--
	K9903723-005	06/11/1999	25	--	--	--	--	--	--	--	--	--
B-114	K9903794-002	06/11/1999	10	--	--	--	--	--	--	--	--	--
	K9903794-003	06/11/1999	15	--	--	--	--	--	--	--	--	--
	K9903794-007	06/14/1999	30	--	--	--	--	--	--	--	--	--
B-115	K9903794-011	06/14/1999	10	--	--	--	--	--	--	--	--	--
	K9903794-012	06/14/1999	15	--	--	--	--	--	--	--	--	--
B-116	K9903826-002	06/14/1999	10	--	--	--	--	--	--	--	--	--
	K9903826-007	06/15/1999	40	--	--	--	--	--	--	--	--	--
	K9903826-018	06/15/1999	95	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-117	K9903826-021	06/15/1999	5	--	--	--	--	--	--	--	--	--
	K9903826-023	06/15/1999	15	--	--	--	--	--	--	--	--	--
	K9903871-004	06/16/1999	65	--	--	--	--	--	--	--	--	--
	K9903871-008	06/16/1999	90	--	--	--	--	--	--	--	--	--
B-118	K9903871-009	06/16/1999	5	--	--	--	--	--	--	--	--	--
	K9903871-010	06/16/1999	10	--	--	--	--	--	--	--	--	--
B-119	K9903915-001	06/17/1999	2.5	--	--	--	--	--	--	--	--	--
	K9903915-002	06/17/1999	5	--	--	--	--	--	--	--	--	--
	K9903915-004	06/17/1999	15	--	--	--	--	--	--	--	--	--
B-139	K9907039-005	10/04/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907039-009	10/04/1999	5	--	--	--	--	--	--	--	--	--
	K9907039-006	10/04/1999	20	--	--	--	--	--	--	--	--	--
B-140	K9907141-001	10/06/1999	10	--	--	--	--	--	--	--	--	0.41
B-141	K9907141-002	10/06/1999	2.5	--	--	--	--	--	--	--	--	0.013
B-142	K9907141-003	10/07/1999	10	--	--	--	--	--	--	--	--	47
B-147	K9907141-004	10/08/1999	10	--	--	--	--	--	--	--	--	51
	K9907141-005	10/08/1999	20	--	--	--	--	--	--	--	--	--
B-148	K9907141-006	10/08/1999	10	--	--	--	--	--	--	--	--	19
	K9907141-007	10/08/1999	15	--	--	--	--	--	--	--	--	15
B-149	K9907141-008	10/08/1999	3	--	--	--	--	--	--	--	--	0.01 U
	K9907141-009	10/08/1999	10	--	--	--	--	--	--	--	--	120
	K9907141-010	10/08/1999	20	--	--	--	--	--	--	--	--	--
B-150	K9907223-003	10/11/1999	10.5	--	--	--	--	--	--	--	--	13
B-153	K9907223-007	10/11/1999	5	--	--	--	--	--	--	--	--	--
	K9907223-008	10/11/1999	10	--	--	--	--	--	--	--	--	0.076

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-155	K9907223-009	10/12/1999	5	--	--	--	--	--	--	--	--	0.64
	K9907223-016	10/12/1999	9	--	--	--	--	--	--	--	--	0.022
B-160	K9907379-011	10/13/1999	10	--	--	--	--	--	--	--	--	0.14
B-161	K9907379-010	10/13/1999	10	--	--	--	--	--	--	--	--	--
B-162	K9907379-009	10/13/1999	11.5	--	--	--	--	--	--	--	--	--
B-165	K9907379-008	10/13/1999	11.5	--	--	--	--	--	--	--	--	--
B-167	K9907379-006	10/14/1999	20	--	--	--	--	--	--	--	--	--
B-170	K9907379-017	10/15/1999	7.5	--	--	--	--	--	--	--	--	--
B-187	K9907559-010	10/21/1999	11.5	--	--	--	--	--	--	--	--	--
B-188	K9907559-011	10/21/1999	5	--	--	--	--	--	--	--	--	--
	K9907559-012	10/21/1999	11.5	--	--	--	--	--	--	--	--	--
B-189	K9907607-001	10/22/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907607-002	10/22/1999	12	--	--	--	--	--	--	--	--	--
B-190	K9907700-001	10/25/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907700-002	10/25/1999	5	--	--	--	--	--	--	--	--	--
	K9907700-003	10/25/1999	10	--	--	--	--	--	--	--	--	--
B-191	K9907700-004	10/25/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907700-005	10/25/1999	5	--	--	--	--	--	--	--	--	0.01 U
B-192	K9907700-006	10/25/1999	2.5	--	--	--	--	--	--	--	--	0.01 U
	K9907700-007	10/25/1999	5	--	--	--	--	--	--	--	--	--
B-193	K9907700-008	10/25/1999	2.5	--	--	--	--	--	--	--	--	0.18
	K9907700-009	10/25/1999	5	--	--	--	--	--	--	--	--	0.36
	K9907700-010	10/25/1999	10	--	--	--	--	--	--	--	--	0.01 U
B-194	K9907700-011	10/25/1999	2.5	--	--	--	--	--	--	--	--	1.9
	K9907700-012	10/25/1999	5	--	--	--	--	--	--	--	--	0.011
	K9907700-013	10/25/1999	10	--	--	--	--	--	--	--	--	3.6
B-195	K9907700-014	10/26/1999	2.5	--	--	--	--	--	--	--	--	0.37
	K9907700-015	10/26/1999	5	--	--	--	--	--	--	--	--	0.01 U
	K9907700-016	10/26/1999	10	--	--	--	--	--	--	--	--	0.045

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-196	K9907700-017	10/26/1999	3	--	--	--	--	--	--	--	--	0.01 U
	K9907700-018	10/26/1999	9	--	--	--	--	--	--	--	--	0.26
B-197	K9907767-001	10/26/1999	2.5	--	--	--	--	--	--	--	--	0.015
	K9907767-002	10/26/1999	5	--	--	--	--	--	--	--	--	0.01 U
	K9907767-003	10/26/1999	10	--	--	--	--	--	--	--	--	0.01 U
B-198	K9907767-004	10/27/1999	2.5	--	--	--	--	--	--	--	--	0.01 U
	K9907767-005	10/27/1999	5	--	--	--	--	--	--	--	--	0.01 U
B-199	K9907767-007	10/27/1999	2.5	--	--	--	--	--	--	--	--	0.01 U
	K9907767-008	10/27/1999	5	--	--	--	--	--	--	--	--	0.01 U
	K9907767-009	10/27/1999	10	--	--	--	--	--	--	--	--	0.01 U
	K9907767-010	10/27/1999	15	--	--	--	--	--	--	--	--	0.01 U
B-200	K9907767-012	10/27/1999	2.5	--	--	--	--	--	--	--	--	0.01 U
	K9907767-013	10/27/1999	5	--	--	--	--	--	--	--	--	0.01 U
B-201	K9907767-014	10/28/1999	2.5	--	--	--	--	--	--	--	--	0.011
	K9907767-015	10/28/1999	5	--	--	--	--	--	--	--	--	0.01 U
	K9907767-016	10/28/1999	10	--	--	--	--	--	--	--	--	--
	K9907767-017	10/28/1999	15	--	--	--	--	--	--	--	--	9.4
	K9907767-018	10/28/1999	20	--	--	--	--	--	--	--	--	0.3
B-202	K9907767-019	10/28/1999	2.5	--	--	--	--	--	--	--	--	0.01 U
	K9907767-020	10/28/1999	5	--	--	--	--	--	--	--	--	0.01 U
	K9907767-021	10/28/1999	15	--	--	--	--	--	--	--	--	--
B-203	K9907788-009	10/28/1999	2.5	--	--	--	--	--	--	--	--	0.01 U
	K9907788-010	10/28/1999	5	--	--	--	--	--	--	--	--	0.01 U
	K9907788-011	10/28/1999	10	--	--	--	--	--	--	--	--	1.1

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-221	K9908093-005	11/09/1999	2.5	--	--	--	--	--	--	--	--	0.01 U
	K9908093-006	11/09/1999	7.5	--	--	--	--	--	--	--	--	0.045
B-222	K9908120-001	11/10/1999	2.5	--	--	--	--	--	--	--	--	19
	K9908120-002	11/10/1999	5	--	--	--	--	--	--	--	--	1.4
	K9908120-003	11/10/1999	10	--	--	--	--	--	--	--	--	0.064
B-223	K9908120-005	11/10/1999	2.5	--	--	--	--	--	--	--	--	--
	K9908120-006	11/10/1999	5	--	--	--	--	--	--	--	--	0.01 U
	K9908120-007	11/10/1999	10	--	--	--	--	--	--	--	--	0.028
B-224	K9908120-008	11/10/1999	2.5	--	--	--	--	--	--	--	--	0.01 U
	K9908120-009	11/10/1999	5	--	--	--	--	--	--	--	--	--
	K9908120-010	11/10/1999	10	--	--	--	--	--	--	--	--	--
B-225	K9908120-012	11/10/1999	2.5	--	--	--	--	--	--	--	--	--
	K9908120-013	11/10/1999	5	--	--	--	--	--	--	--	--	--
B-226	K9908186-001	11/11/1999	2.5	--	--	--	--	--	--	--	--	--
	K9908186-002	11/11/1999	5	--	--	--	--	--	--	--	--	--
	K9908186-003	11/11/1999	10	--	--	--	--	--	--	--	--	--
B-227	K9908186-005	11/11/1999	2.5	--	--	--	--	--	--	--	--	--
	K9908186-006	11/11/1999	5	--	--	--	--	--	--	--	--	--
B-228	K9908186-008	11/11/1999	1.5	--	--	--	--	--	--	--	--	--
	K9908186-010	11/11/1999	5	--	--	--	--	--	--	--	--	--
B-230	K9908189-001	11/12/1999	2.5	--	--	--	--	--	--	--	--	0.02
	K9908189-003	11/12/1999	5	--	--	--	--	--	--	--	--	0.01 U
B-231	K9908189-005	11/12/1999	2.5	--	--	--	--	--	--	--	--	0.01 U
	K9908189-006	11/12/1999	5	--	--	--	--	--	--	--	--	--
	K9908189-007	11/12/1999	7	--	--	--	--	--	--	--	--	0.065
B-232	K9908806-003	12/07/1999	5	--	--	--	--	--	--	--	--	--
	K9908806-007	12/07/1999	25	--	--	--	--	--	--	--	--	--
B-233	K9908806-009	12/07/1999	5	--	--	--	--	--	--	--	--	--
	K9908806-011	12/07/1999	15	--	--	--	--	--	--	--	--	1.1
	K9908806-013	12/07/1999	25	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-234	K9908806-015	12/07/1999	10	--	--	--	--	--	--	--	--	120
	K9908806-016	12/07/1999	15	--	--	--	--	--	--	--	--	0.8
	K9908806-018	12/07/1999	25	--	--	--	--	--	--	--	--	--
B-235	K9908924-016	12/08/1999	10	--	--	--	--	--	--	--	--	2.3
	K9908924-017	12/08/1999	15	--	--	--	--	--	--	--	--	0.83
	K9908924-019	12/08/1999	25	--	--	--	--	--	--	--	--	0.064
B-236	K9908924-023	12/08/1999	10	--	--	--	--	--	--	--	--	0.34
	K9908924-024	12/08/1999	15	--	--	--	--	--	--	--	--	0.71
	K9908924-026	12/08/1999	25	--	--	--	--	--	--	--	--	--
B-237	K9908924-028	12/08/1999	5	--	--	--	--	--	--	--	--	--
	K9908924-030	12/08/1999	15	--	--	--	--	--	--	--	--	--
	K9908924-032	12/08/1999	25	--	--	--	--	--	--	--	--	--
B-238	K9908924-003	12/09/1999	10	--	--	--	--	--	--	--	--	0.41
	K9908924-004	12/09/1999	15	--	--	--	--	--	--	--	--	2.1
	K9908924-006	12/09/1999	25	--	--	--	--	--	--	--	--	--
B-239	K9908924-009	12/09/1999	10	--	--	--	--	--	--	--	--	1
	K9908924-010	12/09/1999	15	--	--	--	--	--	--	--	--	1.2
	K9908924-012	12/09/1999	25	--	--	--	--	--	--	--	--	--
B-240	K9908924-034	12/10/1999	5	--	--	--	--	--	--	--	--	--
	K9908924-036	12/10/1999	15	--	--	--	--	--	--	--	--	0.65
	K9908924-038	12/10/1999	25	--	--	--	--	--	--	--	--	--
B-241	K9908924-039	12/10/1999	5	--	--	--	--	--	--	--	--	1
	K9908924-041	12/10/1999	15	--	--	--	--	--	--	--	--	0.94
	K9908924-043	12/10/1999	25	--	--	--	--	--	--	--	--	--
B-242	K9908973-007	12/13/1999	25	--	--	--	--	--	--	--	--	--
B-243	K9909023-005	12/14/1999	25	--	--	--	--	--	--	--	--	--
B-244	K9909069-002	12/15/1999	25	--	--	--	--	--	--	--	--	--
	K9909069-005	12/15/1999	35	--	--	--	--	--	--	--	--	0.01 U
B-245	K9909069-009	12/15/1999	15	--	--	--	--	--	--	--	--	0.01 U
	K9909069-012	12/15/1999	30	--	--	--	--	--	--	--	--	0.11

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-246	K9909069-015	12/16/1999	5	--	--	--	--	--	--	--	--	0.01 U
	K9909069-016	12/16/1999	10	--	--	--	--	--	--	--	--	--
	K9909069-018	12/16/1999	20	--	--	--	--	--	--	--	--	--
B-247	K9909148-001	12/17/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909148-002	12/17/1999	5	--	--	--	--	--	--	--	--	--
	K9909148-004	12/17/1999	16	--	--	--	--	--	--	--	--	--
B-248	K9909181-001	12/20/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909181-004	12/20/1999	15	--	--	--	--	--	--	--	--	--
	K9909181-006	12/20/1999	25	--	--	--	--	--	--	--	--	--
B-249	K9909181-008	12/20/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909181-012	12/20/1999	20	--	--	--	--	--	--	--	--	--
	K9909181-013	12/20/1999	25	--	--	--	--	--	--	--	--	--
B-250	K9909223-005	12/21/1999	20	--	--	--	--	--	--	--	--	0.01
	K9909223-006	12/21/1999	25	--	--	--	--	--	--	--	--	0.053
	K9909223-004	12/21/1999	35	--	--	--	--	--	--	--	--	0.2
B-251	K9909277-001	12/22/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909277-003	12/22/1999	10	--	--	--	--	--	--	--	--	--
	K9909277-005	12/22/1999	25	--	--	--	--	--	--	--	--	--
B-252	K9909277-012	12/22/1999	15	--	--	--	--	--	--	--	--	0.01 U
	K9909277-013	12/22/1999	20	--	--	--	--	--	--	--	--	0.01 U
	K9909277-014	12/22/1999	25	--	--	--	--	--	--	--	--	0.01 U
B-253	K9909277-021	12/23/1999	25	--	--	--	--	--	--	--	--	0.63
B-255	K2000354-003	01/14/2000	10	--	--	--	--	--	--	--	--	19
	K2000354-004	01/14/2000	15	--	--	--	--	--	--	--	--	0.016
	K2000354-006	01/14/2000	25	--	--	--	--	--	--	--	--	--
B-256	K2000354-010	01/14/2000	5	--	--	--	--	--	--	--	--	0.01 U
	K2000354-011	01/14/2000	10	--	--	--	--	--	--	--	--	0.064
	K2000354-013	01/14/2000	20	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-261	K2000528-003	01/20/2000	10	--	--	--	--	--	--	--	--	0.01 U
	K2000528-004	01/20/2000	15	--	--	--	--	--	--	--	--	0.97
	K2000528-006	01/20/2000	30	--	--	--	--	--	--	--	--	0.01 U
B-264	K2106063-001	08/17/2001	2.5	--	--	--	--	--	--	--	--	0.014 U
	K2106063-003	08/17/2001	10	--	--	--	--	--	--	--	--	0.013 U
B-265	K2106063-005	08/17/2001	5	--	--	--	--	--	--	--	--	0.013 U
B-266	K2106063-008	08/17/2001	5	--	--	--	--	--	--	--	--	0.021
B-272	K2106063-023	08/17/2001	5	--	--	--	--	--	--	--	--	1
B-273	K2106063-025	08/20/2001	5	--	--	--	--	--	--	--	--	0.58
B-274	K2106063-030	08/20/2001	5	--	--	--	--	--	--	--	--	0.018
B-304	0806067-07A	06/12/2008	10	--	--	--	--	--	--	--	--	4.95
	0806067-09A	06/12/2008	19.5	--	--	--	--	--	--	--	--	0.181
B-305	0806067-12A	06/12/2008	10	--	--	--	--	--	--	--	--	0.0463 U
	0806067-14A	06/12/2008	19	--	--	--	--	--	--	--	--	0.407
B-306	1091024001	03/11/2009	2.5	--	--	--	--	--	--	--	--	36
	1091029003	03/11/2009	18	--	--	--	--	--	--	--	--	0.541
B-308	1091024002	03/11/2009	0.5	--	--	--	--	--	--	--	--	0.007 U
	1091024003	03/11/2009	2.5	--	--	--	--	--	--	--	--	0.00727 U
	1091024004	03/11/2009	15	--	--	--	--	--	--	--	--	54.5
B-313	0905143-06A	05/21/2009	2.5	0.177 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	--	0.0353 U	0.177 U	0.0353 U
	0905143-07B	05/21/2009	5	0.179 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	--	0.0358 U	0.179 U	0.0358 U
	0905143-08B	05/21/2009	10	0.215 U	0.043 U	0.043 U	0.043 U	0.043 U	--	0.043 U	0.215 U	0.043 U
	0905143-09B	05/21/2009	15	0.222 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	--	0.0443 U	0.222 U	0.0443 U
CT		02/07/1991	0	--	--	--	--	--	25 U	--	--	--
		02/07/1991	0	--	--	--	--	--	25 U	--	--	--
DS-E		06/18/1997	0	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.3 U
DS-N		06/18/1997	0	20 U	3 U	3 U	3 U	3 U	3 U	20 U	20 U	3 U
DS-S		06/18/1997	0	10 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	10 U	10 U	1.5 U
DS-W		06/18/1997	0	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.3 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
GP8	0905163-05B	05/22/2009	1.4	0.877 U	0.175 U	0.175 U	0.175 U	0.175 U	--	0.175 U	0.877 U	0.175 U
	0905163-06B	05/22/2009	5	0.196 U	0.0392 U	0.0392 U	0.0392 U	0.0392 U	--	0.0392 U	0.196 U	0.145
	0905163-07B	05/22/2009	11	1.05 U	0.21 U	0.21 U	0.21 U	0.21 U	--	0.21 U	1.05 U	0.21 U
	0905163-08B	05/22/2009	15	0.215 U	0.043 U	0.043 U	0.043 U	0.043 U	--	0.043 U	0.215 U	0.0946
GP11	0905143-10B	05/21/2009	1.5	0.191 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	--	0.0382 U	0.191 U	0.0382 U
	0905143-11A	05/21/2009	5	0.211 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	--	0.0422 U	0.211 U	0.0422 U
	0905143-12A	05/21/2009	10	0.227 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	--	0.0455 U	0.227 U	0.0455 U
	0905143-13B	05/21/2009	15	0.22 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	--	0.0439 U	0.22 U	0.0439 U
MFP-01	K9708818-001	11/25/1997	0	--	--	--	--	--	--	--	--	--
	K9708818-002	11/25/1997	3	--	--	--	--	--	--	--	--	--
	K9708818-003	11/25/1997	6	--	--	--	--	--	--	--	--	--
	K9708818-004	11/25/1997	9	--	--	--	--	--	--	--	--	--
MFP-02	K9708818-008R	11/25/1997	6	--	--	--	--	--	--	--	--	--
MFP-04	K9708818-011	11/25/1997	0	--	--	--	--	--	--	--	--	--
	K9708818-012R	11/25/1997	3	--	--	--	--	--	--	--	--	--
MFP-05	K9708818-014R	11/25/1997	0	--	--	--	--	--	--	--	--	--
	K9708818-015	11/25/1997	3	--	--	--	--	--	--	--	--	--
	K9708818-016	11/25/1997	6	--	--	--	--	--	--	--	--	--
	K9708818-018	11/25/1997	9	--	--	--	--	--	--	--	--	--
MW-10		02/05/1991	0	--	--	--	--	--	2.5 U	--	--	--
		02/05/1991	0	--	--	--	--	--	2.5 U	--	--	--
		02/05/1991	0	--	--	--	--	--	2.5 U	--	--	--
MW-11S	K9707902-003	10/23/1997	0	250 U	100 U	100 U	100 U	100 U	--	250 U	250 U	**13000**
MW-13	MW13-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
	MW13-15	05/03/1993	15	--	--	--	--	--	--	--	--	--
MW-14	MW14-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
MW-17	MW17-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
MW-18	MW18-10	05/03/1993	10	--	--	--	--	--	--	--	--	15
	MW18-15	05/03/1993	15	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
MW-22	MW22-15	05/03/1993	15	--	--	--	--	--	--	--	--	--
MW-24	T5070221	04/02/1996	0.5	--	--	--	--	--	--	--	--	--
	T5070224	04/02/1996	11	--	--	--	--	--	--	--	--	22
	T5070226	04/02/1996	21	--	--	--	--	--	--	--	--	51
MW-25	T5060415	04/02/1996	3	--	--	--	--	--	--	--	--	0.12
MW-26	T5070204	04/02/1996	8.5	--	--	--	--	--	--	--	--	56
	T5070207	04/02/1996	21	--	--	--	--	--	--	--	--	17
MW-30	T5070239	04/02/1996	26	--	--	--	--	--	--	--	--	0.42 U
MW-31	T5070231	04/02/1996	21	--	--	--	--	--	--	--	--	0.15
	T5070232	04/02/1996	26	--	--	--	--	--	--	--	--	0.43 U
	T5070233	04/02/1996	31	--	--	--	--	--	--	--	--	0.42 U
MW-32	T5070241	04/02/1996	6	--	--	--	--	--	--	--	--	0.43 U
MW-40	K2204940-001	07/18/2002	55	--	--	--	--	--	--	--	--	12
	K2204940-002	07/19/2002	61	--	--	--	--	--	--	--	--	0.066
	K2204940-003	07/19/2002	66	--	--	--	--	--	--	--	--	0.054
MW-55	0806067-02A	06/10/2008	10	--	--	--	--	--	--	--	--	0.0457 U
	0806067-04A	06/10/2008	20	--	--	--	--	--	--	--	--	0.163
MW-58D	0806103-03A	06/18/2008	10	--	--	--	--	--	--	--	--	0.0363 U
	0806103-04A	06/18/2008	13.5	--	--	--	--	--	--	--	--	0.512
NPY-03		02/06/1991	0	--	--	--	--	--	2.5 U	--	--	--
NPY-04		02/06/1991	0	--	--	--	--	--	2.5 U	--	--	--
P-01	HC-P/01	02/06/1991	0	--	--	--	--	--	2.5 U	--	--	--
P-02	HC-P/02	02/06/1991	0	--	--	--	--	--	2.5 U	--	--	--
PP		06/18/1997	0	20 U	3 U	3 U	3 U	3 U	3 U	20 U	20 U	3 U
SS-01		02/06/1991	0	--	--	--	--	--	2.5 U	--	--	--
SS-3B	0807092-01A	07/16/2008	1.5	--	--	--	--	--	--	--	--	197

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene	
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800	
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000	
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV	
SS-4B	0807092-02A	07/16/2008	0.3	--	--	--	--	--	--	--	--	0.0347	
SS-9	0807092-07A	07/17/2008	0.3	--	--	--	--	--	--	--	--	0.0233	
SS-13	0903005-07A	02/26/2009	0.5	--	--	--	--	--	--	--	--	0.0071	U
SS-14	0903005-08A	02/26/2009	0.5	--	--	--	--	--	--	--	--	0.00725	U
SS-15	0903005-09A	02/26/2009	0.5	--	--	--	--	--	--	--	--	0.00787	U
SS-16	0903005-10A	02/26/2009	0.5	--	--	--	--	--	--	--	--	0.008	U
SS-17	0903005-11A	02/26/2009	0.5	--	--	--	--	--	--	--	--	0.00746	U
SS-18	0903005-12A	02/26/2009	0.5	--	--	--	--	--	--	--	--	0.00749	U
SS-19	0903005-13A	02/26/2009	0.5	--	--	--	--	--	--	--	--	0.0443	
T-4	K2005541-003	07/21/2000	1.5	--	--	--	--	--	--	--	--	0.01	U
	K2005541-002	07/21/2000	1.5	--	--	--	--	--	--	--	--	0.01	U
	K2005541-005	07/21/2000	1.75	--	--	--	--	--	--	--	--	0.01	U
	K2005541-001	07/21/2000	2	--	--	--	--	--	--	--	--	0.01	U
	K2005541-004	07/21/2000	2	--	--	--	--	--	--	--	--	0.01	U
TP-01	TP01-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	3.3	U
	TP01-9.5	05/03/1993	9.5	--	--	--	--	--	--	--	--	--	
TP-02	TP02-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	
	TP02-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	
TP-03	TP03-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	3.3	U
	TP03-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	
TP-04	TP04-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	
	TP04-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	
TP-05	TP05-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	
TP-06	TP06-3	05/03/1993	3	--	--	--	--	--	--	--	--	0.67	U
TP-09	TP09-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	
	TP09-4	05/03/1993	4	--	--	--	--	--	--	--	--	0.3	U
	TP09-9	05/03/1993	9	--	--	--	--	--	--	--	--	57	

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether	4-Chloro-3-methylphenol	4-Chloro-aniline	4-Chlorophenyl-phenyl ether	4-Methyl-phenol	4-Nitro-aniline	4-Nitro-phenol	Acenaphthene
MTCA Method B Cleanup Level				NV	NV	NV	320	NV	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	NV	NV	14,000	NV	NV	NV	NV	210,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
TP-10	TP10-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	0.33 U
	TP10-8.5	05/03/1993	8.5	--	--	--	--	--	--	--	--	50 U
TP-12	TP12-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--
	TP12-3	05/03/1993	3	--	--	--	--	--	--	--	--	67 U
	TP12-6.5	05/03/1993	6.5	--	--	--	--	--	--	--	--	2.6
TP-13	TP13-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--
	TP13-5.5	05/03/1993	5.5	--	--	--	--	--	--	--	--	--
TP-14	TP14-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--
TP-15	TP15-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--
TP-16	TP16-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--
	TP16-7	05/03/1993	7	--	--	--	--	--	--	--	--	--
TP-27	TP27-10	05/03/1993	10	--	--	--	--	--	--	--	--	--
TP-28	TP28-7	05/03/1993	7	--	--	--	--	--	--	--	--	--
	TP28-9.5	05/03/1993	9.5	--	--	--	--	--	--	--	--	250

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-1	L15788-1	04/06/2000	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	L15788-3	04/06/2000	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-2		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	11	--	--	--	--	--	--	--	--	--	--
	L15788-8	04/06/2000	0	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	L15788-6	04/06/2000	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-3		02/04/1991	5.5	--	--	--	--	--	--	--	--	--	--
		02/04/1991	15	--	--	--	--	--	--	--	--	--	--
B-4		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	12.5	--	--	--	--	--	--	--	--	--	--
B-5		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	18.5	--	--	--	--	--	--	--	--	--	--
	L15788-22	04/06/2000	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-6		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	33	--	--	--	--	--	--	--	--	--	--
	L15788-23	04/06/2000	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	L15788-25	04/06/2000	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-7		02/04/1991	5.5	--	--	--	--	--	--	--	--	--	--
		02/04/1991	13.5	--	--	--	--	--	--	--	--	--	--
	L15788-26	04/06/2000	2.5	0.01 U	--	0.01 U	0.01 U	--	--	--	--	--	--
	L15788-28	04/06/2000	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-8		02/04/1991	11	--	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--	--
	L15788-29	04/06/2000	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	L15788-31	04/06/2000	10	0.01 U	--	0.01 U	0.01 U U	0.01 U	0.01 U	0.01 U	0.01 U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-9		02/04/1991	5.5	--	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--	--
	L15788-32	04/06/2000	2.5	0.01 U	--	0.01 U	0.013	0.013	0.018	0.011	0.01 U	--	--
	L15788-33	04/06/2000	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	L15788-34	04/06/2000	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-10		02/04/1991	0	--	--	--	--	--	--	--	--	--	--
		02/04/1991	10.5	0.0025 U	--	0.0025 U	0.0025 U	0.003 U	0.0025 U	0.0025 U	0.0025 U	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--	--
B-11		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	13.5	--	--	--	--	--	--	--	--	--	--
B-12		02/05/1991	3	--	--	--	--	--	--	--	--	--	--
		02/05/1991	13	--	--	--	--	--	--	--	--	--	--
B-13		02/05/1991	15.5	--	--	--	--	--	--	--	--	--	--
B-14		02/05/1991	8	--	--	--	--	--	--	--	--	--	--
		02/05/1991	13	--	--	--	--	--	--	--	--	--	--
B-15		02/05/1991	3	--	--	--	--	--	--	--	--	--	--
		02/05/1991	15.5	--	--	--	--	--	--	--	--	--	--
B-19	B19-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
B-20	B20-20	05/03/1993	20	6.2	--	44	20	6.3	8.6	--	3.6	--	--
B-31	K9708881-014	11/26/1997	3.5	0.005 U	--	0.014	0.006	0.005 U	0.005 U	0.005 U	0.005 U	--	--
	K9708881-013	11/26/1997	8	0.005 U	--	0.005 U	0.01	0.005 U	0.005	0.005 U	0.005 U	--	--
	K9708881-012	11/26/1997	15.5	0.32	--	13	7.8	1.26	1.27	0.246	1.22	--	--
B-32	K9709176-011	12/05/1997	6.5	0.005 U	--	0.005 U	0.008	0.016	0.017	0.015	0.019	--	--
	K9709176-012	12/08/1997	14	--	--	--	--	--	--	--	--	--	--
B-33	K9709014-004	12/04/1997	3.5	0.237	--	8.6	4.3	0.693	0.946	0.228	0.966	--	--
	K9709014-005	12/04/1997	9.5	0.026	--	1.18	0.618	0.146	0.193	0.05	0.216	--	--
		12/04/1997	15.5	--	--	--	--	--	--	--	--	--	--
B-34	K9708881-015	11/26/1997	3.5	0.005 U	--	0.279	0.186	0.065	0.081	0.035	0.088	--	--
	K9708881-016	11/26/1997	8	--	--	--	--	--	--	--	--	--	--
		11/26/1997	17	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-35	K9708926-006	12/02/1997	3.5	--	--	--	--	--	--	--	--	--	--
		12/02/1997	11	--	--	--	--	--	--	--	--	--	--
		12/02/1997	14	--	--	--	--	--	--	--	--	--	--
B-36	K9709014-001	12/03/1997	5	--	--	--	--	--	--	--	--	--	--
		12/03/1997	9.5	0.729	--	22	11	1.54	1.44	0.276	1.61	--	--
		12/03/1997	15.5	--	--	--	--	--	--	--	--	--	--
B-37	K9708926-001	12/02/1997	5	--	--	--	--	--	--	--	--	--	--
		12/03/1997	15.5	0.005 U	--	0.005	0.006	0.005 U	0.005 U	0.005 U	0.005 U	--	--
B-38	K9709176-008	12/05/1997	3.5	0.036	--	3.9	1.23	0.376	0.468	0.113	0.531	--	--
B-39	K9800342-007	01/19/1998	6.5	--	--	--	--	--	--	--	--	--	--
	K9800342-008	01/19/1998	12.5	--	--	--	--	--	--	--	--	--	--
B-42	K9709176-013	12/09/1997	8	0.048	--	3	0.862	0.26	0.265	0.067	0.316	--	--
	K9709176-014	12/09/1997	12.5	--	--	--	--	--	--	--	--	--	--
B-43	K9708705-007	11/20/1997	3.5	0.005 U	--	0.012	0.016	0.008	0.009	0.006	0.009	--	--
B-44	K9708705-009	11/20/1997	6.5	0.035	--	1.12	0.35	0.094	0.1 U	0.028	0.136	--	--
B-45	K9708655-012	11/19/1997	5	0.007	--	0.096	0.063	0.015	0.022	0.007	0.022	--	--
B-46	K9708655-007	11/19/1997	5	0.005 U	--	0.194	0.016	0.005	0.007	0.005 U	0.008	--	--
	K9708655-008	11/19/1997	9.5	0.005 U	--	0.022	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
B-47	K9708655-014	11/18/1997	9.5	0.005 U	--	0.006	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
B-48	K9708705-005	11/20/1997	3.5	0.008	--	0.195	0.051	0.014	0.018	0.009	0.019	--	--
B-49	K9708815-004	11/25/1997	5	--	--	--	--	--	--	--	--	--	--
B-50	K9708704-008	11/21/1997	8	0.005 U	--	0.031	0.011	0.005	0.005	0.005 U	0.005 U	--	--
B-51	K9708815-003	11/24/1997	9.5	0.1 U	--	0.01 U	0.01 U	0.01 U	0.02	0.02 U	0.01 U	--	--
B-52	K9708704-005	11/20/1997	3.5	0.009	--	0.24	0.214	0.07	0.097	0.038	0.132	--	--
B-53	K9800300-013	01/14/1998	9.5	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005	--	--
	K9800300-014	01/14/1998	15.5	0.005 U	--	0.325	0.224	0.071	0.078	0.02 J	0.084	--	--
B-54	K9800300-015	01/14/1998	8	0.005 U	--	0.093	0.032	0.008	0.008	0.005 J	0.006	--	--
B-55	K9800300-017	01/15/1998	8	0.005 U	--	0.01	0.005 U	0.005 U	0.005 U	0.106 J	0.005 U	--	--
B-56	K9800342-001	01/15/1998	6.5	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--
B-57	K9800342-003	01/16/1998	8	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-58	K9800342-005	01/16/1998	6.5	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U	0.005	0.005 U	--	--
B-58A	K9803817-001	06/12/1998	5	0.01 U	--	0.005 U	0.01 U	0.01	0.026	0.016	0.031	--	--
	K9803817-002	06/12/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-62	K9803817-005	06/12/1998	5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9803817-006	06/12/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-63	K9803817-007	06/12/1998	5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.007	0.01 U	--	--
	K9803817-008	06/12/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-66	K9803817-009	06/12/1998	5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9803817-010	06/12/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-69	K9803927-011	06/16/1998	0.5	0.079	--	0.54	2	0.93	2.3	0.43	2.1	--	--
	K9803927-001	06/16/1998	2.5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9803927-012	06/16/1998	5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9803927-013	06/16/1998	10	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9803927-002	06/16/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-72	K9803927-003	06/17/1998	0.5	2.4	--	90	32	1	9.1	2.7	12	--	--
	K9803927-004	06/17/1998	5	0.01 U	--	0.047	0.045	0.012	0.013	0.005 U	0.017	--	--
	K9803927-005	06/17/1998	10	0.01 U	--	0.07	0.068	0.018	0.019	0.005 U	0.025	--	--
	K9803927-006	06/17/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-73	K9803927-008	06/17/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-74	K9803927-009	06/17/1998	2.5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9803927-010	06/17/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-75	K9803927-014	06/17/1998	2.5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9803927-015	06/17/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-76	K9803927-016	06/17/1998	10	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9803927-017	06/17/1998	27	0.01 U	--	0.005 U	0.031	0.022	0.021	0.008	0.021	--	--
B-77	K9803927-018	06/17/1998	2.5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9803927-019	06/17/1998	5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9803927-020	06/17/1998	17	5 U	--	40	16	6.3	5.9	2.5 U	7.7	--	--
B-78	K9803979-001	06/18/1998	0.5	0.25	--	15	7.3	3.1	3.4	1.3	3.6	--	--
	K9803979-002	06/18/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene		Aniline	Anthracene		Benzo(a)-anthracene		Benzo(a)-pyrene[(a)]		Benzo(b)-fluoranthene		Benzo(ghi)-perylene		Benzo(k)-fluoranthene		Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV		180	24,000		NV		0.14		NV		NV		NV		320,000	24,000
MTCA Method C Cleanup Level				NV		23,000	1,100,000		NV		18		NV		NV		NV		14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV		NV	NV		NV		12		NV		NV		NV		NV	NV
B-79	K9803979-004	06/18/1998	2.5	0.1	U	--	0.05	U	0.1	U	0.1	U	0.1	U	0.05	U	0.1	U	--	--
	K9803979-006	06/18/1998	10	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
	K9803979-007	06/18/1998	17	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
B-80	K9803995-001	06/19/1998	2.5	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
	K9803995-002	06/19/1998	15	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
	K9803995-003	06/19/1998	25	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
B-81	K9803995-004	06/19/1998	2.5	0.01	U	--	0.013		0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
B-82	K9803995-005	06/19/1998	10	0.01	U	--	0.015		0.01		0.01	U	0.01	U	0.005	U	0.01	U	--	--
	K9803995-006	06/19/1998	20	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
B-83	K9804079-001	06/23/1998	5	0.01	U	--	0.038		0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
	K9804079-002	06/23/1998	17	0.42		--	19		5.3		1.6		1.5		0.33		1.7		--	--
B-84	K9804079-003	06/23/1998	10	0.01	U	--	0.8		0.061		0.016		0.018		0.005	U	0.024		--	--
	K9804079-004	06/23/1998	35	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
B-85	K9804079-005	06/23/1998	5	0.03		--	0.2		0.14		0.11		0.11		0.049		0.16		--	--
	K9804079-006	06/23/1998	10	5.1		--	92		30		120		9.8		2.7		13		--	--
B-86	K9804079-007	06/23/1998	5	0.01	U	--	0.014		0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
	K9804079-008	06/23/1998	15	1.5		--	34		14		4.8		4.2		1		5.4		--	--
B-87	K9804079-009	06/23/1998	5	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
	K9804079-010	06/23/1998	15	0.015		--	0.74		0.29		0.089		0.081		0.021		0.095		--	--
B-88	K9804079-011	06/23/1998	5	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
	K9804079-012	06/23/1998	15	0.01	U	--	0.022		0.017		0.01	U	0.01	U	0.005	U	0.01	U	--	--
B-89	K9804079-013	06/23/1998	5	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
	K9804079-014	06/23/1998	15	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
B-90	K9804079-015	06/23/1998	0.5	0.2	U	--	2.8		3.8		1.9		2.6		0.68		2.8		--	--
	K9804079-016	06/23/1998	17.5	0.01	U	--	0.015		0.023		0.01	U	0.01	U	0.005	U	0.011		--	--
B-91	K9804079-017	06/23/1998	0.5	0.01	U	--	0.3		0.28		0.12		0.22		0.051		0.24		--	--
	K9804079-018	06/23/1998	15	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
B-92	K9804079-019	06/23/1998	10	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--
	K9804079-020	06/23/1998	30	0.01	U	--	0.005	U	0.01	U	0.01	U	0.01	U	0.005	U	0.01	U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-93	K9804129-001	06/24/1998	25	0.01 U	--	0.083	0.068	0.019	0.022	0.006	0.031	--	--
	K9804129-002	06/24/1998	40	0.01 U	--	0.094	0.09	0.025	0.028	0.007	0.037	--	--
B-94	K9804129-003	06/24/1998	10	0.028	--	0.95	0.35	0.13	0.12	0.04	0.16	--	--
	K9804129-004	06/24/1998	35	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-95	K9804129-005	06/24/1998	10	0.07	--	7.8	3.5	1.1	1.2	0.33	1.4	--	--
	K9804129-006	06/24/1998	25	0.01 U	--	0.018	0.01	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9804129-007	06/24/1998	32.5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-96	K9804470-002	07/08/1998	30	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-97	K9804470-003	07/08/1998	2.5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-98	K9804470-005	07/08/1998	17	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-99	K9804470-007	07/08/1998	45	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9804470-008	07/08/1998	64	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-100	K9804470-010	07/08/1998	45	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9804470-011	07/08/1998	65	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-101	K9804470-012	07/08/1998	10	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
	K9804470-013	07/08/1998	33	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-103	K9804470-014	07/08/1998	2.5	0.01 U	--	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	--	--
B-104	K9903514-001	06/03/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903514-002	06/03/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903514-005	06/03/1999	25	--	--	--	--	--	--	--	--	--	--
B-105	K9903514-010	06/03/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903514-011	06/03/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903514-013	06/03/1999	25	--	--	--	--	--	--	--	--	--	--
B-106	K9903553-001	06/04/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903553-002	06/04/1999	15	--	--	--	--	--	--	--	--	--	--
B-107	K9903553-007	06/04/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903553-009	06/04/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903584-002	06/07/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903584-005	06/07/1999	45	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene(a)	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-108	K9903584-008	06/07/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903584-009	06/07/1999	10	--	--	--	--	--	--	--	--	--	--
B-109	K9903616-007	06/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903616-008	06/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903616-010	06/08/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903616-011	06/08/1999	40	--	--	--	--	--	--	--	--	--	--
B-110	K9903665-001	06/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903665-002	06/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903665-004	06/08/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903665-009	06/08/1999	43	--	--	--	--	--	--	--	--	--	--
B-111	K9903711-001	06/09/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903711-002	06/09/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903711-004	06/10/1999	30	--	--	--	--	--	--	--	--	--	--
B-112	K9903711-009	06/10/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903711-013	06/10/1999	30	--	--	--	--	--	--	--	--	--	--
B-113	K9903723-001	06/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903723-002	06/11/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903723-003	06/11/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903723-005	06/11/1999	25	--	--	--	--	--	--	--	--	--	--
B-114	K9903794-002	06/11/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903794-003	06/11/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903794-007	06/14/1999	30	--	--	--	--	--	--	--	--	--	--
B-115	K9903794-011	06/14/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903794-012	06/14/1999	15	--	--	--	--	--	--	--	--	--	--
B-116	K9903826-002	06/14/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903826-007	06/15/1999	40	--	--	--	--	--	--	--	--	--	--
	K9903826-018	06/15/1999	95	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene$^{(a)}$	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-117	K9903826-021	06/15/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903826-023	06/15/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903871-004	06/16/1999	65	--	--	--	--	--	--	--	--	--	--
	K9903871-008	06/16/1999	90	--	--	--	--	--	--	--	--	--	--
B-118	K9903871-009	06/16/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903871-010	06/16/1999	10	--	--	--	--	--	--	--	--	--	--
B-119	K9903915-001	06/17/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9903915-002	06/17/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903915-004	06/17/1999	15	--	--	--	--	--	--	--	--	--	--
B-139	K9907039-005	10/04/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907039-009	10/04/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907039-006	10/04/1999	20	--	--	--	--	--	--	--	--	--	--
B-140	K9907141-001	10/06/1999	10	0.01 U	--	0.028	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-141	K9907141-002	10/06/1999	2.5	0.05 U	--	0.046	0.06	0.083	0.071	0.044	0.08	--	--
B-142	K9907141-003	10/07/1999	10	0.55	--	15	5.5	1.9	1.8	0.39	1.8	--	--
B-147	K9907141-004	10/08/1999	10	0.37	--	19	7.4	2.1	2.1	0.42	2.2	--	--
	K9907141-005	10/08/1999	20	--	--	--	--	--	--	--	--	--	--
B-148	K9907141-006	10/08/1999	10	0.28	--	7.2	3.1	1	1.1	0.19	1.2	--	--
	K9907141-007	10/08/1999	15	0.22	--	10	2.8	0.95	0.99	0.18	1.1	--	--
B-149	K9907141-008	10/08/1999	3	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907141-009	10/08/1999	10	0.87	--	33	9.1	2.7	2.7	0.54	2.9	--	--
	K9907141-010	10/08/1999	20	--	--	--	--	--	--	--	--	--	--
B-150	K9907223-003	10/11/1999	10.5	0.065	--	2	0.61	0.21	0.25	0.052	0.24	--	--
B-153	K9907223-007	10/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907223-008	10/11/1999	10	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-155	K9907223-009	10/12/1999	5	0.05 U	--	0.099	0.054	0.016	0.03	0.01 U	0.03	--	--
	K9907223-016	10/12/1999	9	0.05 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-160	K9907379-011	10/13/1999	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-161	K9907379-010	10/13/1999	10	--	--	--	--	--	--	--	--	--	--
B-162	K9907379-009	10/13/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-165	K9907379-008	10/13/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-167	K9907379-006	10/14/1999	20	--	--	--	--	--	--	--	--	--	--
B-170	K9907379-017	10/15/1999	7.5	--	--	--	--	--	--	--	--	--	--
B-187	K9907559-010	10/21/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-188	K9907559-011	10/21/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907559-012	10/21/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-189	K9907607-001	10/22/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907607-002	10/22/1999	12	--	--	--	--	--	--	--	--	--	--
B-190	K9907700-001	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907700-002	10/25/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907700-003	10/25/1999	10	--	--	--	--	--	--	--	--	--	--
B-191	K9907700-004	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907700-005	10/25/1999	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-192	K9907700-006	10/25/1999	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907700-007	10/25/1999	5	--	--	--	--	--	--	--	--	--	--
B-193	K9907700-008	10/25/1999	2.5	0.01 U	--	0.11	0.038	0.014	0.024	0.01 U	0.016	--	--
	K9907700-009	10/25/1999	5	0.01 U	--	0.42	0.67	0.14	0.27	0.037	0.17	--	--
	K9907700-010	10/25/1999	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-194	K9907700-011	10/25/1999	2.5	0.027	--	0.72	0.25	0.072	0.092	0.02	0.076	--	--
	K9907700-012	10/25/1999	5	0.01 U	--	0.01 U	0.015	0.012	0.02	0.011	0.014	--	--
	K9907700-013	10/25/1999	10	0.051	--	2.5	0.75	0.23	0.26	0.06	0.21	--	--
B-195	K9907700-014	10/26/1999	2.5	0.034	--	0.54	0.72	1	0.97	0.35	0.85	--	--
	K9907700-015	10/26/1999	5	0.01 U	--	0.041	0.036	0.033	0.093	0.022	0.073	--	--
	K9907700-016	10/26/1999	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-196	K9907700-017	10/26/1999	3	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907700-018	10/26/1999	9	0.01 U	--	0.056	0.078	0.015	0.047	0.01 U	0.035	--	--
B-197	K9907767-001	10/26/1999	2.5	0.01 U	--	0.025	0.025	0.022	0.068	0.038	0.062	--	--
	K9907767-002	10/26/1999	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.014	--	--
	K9907767-003	10/26/1999	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-198	K9907767-004	10/27/1999	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907767-005	10/27/1999	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-199	K9907767-007	10/27/1999	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907767-008	10/27/1999	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907767-009	10/27/1999	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907767-010	10/27/1999	15	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-200	K9907767-012	10/27/1999	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907767-013	10/27/1999	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-201	K9907767-014	10/28/1999	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907767-015	10/28/1999	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907767-016	10/28/1999	10	--	--	--	--	--	--	--	--	--	--
	K9907767-017	10/28/1999	15	0.046	--	2.3	0.55	0.16	0.18	0.04	0.22	--	--
	K9907767-018	10/28/1999	20	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-202	K9907767-019	10/28/1999	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907767-020	10/28/1999	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907767-021	10/28/1999	15	--	--	--	--	--	--	--	--	--	--
B-203	K9907788-009	10/28/1999	2.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907788-010	10/28/1999	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9907788-011	10/28/1999	10	0.021	--	0.52	1.2	0.47	0.8	0.13	0.87	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene		Aniline	Anthracene		Benzo(a)-anthracene		Benzo(a)-pyrene[(a)]		Benzo(b)-fluoranthene		Benzo(ghi)-perylene		Benzo(k)-fluoranthene		Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV		180	24,000		NV		0.14		NV		NV		NV		320,000	24,000
MTCA Method C Cleanup Level				NV		23,000	1,100,000		NV		18		NV		NV		NV		14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV		NV	NV		NV		12		NV		NV		NV		NV	NV
B-221	K9908093-005	11/09/1999	2.5	0.01	U	--	0.01	U	0.01	U	0.01	U	0.013		0.01	U	0.012		--	--
	K9908093-006	11/09/1999	7.5	0.01	U	--	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	--	--
B-222	K9908120-001	11/10/1999	2.5	0.34		--	23		3.4		0.9		1.1		0.23		1.5		--	--
	K9908120-002	11/10/1999	5	0.014		--	0.74		0.3		0.096		0.12		0.026		0.14		--	--
	K9908120-003	11/10/1999	10	0.01	U	--	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	--	--
B-223	K9908120-005	11/10/1999	2.5	--		--	--		--		--		--		--		--		--	--
	K9908120-006	11/10/1999	5	0.01	U	--	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	--	--
	K9908120-007	11/10/1999	10	0.01	U	--	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	--	--
B-224	K9908120-008	11/10/1999	2.5	0.01	U	--	0.01	U	0.01	U	0.01	U	0.01		0.01	U	0.01		--	--
	K9908120-009	11/10/1999	5	--		--	--		--		--		--		--		--		--	--
	K9908120-010	11/10/1999	10	--		--	--		--		--		--		--		--		--	--
B-225	K9908120-012	11/10/1999	2.5	--		--	--		--		--		--		--		--		--	--
	K9908120-013	11/10/1999	5	--		--	--		--		--		--		--		--		--	--
B-226	K9908186-001	11/11/1999	2.5	--		--	--		--		--		--		--		--		--	--
	K9908186-002	11/11/1999	5	--		--	--		--		--		--		--		--		--	--
	K9908186-003	11/11/1999	10	--		--	--		--		--		--		--		--		--	--
B-227	K9908186-005	11/11/1999	2.5	--		--	--		--		--		--		--		--		--	--
	K9908186-006	11/11/1999	5	--		--	--		--		--		--		--		--		--	--
B-228	K9908186-008	11/11/1999	1.5	--		--	--		--		--		--		--		--		--	--
	K9908186-010	11/11/1999	5	--		--	--		--		--		--		--		--		--	--
B-230	K9908189-001	11/12/1999	2.5	0.01	U	--	0.03		0.024		0.01	U	0.01	U	0.01	U	0.01	U	--	--
	K9908189-003	11/12/1999	5	0.01	U	--	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	--	--
B-231	K9908189-005	11/12/1999	2.5	0.01	U	--	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	--	--
	K9908189-006	11/12/1999	5	--		--	--		--		--		--		--		--		--	--
	K9908189-007	11/12/1999	7	0.01	U	--	0.041		0.032		0.023		0.027		0.01	U	0.022		--	--
B-232	K9908806-003	12/07/1999	5	--		--	--		--		--		--		--		--		--	--
	K9908806-007	12/07/1999	25	--		--	--		--		--		--		--		--		--	--
B-233	K9908806-009	12/07/1999	5	--		--	--		--		--		--		--		--		--	--
	K9908806-011	12/07/1999	15	0.014		--	0.14		0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	--	--
	K9908806-013	12/07/1999	25	--		--	--		--		--		--		--		--		--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-234	K9908806-015	12/07/1999	10	1	--	24	7.7	2.4	2.4	0.49	2.6	--	--
	K9908806-016	12/07/1999	15	0.01	--	0.12	0.01	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9908806-018	12/07/1999	25	--	--	--	--	--	--	--	--	--	--
B-235	K9908924-016	12/08/1999	10	0.01 U	--	0.98	0.13	0.029	0.032	0.01 U	0.038	--	--
	K9908924-017	12/08/1999	15	0.01 U	--	0.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9908924-019	12/08/1999	25	0.01 U	--	0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-236	K9908924-023	12/08/1999	10	0.01 U	--	0.077	0.017	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9908924-024	12/08/1999	15	0.012	--	0.058	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9908924-026	12/08/1999	25	--	--	--	--	--	--	--	--	--	--
B-237	K9908924-028	12/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908924-030	12/08/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908924-032	12/08/1999	25	--	--	--	--	--	--	--	--	--	--
B-238	K9908924-003	12/09/1999	10	0.01 U	--	0.18	0.039	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9908924-004	12/09/1999	15	0.027	--	0.82	0.42	0.19	0.21	0.042	0.2	--	--
	K9908924-006	12/09/1999	25	--	--	--	--	--	--	--	--	--	--
B-239	K9908924-009	12/09/1999	10	0.01 U	--	0.23	0.079	0.016	0.019	0.01 U	0.025	--	--
	K9908924-010	12/09/1999	15	0.014	--	0.2	0.076	0.02	0.024	0.01 U	0.03	--	--
	K9908924-012	12/09/1999	25	--	--	--	--	--	--	--	--	--	--
B-240	K9908924-034	12/10/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908924-036	12/10/1999	15	0.01 U	--	0.22	0.035	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9908924-038	12/10/1999	25	--	--	--	--	--	--	--	--	--	--
B-241	K9908924-039	12/10/1999	5	0.01 U	--	0.087	0.083	0.042	0.063	0.022	0.067	--	--
	K9908924-041	12/10/1999	15	0.015	--	0.31	0.022	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9908924-043	12/10/1999	25	--	--	--	--	--	--	--	--	--	--
B-242	K9908973-007	12/13/1999	25	--	--	--	--	--	--	--	--	--	--
B-243	K9909023-005	12/14/1999	25	--	--	--	--	--	--	--	--	--	--
B-244	K9909069-002	12/15/1999	25	--	--	--	--	--	--	--	--	--	--
	K9909069-005	12/15/1999	35	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-245	K9909069-009	12/15/1999	15	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9909069-012	12/15/1999	30	0.01 U	--	0.075	0.045	0.011	0.011	0.01 U	0.017	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene(a)	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-246	K9909069-015	12/16/1999	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9909069-016	12/16/1999	10	--	--	--	--	--	--	--	--	--	--
	K9909069-018	12/16/1999	20	--	--	--	--	--	--	--	--	--	--
B-247	K9909148-001	12/17/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909148-002	12/17/1999	5	--	--	--	--	--	--	--	--	--	--
	K9909148-004	12/17/1999	16	--	--	--	--	--	--	--	--	--	--
B-248	K9909181-001	12/20/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909181-004	12/20/1999	15	--	--	--	--	--	--	--	--	--	--
	K9909181-006	12/20/1999	25	--	--	--	--	--	--	--	--	--	--
B-249	K9909181-008	12/20/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909181-012	12/20/1999	20	--	--	--	--	--	--	--	--	--	--
	K9909181-013	12/20/1999	25	--	--	--	--	--	--	--	--	--	--
B-250	K9909223-005	12/21/1999	20	0.01 U	--	0.01	0.01 U	0.01 U	0.01 U U	0.02	0.01 U	--	--
	K9909223-006	12/21/1999	25	0.01 U	--	0.035	0.01 U	0.01 U	0.01 U U	0.01 U	0.01 U	--	--
	K9909223-004	12/21/1999	35	0.01 U	--	0.087	0.076	0.017	0.016	0.01 U	0.032	--	--
B-251	K9909277-001	12/22/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909277-003	12/22/1999	10	--	--	--	--	--	--	--	--	--	--
	K9909277-005	12/22/1999	25	--	--	--	--	--	--	--	--	--	--
B-252	K9909277-012	12/22/1999	15	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9909277-013	12/22/1999	20	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K9909277-014	12/22/1999	25	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-253	K9909277-021	12/23/1999	25	0.01 U	--	0.17	0.049	0.016	0.017	0.01 U	0.023	--	--
B-255	K2000354-003	01/14/2000	10	0.1	--	9.5	4.1	1.6	1.4	0.27	1.7	--	--
	K2000354-004	01/14/2000	15	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K2000354-006	01/14/2000	25	--	--	--	--	--	--	--	--	--	--
B-256	K2000354-010	01/14/2000	5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K2000354-011	01/14/2000	10	0.01 U	--	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K2000354-013	01/14/2000	20	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
B-261	K2000528-003	01/20/2000	10	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K2000528-004	01/20/2000	15	0.017	--	0.42	0.27	0.066	0.073	0.017	0.07	--	--
	K2000528-006	01/20/2000	30	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
B-264	K2106063-001	08/17/2001	2.5	0.014 U	--	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	--	--
	K2106063-003	08/17/2001	10	0.013 U	--	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	--	--
B-265	K2106063-005	08/17/2001	5	0.013 U	--	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	--	--
B-266	K2106063-008	08/17/2001	5	0.016 U	--	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	--	--
B-272	K2106063-023	08/17/2001	5	0.012 U	--	0.19	0.1	0.031	0.057	0.012 U	0.047	--	--
B-273	K2106063-025	08/20/2001	5	0.015 U	--	0.19	0.061	0.02	0.025	0.015 U	0.022	--	--
B-274	K2106063-030	08/20/2001	5	0.014 U	--	0.014 U	0.016	0.014 U	0.014 U	0.014 U	0.014 U	--	--
B-304	0806067-07A	06/12/2008	10	0.518	--	3.65	6.08	1.36	3.2	0.561	1.25	--	--
	0806067-09A	06/12/2008	19.5	0.0456 U	--	0.0456 U	0.0456 U	0.0456 U	0.0456 U	0.0456 U	0.0456 U	--	--
B-305	0806067-12A	06/12/2008	10	0.0463 U	--	0.0463 U	0.0463 U	0.0463 U	0.0463 U	0.0463 U	0.0463 U	--	--
	0806067-14A	06/12/2008	19	0.0459 U	--	0.0459	0.0459 U	0.0459 U	0.0459 U	0.0459 U	0.0459 U	--	--
B-306	1091024001	03/11/2009	2.5	1.88	--	77.7	49.1	15.7	39.6	5.77	10.7	--	--
	1091029003	03/11/2009	18	0.172	--	6.64	17.5	3.07	5.56	0.892	1.36	--	--
B-308	1091024002	03/11/2009	0.5	0.014	--	0.0993	0.0301	0.0469	0.161	0.0881	0.0357	--	--
	1091024003	03/11/2009	2.5	0.0211	--	0.077	0.0203	0.0283	0.0552	0.0923	0.0203	--	--
	1091024004	03/11/2009	15	0.131	--	19.5	4.72	1.83	2.34	0.394	1.03	--	--
B-313	0905143-06A	05/21/2009	2.5	0.0353 U	--	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.706 U	0.0353 U
	0905143-07B	05/21/2009	5	0.0358 U	--	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.717 U	0.0358 U
	0905143-08B	05/21/2009	10	0.043 U	--	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.86 U	0.043 U
	0905143-09B	05/21/2009	15	0.0443 U	--	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.887 U	0.0443 U
CT		02/07/1991	0	--	--	--	--	--	--	--	--	--	--
		02/07/1991	0	--	--	--	--	--	--	--	--	--	--
DS-E		06/18/1997	0	0.3 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U
DS-N		06/18/1997	0	3 U	10 U	3 U	3 U	3 U	3 U	3 U	3 U	20 U	3 U
DS-S		06/18/1997	0	1.5 U	5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	10 U	1.5 U
DS-W		06/18/1997	0	0.3 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
GP8	0905163-05B	05/22/2009	1.4	0.175 U	--	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	3.51 U	0.175 U
	0905163-06B	05/22/2009	5	0.0392 U	--	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.784 U	0.0392 U
	0905163-07B	05/22/2009	11	0.21 U	--	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	4.2 U	0.21 U
	0905163-08B	05/22/2009	15	0.043 U	--	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.86 U	0.043 U
GP11	0905143-10B	05/21/2009	1.5	0.0382 U	--	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.764 U	0.0382 U
	0905143-11A	05/21/2009	5	0.0422 U	--	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.844 U	0.0422 U
	0905143-12A	05/21/2009	10	0.0455 U	--	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.91 U	0.0455 U
	0905143-13B	05/21/2009	15	0.0439 U	--	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.878 U	0.0439 U
MFP-01	K9708818-001	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-002	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
	K9708818-003	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
	K9708818-004	11/25/1997	9	--	--	--	--	--	--	--	--	--	--
MFP-02	K9708818-008R	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
MFP-04	K9708818-011	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-012R	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
MFP-05	K9708818-014R	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-015	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
	K9708818-016	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
	K9708818-018	11/25/1997	9	--	--	--	--	--	--	--	--	--	--
MW-10		02/05/1991	0	--	--	--	--	--	--	--	--	--	--
		02/05/1991	0	--	--	--	--	--	--	--	--	--	--
		02/05/1991	0	--	--	--	--	--	--	--	--	--	--
MW-11S	K9707902-003	10/23/1997	0	250	250 U	4500	1300	590	590	140	570	250 U	100 U
MW-13	MW13-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
	MW13-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--
MW-14	MW14-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
MW-17	MW17-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
MW-18	MW18-10	05/03/1993	10	--	--	3.9	--	--	--	--	--	--	--
	MW18-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene[(a)]	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
MW-22	MW22-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--
MW-24	T5070221	04/02/1996	0.5	--	--	--	--	0.26	0.52	0.16	0.31	--	--
	T5070224	04/02/1996	11	--	--	9	2.7	0.83	0.87	0.24	0.74	--	--
	T5070226	04/02/1996	21	--	--	22	8.2	3.1	2.8	1	3	--	--
MW-25	T5060415	04/02/1996	3	--	--	0.1	0.14	0.12	0.15	0.07	0.093	--	--
MW-26	T5070204	04/02/1996	8.5	--	--	14	5.1	1.9	2	0.42	2	2.4 U	--
	T5070207	04/02/1996	21	--	--	4.9	1.9	0.65	0.69	0.14	0.72	2.2 U	--
MW-30	T5070239	04/02/1996	26	--	--	0.42 U	0.15 U	0.15 U	--	--	--	--	--
MW-31	T5070231	04/02/1996	21	--	--	0.098	0.052	0.15 U	--	--	--	--	--
	T5070232	04/02/1996	26	--	--	0.43 U	0.16 U	0.16 U	--	--	--	--	--
	T5070233	04/02/1996	31	--	--	0.42 U	0.15 U	0.15 U	--	--	--	--	--
MW-32	T5070241	04/02/1996	6	--	--	0.43 U	0.16 U	0.16 U	--	--	--	--	--
MW-40	K2204940-001	07/18/2002	55	0.39	--	6	3	1.6	1.4	0.37	1.6	--	--
	K2204940-002	07/19/2002	61	0.0056 U	--	0.1	0.062	0.031	0.03	0.0071	0.033	--	--
	K2204940-003	07/19/2002	66	0.0065 U	--	0.037	0.026	0.012	0.013	0.0065 U	0.015	--	--
MW-55	0806067-02A	06/10/2008	10	0.0457 U	--	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	--	--
	0806067-04A	06/10/2008	20	0.0469 U	--	0.0469 U	0.0469 U	0.0469 U	0.0469 U	0.0469 U	0.0469 U	--	--
MW-58D	0806103-03A	06/18/2008	10	0.0363 U	--	0.0363 U	0.0363 U	0.0363 U	0.0363 U	0.0363 U	0.0363 U	--	--
	0806103-04A	06/18/2008	13.5	0.0497 U	--	0.0497 U	0.0497 U	0.0497 U	0.0497 U	0.0497 U	0.0497 U	--	--
NPY-03		02/06/1991	0	--	--	--	--	--	--	--	--	--	--
NPY-04		02/06/1991	0	--	--	--	--	--	--	--	--	--	--
P-01	HC-P/01	02/06/1991	0	--	--	--	--	--	--	--	--	--	--
P-02	HC-P/02	02/06/1991	0	--	--	--	--	--	--	--	--	--	--
PP		06/18/1997	0	3 U	10 U	3 U	3 U	3 U	3 U	3 U	3 U	20 U	3 U
SS-01		02/06/1991	0	--	--	--	--	--	--	--	--	--	--
SS-3B	0807092-01A	07/16/2008	1.5	2.18	--	58.6	49.8	17.8	28.7	1.11	7.04	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene$^{(a)}$	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
SS-4B	0807092-02A	07/16/2008	0.3	0.104	--	0.233	0.658	0.467	2.16	0.393	0.447	--	--
SS-9	0807092-07A	07/17/2008	0.3	0.105	--	0.0903	0.0395	0.0924	0.164	0.0776	0.0353	--	--
SS-13	0903005-07A	02/26/2009	0.5	0.0071 U	--	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	--	--
SS-14	0903005-08A	02/26/2009	0.5	0.00725 U	--	0.0087	0.00725 U	0.00725 U	0.0246	0.0116	0.0145	--	--
SS-15	0903005-09A	02/26/2009	0.5	0.00787 U	--	0.00787 U	0.00787 U	0.00787 U	0.00787	0.00866	0.00787 U	--	--
SS-16	0903005-10A	02/26/2009	0.5	0.008 U	--	0.0216	0.0104	0.008 U	0.036	0.0112	0.008 U	--	--
SS-17	0903005-11A	02/26/2009	0.5	0.00746 U	--	0.00746 U	0.00746 U	0.00746 U	0.00746 U	0.00746 U	0.00746 U	--	--
SS-18	0903005-12A	02/26/2009	0.5	0.00749 U	--	0.00749 U	0.00749 U	0.00749 U	0.00749 U	0.00749 U	0.00749 U	--	--
SS-19	0903005-13A	02/26/2009	0.5	0.302	--	0.628	2.05	1.5	3.08	0.559	1.09	--	--
T-4	K2005541-003	07/21/2000	1.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K2005541-002	07/21/2000	1.5	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K2005541-005	07/21/2000	1.75	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K2005541-001	07/21/2000	2	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
	K2005541-004	07/21/2000	2	0.01 U	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--
TP-01	TP01-0.3	05/03/1993	0.3	--	--	3.3 U	--	--	--	--	--	--	--
	TP01-9.5	05/03/1993	9.5	--	--	--	--	--	--	--	--	--	--
TP-02	TP02-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
	TP02-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
TP-03	TP03-0.3	05/03/1993	0.3	--	--	3.3 U	--	--	--	--	--	--	--
	TP03-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-04	TP04-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
	TP04-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-05	TP05-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	--	--	0.67 U	--	--	--	--	--	--	--
TP-09	TP09-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP09-4	05/03/1993	4	--	--	0.3 U	--	--	--	--	--	--	--
	TP09-9	05/03/1993	9	--	--	23	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Acenaphthylene	Aniline	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene(a)	Benzo(b)-fluoranthene	Benzo(ghi)-perylene	Benzo(k)-fluoranthene	Benzoic acid	Benzyl alcohol
MTCA Method B Cleanup Level				NV	180	24,000	NV	0.14	NV	NV	NV	320,000	24,000
MTCA Method C Cleanup Level				NV	23,000	1,100,000	NV	18	NV	NV	NV	14,000,000	1,100,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	12	NV	NV	NV	NV	NV
TP-10	TP10-0.2	05/03/1993	0.2	--	--	0.33 U	--	--	--	--	--	--	--
	TP10-8.5	05/03/1993	8.5	--	--	50 U	--	--	--	--	--	--	--
TP-12	TP12-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP12-3	05/03/1993	3	--	--	290	--	--	--	--	--	--	--
	TP12-6.5	05/03/1993	6.5	--	--	1.7 U	--	--	--	--	--	--	--
TP-13	TP13-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
	TP13-5.5	05/03/1993	5.5	--	--	--	--	--	--	--	--	--	--
TP-14	TP14-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--
TP-15	TP15-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
TP-16	TP16-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP16-7	05/03/1993	7	--	--	--	--	--	--	--	--	--	--
TP-27	TP27-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-28	TP28-7	05/03/1993	7	--	--	--	--	--	--	--	--	--	--
	TP28-9.5	05/03/1993	9.5	--	--	130	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-1	L15788-1	04/06/2000	2.5	--	--	--	--	--	--	0.01 U	0.01 U	--
	L15788-3	04/06/2000	10	--	--	--	--	--	--	0.01 U	0.01 U	--
B-2		02/04/1991	3	--	--	--	--	--	--	--	--	--
		02/04/1991	11	--	--	--	--	--	--	--	--	--
	L15788-8	04/06/2000	0	--	--	--	--	--	--	0.01 U	0.01 U	--
	L15788-6	04/06/2000	2.5	--	--	--	--	--	--	0.01 U	0.01 U	--
B-3		02/04/1991	5.5	--	--	--	--	--	--	--	--	--
		02/04/1991	15	--	--	--	--	--	--	--	--	--
B-4		02/04/1991	3	--	--	--	--	--	--	--	--	--
		02/04/1991	12.5	--	--	--	--	--	--	--	--	--
B-5		02/04/1991	3	--	--	--	--	--	--	--	--	--
		02/04/1991	18.5	--	--	--	--	--	--	--	--	--
	L15788-22	04/06/2000	10	--	--	--	--	--	--	0.01 U	0.01 U	--
B-6		02/04/1991	3	--	--	--	--	--	--	--	--	--
		02/04/1991	33	--	--	--	--	--	--	--	--	--
	L15788-23	04/06/2000	2.5	--	--	--	--	--	--	0.01 U	0.01 U	--
	L15788-25	04/06/2000	10	--	--	--	--	--	--	0.01 U	0.01 U	--
B-7		02/04/1991	5.5	--	--	--	--	--	--	--	--	--
		02/04/1991	13.5	--	--	--	--	--	--	--	--	--
	L15788-26	04/06/2000	2.5	--	--	--	--	--	--	0.01 U	0.01 U	--
	L15788-28	04/06/2000	10	--	--	--	--	--	--	0.01 U	0.01 U	--
B-8		02/04/1991	11	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--
	L15788-29	04/06/2000	2.5	--	--	--	--	--	--	0.01 U	0.01 U	--
	L15788-31	04/06/2000	10	--	--	--	--	--	--	0.01 U	0.01 U	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-9		02/04/1991	5.5	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--
	L15788-32	04/06/2000	2.5	--	--	--	--	--	--	0.016	0.01 U	--
	L15788-33	04/06/2000	5	--	--	--	--	--	--	0.01 U	0.01 U	--
	L15788-34	04/06/2000	10	--	--	--	--	--	--	0.01 U	0.01 U	--
B-10		02/04/1991	0	--	--	--	--	--	--	--	--	--
		02/04/1991	10.5	--	--	--	--	--	0.3 U	0.0025 U	0.0025 U	0.0025 U
		02/04/1991	16	--	--	--	--	--	--	--	--	--
B-11		02/04/1991	3	--	--	--	--	--	--	--	--	--
		02/04/1991	13.5	--	--	--	--	--	--	--	--	--
B-12		02/05/1991	3	--	--	--	--	--	--	--	--	--
		02/05/1991	13	--	--	--	--	--	--	--	--	--
B-13		02/05/1991	15.5	--	--	--	--	--	--	--	--	--
B-14		02/05/1991	8	--	--	--	--	--	--	--	--	--
		02/05/1991	13	--	--	--	--	--	--	--	--	--
B-15		02/05/1991	3	--	--	--	--	--	--	--	--	--
		02/05/1991	15.5	--	--	--	--	--	--	--	--	--
B-19	B19-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
B-20	B20-20	05/03/1993	20	--	--	--	--	--	21	19	--	110
B-31	K9708881-014	11/26/1997	3.5	--	--	--	--	--	0.3 U	0.006	0.005 U	0.005 U
	K9708881-013	11/26/1997	8	--	--	--	--	--	0.3 U	0.01	0.005 U	0.005 U
	K9708881-012	11/26/1997	15.5	--	--	--	--	--	0.5	5.3	0.098	11
B-32	K9709176-011	12/05/1997	6.5	--	--	--	--	--	--	0.012	0.005 U	0.005 U
	K9709176-012	12/08/1997	14	--	--	--	--	--	0.3 U	--	--	--
B-33	K9709014-004	12/04/1997	3.5	--	--	--	--	--	2.7	4.3	0.09	3.4
	K9709014-005	12/04/1997	9.5	--	--	--	--	--	0.3	0.541	0.016	0.314
		12/04/1997	15.5	--	--	--	--	--	0.3 U	--	--	--
B-34	K9708881-015	11/26/1997	3.5	--	--	--	--	--	0.3 U	0.169	0.017	0.285
	K9708881-016	11/26/1997	8	--	--	--	--	--	0.7	--	--	--
		11/26/1997	17	--	--	--	--	--	0.1	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-35	K9708926-006	12/02/1997	3.5	--	--	--	--	--	2	--	--	--
		12/02/1997	11	--	--	--	--	--	27	--	--	--
		12/02/1997	14	--	--	--	--	--	10	--	--	--
B-36	K9709014-001	12/03/1997	5	--	--	--	--	--	2.7	--	--	--
		12/03/1997	9.5	--	--	--	--	--	10	8.2	0.124	27
		12/03/1997	15.5	--	--	--	--	--	0.9	--	--	--
B-37	K9708926-001	12/02/1997	5	--	--	--	--	--	3 U	--	--	--
		12/03/1997	15.5	--	--	--	--	--	0.3 U	0.005 U	0.005 U	0.005 U
B-38	K9709176-008	12/05/1997	3.5	--	--	--	--	--	--	1.3	0.043	1.15
B-39	K9800342-007	01/19/1998	6.5	--	--	--	--	--	--	--	--	--
	K9800342-008	01/19/1998	12.5	--	--	--	--	--	--	--	--	--
B-42	K9709176-013	12/09/1997	8	--	--	--	--	--	--	0.824	0.028	0.733
	K9709176-014	12/09/1997	12.5	--	--	--	--	--	0.3 U	--	--	--
B-43	K9708705-007	11/20/1997	3.5	--	--	--	--	--	0.0003 U	0.021	0.005 U	0.016
B-44	K9708705-009	11/20/1997	6.5	--	--	--	--	--	0.0003 U	0.4	0.008	0.915
B-45	K9708655-012	11/19/1997	5	--	--	--	--	--	0.3 U	0.069	0.005 U	0.116
B-46	K9708655-007	11/19/1997	5	--	--	--	--	--	0.3 U	0.02	0.005 U	0.021
	K9708655-008	11/19/1997	9.5	--	--	--	--	--	0.3 U	0.005 U	0.005 U	0.005 U
B-47	K9708655-014	11/18/1997	9.5	--	--	--	--	--	0.3 U	0.005 U	0.005 U	0.005 U
B-48	K9708705-005	11/20/1997	3.5	--	--	--	--	--	0.0003 U	0.062	0.005 U	0.226
B-49	K9708815-004	11/25/1997	5	--	--	--	--	--	--	--	--	--
B-50	K9708704-008	11/21/1997	8	--	--	--	--	--	0.3 U	0.01	0.005 U	0.01
B-51	K9708815-003	11/24/1997	9.5	--	--	--	--	--	0.3 U	0.01 U	0.01 U	--
B-52	K9708704-005	11/20/1997	3.5	--	--	--	--	--	0.3 U	0.243	0.011	0.116
B-53	K9800300-013	01/14/1998	9.5	--	--	--	--	--	0.3 U	0.005 U	0.005 U	0.005 U
	K9800300-014	01/14/1998	15.5	--	--	--	--	--	0.3 U	0.193	0.005 U	0.158
B-54	K9800300-015	01/14/1998	8	--	--	--	--	--	0.3 U	0.026	0.005 U	0.131
B-55	K9800300-017	01/15/1998	8	--	--	--	--	--	0.3 U	0.005 U	0.005 J	0.066
B-56	K9800342-001	01/15/1998	6.5	--	--	--	--	--	0.3 U	0.005 U	0.005 U	0.005 U
B-57	K9800342-003	01/16/1998	8	--	--	--	--	--	0.3 U	0.005 U	0.005 U	0.005 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-58	K9800342-005	01/16/1998	6.5	--	--	--	--	--	0.3 U	0.005 U	0.006	0.005 U
B-58A	K9803817-001	06/12/1998	5	--	--	--	--	--	--	0.023	0.005 U	0.005 U
	K9803817-002	06/12/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-62	K9803817-005	06/12/1998	5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803817-006	06/12/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-63	K9803817-007	06/12/1998	5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803817-008	06/12/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-66	K9803817-009	06/12/1998	5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803817-010	06/12/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-69	K9803927-011	06/16/1998	0.5	--	--	--	--	--	--	4.2	0.15	0.005 U
	K9803927-001	06/16/1998	2.5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803927-012	06/16/1998	5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803927-013	06/16/1998	10	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803927-002	06/16/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-72	K9803927-003	06/17/1998	0.5	--	--	--	--	--	--	31	1 U	88
	K9803927-004	06/17/1998	5	--	--	--	--	--	--	0.043	0.005 U	0.031
	K9803927-005	06/17/1998	10	--	--	--	--	--	--	0.065	0.005 U	0.012
	K9803927-006	06/17/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-73	K9803927-008	06/17/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-74	K9803927-009	06/17/1998	2.5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803927-010	06/17/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-75	K9803927-014	06/17/1998	2.5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803927-015	06/17/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-76	K9803927-016	06/17/1998	10	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803927-017	06/17/1998	27	--	--	--	--	--	--	0.038	0.005 U	0.005 U
B-77	K9803927-018	06/17/1998	2.5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803927-019	06/17/1998	5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803927-020	06/17/1998	17	--	--	--	--	--	--	15	2.5 U	46
B-78	K9803979-001	06/18/1998	0.5	--	--	--	--	--	--	8.2	0.27	4.6
	K9803979-002	06/18/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-79	K9803979-004	06/18/1998	2.5	--	--	--	--	--	--	0.1 U	0.05 U	0.19
	K9803979-006	06/18/1998	10	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803979-007	06/18/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-80	K9803995-001	06/19/1998	2.5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803995-002	06/19/1998	15	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9803995-003	06/19/1998	25	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-81	K9803995-004	06/19/1998	2.5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-82	K9803995-005	06/19/1998	10	--	--	--	--	--	--	0.013	0.005 U	0.015
	K9803995-006	06/19/1998	20	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-83	K9804079-001	06/23/1998	5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9804079-002	06/23/1998	17	--	--	--	--	--	--	4.9	0.1 U	24
B-84	K9804079-003	06/23/1998	10	--	--	--	--	--	--	0.075	0.005 U	0.2
	K9804079-004	06/23/1998	35	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-85	K9804079-005	06/23/1998	5	--	--	--	--	--	--	0.16	0.011	0.077
	K9804079-006	06/23/1998	10	--	--	--	--	--	--	28	0.61	100
B-86	K9804079-007	06/23/1998	5	--	--	--	--	--	--	0.01 U	0.005 U	0.02
	K9804079-008	06/23/1998	15	--	--	--	--	--	--	13	0.25	53
B-87	K9804079-009	06/23/1998	5	--	--	--	--	--	--	0.01 U	0.005 U	0.006
	K9804079-010	06/23/1998	15	--	--	--	--	--	--	0.26	0.005 U	0.95
B-88	K9804079-011	06/23/1998	5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9804079-012	06/23/1998	15	--	--	--	--	--	--	0.023	0.005 U	0.013
B-89	K9804079-013	06/23/1998	5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9804079-014	06/23/1998	15	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-90	K9804079-015	06/23/1998	0.5	--	--	--	--	--	--	4.9	0.14	1
	K9804079-016	06/23/1998	17.5	--	--	--	--	--	--	0.021	0.005 U	0.019
B-91	K9804079-017	06/23/1998	0.5	--	--	--	--	--	--	0.45	0.031	0.11
	K9804079-018	06/23/1998	15	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-92	K9804079-019	06/23/1998	10	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9804079-020	06/23/1998	30	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-93	K9804129-001	06/24/1998	25	--	--	--	--	--	--	0.039	0.005 U	0.2
	K9804129-002	06/24/1998	40	--	--	--	--	--	--	0.06	0.005 U	0.11
B-94	K9804129-003	06/24/1998	10	--	--	--	--	--	--	0.37	0.009	1.8
	K9804129-004	06/24/1998	35	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-95	K9804129-005	06/24/1998	10	--	--	--	--	--	--	3.9	0.1	6.2
	K9804129-006	06/24/1998	25	--	--	--	--	--	--	0.01 U	0.005 U	0.019
	K9804129-007	06/24/1998	32.5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-96	K9804470-002	07/08/1998	30	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-97	K9804470-003	07/08/1998	2.5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-98	K9804470-005	07/08/1998	17	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-99	K9804470-007	07/08/1998	45	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9804470-008	07/08/1998	64	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-100	K9804470-010	07/08/1998	45	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9804470-011	07/08/1998	65	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-101	K9804470-012	07/08/1998	10	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
	K9804470-013	07/08/1998	33	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-103	K9804470-014	07/08/1998	2.5	--	--	--	--	--	--	0.01 U	0.005 U	0.005 U
B-104	K9903514-001	06/03/1999	5	--	--	--	--	--	--	--	--	--
	K9903514-002	06/03/1999	10	--	--	--	--	--	--	--	--	--
	K9903514-005	06/03/1999	25	--	--	--	--	--	--	--	--	--
B-105	K9903514-010	06/03/1999	5	--	--	--	--	--	--	--	--	--
	K9903514-011	06/03/1999	10	--	--	--	--	--	--	--	--	--
	K9903514-013	06/03/1999	25	--	--	--	--	--	--	--	--	--
B-106	K9903553-001	06/04/1999	5	--	--	--	--	--	--	--	--	--
	K9903553-002	06/04/1999	15	--	--	--	--	--	--	--	--	--
B-107	K9903553-007	06/04/1999	5	--	--	--	--	--	--	--	--	--
	K9903553-009	06/04/1999	15	--	--	--	--	--	--	--	--	--
	K9903584-002	06/07/1999	25	--	--	--	--	--	--	--	--	--
	K9903584-005	06/07/1999	45	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-108	K9903584-008	06/07/1999	5	--	--	--	--	--	--	--	--	--
	K9903584-009	06/07/1999	10	--	--	--	--	--	--	--	--	--
B-109	K9903616-007	06/08/1999	5	--	--	--	--	--	--	--	--	--
	K9903616-008	06/08/1999	10	--	--	--	--	--	--	--	--	--
	K9903616-010	06/08/1999	25	--	--	--	--	--	--	--	--	--
	K9903616-011	06/08/1999	40	--	--	--	--	--	--	--	--	--
B-110	K9903665-001	06/08/1999	5	--	--	--	--	--	--	--	--	--
	K9903665-002	06/08/1999	10	--	--	--	--	--	--	--	--	--
	K9903665-004	06/08/1999	25	--	--	--	--	--	--	--	--	--
	K9903665-009	06/08/1999	43	--	--	--	--	--	--	--	--	--
B-111	K9903711-001	06/09/1999	5	--	--	--	--	--	--	--	--	--
	K9903711-002	06/09/1999	10	--	--	--	--	--	--	--	--	--
	K9903711-004	06/10/1999	30	--	--	--	--	--	--	--	--	--
B-112	K9903711-009	06/10/1999	10	--	--	--	--	--	--	--	--	--
	K9903711-013	06/10/1999	30	--	--	--	--	--	--	--	--	--
B-113	K9903723-001	06/11/1999	5	--	--	--	--	--	--	--	--	--
	K9903723-002	06/11/1999	10	--	--	--	--	--	--	--	--	--
	K9903723-003	06/11/1999	15	--	--	--	--	--	--	--	--	--
	K9903723-005	06/11/1999	25	--	--	--	--	--	--	--	--	--
B-114	K9903794-002	06/11/1999	10	--	--	--	--	--	--	--	--	--
	K9903794-003	06/11/1999	15	--	--	--	--	--	--	--	--	--
	K9903794-007	06/14/1999	30	--	--	--	--	--	--	--	--	--
B-115	K9903794-011	06/14/1999	10	--	--	--	--	--	--	--	--	--
	K9903794-012	06/14/1999	15	--	--	--	--	--	--	--	--	--
B-116	K9903826-002	06/14/1999	10	--	--	--	--	--	--	--	--	--
	K9903826-007	06/15/1999	40	--	--	--	--	--	--	--	--	--
	K9903826-018	06/15/1999	95	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-117	K9903826-021	06/15/1999	5	--	--	--	--	--	--	--	--	--
	K9903826-023	06/15/1999	15	--	--	--	--	--	--	--	--	--
	K9903871-004	06/16/1999	65	--	--	--	--	--	--	--	--	--
	K9903871-008	06/16/1999	90	--	--	--	--	--	--	--	--	--
B-118	K9903871-009	06/16/1999	5	--	--	--	--	--	--	--	--	--
	K9903871-010	06/16/1999	10	--	--	--	--	--	--	--	--	--
B-119	K9903915-001	06/17/1999	2.5	--	--	--	--	--	--	--	--	--
	K9903915-002	06/17/1999	5	--	--	--	--	--	--	--	--	--
	K9903915-004	06/17/1999	15	--	--	--	--	--	--	--	--	--
B-139	K9907039-005	10/04/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907039-009	10/04/1999	5	--	--	--	--	--	--	--	--	--
	K9907039-006	10/04/1999	20	--	--	--	--	--	--	--	--	--
B-140	K9907141-001	10/06/1999	10	--	--	--	--	--	0.14	0.01 U	0.01 U	0.13
B-141	K9907141-002	10/06/1999	2.5	--	--	--	--	--	0.014	0.13	0.012	0.01 U
B-142	K9907141-003	10/07/1999	10	--	--	--	--	--	3.3	5.7	0.15	25
B-147	K9907141-004	10/08/1999	10	--	--	--	--	--	1.7	7	0.16	31
	K9907141-005	10/08/1999	20	--	--	--	--	--	--	--	--	--
B-148	K9907141-006	10/08/1999	10	--	--	--	--	--	2.9	2.8	0.087	11
	K9907141-007	10/08/1999	15	--	--	--	--	--	2.8	5.6	0.079	9.2
B-149	K9907141-008	10/08/1999	3	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907141-009	10/08/1999	10	--	--	--	--	--	4.7	9.8	0.2	64
	K9907141-010	10/08/1999	20	--	--	--	--	--	--	--	--	--
B-150	K9907223-003	10/11/1999	10.5	--	--	--	--	--	2.3	0.62	0.019	6.7
B-153	K9907223-007	10/11/1999	5	--	--	--	--	--	--	--	--	--
	K9907223-008	10/11/1999	10	--	--	--	--	--	0.01	0.01 U	0.01 U	0.021

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-155	K9907223-009	10/12/1999	5	--	--	--	--	--	0.068	0.077	0.01 U	0.01 U
	K9907223-016	10/12/1999	9	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01
B-160	K9907379-011	10/13/1999	10	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.011
B-161	K9907379-010	10/13/1999	10	--	--	--	--	--	--	--	--	--
B-162	K9907379-009	10/13/1999	11.5	--	--	--	--	--	--	--	--	--
B-165	K9907379-008	10/13/1999	11.5	--	--	--	--	--	--	--	--	--
B-167	K9907379-006	10/14/1999	20	--	--	--	--	--	--	--	--	--
B-170	K9907379-017	10/15/1999	7.5	--	--	--	--	--	--	--	--	--
B-187	K9907559-010	10/21/1999	11.5	--	--	--	--	--	--	--	--	--
B-188	K9907559-011	10/21/1999	5	--	--	--	--	--	--	--	--	--
	K9907559-012	10/21/1999	11.5	--	--	--	--	--	--	--	--	--
B-189	K9907607-001	10/22/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907607-002	10/22/1999	12	--	--	--	--	--	--	--	--	--
B-190	K9907700-001	10/25/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907700-002	10/25/1999	5	--	--	--	--	--	--	--	--	--
	K9907700-003	10/25/1999	10	--	--	--	--	--	--	--	--	--
B-191	K9907700-004	10/25/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907700-005	10/25/1999	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-192	K9907700-006	10/25/1999	2.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01
	K9907700-007	10/25/1999	5	--	--	--	--	--	--	--	--	--
B-193	K9907700-008	10/25/1999	2.5	--	--	--	--	--	0.039	0.043	0.01 U	0.12
	K9907700-009	10/25/1999	5	--	--	--	--	--	0.079	0.74	0.014	0.16
	K9907700-010	10/25/1999	10	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-194	K9907700-011	10/25/1999	2.5	--	--	--	--	--	0.7	0.23	0.01 U	1
	K9907700-012	10/25/1999	5	--	--	--	--	--	0.01 U	0.022	0.01 U	0.01 U
	K9907700-013	10/25/1999	10	--	--	--	--	--	0.8	0.68	0.02	2.1
B-195	K9907700-014	10/26/1999	2.5	--	--	--	--	--	0.27	1.2	0.12	0.2
	K9907700-015	10/26/1999	5	--	--	--	--	--	0.01 U	0.11	0.01 U	0.01 U
	K9907700-016	10/26/1999	10	--	--	--	--	--	0.01 U	0.012	0.01 U	0.01 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-196	K9907700-017	10/26/1999	3	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907700-018	10/26/1999	9	--	--	--	--	--	0.021	0.12	0.01 U	0.12
B-197	K9907767-001	10/26/1999	2.5	--	--	--	--	--	0.01 U	0.088	0.01 U	0.01 U
	K9907767-002	10/26/1999	5	--	--	--	--	--	0.01 U	0.02	0.01 U	0.01 U
	K9907767-003	10/26/1999	10	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-198	K9907767-004	10/27/1999	2.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907767-005	10/27/1999	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-199	K9907767-007	10/27/1999	2.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907767-008	10/27/1999	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907767-009	10/27/1999	10	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907767-010	10/27/1999	15	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-200	K9907767-012	10/27/1999	2.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907767-013	10/27/1999	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-201	K9907767-014	10/28/1999	2.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907767-015	10/28/1999	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907767-016	10/28/1999	10	--	--	--	--	--	--	--	--	--
	K9907767-017	10/28/1999	15	--	--	--	--	--	0.88	0.55	0.017	5
	K9907767-018	10/28/1999	20	--	--	--	--	--	0.29	0.01 U	0.01 U	0.29
B-202	K9907767-019	10/28/1999	2.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907767-020	10/28/1999	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907767-021	10/28/1999	15	--	--	--	--	--	--	--	--	--
B-203	K9907788-009	10/28/1999	2.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907788-010	10/28/1999	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9907788-011	10/28/1999	10	--	--	--	--	--	0.16	1.7	0.069	0.45

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-221	K9908093-005	11/09/1999	2.5	--	--	--	--	--	0.01 U	0.015	0.01 U	0.01 U
	K9908093-006	11/09/1999	7.5	--	--	--	--	--	0.01 U	0.014	0.01 U	0.019
B-222	K9908120-001	11/10/1999	2.5	--	--	--	--	--	6.3	3.6	0.091	12
	K9908120-002	11/10/1999	5	--	--	--	--	--	0.27	0.3	0.01 U	0.86
	K9908120-003	11/10/1999	10	--	--	--	--	--	0.019	0.01 U	0.01 U	0.01 U
B-223	K9908120-005	11/10/1999	2.5	--	--	--	--	--	--	--	--	--
	K9908120-006	11/10/1999	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9908120-007	11/10/1999	10	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-224	K9908120-008	11/10/1999	2.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9908120-009	11/10/1999	5	--	--	--	--	--	--	--	--	--
	K9908120-010	11/10/1999	10	--	--	--	--	--	--	--	--	--
B-225	K9908120-012	11/10/1999	2.5	--	--	--	--	--	--	--	--	--
	K9908120-013	11/10/1999	5	--	--	--	--	--	--	--	--	--
B-226	K9908186-001	11/11/1999	2.5	--	--	--	--	--	--	--	--	--
	K9908186-002	11/11/1999	5	--	--	--	--	--	--	--	--	--
	K9908186-003	11/11/1999	10	--	--	--	--	--	--	--	--	--
B-227	K9908186-005	11/11/1999	2.5	--	--	--	--	--	--	--	--	--
	K9908186-006	11/11/1999	5	--	--	--	--	--	--	--	--	--
B-228	K9908186-008	11/11/1999	1.5	--	--	--	--	--	--	--	--	--
	K9908186-010	11/11/1999	5	--	--	--	--	--	--	--	--	--
B-230	K9908189-001	11/12/1999	2.5	--	--	--	--	--	0.021	0.035	0.01 U	0.031
	K9908189-003	11/12/1999	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-231	K9908189-005	11/12/1999	2.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9908189-006	11/12/1999	5	--	--	--	--	--	--	--	--	--
	K9908189-007	11/12/1999	7	--	--	--	--	--	0.012	0.051	0.01 U	0.042
B-232	K9908806-003	12/07/1999	5	--	--	--	--	--	--	--	--	--
	K9908806-007	12/07/1999	25	--	--	--	--	--	--	--	--	--
B-233	K9908806-009	12/07/1999	5	--	--	--	--	--	--	--	--	--
	K9908806-011	12/07/1999	15	--	--	--	--	--	0.87	0.01 U	0.01 U	0.93
	K9908806-013	12/07/1999	25	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-234	K9908806-015	12/07/1999	10	--	--	--	--	--	5.5	8.1	0.18	60
	K9908806-016	12/07/1999	15	--	--	--	--	--	1.3	0.011	0.01 U	0.66
	K9908806-018	12/07/1999	25	--	--	--	--	--	--	--	--	--
B-235	K9908924-016	12/08/1999	10	--	--	--	--	--	0.77	0.13	0.01 U	1.5
	K9908924-017	12/08/1999	15	--	--	--	--	--	0.6	0.01 U	0.01 U	0.6
	K9908924-019	12/08/1999	25	--	--	--	--	--	0.028	0.01 U	0.01 U	0.04
B-236	K9908924-023	12/08/1999	10	--	--	--	--	--	0.14	0.024	0.01 U	0.18
	K9908924-024	12/08/1999	15	--	--	--	--	--	0.59	0.024	0.01 U	0.5
	K9908924-026	12/08/1999	25	--	--	--	--	--	--	--	--	--
B-237	K9908924-028	12/08/1999	5	--	--	--	--	--	--	--	--	--
	K9908924-030	12/08/1999	15	--	--	--	--	--	--	--	--	--
	K9908924-032	12/08/1999	25	--	--	--	--	--	--	--	--	--
B-238	K9908924-003	12/09/1999	10	--	--	--	--	--	0.095	0.038	0.01 U	0.38
	K9908924-004	12/09/1999	15	--	--	--	--	--	0.19	0.35	0.014	1.3
	K9908924-006	12/09/1999	25	--	--	--	--	--	--	--	--	--
B-239	K9908924-009	12/09/1999	10	--	--	--	--	--	0.45	0.085	0.01 U	0.65
	K9908924-010	12/09/1999	15	--	--	--	--	--	0.24	0.08	0.01 U	0.72
	K9908924-012	12/09/1999	25	--	--	--	--	--	--	--	--	--
B-240	K9908924-034	12/10/1999	5	--	--	--	--	--	--	--	--	--
	K9908924-036	12/10/1999	15	--	--	--	--	--	0.24	0.029	0.01 U	0.56
	K9908924-038	12/10/1999	25	--	--	--	--	--	--	--	--	--
B-241	K9908924-039	12/10/1999	5	--	--	--	--	--	0.18	0.13	0.01 U	0.48
	K9908924-041	12/10/1999	15	--	--	--	--	--	0.56	0.023	0.01 U	0.8
	K9908924-043	12/10/1999	25	--	--	--	--	--	--	--	--	--
B-242	K9908973-007	12/13/1999	25	--	--	--	--	--	--	--	--	--
B-243	K9909023-005	12/14/1999	25	--	--	--	--	--	--	--	--	--
B-244	K9909069-002	12/15/1999	25	--	--	--	--	--	--	--	--	--
	K9909069-005	12/15/1999	35	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-245	K9909069-009	12/15/1999	15	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9909069-012	12/15/1999	30	--	--	--	--	--	0.022	0.046	0.01 U	0.11

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-246	K9909069-015	12/16/1999	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9909069-016	12/16/1999	10	--	--	--	--	--	--	--	--	--
	K9909069-018	12/16/1999	20	--	--	--	--	--	--	--	--	--
B-247	K9909148-001	12/17/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909148-002	12/17/1999	5	--	--	--	--	--	--	--	--	--
	K9909148-004	12/17/1999	16	--	--	--	--	--	--	--	--	--
B-248	K9909181-001	12/20/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909181-004	12/20/1999	15	--	--	--	--	--	--	--	--	--
	K9909181-006	12/20/1999	25	--	--	--	--	--	--	--	--	--
B-249	K9909181-008	12/20/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909181-012	12/20/1999	20	--	--	--	--	--	--	--	--	--
	K9909181-013	12/20/1999	25	--	--	--	--	--	--	--	--	--
B-250	K9909223-005	12/21/1999	20	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.029
	K9909223-006	12/21/1999	25	--	--	--	--	--	0.051	0.01 U	0.01 U	0.079
	K9909223-004	12/21/1999	35	--	--	--	--	--	0.036	0.075	0.01 U	0.14
B-251	K9909277-001	12/22/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909277-003	12/22/1999	10	--	--	--	--	--	--	--	--	--
	K9909277-005	12/22/1999	25	--	--	--	--	--	--	--	--	--
B-252	K9909277-012	12/22/1999	15	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9909277-013	12/22/1999	20	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K9909277-014	12/22/1999	25	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-253	K9909277-021	12/23/1999	25	--	--	--	--	--	0.12	0.047	0.01 U	0.29
B-255	K2000354-003	01/14/2000	10	--	--	--	--	--	2.3	6.5	0.11	9.3
	K2000354-004	01/14/2000	15	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K2000354-006	01/14/2000	25	--	--	--	--	--	--	--	--	--
B-256	K2000354-010	01/14/2000	5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K2000354-011	01/14/2000	10	--	--	--	--	--	0.015	0.01	0.01 U	0.022
	K2000354-013	01/14/2000	20	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-261	K2000528-003	01/20/2000	10	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K2000528-004	01/20/2000	15	--	--	--	--	--	0.071	0.22	0.01 U	0.65
	K2000528-006	01/20/2000	30	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
B-264	K2106063-001	08/17/2001	2.5	--	--	--	--	--	0.014 U	0.014 U	0.014 U	0.014 U
	K2106063-003	08/17/2001	10	--	--	--	--	--	0.013 U	0.013 U	0.013 U	0.013 U
B-265	K2106063-005	08/17/2001	5	--	--	--	--	--	0.013 U	0.013 U	0.013 U	0.013 U
B-266	K2106063-008	08/17/2001	5	--	--	--	--	--	0.016 U	0.016 U	0.016 U	0.016 U
B-272	K2106063-023	08/17/2001	5	--	--	--	--	--	0.27	0.12	0.012 U	0.33
B-273	K2106063-025	08/20/2001	5	--	--	--	--	--	0.061	0.057	0.015 U	0.28
B-274	K2106063-030	08/20/2001	5	--	--	--	--	--	0.014 U	0.022	0.014 U	0.014 U
B-304	0806067-07A	06/12/2008	10	--	--	--	0.152 U	--	1.63	6.35	0.262	0.629
	0806067-09A	06/12/2008	19.5	--	--	--	0.0456 U	--	0.0456 U	0.0456 U	0.0456 U	0.0711
B-305	0806067-12A	06/12/2008	10	--	--	--	0.0463 U	--	0.0463 U	0.0463 U	0.0463 U	0.0463 U
	0806067-14A	06/12/2008	19	--	--	--	0.0459 U	--	0.171	0.0459 U	0.0459 U	0.227
B-306	1091024001	03/11/2009	2.5	--	--	--	--	--	--	50.7	4.3	--
	1091029003	03/11/2009	18	--	--	--	--	--	--	15.6	0.445	--
B-308	1091024002	03/11/2009	0.5	--	--	--	--	--	--	0.0399	0.0476	--
	1091024003	03/11/2009	2.5	--	--	--	--	--	--	0.0153	0.0327	--
	1091024004	03/11/2009	15	--	--	--	--	--	--	4.22	0.177	--
B-313	0905143-06A	05/21/2009	2.5	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U
	0905143-07B	05/21/2009	5	0.0358 U	0.0358 U	0.0358 U	0.0469	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U
	0905143-08B	05/21/2009	10	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
	0905143-09B	05/21/2009	15	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U
CT		02/07/1991	0	--	--	--	--	--	--	--	--	--
		02/07/1991	0	--	--	--	--	--	--	--	--	--
DS-E		06/18/1997	0	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	--	0.3 U	0.3 U	0.3 U
DS-N		06/18/1997	0	3 U	3 U	3 U	3 U	3 U	--	3 U	3 U	3 U
DS-S		06/18/1997	0	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	--	1.5 U	1.5 U	1.5 U
DS-W		06/18/1997	0	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	--	0.3 U	0.3 U	0.3 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
GP8	0905163-05B	05/22/2009	1.4	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U
	0905163-06B	05/22/2009	5	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.0494	0.0392 U	0.0392 U	0.0827
	0905163-07B	05/22/2009	11	0.21 U	0.21 U	0.21 U	0.271	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
	0905163-08B	05/22/2009	15	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.0714
GP11	0905143-10B	05/21/2009	1.5	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U
	0905143-11A	05/21/2009	5	0.0422 U	0.0422 U	0.0422 U	0.0561	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U
	0905143-12A	05/21/2009	10	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U
	0905143-13B	05/21/2009	15	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U
MFP-01	K9708818-001	11/25/1997	0	--	--	--	--	--	--	--	--	--
	K9708818-002	11/25/1997	3	--	--	--	--	--	--	--	--	--
	K9708818-003	11/25/1997	6	--	--	--	--	--	--	--	--	--
	K9708818-004	11/25/1997	9	--	--	--	--	--	--	--	--	--
MFP-02	K9708818-008R	11/25/1997	6	--	--	--	--	--	--	--	--	--
MFP-04	K9708818-011	11/25/1997	0	--	--	--	--	--	--	--	--	--
	K9708818-012R	11/25/1997	3	--	--	--	--	--	--	--	--	--
MFP-05	K9708818-014R	11/25/1997	0	--	--	--	--	--	--	--	--	--
	K9708818-015	11/25/1997	3	--	--	--	--	--	--	--	--	--
	K9708818-016	11/25/1997	6	--	--	--	--	--	--	--	--	--
	K9708818-018	11/25/1997	9	--	--	--	--	--	--	--	--	--
MW-10		02/05/1991	0	--	--	--	--	--	--	--	--	--
		02/05/1991	0	--	--	--	--	--	--	--	--	--
		02/05/1991	0	--	--	--	--	--	--	--	--	--
MW-11S	K9707902-003	10/23/1997	0	100 U	100 U	100 U	100 U	100 U	--	1200	100 U	**7300**
MW-13	MW13-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
	MW13-15	05/03/1993	15	--	--	--	--	--	--	--	--	--
MW-14	MW14-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
MW-17	MW17-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
MW-18	MW18-10	05/03/1993	10	--	--	--	--	--	3.3 U	--	--	7.5
	MW18-15	05/03/1993	15	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
MW-22	MW22-15	05/03/1993	15	--	--	--	--	--	--	--	--	--
MW-24	T5070221	04/02/1996	0.5	--	--	--	--	--	--	0.12	0.063	--
	T5070224	04/02/1996	11	--	--	--	1.2	--	--	2.7	0.17	13
	T5070226	04/02/1996	21	--	--	--	8.7 U	--	--	8.1	0.62	30
MW-25	T5060415	04/02/1996	3	--	--	--	0.37 U	--	--	0.21	0.043	0.05
MW-26	T5070204	04/02/1996	8.5	--	--	--	0.032	--	--	5.8	0.29	30
	T5070207	04/02/1996	21	--	--	--	0.46 U	--	--	2.4	0.11	9.1
MW-30	T5070239	04/02/1996	26	--	--	--	0.56	--	--	0.42 U	--	0.42 U
MW-31	T5070231	04/02/1996	21	--	--	--	0.31	--	--	0.063	--	0.073
	T5070232	04/02/1996	26	--	--	--	0.19	--	--	0.43 U	--	0.43 U
	T5070233	04/02/1996	31	--	--	--	0.4	--	--	0.42 U	--	0.42 U
MW-32	T5070241	04/02/1996	6	--	--	--	0.29	--	--	0.43 U	--	0.43 U
MW-40	K2204940-001	07/18/2002	55	--	--	--	--	--	--	2.8	0.14	5.2
	K2204940-002	07/19/2002	61	--	--	--	--	--	--	0.063	0.0056 U	0.054
	K2204940-003	07/19/2002	66	--	--	--	--	--	--	0.029	0.0065 U	0.035
MW-55	0806067-02A	06/10/2008	10	--	--	--	0.0457 U	--	0.0457 U	0.0457 U	0.0457 U	0.0457 U
	0806067-04A	06/10/2008	20	--	--	--	0.0469 U	--	0.0825	0.0469 U	0.0469 U	0.0769
MW-58D	0806103-03A	06/18/2008	10	--	--	--	0.0363 U	--	0.0363 U	0.0363 U	0.0363 U	0.0363 U
	0806103-04A	06/18/2008	13.5	--	--	--	0.0497 U	--	0.0497 U	0.0497 U	0.0497 U	0.0502
NPY-03		02/06/1991	0	--	--	--	--	--	--	--	--	--
NPY-04		02/06/1991	0	--	--	--	--	--	--	--	--	--
P-01	HC-P/01	02/06/1991	0	--	--	--	--	--	--	--	--	--
P-02	HC-P/02	02/06/1991	0	--	--	--	--	--	--	--	--	--
PP		06/18/1997	0	3 U	3 U	3 U	3 U	3 U	--	3 U	3 U	3 U
SS-01		02/06/1991	0	--	--	--	--	--	--	--	--	--
SS-3B	0807092-01A	07/16/2008	1.5	--	--	--	--	--	--	34	2.13	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
SS-4B	0807092-02A	07/16/2008	0.3	--	--	--	--	--	--	1.89	0.232	--
SS-9	0807092-07A	07/17/2008	0.3	--	--	--	--	--	--	0.0423	0.0508	--
SS-13	0903005-07A	02/26/2009	0.5	--	--	--	--	--	--	0.0071 U	0.0071 U	--
SS-14	0903005-08A	02/26/2009	0.5	--	--	--	--	--	--	0.0145	0.00725 U	--
SS-15	0903005-09A	02/26/2009	0.5	--	--	--	--	--	--	0.00787 U	0.00787 U	--
SS-16	0903005-10A	02/26/2009	0.5	--	--	--	--	--	--	0.0248	0.00879	--
SS-17	0903005-11A	02/26/2009	0.5	--	--	--	--	--	--	0.00746 U	0.00746 U	--
SS-18	0903005-12A	02/26/2009	0.5	--	--	--	--	--	--	0.00749 U	0.00749 U	--
SS-19	0903005-13A	02/26/2009	0.5	--	--	--	--	--	--	3.48	0.247	--
T-4	K2005541-003	07/21/2000	1.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K2005541-002	07/21/2000	1.5	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K2005541-005	07/21/2000	1.75	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K2005541-001	07/21/2000	2	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
	K2005541-004	07/21/2000	2	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U
TP-01	TP01-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	3.3 U
	TP01-9.5	05/03/1993	9.5	--	--	--	--	--	--	--	--	--
TP-02	TP02-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--
	TP02-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
TP-03	TP03-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	3.3 U
	TP03-10	05/03/1993	10	--	--	--	--	--	--	--	--	--
TP-04	TP04-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
	TP04-10	05/03/1993	10	--	--	--	--	--	--	--	--	--
TP-05	TP05-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	--	--	--	--	--	--	--	--	0.67 U
TP-09	TP09-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--
	TP09-4	05/03/1993	4	--	--	--	--	--	0.3 U	--	--	0.3 U
	TP09-9	05/03/1993	9	--	--	--	--	--	20	--	--	33

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Bis(2-chloroethoxy)-methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate	Butylbenzyl-phthalate	Carbazole	Chrysene	Dibenzo(a,h)-anthracene	Dibenzofuran
MTCA Method B Cleanup Level				NV	0.04	320	71	3,200	50	NV	NV	160
MTCA Method C Cleanup Level				NV	0.4	700	9,400	7,000	6,600	NV	NV	7,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
TP-10	TP10-0.2	05/03/1993	0.2	--	--	--	--	--	0.33 U	--	--	0.33 U
	TP10-8.5	05/03/1993	8.5	--	--	--	--	--	50 U	--	--	50 U
TP-12	TP12-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--
	TP12-3	05/03/1993	3	--	--	--	--	--	--	--	--	67 U
	TP12-6.5	05/03/1993	6.5	--	--	--	--	--	1.7 U	--	--	1.7 U
TP-13	TP13-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--
	TP13-5.5	05/03/1993	5.5	--	--	--	--	--	--	--	--	--
TP-14	TP14-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--
TP-15	TP15-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--
TP-16	TP16-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--
	TP16-7	05/03/1993	7	--	--	--	--	--	--	--	--	--
TP-27	TP27-10	05/03/1993	10	--	--	--	--	--	--	--	--	--
TP-28	TP28-7	05/03/1993	7	--	--	--	--	--	--	--	--	--
	TP28-9.5	05/03/1993	9.5	--	--	--	--	--	67 U	--	--	140

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-1	L15788-1	04/06/2000	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	L15788-3	04/06/2000	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-2		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	11	--	--	--	--	--	--	--	--	--	--
	L15788-8	04/06/2000	0	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	L15788-6	04/06/2000	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-3		02/04/1991	5.5	--	--	--	--	--	--	--	--	--	--
		02/04/1991	15	--	--	--	--	--	--	--	--	--	--
B-4		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	12.5	--	--	--	--	--	--	--	--	--	--
B-5		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	18.5	--	--	--	--	--	--	--	--	--	--
	L15788-22	04/06/2000	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-6		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	33	--	--	--	--	--	--	--	--	--	--
	L15788-23	04/06/2000	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	L15788-25	04/06/2000	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-7		02/04/1991	5.5	--	--	--	--	--	--	--	--	--	--
		02/04/1991	13.5	--	--	--	--	--	--	--	--	--	--
	L15788-26	04/06/2000	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	L15788-28	04/06/2000	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-8		02/04/1991	11	--	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--	--
	L15788-29	04/06/2000	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	L15788-31	04/06/2000	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-9		02/04/1991	5.5	--	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--	--
	L15788-32	04/06/2000	2.5	--	--	--	--	0.035	0.01 U	--	--	--	--
	L15788-33	04/06/2000	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	L15788-34	04/06/2000	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-10		02/04/1991	0	--	--	--	--	--	--	--	--	--	--
		02/04/1991	10.5	--	--	--	--	0.0025 U	0.0025 U	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--	--
B-11		02/04/1991	3	--	--	--	--	--	--	--	--	--	--
		02/04/1991	13.5	--	--	--	--	--	--	--	--	--	--
B-12		02/05/1991	3	--	--	--	--	--	--	--	--	--	--
		02/05/1991	13	--	--	--	--	--	--	--	--	--	--
B-13		02/05/1991	15.5	--	--	--	--	--	--	--	--	--	--
B-14		02/05/1991	8	--	--	--	--	--	--	--	--	--	--
		02/05/1991	13	--	--	--	--	--	--	--	--	--	--
B-15		02/05/1991	3	--	--	--	--	--	--	--	--	--	--
		02/05/1991	15.5	--	--	--	--	--	--	--	--	--	--
B-19	B19-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
B-20	B20-20	05/03/1993	20	--	--	--	--	200	150	--	--	--	--
B-31	K9708881-014	11/26/1997	3.5	--	--	--	--	0.034	0.005 U	--	--	--	--
	K9708881-013	11/26/1997	8	--	--	--	--	0.044	0.005 U	--	--	--	--
	K9708881-012	11/26/1997	15.5	--	--	--	--	29	16	--	--	--	--
B-32	K9709176-011	12/05/1997	6.5	--	--	--	--	0.021	0.005 U	--	--	--	--
	K9709176-012	12/08/1997	14	--	--	--	--	--	--	--	--	--	--
B-33	K9709014-004	12/04/1997	3.5	--	--	--	--	19	4.3	--	--	--	--
	K9709014-005	12/04/1997	9.5	--	--	--	--	3.8	0.537	--	--	--	--
		12/04/1997	15.5	--	--	--	--	--	--	--	--	--	--
B-34	K9708881-015	11/26/1997	3.5	--	--	--	--	1.07	0.489	--	--	--	--
	K9708881-016	11/26/1997	8	--	--	--	--	--	--	--	--	--	--
		11/26/1997	17	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-35	K9708926-006	12/02/1997	3.5	--	--	--	--	--	--	--	--	--	--
		12/02/1997	11	--	--	--	--	--	--	--	--	--	--
		12/02/1997	14	--	--	--	--	--	--	--	--	--	--
B-36	K9709014-001	12/03/1997	5	--	--	--	--	--	--	--	--	--	--
		12/03/1997	9.5	--	--	--	--	44	35	--	--	--	--
		12/03/1997	15.5	--	--	--	--	--	--	--	--	--	--
B-37	K9708926-001	12/02/1997	5	--	--	--	--	--	--	--	--	--	--
		12/03/1997	15.5	--	--	--	--	0.024	0.005 U	--	--	--	--
B-38	K9709176-008	12/05/1997	3.5	--	--	--	--	8.8	1.9	--	--	--	--
B-39	K9800342-007	01/19/1998	6.5	--	--	--	--	--	--	--	--	--	--
	K9800342-008	01/19/1998	12.5	--	--	--	--	--	--	--	--	--	--
B-42	K9709176-013	12/09/1997	8	--	--	--	--	5	1.22	--	--	--	--
	K9709176-014	12/09/1997	12.5	--	--	--	--	--	--	--	--	--	--
B-43	K9708705-007	11/20/1997	3.5	--	--	--	--	0.023	0.011	--	--	--	--
B-44	K9708705-009	11/20/1997	6.5	--	--	--	--	2.05	1.12	--	--	--	--
B-45	K9708655-012	11/19/1997	5	--	--	--	--	0.327	0.168	--	--	--	--
B-46	K9708655-007	11/19/1997	5	--	--	--	--	0.099	0.044	--	--	--	--
	K9708655-008	11/19/1997	9.5	--	--	--	--	0.017	0.005 U	--	--	--	--
B-47	K9708655-014	11/18/1997	9.5	--	--	--	--	0.005	0.005 U	--	--	--	--
B-48	K9708705-005	11/20/1997	3.5	--	--	--	--	0.266	0.444	--	--	--	--
B-49	K9708815-004	11/25/1997	5	--	--	--	--	--	--	--	--	--	--
B-50	K9708704-008	11/21/1997	8	--	--	--	--	0.032	0.01	--	--	--	--
B-51	K9708815-003	11/24/1997	9.5	--	--	--	--	0.05	0.02 U	--	--	--	--
B-52	K9708704-005	11/20/1997	3.5	--	--	--	--	1.05	0.168	--	--	--	--
B-53	K9800300-013	01/14/1998	9.5	--	--	--	--	0.005 U	0.005 U	--	--	--	--
	K9800300-014	01/14/1998	15.5	--	--	--	--	0.833	0.287	--	--	--	--
B-54	K9800300-015	01/14/1998	8	--	--	--	--	0.168	0.161	--	--	--	--
B-55	K9800300-017	01/15/1998	8	--	--	--	--	0.016	0.049	--	--	--	--
B-56	K9800342-001	01/15/1998	6.5	--	--	--	--	0.005 U	0.005 U	--	--	--	--
B-57	K9800342-003	01/16/1998	8	--	--	--	--	0.005 U	0.005 U	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-58	K9800342-005	01/16/1998	6.5	--	--	--	--	0.011	0.005 U	--	--	--	--
B-58A	K9803817-001	06/12/1998	5	--	--	--	--	0.015	0.01 U	--	--	--	--
	K9803817-002	06/12/1998	17	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-62	K9803817-005	06/12/1998	5	--	--	--	--	0.01	0.01 U	--	--	--	--
	K9803817-006	06/12/1998	17	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-63	K9803817-007	06/12/1998	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9803817-008	06/12/1998	17	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-66	K9803817-009	06/12/1998	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9803817-010	06/12/1998	17	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-69	K9803927-011	06/16/1998	0.5	--	--	--	--	1.5	0.013	--	--	--	--
	K9803927-001	06/16/1998	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9803927-012	06/16/1998	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9803927-013	06/16/1998	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9803927-002	06/16/1998	17	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-72	K9803927-003	06/17/1998	0.5	--	--	--	--	220	130	--	--	--	--
	K9803927-004	06/17/1998	5	--	--	--	--	0.22	0.051	--	--	--	--
	K9803927-005	06/17/1998	10	--	--	--	--	0.33	0.031	--	--	--	--
	K9803927-006	06/17/1998	17	--	--	--	--	0.04	0.01 U	--	--	--	--
B-73	K9803927-008	06/17/1998	17	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-74	K9803927-009	06/17/1998	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9803927-010	06/17/1998	17	--	--	--	--	0.012	0.01 U	--	--	--	--
B-75	K9803927-014	06/17/1998	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9803927-015	06/17/1998	17	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-76	K9803927-016	06/17/1998	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9803927-017	06/17/1998	27	--	--	--	--	0.11	0.01 U	--	--	--	--
B-77	K9803927-018	06/17/1998	2.5	--	--	--	--	0.022	0.01 U	--	--	--	--
	K9803927-019	06/17/1998	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9803927-020	06/17/1998	17	--	--	--	--	73	58	--	--	--	--
B-78	K9803979-001	06/18/1998	0.5	--	--	--	--	37	9.4	--	--	--	--
	K9803979-002	06/18/1998	17	--	--	--	--	0.01 U	0.01 U	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene		Fluorene		Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200		3,200		0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000		140,000		0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV		NV		17	NV	NV	NV
B-79	K9803979-004	06/18/1998	2.5	--	--	--	--	0.14		1.6		--	--	--	--
	K9803979-006	06/18/1998	10	--	--	--	--	0.01	U	0.01	U	--	--	--	--
	K9803979-007	06/18/1998	17	--	--	--	--	0.01	U	0.01	U	--	--	--	--
B-80	K9803995-001	06/19/1998	2.5	--	--	--	--	0.01	U	0.01	U	--	--	--	--
	K9803995-002	06/19/1998	15	--	--	--	--	0.01	U	0.01	U	--	--	--	--
	K9803995-003	06/19/1998	25	--	--	--	--	0.01	U	0.01	U	--	--	--	--
B-81	K9803995-004	06/19/1998	2.5	--	--	--	--	0.028		0.016		--	--	--	--
B-82	K9803995-005	06/19/1998	10	--	--	--	--	0.061		0.034		--	--	--	--
	K9803995-006	06/19/1998	20	--	--	--	--	0.01	U	0.01	U	--	--	--	--
B-83	K9804079-001	06/23/1998	5	--	--	--	--	0.01	U	0.01	U	--	--	--	--
	K9804079-002	06/23/1998	17	--	--	--	--	28		27		--	--	--	--
B-84	K9804079-003	06/23/1998	10	--	--	--	--	0.36		0.38		--	--	--	--
	K9804079-004	06/23/1998	35	--	--	--	--	0.01	U	0.01	U	--	--	--	--
B-85	K9804079-005	06/23/1998	5	--	--	--	--	0.27		0.077		--	--	--	--
	K9804079-006	06/23/1998	10	--	--	--	--	130		130		--	--	--	--
B-86	K9804079-007	06/23/1998	5	--	--	--	--	0.034		0.024		--	--	--	--
	K9804079-008	06/23/1998	15	--	--	--	--	85		67		--	--	--	--
B-87	K9804079-009	06/23/1998	5	--	--	--	--	0.01	U	0.01	U	--	--	--	--
	K9804079-010	06/23/1998	15	--	--	--	--	2.1		1.3		--	--	--	--
B-88	K9804079-011	06/23/1998	5	--	--	--	--	0.01	U	0.01	U	--	--	--	--
	K9804079-012	06/23/1998	15	--	--	--	--	0.08		0.023		--	--	--	--
B-89	K9804079-013	06/23/1998	5	--	--	--	--	0.01	U	0.01	U	--	--	--	--
	K9804079-014	06/23/1998	15	--	--	--	--	0.01	U	0.01	U	--	--	--	--
B-90	K9804079-015	06/23/1998	0.5	--	--	--	--	17		2.3		--	--	--	--
	K9804079-016	06/23/1998	17.5	--	--	--	--	0.1		0.027		--	--	--	--
B-91	K9804079-017	06/23/1998	0.5	--	--	--	--	1.4		0.21		--	--	--	--
	K9804079-018	06/23/1998	15	--	--	--	--	0.01	U	0.01	U	--	--	--	--
B-92	K9804079-019	06/23/1998	10	--	--	--	--	0.01		0.01	U	--	--	--	--
	K9804079-020	06/23/1998	30	--	--	--	--	0.01	U	0.01	U	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-93	K9804129-001	06/24/1998	25	--	--	--	--	0.28	0.38	--	--	--	--
	K9804129-002	06/24/1998	40	--	--	--	--	0.38	0.2	--	--	--	--
B-94	K9804129-003	06/24/1998	10	--	--	--	--	2.1	2.4	--	--	--	--
	K9804129-004	06/24/1998	35	--	--	--	--	0.013	0.01 U	--	--	--	--
B-95	K9804129-005	06/24/1998	10	--	--	--	--	12	8.7	--	--	--	--
	K9804129-006	06/24/1998	25	--	--	--	--	0.037	0.028	--	--	--	--
	K9804129-007	06/24/1998	32.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-96	K9804470-002	07/08/1998	30	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-97	K9804470-003	07/08/1998	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-98	K9804470-005	07/08/1998	17	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-99	K9804470-007	07/08/1998	45	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9804470-008	07/08/1998	64	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-100	K9804470-010	07/08/1998	45	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9804470-011	07/08/1998	65	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-101	K9804470-012	07/08/1998	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9804470-013	07/08/1998	33	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-103	K9804470-014	07/08/1998	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-104	K9903514-001	06/03/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903514-002	06/03/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903514-005	06/03/1999	25	--	--	--	--	--	--	--	--	--	--
B-105	K9903514-010	06/03/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903514-011	06/03/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903514-013	06/03/1999	25	--	--	--	--	--	--	--	--	--	--
B-106	K9903553-001	06/04/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903553-002	06/04/1999	15	--	--	--	--	--	--	--	--	--	--
B-107	K9903553-007	06/04/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903553-009	06/04/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903584-002	06/07/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903584-005	06/07/1999	45	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-108	K9903584-008	06/07/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903584-009	06/07/1999	10	--	--	--	--	--	--	--	--	--	--
B-109	K9903616-007	06/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903616-008	06/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903616-010	06/08/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903616-011	06/08/1999	40	--	--	--	--	--	--	--	--	--	--
B-110	K9903665-001	06/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903665-002	06/08/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903665-004	06/08/1999	25	--	--	--	--	--	--	--	--	--	--
	K9903665-009	06/08/1999	43	--	--	--	--	--	--	--	--	--	--
B-111	K9903711-001	06/09/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903711-002	06/09/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903711-004	06/10/1999	30	--	--	--	--	--	--	--	--	--	--
B-112	K9903711-009	06/10/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903711-013	06/10/1999	30	--	--	--	--	--	--	--	--	--	--
B-113	K9903723-001	06/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903723-002	06/11/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903723-003	06/11/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903723-005	06/11/1999	25	--	--	--	--	--	--	--	--	--	--
B-114	K9903794-002	06/11/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903794-003	06/11/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903794-007	06/14/1999	30	--	--	--	--	--	--	--	--	--	--
B-115	K9903794-011	06/14/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903794-012	06/14/1999	15	--	--	--	--	--	--	--	--	--	--
B-116	K9903826-002	06/14/1999	10	--	--	--	--	--	--	--	--	--	--
	K9903826-007	06/15/1999	40	--	--	--	--	--	--	--	--	--	--
	K9903826-018	06/15/1999	95	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-117	K9903826-021	06/15/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903826-023	06/15/1999	15	--	--	--	--	--	--	--	--	--	--
	K9903871-004	06/16/1999	65	--	--	--	--	--	--	--	--	--	--
	K9903871-008	06/16/1999	90	--	--	--	--	--	--	--	--	--	--
B-118	K9903871-009	06/16/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903871-010	06/16/1999	10	--	--	--	--	--	--	--	--	--	--
B-119	K9903915-001	06/17/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9903915-002	06/17/1999	5	--	--	--	--	--	--	--	--	--	--
	K9903915-004	06/17/1999	15	--	--	--	--	--	--	--	--	--	--
B-139	K9907039-005	10/04/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907039-009	10/04/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907039-006	10/04/1999	20	--	--	--	--	--	--	--	--	--	--
B-140	K9907141-001	10/06/1999	10	--	--	--	--	0.029	0.18	--	--	--	--
B-141	K9907141-002	10/06/1999	2.5	--	--	--	--	0.094	0.01 U	--	--	--	--
B-142	K9907141-003	10/07/1999	10	--	--	--	--	42	31	--	--	--	--
B-147	K9907141-004	10/08/1999	10	--	--	--	--	40	37	--	--	--	--
	K9907141-005	10/08/1999	20	--	--	--	--	--	--	--	--	--	--
B-148	K9907141-006	10/08/1999	10	--	--	--	--	24	14	--	--	--	--
	K9907141-007	10/08/1999	15	--	--	--	--	21	12	--	--	--	--
B-149	K9907141-008	10/08/1999	3	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907141-009	10/08/1999	10	--	--	--	--	64	70	--	--	--	--
	K9907141-010	10/08/1999	20	--	--	--	--	--	--	--	--	--	--
B-150	K9907223-003	10/11/1999	10.5	--	--	--	--	3.2	7.4	--	--	--	--
B-153	K9907223-007	10/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907223-008	10/11/1999	10	--	--	--	--	0.018	0.022	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-155	K9907223-009	10/12/1999	5	--	--	--	--	0.45	0.24	--	--	--	--
	K9907223-016	10/12/1999	9	--	--	--	--	0.02	0.013	--	--	--	--
B-160	K9907379-011	10/13/1999	10	--	--	--	--	0.01 U	0.031	--	--	--	--
B-161	K9907379-010	10/13/1999	10	--	--	--	--	--	--	--	--	--	--
B-162	K9907379-009	10/13/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-165	K9907379-008	10/13/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-167	K9907379-006	10/14/1999	20	--	--	--	--	--	--	--	--	--	--
B-170	K9907379-017	10/15/1999	7.5	--	--	--	--	--	--	--	--	--	--
B-187	K9907559-010	10/21/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-188	K9907559-011	10/21/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907559-012	10/21/1999	11.5	--	--	--	--	--	--	--	--	--	--
B-189	K9907607-001	10/22/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907607-002	10/22/1999	12	--	--	--	--	--	--	--	--	--	--
B-190	K9907700-001	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907700-002	10/25/1999	5	--	--	--	--	--	--	--	--	--	--
	K9907700-003	10/25/1999	10	--	--	--	--	--	--	--	--	--	--
B-191	K9907700-004	10/25/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9907700-005	10/25/1999	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-192	K9907700-006	10/25/1999	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907700-007	10/25/1999	5	--	--	--	--	--	--	--	--	--	--
B-193	K9907700-008	10/25/1999	2.5	--	--	--	--	0.27	0.18	--	--	--	--
	K9907700-009	10/25/1999	5	--	--	--	--	3.7	0.39	--	--	--	--
	K9907700-010	10/25/1999	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-194	K9907700-011	10/25/1999	2.5	--	--	--	--	1.9	1.4	--	--	--	--
	K9907700-012	10/25/1999	5	--	--	--	--	0.044	0.01 U	--	--	--	--
	K9907700-013	10/25/1999	10	--	--	--	--	4.4	3	--	--	--	--
B-195	K9907700-014	10/26/1999	2.5	--	--	--	--	2.3	0.39	--	--	--	--
	K9907700-015	10/26/1999	5	--	--	--	--	0.09	0.013	--	--	--	--
	K9907700-016	10/26/1999	10	--	--	--	--	0.061	0.014	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-196	K9907700-017	10/26/1999	3	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907700-018	10/26/1999	9	--	--	--	--	0.43	0.14	--	--	--	--
B-197	K9907767-001	10/26/1999	2.5	--	--	--	--	0.066	0.01 U	--	--	--	--
	K9907767-002	10/26/1999	5	--	--	--	--	0.042	0.01 U	--	--	--	--
	K9907767-003	10/26/1999	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-198	K9907767-004	10/27/1999	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907767-005	10/27/1999	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-199	K9907767-007	10/27/1999	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907767-008	10/27/1999	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907767-009	10/27/1999	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907767-010	10/27/1999	15	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-200	K9907767-012	10/27/1999	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907767-013	10/27/1999	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-201	K9907767-014	10/28/1999	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907767-015	10/28/1999	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907767-016	10/28/1999	10	--	--	--	--	--	--	--	--	--	--
	K9907767-017	10/28/1999	15	--	--	--	--	3.1	5.4	--	--	--	--
	K9907767-018	10/28/1999	20	--	--	--	--	0.01 U	0.23	--	--	--	--
B-202	K9907767-019	10/28/1999	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907767-020	10/28/1999	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907767-021	10/28/1999	15	--	--	--	--	--	--	--	--	--	--
B-203	K9907788-009	10/28/1999	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907788-010	10/28/1999	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9907788-011	10/28/1999	10	--	--	--	--	4.4	0.7	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-221	K9908093-005	11/09/1999	2.5	--	--	--	--	0.01	0.01 U	--	--	--	--
	K9908093-006	11/09/1999	7.5	--	--	--	--	0.038	0.024	--	--	--	--
B-222	K9908120-001	11/10/1999	2.5	--	--	--	--	24	22	--	--	--	--
	K9908120-002	11/10/1999	5	--	--	--	--	1.9	1.2	--	--	--	--
	K9908120-003	11/10/1999	10	--	--	--	--	0.01 U	0.081	--	--	--	--
B-223	K9908120-005	11/10/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908120-006	11/10/1999	5	--	--	--	--	0.017	0.01 U	--	--	--	--
	K9908120-007	11/10/1999	10	--	--	--	--	0.01 U	0.014	--	--	--	--
B-224	K9908120-008	11/10/1999	2.5	--	--	--	--	0.011	0.01 U	--	--	--	--
	K9908120-009	11/10/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908120-010	11/10/1999	10	--	--	--	--	--	--	--	--	--	--
B-225	K9908120-012	11/10/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908120-013	11/10/1999	5	--	--	--	--	--	--	--	--	--	--
B-226	K9908186-001	11/11/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908186-002	11/11/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908186-003	11/11/1999	10	--	--	--	--	--	--	--	--	--	--
B-227	K9908186-005	11/11/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9908186-006	11/11/1999	5	--	--	--	--	--	--	--	--	--	--
B-228	K9908186-008	11/11/1999	1.5	--	--	--	--	--	--	--	--	--	--
	K9908186-010	11/11/1999	5	--	--	--	--	--	--	--	--	--	--
B-230	K9908189-001	11/12/1999	2.5	--	--	--	--	0.097	0.048	--	--	--	--
	K9908189-003	11/12/1999	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-231	K9908189-005	11/12/1999	2.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9908189-006	11/12/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908189-007	11/12/1999	7	--	--	--	--	0.19	0.068	--	--	--	--
B-232	K9908806-003	12/07/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908806-007	12/07/1999	25	--	--	--	--	--	--	--	--	--	--
B-233	K9908806-009	12/07/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908806-011	12/07/1999	15	--	--	--	--	0.049	0.79	--	--	--	--
	K9908806-013	12/07/1999	25	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-234	K9908806-015	12/07/1999	10	--	--	--	--	40	61	--	--	--	--
	K9908806-016	12/07/1999	15	--	--	--	--	0.086	0.74	--	--	--	--
	K9908806-018	12/07/1999	25	--	--	--	--	--	--	--	--	--	--
B-235	K9908924-016	12/08/1999	10	--	--	--	--	0.91	2.6	--	--	--	--
	K9908924-017	12/08/1999	15	--	--	--	--	0.1	0.68	--	--	--	--
	K9908924-019	12/08/1999	25	--	--	--	--	0.013	0.047	--	--	--	--
B-236	K9908924-023	12/08/1999	10	--	--	--	--	0.22	0.22	--	--	--	--
	K9908924-024	12/08/1999	15	--	--	--	--	0.045	0.43	--	--	--	--
	K9908924-026	12/08/1999	25	--	--	--	--	--	--	--	--	--	--
B-237	K9908924-028	12/08/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908924-030	12/08/1999	15	--	--	--	--	--	--	--	--	--	--
	K9908924-032	12/08/1999	25	--	--	--	--	--	--	--	--	--	--
B-238	K9908924-003	12/09/1999	10	--	--	--	--	0.31	0.35	--	--	--	--
	K9908924-004	12/09/1999	15	--	--	--	--	2.8	1.5	--	--	--	--
	K9908924-006	12/09/1999	25	--	--	--	--	--	--	--	--	--	--
B-239	K9908924-009	12/09/1999	10	--	--	--	--	0.79	0.72	--	--	--	--
	K9908924-010	12/09/1999	15	--	--	--	--	0.67	0.57	--	--	--	--
	K9908924-012	12/09/1999	25	--	--	--	--	--	--	--	--	--	--
B-240	K9908924-034	12/10/1999	5	--	--	--	--	--	--	--	--	--	--
	K9908924-036	12/10/1999	15	--	--	--	--	0.24	0.57	--	--	--	--
	K9908924-038	12/10/1999	25	--	--	--	--	--	--	--	--	--	--
B-241	K9908924-039	12/10/1999	5	--	--	--	--	0.25	0.6	--	--	--	--
	K9908924-041	12/10/1999	15	--	--	--	--	0.23	0.78	--	--	--	--
	K9908924-043	12/10/1999	25	--	--	--	--	--	--	--	--	--	--
B-242	K9908973-007	12/13/1999	25	--	--	--	--	--	--	--	--	--	--
B-243	K9909023-005	12/14/1999	25	--	--	--	--	--	--	--	--	--	--
B-244	K9909069-002	12/15/1999	25	--	--	--	--	--	--	--	--	--	--
	K9909069-005	12/15/1999	35	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-245	K9909069-009	12/15/1999	15	--	--	--	--	0.023	0.01 U	--	--	--	--
	K9909069-012	12/15/1999	30	--	--	--	--	0.33	0.14	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-246	K9909069-015	12/16/1999	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9909069-016	12/16/1999	10	--	--	--	--	--	--	--	--	--	--
	K9909069-018	12/16/1999	20	--	--	--	--	--	--	--	--	--	--
B-247	K9909148-001	12/17/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909148-002	12/17/1999	5	--	--	--	--	--	--	--	--	--	--
	K9909148-004	12/17/1999	16	--	--	--	--	--	--	--	--	--	--
B-248	K9909181-001	12/20/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909181-004	12/20/1999	15	--	--	--	--	--	--	--	--	--	--
	K9909181-006	12/20/1999	25	--	--	--	--	--	--	--	--	--	--
B-249	K9909181-008	12/20/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909181-012	12/20/1999	20	--	--	--	--	--	--	--	--	--	--
	K9909181-013	12/20/1999	25	--	--	--	--	--	--	--	--	--	--
B-250	K9909223-005	12/21/1999	20	--	--	--	--	0.019	0.01 U	--	--	--	--
	K9909223-006	12/21/1999	25	--	--	--	--	0.039	0.069	--	--	--	--
	K9909223-004	12/21/1999	35	--	--	--	--	0.48	0.26	--	--	--	--
B-251	K9909277-001	12/22/1999	2.5	--	--	--	--	--	--	--	--	--	--
	K9909277-003	12/22/1999	10	--	--	--	--	--	--	--	--	--	--
	K9909277-005	12/22/1999	25	--	--	--	--	--	--	--	--	--	--
B-252	K9909277-012	12/22/1999	15	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9909277-013	12/22/1999	20	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K9909277-014	12/22/1999	25	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-253	K9909277-021	12/23/1999	25	--	--	--	--	0.34	0.4	--	--	--	--
B-255	K2000354-003	01/14/2000	10	--	--	--	--	16	9.5	--	--	--	--
	K2000354-004	01/14/2000	15	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K2000354-006	01/14/2000	25	--	--	--	--	--	--	--	--	--	--
B-256	K2000354-010	01/14/2000	5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K2000354-011	01/14/2000	10	--	--	--	--	0.044	0.044	--	--	--	--
	K2000354-013	01/14/2000	20	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
B-261	K2000528-003	01/20/2000	10	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K2000528-004	01/20/2000	15	--	--	--	--	1.2	0.78	--	--	--	--
	K2000528-006	01/20/2000	30	--	--	--	--	0.01 U	0.01 U	--	--	--	--
B-264	K2106063-001	08/17/2001	2.5	--	--	--	--	0.015	0.014 U	--	--	--	--
	K2106063-003	08/17/2001	10	--	--	--	--	0.013 U	0.013 U	--	--	--	--
B-265	K2106063-005	08/17/2001	5	--	--	--	--	0.013 U	0.013 U	--	--	--	--
B-266	K2106063-008	08/17/2001	5	--	--	--	--	0.016 U	0.016 U	--	--	--	--
B-272	K2106063-023	08/17/2001	5	--	--	--	--	0.71	0.49	--	--	--	--
B-273	K2106063-025	08/20/2001	5	--	--	--	--	0.39	0.36	--	--	--	--
B-274	K2106063-030	08/20/2001	5	--	--	--	--	0.076	0.014 U	--	--	--	--
B-304	0806067-07A	06/12/2008	10	--	--	--	--	28.3	1.57	--	--	--	--
	0806067-09A	06/12/2008	19.5	--	--	--	--	0.0456 U	0.0798	--	--	--	--
B-305	0806067-12A	06/12/2008	10	--	--	--	--	0.0463 U	0.0463 U	--	--	--	--
	0806067-14A	06/12/2008	19	--	--	--	--	0.0459 U	0.181	--	--	--	--
B-306	1091024001	03/11/2009	2.5	--	--	--	--	310	13.4	--	--	--	--
	1091029003	03/11/2009	18	--	--	--	--	55.8	1.53	--	--	--	--
B-308	1091024002	03/11/2009	0.5	--	--	--	--	0.0818	0.0112	--	--	--	--
	1091024003	03/11/2009	2.5	--	--	--	--	0.0465	0.0109	--	--	--	--
	1091024004	03/11/2009	15	--	--	--	--	31.9	--	--	--	--	--
B-313	0905143-06A	05/21/2009	2.5	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U	0.0353 U
	0905143-07B	05/21/2009	5	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U
	0905143-08B	05/21/2009	10	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
	0905143-09B	05/21/2009	15	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U	0.0443 U
CT		02/07/1991	0	--	--	--	--	--	--	--	--	--	--
		02/07/1991	0	--	--	--	--	--	--	--	--	--	--
DS-E		06/18/1997	0	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
DS-N		06/18/1997	0	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
DS-S		06/18/1997	0	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
DS-W		06/18/1997	0	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
GP8	0905163-05B	05/22/2009	1.4	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U	0.175 U
	0905163-06B	05/22/2009	5	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.0639	0.0392 U	0.0392 U	0.0392 U	0.0392 U
	0905163-07B	05/22/2009	11	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
	0905163-08B	05/22/2009	15	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.0551	0.043 U	0.043 U	0.043 U	0.043 U
GP11	0905143-10B	05/21/2009	1.5	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U
	0905143-11A	05/21/2009	5	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U
	0905143-12A	05/21/2009	10	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U
	0905143-13B	05/21/2009	15	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U
MFP-01	K9708818-001	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-002	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
	K9708818-003	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
	K9708818-004	11/25/1997	9	--	--	--	--	--	--	--	--	--	--
MFP-02	K9708818-008R	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
MFP-04	K9708818-011	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-012R	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
MFP-05	K9708818-014R	11/25/1997	0	--	--	--	--	--	--	--	--	--	--
	K9708818-015	11/25/1997	3	--	--	--	--	--	--	--	--	--	--
	K9708818-016	11/25/1997	6	--	--	--	--	--	--	--	--	--	--
	K9708818-018	11/25/1997	9	--	--	--	--	--	--	--	--	--	--
MW-10		02/05/1991	0	--	--	--	--	--	--	--	--	--	--
		02/05/1991	0	--	--	--	--	--	--	--	--	--	--
		02/05/1991	0	--	--	--	--	--	--	--	--	--	--
MW-11S	K9707902-003	10/23/1997	0	100 U	100 U	100 U	100 U	**9600**	**8700**	100 U	100 U	100 U	100 U
MW-13	MW13-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
	MW13-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--
MW-14	MW14-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
MW-17	MW17-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
MW-18	MW18-10	05/03/1993	10	--	--	--	--	5.7	8.2	--	--	--	--
	MW18-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
MW-22	MW22-15	05/03/1993	15	--	--	--	--	--	--	--	--	--	--
MW-24	T5070221	04/02/1996	0.5	--	--	--	--	0.1	--	--	--	--	--
	T5070224	04/02/1996	11	--	--	--	--	14	15	--	--	--	--
	T5070226	04/02/1996	21	--	--	--	--	38	36	--	--	--	--
MW-25	T5060415	04/02/1996	3	--	--	--	--	0.44	0.07	--	--	--	--
MW-26	T5070204	04/02/1996	8.5	--	--	--	--	31	31	--	--	--	--
	T5070207	04/02/1996	21	--	--	--	--	10	9.7	--	--	--	--
MW-30	T5070239	04/02/1996	26	--	--	--	--	0.42 U	0.42 U	--	--	--	--
MW-31	T5070231	04/02/1996	21	--	--	--	--	0.28	0.1	--	--	--	--
	T5070232	04/02/1996	26	--	--	--	--	0.43 U	0.43 U	--	--	--	--
	T5070233	04/02/1996	31	--	--	--	--	0.42 U	0.42 U	--	--	--	--
MW-32	T5070241	04/02/1996	6	--	--	--	--	0.43 U	0.43 U	--	--	--	--
MW-40	K2204940-001	07/18/2002	55	--	--	--	--	12	8.8	--	--	--	--
	K2204940-002	07/19/2002	61	--	--	--	--	0.25	0.093	--	--	--	--
	K2204940-003	07/19/2002	66	--	--	--	--	0.12	0.048	--	--	--	--
MW-55	0806067-02A	06/10/2008	10	--	--	--	--	0.0457 U	0.0457 U	--	--	--	--
	0806067-04A	06/10/2008	20	--	--	--	--	0.0469 U	0.0516	--	--	--	--
MW-58D	0806103-03A	06/18/2008	10	--	--	--	--	0.0363 U	0.0363 U	--	--	--	--
	0806103-04A	06/18/2008	13.5	--	--	--	--	0.0497 U	0.0686	--	--	--	--
NPY-03		02/06/1991	0	--	--	--	--	--	--	--	--	--	--
NPY-04		02/06/1991	0	--	--	--	--	--	--	--	--	--	--
P-01	HC-P/01	02/06/1991	0	--	--	--	--	--	--	--	--	--	--
P-02	HC-P/02	02/06/1991	0	--	--	--	--	--	--	--	--	--	--
PP		06/18/1997	0	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
SS-01		02/06/1991	0	--	--	--	--	--	--	--	--	--	--
SS-3B	0807092-01A	07/16/2008	1.5	--	--	--	--	224	106	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
SS-4B	0807092-02A	07/16/2008	0.3	--	--	--	--	1.92	0.0409	--	--	--	--
SS-9	0807092-07A	07/17/2008	0.3	--	--	--	--	0.103	0.0522	--	--	--	--
SS-13	0903005-07A	02/26/2009	0.5	--	--	--	--	0.0071 U	0.0071 U	--	--	--	--
SS-14	0903005-08A	02/26/2009	0.5	--	--	--	--	0.0239	0.00725 U	--	--	--	--
SS-15	0903005-09A	02/26/2009	0.5	--	--	--	--	0.0118	0.00787 U	--	--	--	--
SS-16	0903005-10A	02/26/2009	0.5	--	--	--	--	0.024	0.008 U	--	--	--	--
SS-17	0903005-11A	02/26/2009	0.5	--	--	--	--	0.00746 U	0.00746 U	--	--	--	--
SS-18	0903005-12A	02/26/2009	0.5	--	--	--	--	0.00749 U	0.00749 U	--	--	--	--
SS-19	0903005-13A	02/26/2009	0.5	--	--	--	--	5.07	0.0397	--	--	--	--
T-4	K2005541-003	07/21/2000	1.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K2005541-002	07/21/2000	1.5	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K2005541-005	07/21/2000	1.75	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K2005541-001	07/21/2000	2	--	--	--	--	0.01 U	0.01 U	--	--	--	--
	K2005541-004	07/21/2000	2	--	--	--	--	0.01 U	0.01 U	--	--	--	--
TP-01	TP01-0.3	05/03/1993	0.3	--	--	--	--	3.3 U	3.3 U	--	--	--	--
	TP01-9.5	05/03/1993	9.5	--	--	--	--	--	--	--	--	--	--
TP-02	TP02-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
	TP02-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
TP-03	TP03-0.3	05/03/1993	0.3	--	--	--	--	3.3 U	3.3 U	--	--	--	--
	TP03-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-04	TP04-5	05/03/1993	5	--	--	--	--	--	--	--	--	--	--
	TP04-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-05	TP05-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	--	--	--	--	0.94	0.67 U	--	--	--	--
TP-09	TP09-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP09-4	05/03/1993	4	--	--	--	--	0.3 U	0.3 U	--	--	--	--
	TP09-9	05/03/1993	9	--	--	--	--	43	38	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Diethyl-phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane
MTCA Method B Cleanup Level				64,000	80,000	64,000	1,600	3,200	3,200	0.055	0.56	48	3.1
MTCA Method C Cleanup Level				2,800,000	3,500,000	2,800,000	70,000	140,000	140,000	0.55	5.6	110	18
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	17	NV	NV	NV
TP-10	TP10-0.2	05/03/1993	0.2	--	--	--	--	0.33 U	0.33 U	--	--	--	--
	TP10-8.5	05/03/1993	8.5	--	--	--	--	50 U	50 U	--	--	--	--
TP-12	TP12-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP12-3	05/03/1993	3	--	--	--	--	200	67 U	--	--	--	--
	TP12-6.5	05/03/1993	6.5	--	--	--	--	5.3	1.7 U	--	--	--	--
TP-13	TP13-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
	TP13-5.5	05/03/1993	5.5	--	--	--	--	--	--	--	--	--	--
TP-14	TP14-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--	--
TP-15	TP15-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--	--
TP-16	TP16-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--	--
	TP16-7	05/03/1993	7	--	--	--	--	--	--	--	--	--	--
TP-27	TP27-10	05/03/1993	10	--	--	--	--	--	--	--	--	--	--
TP-28	TP28-7	05/03/1993	7	--	--	--	--	--	--	--	--	--	--
	TP28-9.5	05/03/1993	9.5	--	--	--	--	240	180	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-1	L15788-1	04/06/2000	2.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	L15788-3	04/06/2000	10	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-2		02/04/1991	3	--	--	--	--	--	--	--	--	--
		02/04/1991	11	--	--	--	--	--	--	--	--	--
	L15788-8	04/06/2000	0	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	L15788-6	04/06/2000	2.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-3		02/04/1991	5.5	--	--	--	--	--	--	--	--	--
		02/04/1991	15	--	--	--	--	--	--	--	--	--
B-4		02/04/1991	3	--	--	--	--	--	--	--	--	--
		02/04/1991	12.5	--	--	--	--	--	--	--	--	--
B-5		02/04/1991	3	--	--	--	--	--	--	--	--	--
		02/04/1991	18.5	--	--	--	--	--	--	--	--	--
	L15788-22	04/06/2000	10	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-6		02/04/1991	3	--	--	--	--	--	--	--	--	--
		02/04/1991	33	--	--	--	--	--	--	--	--	--
	L15788-23	04/06/2000	2.5	0.01 U	--	0.022	--	--	--	--	0.01 U	--
	L15788-25	04/06/2000	10	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-7		02/04/1991	5.5	--	--	--	--	--	--	--	--	--
		02/04/1991	13.5	--	--	--	--	--	--	--	--	--
	L15788-26	04/06/2000	2.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	L15788-28	04/06/2000	10	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-8		02/04/1991	11	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--
	L15788-29	04/06/2000	2.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	L15788-31	04/06/2000	10	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-9		02/04/1991	5.5	--	--	--	--	--	--	--	--	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--
	L15788-32	04/06/2000	2.5	0.01 U	--	0.023	--	--	--	--	0.027	--
	L15788-33	04/06/2000	5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	L15788-34	04/06/2000	10	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-10		02/04/1991	0	--	--	--	--	--	--	--	--	--
		02/04/1991	10.5	0.0025 U	--	0.0025 U	--	--	--	--	0.0025 U	--
		02/04/1991	16	--	--	--	--	--	--	--	--	--
B-11		02/04/1991	3	--	--	--	--	--	--	--	--	--
		02/04/1991	13.5	--	--	--	--	--	--	--	--	--
B-12		02/05/1991	3	--	--	--	--	--	--	--	--	--
		02/05/1991	13	--	--	--	--	--	--	--	--	--
B-13		02/05/1991	15.5	--	--	--	--	--	--	--	--	--
B-14		02/05/1991	8	--	--	--	--	--	--	--	--	--
		02/05/1991	13	--	--	--	--	--	--	--	--	--
B-15		02/05/1991	3	--	--	--	--	--	--	--	--	--
		02/05/1991	15.5	--	--	--	--	--	--	--	--	--
B-19	B19-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
B-20	B20-20	05/03/1993	20	--	--	34	--	--	--	--	520	--
B-31	K9708881-014	11/26/1997	3.5	0.005 U	--	0.005 U	--	--	--	--	0.3 U	--
	K9708881-013	11/26/1997	8	0.005 U	--	0.005 U	--	--	--	--	0.3 U	--
	K9708881-012	11/26/1997	15.5	0.396	--	3.1	--	--	--	--	58	--
B-32	K9709176-011	12/05/1997	6.5	0.017	--	0.005 U	--	--	--	--	0.005 U	--
	K9709176-012	12/08/1997	14	--	--	--	--	--	--	--	0.3 U	--
B-33	K9709014-004	12/04/1997	3.5	0.357	--	0.238	--	--	--	--	28	--
	K9709014-005	12/04/1997	9.5	0.074	--	0.014	--	--	--	--	2.7	--
		12/04/1997	15.5	--	--	--	--	--	--	--	19	--
B-34	K9708881-015	11/26/1997	3.5	0.033	--	0.039	--	--	--	--	1.6	--
	K9708881-016	11/26/1997	8	--	--	--	--	--	--	--	50	--
		11/26/1997	17	--	--	--	--	--	--	--	30	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-35	K9708926-006	12/02/1997	3.5	--	--	--	--	--	--	--	34	--
		12/02/1997	11	--	--	--	--	--	--	--	98	--
		12/02/1997	14	--	--	--	--	--	--	--	150 E	--
B-36	K9709014-001	12/03/1997	5	--	--	--	--	--	--	--	47	--
		12/03/1997	9.5	0.459	--	120	--	--	--	--	120	--
		12/03/1997	15.5	--	--	--	--	--	--	--	9.5	--
B-37	K9708926-001	12/02/1997	5	--	--	--	--	--	--	--	24	--
		12/03/1997	15.5	0.005 U	--	0.008	--	--	--	--	0.3 U	--
B-38	K9709176-008	12/05/1997	3.5	0.145	--	0.705	--	--	--	--	5.9	--
B-39	K9800342-007	01/19/1998	6.5	--	--	--	--	--	--	--	--	--
	K9800342-008	01/19/1998	12.5	--	--	--	--	--	--	--	--	--
B-42	K9709176-013	12/09/1997	8	0.086	--	0.2	--	--	--	--	4.1	--
	K9709176-014	12/09/1997	12.5	--	--	--	--	--	--	--	0.3 U	--
B-43	K9708705-007	11/20/1997	3.5	0.006	--	9.4	--	--	--	--	0.0003 U	--
B-44	K9708705-009	11/20/1997	6.5	0.033	--	1.06	--	--	--	--	0.0043	--
B-45	K9708655-012	11/19/1997	5	0.008	--	0.053	--	--	--	--	1.6	--
B-46	K9708655-007	11/19/1997	5	0.005 U	--	0.027	--	--	--	--	0.3 U	--
	K9708655-008	11/19/1997	9.5	0.005 U	--	0.005	--	--	--	--	0.3 U	--
B-47	K9708655-014	11/18/1997	9.5	0.005 U	--	0.01	--	--	--	--	0.3 U	--
B-48	K9708705-005	11/20/1997	3.5	0.008	--	8.7	--	--	--	--	0.0009	--
B-49	K9708815-004	11/25/1997	5	--	--	--	--	--	--	--	--	--
B-50	K9708704-008	11/21/1997	8	0.005 U	--	0.042	--	--	--	--	0.3 U	--
B-51	K9708815-003	11/24/1997	9.5	0.01 U	--	0.1 U	--	--	--	--	0.3 U	--
B-52	K9708704-005	11/20/1997	3.5	0.042	--	0.964	--	--	--	--	0.7	--
B-53	K9800300-013	01/14/1998	9.5	0.005 U	--	0.005 U	--	--	--	--	0.3 U	--
	K9800300-014	01/14/1998	15.5	0.028 J	--	0.026	--	--	--	--	0.6	--
B-54	K9800300-015	01/14/1998	8	0.005 U	--	0.027	--	--	--	--	0.3 U	--
B-55	K9800300-017	01/15/1998	8	0.006 J	--	0.34	--	--	--	--	0.3 U	--
B-56	K9800342-001	01/15/1998	6.5	0.006	--	0.252	--	--	--	--	0.3 U	--
B-57	K9800342-003	01/16/1998	8	0.005 U	--	0.013	--	--	--	--	0.3 U	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene		Isophorone	Naphthalene		Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene		Phenol
MTCA Method B Cleanup Level				NV		46	1,600		4	200	NV	NV	NV		4,800
MTCA Method C Cleanup Level				NV		460	70,000		8.8	27,000	NV	NV	NV		11,000
Wildlife Ecological Indicator Concentration				NV		NV	NV		NV	NV	NV	NV	NV		NV
B-58	K9800342-005	01/16/1998	6.5	0.005		--	0.005	U	--	--	--	--	0.3	U	--
B-58A	K9803817-001	06/12/1998	5	0.022		--	0.005	U	--	--	--	--	0.01	U	--
	K9803817-002	06/12/1998	17	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
B-62	K9803817-005	06/12/1998	5	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
	K9803817-006	06/12/1998	17	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
B-63	K9803817-007	06/12/1998	5	0.008		--	0.005	U	--	--	--	--	0.01	U	--
	K9803817-008	06/12/1998	17	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
B-66	K9803817-009	06/12/1998	5	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
	K9803817-010	06/12/1998	17	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
B-69	K9803927-011	06/16/1998	0.5	0.98		--	0.005	U	--	--	--	--	0.15		--
	K9803927-001	06/16/1998	2.5	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
	K9803927-012	06/16/1998	5	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
	K9803927-013	06/16/1998	10	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
	K9803927-002	06/16/1998	17	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
B-72	K9803927-003	06/17/1998	0.5	3.4		--	220		--	--	--	--	400		--
	K9803927-004	06/17/1998	5	0.005	U	--	0.005	U	--	--	--	--	0.3		--
	K9803927-005	06/17/1998	10	0.006		--	0.005	U	--	--	--	--	0.33		--
	K9803927-006	06/17/1998	17	0.005	U	--	0.005	U	--	--	--	--	0.011		--
B-73	K9803927-008	06/17/1998	17	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
B-74	K9803927-009	06/17/1998	2.5	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
	K9803927-010	06/17/1998	17	0.005	U	--	0.005	U	--	--	--	--	0.015		--
B-75	K9803927-014	06/17/1998	2.5	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
	K9803927-015	06/17/1998	17	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
B-76	K9803927-016	06/17/1998	10	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--
	K9803927-017	06/17/1998	27	0.011		--	0.005	U	--	--	--	--	0.01	U	--
B-77	K9803927-018	06/17/1998	2.5	0.005	U	--	0.05		--	--	--	--	0.01		--
	K9803927-019	06/17/1998	5	0.005	U	--	0.017		--	--	--	--	0.01	U	--
	K9803927-020	06/17/1998	17	2.5	U	--	370		--	--	--	--	150		--
B-78	K9803979-001	06/18/1998	0.5	1.7		--	0.2		--	--	--	--	38		--
	K9803979-002	06/18/1998	17	0.005	U	--	0.005	U	--	--	--	--	0.01	U	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-79	K9803979-004	06/18/1998	2.5	0.05 U	--	0.05 U	--	--	--	--	2.7	--
	K9803979-006	06/18/1998	10	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
	K9803979-007	06/18/1998	17	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
B-80	K9803995-001	06/19/1998	2.5	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
	K9803995-002	06/19/1998	15	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
	K9803995-003	06/19/1998	25	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
B-81	K9803995-004	06/19/1998	2.5	0.005 U	--	0.25	--	--	--	--	0.05	--
B-82	K9803995-005	06/19/1998	10	0.005 U	--	0.04	--	--	--	--	0.069	--
	K9803995-006	06/19/1998	20	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
B-83	K9804079-001	06/23/1998	5	0.005 U	--	0.03	--	--	--	--	0.014	--
	K9804079-002	06/23/1998	17	0.53	--	530	--	--	--	--	68	--
B-84	K9804079-003	06/23/1998	10	0.007	--	0.89	--	--	--	--	0.97	--
	K9804079-004	06/23/1998	35	0.005 U	--	0.043	--	--	--	--	0.01 U	--
B-85	K9804079-005	06/23/1998	5	0.08	--	1.7	--	--	--	--	0.27	--
	K9804079-006	06/23/1998	10	4.3	--	**5800**	--	--	--	--	320	--
B-86	K9804079-007	06/23/1998	5	0.005 U	--	0.3	--	--	--	--	0.069	--
	K9804079-008	06/23/1998	15	1.6	--	520	--	--	--	--	200	--
B-87	K9804079-009	06/23/1998	5	0.005 U	--	0.24	--	--	--	--	0.01 U	--
	K9804079-010	06/23/1998	15	0.028	--	1.9	--	--	--	--	4.8	--
B-88	K9804079-011	06/23/1998	5	0.005 U	--	0.21	--	--	--	--	0.01 U	--
	K9804079-012	06/23/1998	15	0.005 U	--	0.15	--	--	--	--	0.12	--
B-89	K9804079-013	06/23/1998	5	0.005 U	--	0.022	--	--	--	--	0.01 U	--
	K9804079-014	06/23/1998	15	0.006	--	0.005 U	--	--	--	--	0.01 U	--
B-90	K9804079-015	06/23/1998	0.5	1.1	--	0.1 U	--	--	--	--	8.6	--
	K9804079-016	06/23/1998	17.5	0.005 U	--	0.005 U	--	--	--	--	0.13	--
B-91	K9804079-017	06/23/1998	0.5	0.059	--	0.7	--	--	--	--	2.1	--
	K9804079-018	06/23/1998	15	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
B-92	K9804079-019	06/23/1998	10	0.005 U	--	0.016	--	--	--	--	0.01	--
	K9804079-020	06/23/1998	30	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-93	K9804129-001	06/24/1998	25	0.008	--	0.094	--	--	--	--	0.7	--
	K9804129-002	06/24/1998	40	0.01	--	0.22	--	--	--	--	0.77	--
B-94	K9804129-003	06/24/1998	10	0.058	--	35	--	--	--	--	5.4	--
	K9804129-004	06/24/1998	35	0.005 U	--	0.015	--	--	--	--	0.025	--
B-95	K9804129-005	06/24/1998	10	0.44	--	22	--	--	--	--	18	--
	K9804129-006	06/24/1998	25	0.005 U	--	0.054	--	--	--	--	0.048	--
	K9804129-007	06/24/1998	32.5	0.005 U	--	0.011	--	--	--	--	0.018	--
B-96	K9804470-002	07/08/1998	30	0.005 U	--	0.012	--	--	--	--	0.01 U	--
B-97	K9804470-003	07/08/1998	2.5	0.005 U	--	0.014	--	--	--	--	0.01 U	--
B-98	K9804470-005	07/08/1998	17	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
B-99	K9804470-007	07/08/1998	45	0.005 U	--	0.05	--	--	--	--	0.01 U	--
	K9804470-008	07/08/1998	64	0.005 U	--	0.006	--	--	--	--	0.01 U	--
B-100	K9804470-010	07/08/1998	45	0.005 U	--	0.009	--	--	--	--	0.01 U	--
	K9804470-011	07/08/1998	65	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
B-101	K9804470-012	07/08/1998	10	0.005 U	--	0.009	--	--	--	--	0.01 U	--
	K9804470-013	07/08/1998	33	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
B-103	K9804470-014	07/08/1998	2.5	0.005 U	--	0.005 U	--	--	--	--	0.01 U	--
B-104	K9903514-001	06/03/1999	5	--	--	--	--	--	--	--	--	--
	K9903514-002	06/03/1999	10	--	--	--	--	--	--	--	--	--
	K9903514-005	06/03/1999	25	--	--	--	--	--	--	--	--	--
B-105	K9903514-010	06/03/1999	5	--	--	--	--	--	--	--	--	--
	K9903514-011	06/03/1999	10	--	--	--	--	--	--	--	--	--
	K9903514-013	06/03/1999	25	--	--	--	--	--	--	--	--	--
B-106	K9903553-001	06/04/1999	5	--	--	--	--	--	--	--	--	--
	K9903553-002	06/04/1999	15	--	--	--	--	--	--	--	--	--
B-107	K9903553-007	06/04/1999	5	--	--	--	--	--	--	--	--	--
	K9903553-009	06/04/1999	15	--	--	--	--	--	--	--	--	--
	K9903584-002	06/07/1999	25	--	--	--	--	--	--	--	--	--
	K9903584-005	06/07/1999	45	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-108	K9903584-008	06/07/1999	5	--	--	--	--	--	--	--	--	--
	K9903584-009	06/07/1999	10	--	--	--	--	--	--	--	--	--
B-109	K9903616-007	06/08/1999	5	--	--	--	--	--	--	--	--	--
	K9903616-008	06/08/1999	10	--	--	--	--	--	--	--	--	--
	K9903616-010	06/08/1999	25	--	--	--	--	--	--	--	--	--
	K9903616-011	06/08/1999	40	--	--	--	--	--	--	--	--	--
B-110	K9903665-001	06/08/1999	5	--	--	--	--	--	--	--	--	--
	K9903665-002	06/08/1999	10	--	--	--	--	--	--	--	--	--
	K9903665-004	06/08/1999	25	--	--	--	--	--	--	--	--	--
	K9903665-009	06/08/1999	43	--	--	--	--	--	--	--	--	--
B-111	K9903711-001	06/09/1999	5	--	--	--	--	--	--	--	--	--
	K9903711-002	06/09/1999	10	--	--	--	--	--	--	--	--	--
	K9903711-004	06/10/1999	30	--	--	--	--	--	--	--	--	--
B-112	K9903711-009	06/10/1999	10	--	--	--	--	--	--	--	--	--
	K9903711-013	06/10/1999	30	--	--	--	--	--	--	--	--	--
B-113	K9903723-001	06/11/1999	5	--	--	--	--	--	--	--	--	--
	K9903723-002	06/11/1999	10	--	--	--	--	--	--	--	--	--
	K9903723-003	06/11/1999	15	--	--	--	--	--	--	--	--	--
	K9903723-005	06/11/1999	25	--	--	--	--	--	--	--	--	--
B-114	K9903794-002	06/11/1999	10	--	--	--	--	--	--	--	--	--
	K9903794-003	06/11/1999	15	--	--	--	--	--	--	--	--	--
	K9903794-007	06/14/1999	30	--	--	--	--	--	--	--	--	--
B-115	K9903794-011	06/14/1999	10	--	--	--	--	--	--	--	--	--
	K9903794-012	06/14/1999	15	--	--	--	--	--	--	--	--	--
B-116	K9903826-002	06/14/1999	10	--	--	--	--	--	--	--	--	--
	K9903826-007	06/15/1999	40	--	--	--	--	--	--	--	--	--
	K9903826-018	06/15/1999	95	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-117	K9903826-021	06/15/1999	5	--	--	--	--	--	--	--	--	--
	K9903826-023	06/15/1999	15	--	--	--	--	--	--	--	--	--
	K9903871-004	06/16/1999	65	--	--	--	--	--	--	--	--	--
	K9903871-008	06/16/1999	90	--	--	--	--	--	--	--	--	--
B-118	K9903871-009	06/16/1999	5	--	--	--	--	--	--	--	--	--
	K9903871-010	06/16/1999	10	--	--	--	--	--	--	--	--	--
B-119	K9903915-001	06/17/1999	2.5	--	--	--	--	--	--	--	--	--
	K9903915-002	06/17/1999	5	--	--	--	--	--	--	--	--	--
	K9903915-004	06/17/1999	15	--	--	--	--	--	--	--	--	--
B-139	K9907039-005	10/04/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907039-009	10/04/1999	5	--	--	--	--	--	--	--	--	--
	K9907039-006	10/04/1999	20	--	--	--	--	--	--	--	--	--
B-140	K9907141-001	10/06/1999	10	0.01 U	--	1.1	--	--	--	--	0.32	--
B-141	K9907141-002	10/06/1999	2.5	0.069	--	0.03	--	--	--	--	0.034	--
B-142	K9907141-003	10/07/1999	10	0.56	--	280	--	--	--	--	66	--
B-147	K9907141-004	10/08/1999	10	0.66	--	230	--	--	--	--	73	--
	K9907141-005	10/08/1999	20	--	--	--	--	--	--	--	--	--
B-148	K9907141-006	10/08/1999	10	0.31	--	75	--	--	--	--	37	--
	K9907141-007	10/08/1999	15	0.29	--	90	--	--	--	--	33	--
B-149	K9907141-008	10/08/1999	3	0.01 U	--	0.015	--	--	--	--	0.01 U	--
	K9907141-009	10/08/1999	10	0.78	--	640	--	--	--	--	130	--
	K9907141-010	10/08/1999	20	--	--	--	--	--	--	--	--	--
B-150	K9907223-003	10/11/1999	10.5	0.072	--	66	--	--	--	--	9.6	--
B-153	K9907223-007	10/11/1999	5	--	--	--	--	--	--	--	--	--
	K9907223-008	10/11/1999	10	0.01 U	--	0.068	--	--	--	--	0.046	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-155	K9907223-009	10/12/1999	5	0.011	--	14	--	--	--	--	0.43	--
	K9907223-016	10/12/1999	9	0.01 U	--	0.58	--	--	--	--	0.033	--
B-160	K9907379-011	10/13/1999	10	0.01 U	--	0.028	--	--	--	--	0.01 U	--
B-161	K9907379-010	10/13/1999	10	--	--	--	--	--	--	--	--	--
B-162	K9907379-009	10/13/1999	11.5	--	--	--	--	--	--	--	--	--
B-165	K9907379-008	10/13/1999	11.5	--	--	--	--	--	--	--	--	--
B-167	K9907379-006	10/14/1999	20	--	--	--	--	--	--	--	--	--
B-170	K9907379-017	10/15/1999	7.5	--	--	--	--	--	--	--	--	--
B-187	K9907559-010	10/21/1999	11.5	--	--	--	--	--	--	--	--	--
B-188	K9907559-011	10/21/1999	5	--	--	--	--	--	--	--	--	--
	K9907559-012	10/21/1999	11.5	--	--	--	--	--	--	--	--	--
B-189	K9907607-001	10/22/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907607-002	10/22/1999	12	--	--	--	--	--	--	--	--	--
B-190	K9907700-001	10/25/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907700-002	10/25/1999	5	--	--	--	--	--	--	--	--	--
	K9907700-003	10/25/1999	10	--	--	--	--	--	--	--	--	--
B-191	K9907700-004	10/25/1999	2.5	--	--	--	--	--	--	--	--	--
	K9907700-005	10/25/1999	5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-192	K9907700-006	10/25/1999	2.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907700-007	10/25/1999	5	--	--	--	--	--	--	--	--	--
B-193	K9907700-008	10/25/1999	2.5	0.01 U	--	0.036	--	--	--	--	0.48	--
	K9907700-009	10/25/1999	5	0.06	--	0.062	--	--	--	--	1.4	--
	K9907700-010	10/25/1999	10	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-194	K9907700-011	10/25/1999	2.5	0.032	--	23	--	--	--	--	3.2	--
	K9907700-012	10/25/1999	5	0.014	--	0.88	--	--	--	--	0.039	--
	K9907700-013	10/25/1999	10	0.099	--	18	--	--	--	--	9.1	--
B-195	K9907700-014	10/26/1999	2.5	0.63	--	0.093	--	--	--	--	1.2	--
	K9907700-015	10/26/1999	5	0.044	--	0.01 U	--	--	--	--	0.027	--
	K9907700-016	10/26/1999	10	0.01 U	--	0.12	--	--	--	--	0.033	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-196	K9907700-017	10/26/1999	3	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907700-018	10/26/1999	9	0.012	--	0.79	--	--	--	--	0.45	--
B-197	K9907767-001	10/26/1999	2.5	0.044	--	0.02	--	--	--	--	0.048	--
	K9907767-002	10/26/1999	5	0.01 U	--	0.01 U	--	--	--	--	0.025	--
	K9907767-003	10/26/1999	10	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-198	K9907767-004	10/27/1999	2.5	0.01 U	--	0.01 U	--	--	--	--	0.03	--
	K9907767-005	10/27/1999	5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-199	K9907767-007	10/27/1999	2.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907767-008	10/27/1999	5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907767-009	10/27/1999	10	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907767-010	10/27/1999	15	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-200	K9907767-012	10/27/1999	2.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907767-013	10/27/1999	5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-201	K9907767-014	10/28/1999	2.5	0.01 U	--	0.061	--	--	--	--	0.022	--
	K9907767-015	10/28/1999	5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907767-016	10/28/1999	10	--	--	--	--	--	--	--	--	--
	K9907767-017	10/28/1999	15	0.055	--	59	--	--	--	--	9.4	--
	K9907767-018	10/28/1999	20	0.01 U	--	0.81	--	--	--	--	0.038	--
B-202	K9907767-019	10/28/1999	2.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907767-020	10/28/1999	5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907767-021	10/28/1999	15	--	--	--	--	--	--	--	--	--
B-203	K9907788-009	10/28/1999	2.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907788-010	10/28/1999	5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9907788-011	10/28/1999	10	0.21	--	0.88	--	--	--	--	1.6	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene		Isophorone	Naphthalene		Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene		Phenol
MTCA Method B Cleanup Level				NV		46	1,600		4	200	NV	NV	NV		4,800
MTCA Method C Cleanup Level				NV		460	70,000		8.8	27,000	NV	NV	NV		11,000
Wildlife Ecological Indicator Concentration				NV		NV	NV		NV	NV	NV	NV	NV		NV
B-221	K9908093-005	11/09/1999	2.5	0.01		--	0.01	U	--	--	--	--	0.01	U	--
	K9908093-006	11/09/1999	7.5	0.01	U	--	0.058		--	--	--	--	0.032		--
B-222	K9908120-001	11/10/1999	2.5	0.32		--	3		--	--	--	--	74		--
	K9908120-002	11/10/1999	5	0.034		--	0.81		--	--	--	--	3.9		--
	K9908120-003	11/10/1999	10	0.01	U	--	0.01	U	--	--	--	--	0.01	U	--
B-223	K9908120-005	11/10/1999	2.5	--		--	--		--	--	--	--	--		--
	K9908120-006	11/10/1999	5	0.01	U	--	0.01	U	--	--	--	--	0.01	U	--
	K9908120-007	11/10/1999	10	0.01	U	--	0.01	U	--	--	--	--	0.01	U	--
B-224	K9908120-008	11/10/1999	2.5	0.01	U	--	0.01	U	--	--	--	--	0.01	U	--
	K9908120-009	11/10/1999	5	--		--	--		--	--	--	--	--		--
	K9908120-010	11/10/1999	10	--		--	--		--	--	--	--	--		--
B-225	K9908120-012	11/10/1999	2.5	--		--	--		--	--	--	--	--		--
	K9908120-013	11/10/1999	5	--		--	--		--	--	--	--	--		--
B-226	K9908186-001	11/11/1999	2.5	--		--	--		--	--	--	--	--		--
	K9908186-002	11/11/1999	5	--		--	--		--	--	--	--	--		--
	K9908186-003	11/11/1999	10	--		--	--		--	--	--	--	--		--
B-227	K9908186-005	11/11/1999	2.5	--		--	--		--	--	--	--	--		--
	K9908186-006	11/11/1999	5	--		--	--		--	--	--	--	--		--
B-228	K9908186-008	11/11/1999	1.5	--		--	--		--	--	--	--	--		--
	K9908186-010	11/11/1999	5	--		--	--		--	--	--	--	--		--
B-230	K9908189-001	11/12/1999	2.5	0.01	U	--	0.25		--	--	--	--	0.29		--
	K9908189-003	11/12/1999	5	0.01	U	--	0.01	U	--	--	--	--	0.01	U	--
B-231	K9908189-005	11/12/1999	2.5	0.01	U	--	0.01	U	--	--	--	--	0.01	U	--
	K9908189-006	11/12/1999	5	--		--	--		--	--	--	--	--		--
	K9908189-007	11/12/1999	7	0.01	U	--	0.063		--	--	--	--	0.28		--
B-232	K9908806-003	12/07/1999	5	--		--	--		--	--	--	--	--		--
	K9908806-007	12/07/1999	25	--		--	--		--	--	--	--	--		--
B-233	K9908806-009	12/07/1999	5	--		--	--		--	--	--	--	--		--
	K9908806-011	12/07/1999	15	0.01	U	--	27		--	--	--	--	1.1		--
	K9908806-013	12/07/1999	25	--		--	--		--	--	--	--	--		--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-234	K9908806-015	12/07/1999	10	0.72	--	960	--	--	--	--	120	--
	K9908806-016	12/07/1999	15	0.01 U	--	45	--	--	--	--	0.86	--
	K9908806-018	12/07/1999	25	--	--	--	--	--	--	--	--	--
B-235	K9908924-016	12/08/1999	10	0.01	--	0.89	--	--	--	--	3.8	--
	K9908924-017	12/08/1999	15	0.01 U	--	0.36	--	--	--	--	1.1	--
	K9908924-019	12/08/1999	25	0.01 U	--	1.9	--	--	--	--	0.069	--
B-236	K9908924-023	12/08/1999	10	0.01 U	--	2.9	--	--	--	--	0.6	--
	K9908924-024	12/08/1999	15	0.01 U	--	7.4	--	--	--	--	0.46	--
	K9908924-026	12/08/1999	25	--	--	--	--	--	--	--	--	--
B-237	K9908924-028	12/08/1999	5	--	--	--	--	--	--	--	--	--
	K9908924-030	12/08/1999	15	--	--	--	--	--	--	--	--	--
	K9908924-032	12/08/1999	25	--	--	--	--	--	--	--	--	--
B-238	K9908924-003	12/09/1999	10	0.01 U	--	1.3	--	--	--	--	0.92	--
	K9908924-004	12/09/1999	15	0.057	--	4.6	--	--	--	--	4.7	--
	K9908924-006	12/09/1999	25	--	--	--	--	--	--	--	--	--
B-239	K9908924-009	12/09/1999	10	0.01 U	--	4	--	--	--	--	1.5	--
	K9908924-010	12/09/1999	15	0.01 U	--	5.9	--	--	--	--	1.8	--
	K9908924-012	12/09/1999	25	--	--	--	--	--	--	--	--	--
B-240	K9908924-034	12/10/1999	5	--	--	--	--	--	--	--	--	--
	K9908924-036	12/10/1999	15	0.01 U	--	0.2	--	--	--	--	1.1	--
	K9908924-038	12/10/1999	25	--	--	--	--	--	--	--	--	--
B-241	K9908924-039	12/10/1999	5	0.027	--	45	--	--	--	--	0.21	--
	K9908924-041	12/10/1999	15	0.01 U	--	10	--	--	--	--	1.5	--
	K9908924-043	12/10/1999	25	--	--	--	--	--	--	--	--	--
B-242	K9908973-007	12/13/1999	25	--	--	--	--	--	--	--	--	--
B-243	K9909023-005	12/14/1999	25	--	--	--	--	--	--	--	--	--
B-244	K9909069-002	12/15/1999	25	--	--	--	--	--	--	--	--	--
	K9909069-005	12/15/1999	35	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-245	K9909069-009	12/15/1999	15	0.01 U	--	0.01 U	--	--	--	--	0.022	--
	K9909069-012	12/15/1999	30	0.01 U	--	0.076	--	--	--	--	0.49	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-246	K9909069-015	12/16/1999	5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9909069-016	12/16/1999	10	--	--	--	--	--	--	--	--	--
	K9909069-018	12/16/1999	20	--	--	--	--	--	--	--	--	--
B-247	K9909148-001	12/17/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909148-002	12/17/1999	5	--	--	--	--	--	--	--	--	--
	K9909148-004	12/17/1999	16	--	--	--	--	--	--	--	--	--
B-248	K9909181-001	12/20/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909181-004	12/20/1999	15	--	--	--	--	--	--	--	--	--
	K9909181-006	12/20/1999	25	--	--	--	--	--	--	--	--	--
B-249	K9909181-008	12/20/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909181-012	12/20/1999	20	--	--	--	--	--	--	--	--	--
	K9909181-013	12/20/1999	25	--	--	--	--	--	--	--	--	--
B-250	K9909223-005	12/21/1999	20	0.021	--	0.01 U	--	--	--	--	0.015	--
	K9909223-006	12/21/1999	25	0.01 U	--	0.013	--	--	--	--	0.18	--
	K9909223-004	12/21/1999	35	0.01 U	--	0.01 U	--	--	--	--	1	--
B-251	K9909277-001	12/22/1999	2.5	--	--	--	--	--	--	--	--	--
	K9909277-003	12/22/1999	10	--	--	--	--	--	--	--	--	--
	K9909277-005	12/22/1999	25	--	--	--	--	--	--	--	--	--
B-252	K9909277-012	12/22/1999	15	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K9909277-013	12/22/1999	20	0.01 U	--	0.013	--	--	--	--	0.01 U	--
	K9909277-014	12/22/1999	25	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
B-253	K9909277-021	12/23/1999	25	0.01 U	--	2.3	--	--	--	--	0.83	--
B-255	K2000354-003	01/14/2000	10	0.32	--	360	--	--	--	--	21	--
	K2000354-004	01/14/2000	15	0.01 U	--	0.19	--	--	--	--	0.01	--
	K2000354-006	01/14/2000	25	--	--	--	--	--	--	--	--	--
B-256	K2000354-010	01/14/2000	5	0.01 U	--	0.024	--	--	--	--	0.01 U	--
	K2000354-011	01/14/2000	10	0.01 U	--	0.049	--	--	--	--	0.01 U	--
	K2000354-013	01/14/2000	20	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
B-261	K2000528-003	01/20/2000	10	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K2000528-004	01/20/2000	15	0.019	--	0.85	--	--	--	--	2.3	--
	K2000528-006	01/20/2000	30	0.01 U	--	0.01 U	--	--	--	--	0.011	--
B-264	K2106063-001	08/17/2001	2.5	0.014 U	--	0.12	--	--	--	--	0.014 U	--
	K2106063-003	08/17/2001	10	0.013 U	--	0.013 U	--	--	--	--	0.013 U	--
B-265	K2106063-005	08/17/2001	5	0.013 U	--	0.013 U	--	--	--	--	0.013 U	--
B-266	K2106063-008	08/17/2001	5	0.016 U	--	0.052	--	--	--	--	0.016 U	--
B-272	K2106063-023	08/17/2001	5	0.012	--	2.4	--	--	--	--	0.93	--
B-273	K2106063-025	08/20/2001	5	0.015 U	--	1.7	--	--	--	--	0.96	--
B-274	K2106063-030	08/20/2001	5	0.014 U	--	1.3	--	--	--	--	0.035	--
B-304	0806067-07A	06/12/2008	10	0.627	--	0.596	--	--	--	--	4.93	--
	0806067-09A	06/12/2008	19.5	0.0456 U	--	0.0456 U	--	--	--	--	0.0456 U	--
B-305	0806067-12A	06/12/2008	10	0.0463 U	--	0.0463 U	--	--	--	--	0.0463 U	--
	0806067-14A	06/12/2008	19	0.0459 U	--	0.0776	--	--	--	--	0.0996	--
B-306	1091024001	03/11/2009	2.5	7.63	--	0.863	--	--	--	--	86.9	--
	1091029003	03/11/2009	18	0.983	--	0.0614	--	--	--	--	26	--
B-308	1091024002	03/11/2009	0.5	0.0804	--	0.007 U	--	--	--	--	0.0322	--
	1091024003	03/11/2009	2.5	0.0756	--	0.0102	--	--	--	--	0.0254	--
	1091024004	03/11/2009	15	0.467	--	140	--	--	--	--	66.9	--
B-313	0905143-06A	05/21/2009	2.5	0.0353 U	0.0353 U	0.0353 U	0.0353 U	--	0.0353 U	0.0353 U	0.0353 U	0.0353 U
	0905143-07B	05/21/2009	5	0.0358 U	0.0358 U	0.0358 U	0.0358 U	--	0.0358 U	0.0358 U	0.0358 U	0.0358 U
	0905143-08B	05/21/2009	10	0.043 U	0.043 U	0.043 U	0.043 U	--	0.043 U	0.043 U	0.043 U	0.043 U
	0905143-09B	05/21/2009	15	0.0443 U	0.0443 U	0.0443 U	0.0443 U	--	0.0443 U	0.0443 U	0.0443 U	0.0443 U
CT		02/07/1991	0	--	--	--	--	--	--	--	--	--
		02/07/1991	0	--	--	--	--	--	--	--	--	--
DS-E		06/18/1997	0	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U
DS-N		06/18/1997	0	3 U	3 U	4	3 U	20 U	3 U	3 U	4.5	3 U
DS-S		06/18/1997	0	1.5 U	1.5 U	1.5 U	1.5 U	10 U	1.5 U	1.5 U	1.5 U	1.5 U
DS-W		06/18/1997	0	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
GP8	0905163-05B	05/22/2009	1.4	0.175 U	0.175 U	0.175 U	0.175 U	--	0.175 U	0.175 U	0.175 U	0.175 U
	0905163-06B	05/22/2009	5	0.0392 U	0.0392 U	0.0392 U	0.0392 U	--	0.0392 U	0.0392 U	0.0392 U	0.0392 U
	0905163-07B	05/22/2009	11	0.21 U	0.21 U	0.21 U	0.21 U	--	0.21 U	0.21 U	0.21 U	0.21 U
	0905163-08B	05/22/2009	15	0.043 U	0.043 U	0.043 U	0.043 U	--	0.043 U	0.043 U	0.043 U	0.043 U
GP11	0905143-10B	05/21/2009	1.5	0.0382 U	0.0382 U	0.0382 U	0.0382 U	--	0.0382 U	0.0382 U	0.0382 U	0.0382 U
	0905143-11A	05/21/2009	5	0.0422 U	0.0422 U	0.0422 U	0.0422 U	--	0.0422 U	0.0422 U	0.0422 U	0.0422 U
	0905143-12A	05/21/2009	10	0.0455 U	0.0455 U	0.0455 U	0.0455 U	--	0.0455 U	0.0455 U	0.0455 U	0.0455 U
	0905143-13B	05/21/2009	15	0.0439 U	0.0439 U	0.0439 U	0.0439 U	--	0.0439 U	0.0439 U	0.0439 U	0.0439 U
MFP-01	K9708818-001	11/25/1997	0	--	--	--	--	--	--	--	--	--
	K9708818-002	11/25/1997	3	--	--	--	--	--	--	--	--	--
	K9708818-003	11/25/1997	6	--	--	--	--	--	--	--	--	--
	K9708818-004	11/25/1997	9	--	--	--	--	--	--	--	--	--
MFP-02	K9708818-008R	11/25/1997	6	--	--	--	--	--	--	--	--	--
MFP-04	K9708818-011	11/25/1997	0	--	--	--	--	--	--	--	--	--
	K9708818-012R	11/25/1997	3	--	--	--	--	--	--	--	--	--
MFP-05	K9708818-014R	11/25/1997	0	--	--	--	--	--	--	--	--	--
	K9708818-015	11/25/1997	3	--	--	--	--	--	--	--	--	--
	K9708818-016	11/25/1997	6	--	--	--	--	--	--	--	--	--
	K9708818-018	11/25/1997	9	--	--	--	--	--	--	--	--	--
MW-10		02/05/1991	0	--	--	--	--	--	--	--	--	--
		02/05/1991	0	--	--	--	--	--	--	--	--	--
		02/05/1991	0	--	--	--	--	--	--	--	--	--
MW-11S	K9707902-003	10/23/1997	0	190	100 U	**100000**	100 U	250 U	100 U	100 U	19000	100 U
MW-13	MW13-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
	MW13-15	05/03/1993	15	--	--	--	--	--	--	--	--	--
MW-14	MW14-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
MW-17	MW17-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
MW-18	MW18-10	05/03/1993	10	--	--	150	--	--	--	--	17	--
	MW18-15	05/03/1993	15	--	--	--	--	--	--	--	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
MW-22	MW22-15	05/03/1993	15	--	--	--	--	--	--	--	--	--
MW-24	T5070221	04/02/1996	0.5	0.2	--	0.13	--	--	--	--	0.35 U	--
	T5070224	04/02/1996	11	0.27	--	4.1 U	--	--	--	--	23	--
	T5070226	04/02/1996	21	1	--	8.7 U	--	--	--	--	54	--
MW-25	T5060415	04/02/1996	3	0.073	--	0.37 U	--	--	--	--	0.17	--
MW-26	T5070204	04/02/1996	8.5	0.52	--	65	--	--	--	--	62	--
	T5070207	04/02/1996	21	0.16	--	32	--	--	--	--	20	--
MW-30	T5070239	04/02/1996	26	--	--	0.42 U	--	--	--	--	0.42 U	--
MW-31	T5070231	04/02/1996	21	--	--	0.05	--	--	--	--	0.52	--
	T5070232	04/02/1996	26	--	--	0.43 U	--	--	--	--	0.43 U	--
	T5070233	04/02/1996	31	--	--	0.42 U	--	--	--	--	0.42 U	--
MW-32	T5070241	04/02/1996	6	--	--	0.43 U	--	--	--	--	0.43 U	--
MW-40	K2204940-001	07/18/2002	55	0.55	--	43	--	--	--	--	24	--
	K2204940-002	07/19/2002	61	0.0094	--	0.0066	--	--	--	--	0.4	--
	K2204940-003	07/19/2002	66	0.0065 U	--	0.0078	--	--	--	--	0.17	--
MW-55	0806067-02A	06/10/2008	10	0.0457 U	--	0.0457 U	--	--	--	--	0.0457 U	--
	0806067-04A	06/10/2008	20	0.0469 U	--	0.752	--	--	--	--	0.0469 U	--
MW-58D	0806103-03A	06/18/2008	10	0.0363 U	--	0.0363 U	--	--	--	--	0.0363 U	--
	0806103-04A	06/18/2008	13.5	0.0497 U	--	0.0497 U	--	--	--	--	0.0497 U	--
NPY-03		02/06/1991	0	--	--	--	--	--	--	--	--	--
NPY-04		02/06/1991	0	--	--	--	--	--	--	--	--	--
P-01	HC-P/01	02/06/1991	0	--	--	--	--	--	--	--	--	--
P-02	HC-P/02	02/06/1991	0	--	--	--	--	--	--	--	--	--
PP		06/18/1997	0	3 U	3 U	4.7	3 U	20 U	3 U	3 U	6.9	3 U
SS-01		02/06/1991	0	--	--	--	--	--	--	--	--	--
SS-3B	0807092-01A	07/16/2008	1.5	4.85	--	38.4	--	--	--	--	279	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
SS-4B	0807092-02A	07/16/2008	0.3	0.446	--	0.157	--	--	--	--	0.472	--
SS-9	0807092-07A	07/17/2008	0.3	0.0839	--	0.00706 U	--	--	--	--	0.0649	--
SS-13	0903005-07A	02/26/2009	0.5	0.0071 U	--	0.0071 U	--	--	--	--	0.0071 U	--
SS-14	0903005-08A	02/26/2009	0.5	0.0109	--	0.00725 U	--	--	--	--	0.00725 U	--
SS-15	0903005-09A	02/26/2009	0.5	0.00787 U	--	0.0165	--	--	--	--	0.0228	--
SS-16	0903005-10A	02/26/2009	0.5	0.012	--	0.008 U	--	--	--	--	0.016	--
SS-17	0903005-11A	02/26/2009	0.5	0.00746 U	--	0.00746 U	--	--	--	--	0.00746 U	--
SS-18	0903005-12A	02/26/2009	0.5	0.00749 U	--	0.00749 U	--	--	--	--	0.00749 U	--
SS-19	0903005-13A	02/26/2009	0.5	0.607	--	0.0641	--	--	--	--	0.342	--
T-4	K2005541-003	07/21/2000	1.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K2005541-002	07/21/2000	1.5	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K2005541-005	07/21/2000	1.75	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K2005541-001	07/21/2000	2	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
	K2005541-004	07/21/2000	2	0.01 U	--	0.01 U	--	--	--	--	0.01 U	--
TP-01	TP01-0.3	05/03/1993	0.3	--	--	3.3 U	--	--	--	--	3.3 U	--
	TP01-9.5	05/03/1993	9.5	--	--	--	--	--	--	--	--	--
TP-02	TP02-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--
	TP02-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
TP-03	TP03-0.3	05/03/1993	0.3	--	--	6	--	--	--	--	6.1	--
	TP03-10	05/03/1993	10	--	--	--	--	--	--	--	--	--
TP-04	TP04-5	05/03/1993	5	--	--	--	--	--	--	--	--	--
	TP04-10	05/03/1993	10	--	--	--	--	--	--	--	--	--
TP-05	TP05-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	--	--	0.67 U	--	--	--	--	0.67 U	--
TP-09	TP09-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--
	TP09-4	05/03/1993	4	--	--	12	--	--	--	--	0.3 U	--
	TP09-9	05/03/1993	9	--	--	280	--	--	--	--	100	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Indeno(1,2,3-cd)-pyrene	Isophorone	Naphthalene	Nitrobenzene	N -Nitroso-dimethylamine	N-Nitroso-diphenylamine	N-Nitrosodi-propylamine	Phenanthrene	Phenol
MTCA Method B Cleanup Level				NV	46	1,600	4	200	NV	NV	NV	4,800
MTCA Method C Cleanup Level				NV	460	70,000	8.8	27,000	NV	NV	NV	11,000
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV	NV
TP-10	TP10-0.2	05/03/1993	0.2	--	--	0.33 U	--	--	--	--	0.33 U	--
	TP10-8.5	05/03/1993	8.5	--	--	300	--	--	--	--	95	--
TP-12	TP12-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--
	TP12-3	05/03/1993	3	--	--	810	--	--	--	--	320 U	--
	TP12-6.5	05/03/1993	6.5	--	--	19	--	--	--	--	4	--
TP-13	TP13-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--
	TP13-5.5	05/03/1993	5.5	--	--	--	--	--	--	--	--	--
TP-14	TP14-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--	--
TP-15	TP15-0.2	05/03/1993	0.2	--	--	--	--	--	--	--	--	--
TP-16	TP16-0.3	05/03/1993	0.3	--	--	--	--	--	--	--	--	--
	TP16-7	05/03/1993	7	--	--	--	--	--	--	--	--	--
TP-27	TP27-10	05/03/1993	10	--	--	--	--	--	--	--	--	--
TP-28	TP28-7	05/03/1993	7	--	--	--	--	--	--	--	--	--
	TP28-9.5	05/03/1993	9.5	--	--	1400	--	--	--	--	500	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
B-1	L15788-1	04/06/2000	2.5	0.01	U	ND
	L15788-3	04/06/2000	10	0.01	U	ND
B-2		02/04/1991	3	--		--
		02/04/1991	11	--		--
	L15788-8	04/06/2000	0	0.01	U	ND
	L15788-6	04/06/2000	2.5	0.01	U	ND
B-3		02/04/1991	5.5	--		--
		02/04/1991	15	--		--
B-4		02/04/1991	3	--		--
		02/04/1991	12.5	--		--
B-5		02/04/1991	3	--		--
		02/04/1991	18.5	--		--
	L15788-22	04/06/2000	10	0.01	U	ND
B-6		02/04/1991	3	--		--
		02/04/1991	33	--		--
	L15788-23	04/06/2000	2.5	0.01	U	ND
	L15788-25	04/06/2000	10	0.01	U	ND
B-7		02/04/1991	5.5	--		--
		02/04/1991	13.5	--		--
	L15788-26	04/06/2000	2.5	0.01	U	ND
	L15788-28	04/06/2000	10	0.01	U	ND
B-8		02/04/1991	11	--		--
		02/04/1991	16	--		--
	L15788-29	04/06/2000	2.5	0.01	U	ND
	L15788-31	04/06/2000	10	0.01	U	ND

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene	cPAH TEQ
MTCA Method B Cleanup Level				2,400	0.14
MTCA Method C Cleanup Level				110,000	18
Wildlife Ecological Indicator Concentration				NV	12
B-9		02/04/1991	5.5	--	--
		02/04/1991	16	--	--
	L15788-32	04/06/2000	2.5	0.035	0.01776
	L15788-33	04/06/2000	5	0.01 U	ND
	L15788-34	04/06/2000	10	0.01 U	ND
B-10		02/04/1991	0	--	--
		02/04/1991	10.5	0.0025 U	ND
		02/04/1991	16	--	--
B-11		02/04/1991	3	--	--
		02/04/1991	13.5	--	--
B-12		02/05/1991	3	--	--
		02/05/1991	13	--	--
B-13		02/05/1991	15.5	--	--
B-14		02/05/1991	8	--	--
		02/05/1991	13	--	--
B-15		02/05/1991	3	--	--
		02/05/1991	15.5	--	--
B-19	B19-5	05/03/1993	5	--	--
B-20	B20-20	05/03/1993	20	130	9.71
B-31	K9708881-014	11/26/1997	3.5	0.025	0.00416
	K9708881-013	11/26/1997	8	0.04	0.00485
	K9708881-012	11/26/1997	15.5	21	2.314
B-32	K9709176-011	12/05/1997	6.5	0.021	**0.2247**
	K9709176-012	12/08/1997	14	--	--
B-33	K9709014-004	12/04/1997	3.5	20	**1.4019**
	K9709014-005	12/04/1997	9.5	1.8	**0.26311**
		12/04/1997	15.5	--	--
B-34	K9708881-015	11/26/1997	3.5	0.765	0.10719
	K9708881-016	11/26/1997	8	--	--
		11/26/1997	17	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene	cPAH TEQ
MTCA Method B Cleanup Level				2,400	0.14
MTCA Method C Cleanup Level				110,000	18
Wildlife Ecological Indicator Concentration				NV	12
B-35	K9708926-006	12/02/1997	3.5	--	--
		12/02/1997	11	--	--
		12/02/1997	14	--	--
B-36	K9709014-001	12/03/1997	5	--	--
		12/03/1997	9.5	49	**3.0853**
		12/03/1997	15.5	--	--
B-37	K9708926-001	12/02/1997	5	--	--
		12/03/1997	15.5	0.015	0.004125
B-38	K9709176-008	12/05/1997	3.5	8.1	**0.6307**
B-39	K9800342-007	01/19/1998	6.5	--	--
	K9800342-008	01/19/1998	12.5	--	--
B-42	K9709176-013	12/09/1997	8	4.7	**0.42394**
	K9709176-014	12/09/1997	12.5	--	--
B-43	K9708705-007	11/20/1997	3.5	0.028	0.01246
B-44	K9708705-009	11/20/1997	6.5	1.93	**0.1607**
B-45	K9708655-012	11/19/1997	5	0.331	**0.2744**
B-46	K9708655-007	11/19/1997	5	0.075	0.0088
	K9708655-008	11/19/1997	9.5	0.015	ND
B-47	K9708655-014	11/18/1997	9.5	0.005 U	ND
B-48	K9708705-005	11/20/1997	3.5	0.264	0.02447
B-49	K9708815-004	11/25/1997	5	--	--
B-50	K9708704-008	11/21/1997	8	0.03	0.0072
B-51	K9708815-003	11/24/1997	9.5	0.02 U	ND
B-52	K9708704-005	11/20/1997	3.5	0.844	0.12203
B-53	K9800300-013	01/14/1998	9.5	0.005 U	ND
	K9800300-014	01/14/1998	15.5	0.742	0.11458
B-54	K9800300-015	01/14/1998	8	0.15	0.1336
B-55	K9800300-017	01/15/1998	8	0.011	0.004375
B-56	K9800342-001	01/15/1998	6.5	0.005 U	0.004125
B-57	K9800342-003	01/16/1998	8	0.005 U	ND

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
B-58	K9800342-005	01/16/1998	6.5	0.01		0.004375
B-58A	K9803817-001	06/12/1998	5	0.017		0.01888
	K9803817-002	06/12/1998	17	0.01	U	ND
B-62	K9803817-005	06/12/1998	5	0.011		ND
	K9803817-006	06/12/1998	17	0.01	U	ND
B-63	K9803817-007	06/12/1998	5	0.01	U	0.0076
	K9803817-008	06/12/1998	17	0.01	U	ND
B-66	K9803817-009	06/12/1998	5	0.01	U	ND
	K9803817-010	06/12/1998	17	0.01	U	ND
B-69	K9803927-011	06/16/1998	0.5	2.2		**1.725**
	K9803927-001	06/16/1998	2.5	0.01	U	ND
	K9803927-012	06/16/1998	5	0.01	U	ND
	K9803927-013	06/16/1998	10	0.01	U	ND
	K9803927-002	06/16/1998	17	0.01	U	ND
B-72	K9803927-003	06/17/1998	0.5	160		**7.01**
	K9803927-004	06/17/1998	5	0.16		0.02043
	K9803927-005	06/17/1998	10	0.25		0.0307
	K9803927-006	06/17/1998	17	0.032		ND
B-73	K9803927-008	06/17/1998	17	0.01	U	ND
B-74	K9803927-009	06/17/1998	2.5	0.01	U	ND
	K9803927-010	06/17/1998	17	0.01	U	ND
B-75	K9803927-014	06/17/1998	2.5	0.01	U	ND
	K9803927-015	06/17/1998	17	0.01	U	ND
B-76	K9803927-016	06/17/1998	10	0.01	U	ND
	K9803927-017	06/17/1998	27	0.09		0.03103
B-77	K9803927-018	06/17/1998	2.5	0.02		ND
	K9803927-019	06/17/1998	5	0.01	U	ND
	K9803927-020	06/17/1998	17	57		9.66
B-78	K9803979-001	06/18/1998	0.5	32		**4.809**
	K9803979-002	06/18/1998	17	0.01	U	ND

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene	cPAH TEQ
MTCA Method B Cleanup Level				2,400	0.14
MTCA Method C Cleanup Level				110,000	18
Wildlife Ecological Indicator Concentration				NV	12
B-79	K9803979-004	06/18/1998	2.5	0.14	ND
	K9803979-006	06/18/1998	10	0.01 U	ND
	K9803979-007	06/18/1998	17	0.01 U	ND
B-80	K9803995-001	06/19/1998	2.5	0.01 U	ND
	K9803995-002	06/19/1998	15	0.01 U	ND
	K9803995-003	06/19/1998	25	0.01 U	ND
B-81	K9803995-004	06/19/1998	2.5	0.025	ND
B-82	K9803995-005	06/19/1998	10	0.053	0.00763
	K9803995-006	06/19/1998	20	0.01 U	ND
B-83	K9804079-001	06/23/1998	5	0.01 U	ND
	K9804079-002	06/23/1998	17	20	2.557
B-84	K9804079-003	06/23/1998	10	0.25	0.028
	K9804079-004	06/23/1998	35	0.01 U	ND
B-85	K9804079-005	06/23/1998	5	0.26	**0.1617**
	K9804079-006	06/23/1998	10	100	**126.051**
B-86	K9804079-007	06/23/1998	5	0.026	ND
	K9804079-008	06/23/1998	15	64	**7.475**
B-87	K9804079-009	06/23/1998	5	0.01 U	ND
	K9804079-010	06/23/1998	15	1.6	**0.14125**
B-88	K9804079-011	06/23/1998	5	0.01 U	ND
	K9804079-012	06/23/1998	15	0.061	0.00843
B-89	K9804079-013	06/23/1998	5	0.01 U	ND
	K9804079-014	06/23/1998	15	0.01 U	0.0074
B-90	K9804079-015	06/23/1998	0.5	14	**2.993**
	K9804079-016	06/23/1998	17.5	0.082	0.00961
B-91	K9804079-017	06/23/1998	0.5	1	**0.2075**
	K9804079-018	06/23/1998	15	0.01 U	ND
B-92	K9804079-019	06/23/1998	10	0.01 U	ND
	K9804079-020	06/23/1998	30	0.01 U	ND

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
B-93	K9804129-001	06/24/1998	25	0.2		0.03254
	K9804129-002	06/24/1998	40	0.27		0.04235
B-94	K9804129-003	06/24/1998	10	1.4		**0.2034**
	K9804129-004	06/24/1998	35	0.01	U	ND
B-95	K9804129-005	06/24/1998	10	9.3		**0.803**
	K9804129-006	06/24/1998	25	0.029		ND
	K9804129-007	06/24/1998	32.5	0.01	U	ND
B-96	K9804470-002	07/08/1998	30	0.01	U	ND
B-97	K9804470-003	07/08/1998	2.5	0.01	U	ND
B-98	K9804470-005	07/08/1998	17	0.01	U	ND
B-99	K9804470-007	07/08/1998	45	0.01	U	ND
	K9804470-008	07/08/1998	64	0.01	U	ND
B-100	K9804470-010	07/08/1998	45	0.01	U	ND
	K9804470-011	07/08/1998	65	0.01	U	ND
B-101	K9804470-012	07/08/1998	10	0.01	U	ND
	K9804470-013	07/08/1998	33	0.01	U	ND
B-103	K9804470-014	07/08/1998	2.5	0.01	U	ND
B-104	K9903514-001	06/03/1999	5	--		--
	K9903514-002	06/03/1999	10	--		--
	K9903514-005	06/03/1999	25	--		--
B-105	K9903514-010	06/03/1999	5	--		--
	K9903514-011	06/03/1999	10	--		--
	K9903514-013	06/03/1999	25	--		--
B-106	K9903553-001	06/04/1999	5	--		--
	K9903553-002	06/04/1999	15	--		--
B-107	K9903553-007	06/04/1999	5	--		--
	K9903553-009	06/04/1999	15	--		--
	K9903584-002	06/07/1999	25	--		--
	K9903584-005	06/07/1999	45	--		--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene	cPAH TEQ
MTCA Method B Cleanup Level				2,400	0.14
MTCA Method C Cleanup Level				110,000	18
Wildlife Ecological Indicator Concentration				NV	12
B-108	K9903584-008	06/07/1999	5	--	--
	K9903584-009	06/07/1999	10	--	--
B-109	K9903616-007	06/08/1999	5	--	--
	K9903616-008	06/08/1999	10	--	--
	K9903616-010	06/08/1999	25	--	--
	K9903616-011	06/08/1999	40	--	--
B-110	K9903665-001	06/08/1999	5	--	--
	K9903665-002	06/08/1999	10	--	--
	K9903665-004	06/08/1999	25	--	--
	K9903665-009	06/08/1999	43	--	--
B-111	K9903711-001	06/09/1999	5	--	--
	K9903711-002	06/09/1999	10	--	--
	K9903711-004	06/10/1999	30	--	--
B-112	K9903711-009	06/10/1999	10	--	--
	K9903711-013	06/10/1999	30	--	--
B-113	K9903723-001	06/11/1999	5	--	--
	K9903723-002	06/11/1999	10	--	--
	K9903723-003	06/11/1999	15	--	--
	K9903723-005	06/11/1999	25	--	--
B-114	K9903794-002	06/11/1999	10	--	--
	K9903794-003	06/11/1999	15	--	--
	K9903794-007	06/14/1999	30	--	--
B-115	K9903794-011	06/14/1999	10	--	--
	K9903794-012	06/14/1999	15	--	--
B-116	K9903826-002	06/14/1999	10	--	--
	K9903826-007	06/15/1999	40	--	--
	K9903826-018	06/15/1999	95	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
B-117	K9903826-021	06/15/1999	5	--		--
	K9903826-023	06/15/1999	15	--		--
	K9903871-004	06/16/1999	65	--		--
	K9903871-008	06/16/1999	90	--		--
B-118	K9903871-009	06/16/1999	5	--		--
	K9903871-010	06/16/1999	10	--		--
B-119	K9903915-001	06/17/1999	2.5	--		--
	K9903915-002	06/17/1999	5	--		--
	K9903915-004	06/17/1999	15	--		--
B-139	K9907039-005	10/04/1999	2.5	--		--
	K9907039-009	10/04/1999	5	--		--
	K9907039-006	10/04/1999	20	--		--
B-140	K9907141-001	10/06/1999	10	0.018		ND
B-141	K9907141-002	10/06/1999	2.5	0.08		0.1135
B-142	K9907141-003	10/07/1999	10	32		**2.938**
B-147	K9907141-004	10/08/1999	10	30		**3.422**
	K9907141-005	10/08/1999	20	--		--
B-148	K9907141-006	10/08/1999	10	18		**1.6077**
	K9907141-007	10/08/1999	15	15		**1.5319**
B-149	K9907141-008	10/08/1999	3	0.01	U	ND
	K9907141-009	10/08/1999	10	48		**4.366**
	K9907141-010	10/08/1999	20	--		--
B-150	K9907223-003	10/11/1999	10.5	2.4		**0.3353**
B-153	K9907223-007	10/11/1999	5	--		--
	K9907223-008	10/11/1999	10	0.014		ND

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
B-155	K9907223-009	10/12/1999	5	0.34		0.02977
	K9907223-016	10/12/1999	9	0.017		ND
B-160	K9907379-011	10/13/1999	10	0.01	U	ND
B-161	K9907379-010	10/13/1999	10	--		--
B-162	K9907379-009	10/13/1999	11.5	--		--
B-165	K9907379-008	10/13/1999	11.5	--		--
B-167	K9907379-006	10/14/1999	20	--		--
B-170	K9907379-017	10/15/1999	7.5	--		--
B-187	K9907559-010	10/21/1999	11.5	--		--
B-188	K9907559-011	10/21/1999	5	--		--
	K9907559-012	10/21/1999	11.5	--		--
B-189	K9907607-001	10/22/1999	2.5	--		--
	K9907607-002	10/22/1999	12	--		--
B-190	K9907700-001	10/25/1999	2.5	--		--
	K9907700-002	10/25/1999	5	--		--
	K9907700-003	10/25/1999	10	--		--
B-191	K9907700-004	10/25/1999	2.5	--		--
	K9907700-005	10/25/1999	5	0.01	U	ND
B-192	K9907700-006	10/25/1999	2.5	0.01	U	ND
	K9907700-007	10/25/1999	5	--		--
B-193	K9907700-008	10/25/1999	2.5	0.23		0.02323
	K9907700-009	10/25/1999	5	3.9		**0.2658**
	K9907700-010	10/25/1999	10	0.01	U	ND
B-194	K9907700-011	10/25/1999	2.5	1.5		0.1198
	K9907700-012	10/25/1999	5	0.037		0.01902
	K9907700-013	10/25/1999	10	3.3		**0.3707**
B-195	K9907700-014	10/26/1999	2.5	1.7		**1.341**
	K9907700-015	10/26/1999	5	0.1		0.0592
	K9907700-016	10/26/1999	10	0.057		0.00762

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
B-196	K9907700-017	10/26/1999	3	0.01	U	ND
	K9907700-018	10/26/1999	9	0.31		0.0339
B-197	K9907767-001	10/26/1999	2.5	0.055		0.04328
	K9907767-002	10/26/1999	5	0.038		0.0094
	K9907767-003	10/26/1999	10	0.01	U	ND
B-198	K9907767-004	10/27/1999	2.5	0.01	U	ND
	K9907767-005	10/27/1999	5	0.01	U	ND
B-199	K9907767-007	10/27/1999	2.5	0.01	U	ND
	K9907767-008	10/27/1999	5	0.01	U	ND
	K9907767-009	10/27/1999	10	0.01	U	ND
	K9907767-010	10/27/1999	15	0.01	U	ND
B-200	K9907767-012	10/27/1999	2.5	0.01	U	ND
	K9907767-013	10/27/1999	5	0.01	U	ND
B-201	K9907767-014	10/28/1999	2.5	0.01	U	ND
	K9907767-015	10/28/1999	5	0.01	U	ND
	K9907767-016	10/28/1999	10	--		--
	K9907767-017	10/28/1999	15	2.3		**0.2677**
	K9907767-018	10/28/1999	20	0.01	U	ND
B-202	K9907767-019	10/28/1999	2.5	0.01	U	ND
	K9907767-020	10/28/1999	5	0.01	U	ND
	K9907767-021	10/28/1999	15	--		--
B-203	K9907788-009	10/28/1999	2.5	0.01	U	ND
	K9907788-010	10/28/1999	5	0.01	U	ND
	K9907788-011	10/28/1999	10	4.3		**0.8019**

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene	cPAH TEQ
MTCA Method B Cleanup Level				2,400	0.14
MTCA Method C Cleanup Level				110,000	18
Wildlife Ecological Indicator Concentration				NV	12
B-221	K9908093-005	11/09/1999	2.5	0.018	0.00965
	K9908093-006	11/09/1999	7.5	0.04	0.00764
B-222	K9908120-001	11/10/1999	2.5	17	**1.5771**
	K9908120-002	11/10/1999	5	1.4	**0.1589**
	K9908120-003	11/10/1999	10	0.01 U	ND
B-223	K9908120-005	11/10/1999	2.5	--	--
	K9908120-006	11/10/1999	5	0.017	ND
	K9908120-007	11/10/1999	10	0.01 U	ND
B-224	K9908120-008	11/10/1999	2.5	0.011	0.00855
	K9908120-009	11/10/1999	5	--	--
	K9908120-010	11/10/1999	10	--	--
B-225	K9908120-012	11/10/1999	2.5	--	--
	K9908120-013	11/10/1999	5	--	--
B-226	K9908186-001	11/11/1999	2.5	--	--
	K9908186-002	11/11/1999	5	--	--
	K9908186-003	11/11/1999	10	--	--
B-227	K9908186-005	11/11/1999	2.5	--	--
	K9908186-006	11/11/1999	5	--	--
B-228	K9908186-008	11/11/1999	1.5	--	--
	K9908186-010	11/11/1999	5	--	--
B-230	K9908189-001	11/12/1999	2.5	0.087	0.00975
	K9908189-003	11/12/1999	5	0.01 U	ND
B-231	K9908189-005	11/12/1999	2.5	0.01 U	ND
	K9908189-006	11/12/1999	5	--	--
	K9908189-007	11/12/1999	7	0.14	0.03261
B-232	K9908806-003	12/07/1999	5	--	--
	K9908806-007	12/07/1999	25	--	--
B-233	K9908806-009	12/07/1999	5	--	--
	K9908806-011	12/07/1999	15	0.029	ND
	K9908806-013	12/07/1999	25	--	--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene	cPAH TEQ
MTCA Method B Cleanup Level				2,400	0.14
MTCA Method C Cleanup Level				110,000	18
Wildlife Ecological Indicator Concentration				NV	12
B-234	K9908806-015	12/07/1999	10	30	**3.841**
	K9908806-016	12/07/1999	15	0.054	0.00811
	K9908806-018	12/07/1999	25	--	--
B-235	K9908924-016	12/08/1999	10	0.7	0.0518
	K9908924-017	12/08/1999	15	0.065	ND
	K9908924-019	12/08/1999	25	0.01 U	ND
B-236	K9908924-023	12/08/1999	10	0.16	0.00894
	K9908924-024	12/08/1999	15	0.029	0.00774
	K9908924-026	12/08/1999	25	--	--
B-237	K9908924-028	12/08/1999	5	--	--
	K9908924-030	12/08/1999	15	--	--
	K9908924-032	12/08/1999	25	--	--
B-238	K9908924-003	12/09/1999	10	0.23	0.01128
	K9908924-004	12/09/1999	15	2.1	**0.2836**
	K9908924-006	12/09/1999	25	--	--
B-239	K9908924-009	12/09/1999	10	0.45	0.03015
	K9908924-010	12/09/1999	15	0.38	0.0348
	K9908924-012	12/09/1999	25	--	--
B-240	K9908924-034	12/10/1999	5	--	--
	K9908924-036	12/10/1999	15	0.16	0.01079
	K9908924-038	12/10/1999	25	--	--
B-241	K9908924-039	12/10/1999	5	0.18	0.0678
	K9908924-041	12/10/1999	15	0.15	0.00943
	K9908924-043	12/10/1999	25	--	--
B-242	K9908973-007	12/13/1999	25	--	--
B-243	K9909023-005	12/14/1999	25	--	--
B-244	K9909069-002	12/15/1999	25	--	--
	K9909069-005	12/15/1999	35	0.01 U	ND
B-245	K9909069-009	12/15/1999	15	0.018	ND
	K9909069-012	12/15/1999	30	0.25	0.01976

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
B-246	K9909069-015	12/16/1999	5	0.01	U	ND
	K9909069-016	12/16/1999	10	--		--
	K9909069-018	12/16/1999	20	--		--
B-247	K9909148-001	12/17/1999	2.5	--		--
	K9909148-002	12/17/1999	5	--		--
	K9909148-004	12/17/1999	16	--		--
B-248	K9909181-001	12/20/1999	2.5	--		--
	K9909181-004	12/20/1999	15	--		--
	K9909181-006	12/20/1999	25	--		--
B-249	K9909181-008	12/20/1999	2.5	--		--
	K9909181-012	12/20/1999	20	--		--
	K9909181-013	12/20/1999	25	--		--
B-250	K9909223-005	12/21/1999	20	0.016		0.00915
	K9909223-006	12/21/1999	25	0.03		ND
	K9909223-004	12/21/1999	35	0.38		0.03115
B-251	K9909277-001	12/22/1999	2.5	--		--
	K9909277-003	12/22/1999	10	--		--
	K9909277-005	12/22/1999	25	--		--
B-252	K9909277-012	12/22/1999	15	0.01	U	ND
	K9909277-013	12/22/1999	20	0.01	U	ND
	K9909277-014	12/22/1999	25	0.01	U	ND
B-253	K9909277-021	12/23/1999	25	0.27		0.0637
B-255	K2000354-003	01/14/2000	10	13		**2.428**
	K2000354-004	01/14/2000	15	0.01	U	ND
	K2000354-006	01/14/2000	25	--		--
B-256	K2000354-010	01/14/2000	5	0.01	U	ND
	K2000354-011	01/14/2000	10	0.036		ND
	K2000354-013	01/14/2000	20	--		--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
B-261	K2000528-003	01/20/2000	10	0.01	U	ND
	K2000528-004	01/20/2000	15	0.93		0.1119
	K2000528-006	01/20/2000	30	0.01	U	ND
B-264	K2106063-001	08/17/2001	2.5	0.014		0.01057
	K2106063-003	08/17/2001	10	0.013	U	ND
B-265	K2106063-005	08/17/2001	5	0.013	U	ND
B-266	K2106063-008	08/17/2001	5	0.016	U	ND
B-272	K2106063-023	08/17/2001	5	0.54		0.0544
B-273	K2106063-025	08/20/2001	5	0.29		0.03287
B-274	K2106063-030	08/20/2001	5	0.067		0.01162
B-304	0806067-07A	06/12/2008	10	32.4		**2.5654**
	0806067-09A	06/12/2008	19.5	0.0456	U	ND
B-305	0806067-12A	06/12/2008	10	0.0463	U	ND
	0806067-14A	06/12/2008	19	0.0459	U	ND
B-306	1091024001	03/11/2009	2.5	194		**27.34**
	1091029003	03/11/2009	18	55.3		5.8108
B-308	1091024002	03/11/2009	0.5	0.0608		0.082779
	1091024003	03/11/2009	2.5	0.0436		0.048863
	1091024004	03/11/2009	15	21.9		**2.7456**
B-313	0905143-06A	05/21/2009	2.5	0.0353	U	ND
	0905143-07B	05/21/2009	5	0.0358	U	ND
	0905143-08B	05/21/2009	10	0.043	U	ND
	0905143-09B	05/21/2009	15	0.0443	U	ND
CT		02/07/1991	0	--		--
		02/07/1991	0	--		--
DS-E		06/18/1997	0	0.3	U	ND
DS-N		06/18/1997	0	3.2		ND
DS-S		06/18/1997	0	1.5	U	ND
DS-W		06/18/1997	0	0.3	U	ND

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
GP8	0905163-05B	05/22/2009	1.4	0.175	U	ND
	0905163-06B	05/22/2009	5	0.0392	U	ND
	0905163-07B	05/22/2009	11	0.21	U	ND
	0905163-08B	05/22/2009	15	0.043	U	ND
GP11	0905143-10B	05/21/2009	1.5	0.0382	U	ND
	0905143-11A	05/21/2009	5	0.0422	U	ND
	0905143-12A	05/21/2009	10	0.0455	U	ND
	0905143-13B	05/21/2009	15	0.0439	U	ND
MFP-01	K9708818-001	11/25/1997	0	--		--
	K9708818-002	11/25/1997	3	--		--
	K9708818-003	11/25/1997	6	--		--
	K9708818-004	11/25/1997	9	--		--
MFP-02	K9708818-008R	11/25/1997	6	--		--
MFP-04	K9708818-011	11/25/1997	0	--		--
	K9708818-012R	11/25/1997	3	--		--
MFP-05	K9708818-014R	11/25/1997	0	--		--
	K9708818-015	11/25/1997	3	--		--
	K9708818-016	11/25/1997	6	--		--
	K9708818-018	11/25/1997	9	--		--
MW-10		02/05/1991	0	--		--
		02/05/1991	0	--		--
		02/05/1991	0	--		--
MW-11S	K9707902-003	10/23/1997	0	**7100**		**872**
MW-13	MW13-5	05/03/1993	5	--		--
	MW13-15	05/03/1993	15	--		--
MW-14	MW14-5	05/03/1993	5	--		--
MW-17	MW17-5	05/03/1993	5	--		--
MW-18	MW18-10	05/03/1993	10	5.7		--
	MW18-15	05/03/1993	15	--		--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
MW-22	MW22-15	05/03/1993	15	--		--
MW-24	T5070221	04/02/1996	0.5	0.32		**0.3705**
	T5070224	04/02/1996	11	9.5		**1.332**
	T5070226	04/02/1996	21	16		4.743
MW-25	T5060415	04/02/1996	3	0.38		**0.172**
MW-26	T5070204	04/02/1996	8.5	30		**2.949**
	T5070207	04/02/1996	21	11		1.032
MW-30	T5070239	04/02/1996	26	0.42	U	ND
MW-31	T5070231	04/02/1996	21	0.2		0.08083
	T5070232	04/02/1996	26	0.43	U	0.09015
	T5070233	04/02/1996	31	0.42	U	ND
MW-32	T5070241	04/02/1996	6	0.43	U	ND
MW-40	K2204940-001	07/18/2002	55	10		2.297
	K2204940-002	07/19/2002	61	0.21		0.04535
	K2204940-003	07/19/2002	66	0.1		0.01834
MW-55	0806067-02A	06/10/2008	10	0.0457	U	ND
	0806067-04A	06/10/2008	20	0.0469	U	ND
MW-58D	0806103-03A	06/18/2008	10	0.0363	U	ND
	0806103-04A	06/18/2008	13.5	0.0497	U	ND
NPY-03		02/06/1991	0	--		--
NPY-04		02/06/1991	0	--		--
P-01	HC-P/01	02/06/1991	0	--		--
P-02	HC-P/02	02/06/1991	0	--		--
PP		06/18/1997	0	3	U	ND
SS-01		02/06/1991	0	--		--
SS-3B	0807092-01A	07/16/2008	1.5	162		**27.392**

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
SS-4B	0807092-02A	07/16/2008	0.3	1.58		**0.8802**
SS-9	0807092-07A	07/17/2008	0.3	0.0698		0.130173
SS-13	0903005-07A	02/26/2009	0.5	0.0071	U	ND
SS-14	0903005-08A	02/26/2009	0.5	0.071		0.009495
SS-15	0903005-09A	02/26/2009	0.5	0.0173		ND
SS-16	0903005-10A	02/26/2009	0.5	0.024		0.011367
SS-17	0903005-11A	02/26/2009	0.5	0.00746	U	ND
SS-18	0903005-12A	02/26/2009	0.5	0.00749	U	0.00565495
SS-19	0903005-13A	02/26/2009	0.5	6.61		**2.2422**
T-4	K2005541-003	07/21/2000	1.5	0.01	U	ND
	K2005541-002	07/21/2000	1.5	0.01	U	ND
	K2005541-005	07/21/2000	1.75	0.01	U	ND
	K2005541-001	07/21/2000	2	0.01	U	ND
	K2005541-004	07/21/2000	2	0.01	U	ND
TP-01	TP01-0.3	05/03/1993	0.3	3.3	U	--
	TP01-9.5	05/03/1993	9.5	--		--
TP-02	TP02-0.2	05/03/1993	0.2	--		--
	TP02-5	05/03/1993	5	--		--
TP-03	TP03-0.3	05/03/1993	0.3	3.3	U	--
	TP03-10	05/03/1993	10	--		--
TP-04	TP04-5	05/03/1993	5	--		--
	TP04-10	05/03/1993	10	--		--
TP-05	TP05-0.5	05/03/1993	0.5	--		--
TP-06	TP06-3	05/03/1993	3	1.6		--
TP-09	TP09-0.3	05/03/1993	0.3	--		--
	TP09-4	05/03/1993	4	0.3	U	--
	TP09-9	05/03/1993	9	34		--

Table E-I-2
Summary of Semivolatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Lab Code	Date	Depth (ft. bgs)	Pyrene		cPAH TEQ
MTCA Method B Cleanup Level				2,400		0.14
MTCA Method C Cleanup Level				110,000		18
Wildlife Ecological Indicator Concentration				NV		12
TP-10	TP10-0.2	05/03/1993	0.2	0.42		--
	TP10-8.5	05/03/1993	8.5	50	U	--
TP-12	TP12-0.3	05/03/1993	0.3	--		--
	TP12-3	05/03/1993	3	67	U	--
	TP12-6.5	05/03/1993	6.5	6.4		--
TP-13	TP13-0.2	05/03/1993	0.2	--		--
	TP13-5.5	05/03/1993	5.5	--		--
TP-14	TP14-0.5	05/03/1993	0.5	--		--
TP-15	TP15-0.2	05/03/1993	0.2	--		--
TP-16	TP16-0.3	05/03/1993	0.3	--		--
	TP16-7	05/03/1993	7	--		--
TP-27	TP27-10	05/03/1993	10	--		--
TP-28	TP28-7	05/03/1993	7	--		--
	TP28-9.5	05/03/1993	9.5	200		--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
B-1	B1-S-2.5	L15788-1	04/06/2000	2.5	mg/kg	--	--	--	--	--	--	--
	B1-S-10.0	L15788-3	04/06/2000	10	mg/kg	--	--	--	--	--	--	--
B-2	HC-B2_S2		02/04/1991	3	mg/kg	--	--	--	--	--	--	--
	HC-B2_S5		02/04/1991	11	mg/kg	--	--	--	--	--	--	--
	B2-S-10.0	L15788-8	04/06/2000	0	mg/kg	--	--	--	--	--	--	--
	B2-S-2.5	L15788-6	04/06/2000	2.5	mg/kg	--	--	--	--	--	--	--
B-3	HC-B3_S3		02/04/1991	5.5	mg/kg	--	--	--	--	--	--	--
	HC-B3_S7		02/04/1991	15	mg/kg	--	--	--	--	--	--	--
B-4	HC-B4_S2		02/04/1991	3	mg/kg	--	--	--	--	--	--	--
	HC-B4_S6		02/04/1991	12.5	mg/kg	--	--	--	--	--	--	--
B-5	HC-B5_S2		02/04/1991	3	mg/kg	--	--	--	--	--	--	--
	HC-B5_S8		02/04/1991	18.5	mg/kg	--	--	--	--	--	--	--
	B5-S-10.0	L15788-22	04/06/2000	10	mg/kg	--	--	--	--	--	--	--
B-6	HC-B6_S2		02/04/1991	3	mg/kg	--	--	--	--	--	--	--
	B6-S-2.5	L15788-23	04/06/2000	2.5	mg/kg	--	--	--	--	--	--	--
	B6-S-10.0	L15788-25	04/06/2000	10	mg/kg	--	--	--	--	--	--	--
	HC-B6_S14		02/04/1991	33	mg/kg	--	--	--	--	--	--	--
B-7	HC-B7_S3		02/04/1991	5.5	mg/kg	--	--	--	--	--	--	--
	HC-B7_S6		02/04/1991	13.5	mg/kg	--	--	--	--	--	--	--
	B7-S-2.5	L15788-26	04/06/2000	2.5	mg/kg	--	--	--	--	--	--	--
	B7-S-10.0	L15788-28	04/06/2000	10	mg/kg	--	--	--	--	--	--	--
B-8	HC-B8_S4		02/04/1991	11	mg/kg	--	--	--	--	--	--	--
	HC-B8_S5		02/04/1991	16	mg/kg	--	--	--	--	--	--	--
	B8-S-2.5	L15788-29	04/06/2000	2.5	mg/kg	--	--	--	--	--	--	--
	B8-S-10.0	L15788-31	04/06/2000	10	mg/kg	--	--	--	--	--	--	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
B-9	HC-B9_S3		02/04/1991	5.5	mg/kg	--	--	--	--	--	--	--
	HC-B9_S7		02/04/1991	16	mg/kg	--	--	--	--	--	--	--
	B9-S-2.5	L15788-32	04/06/2000	2.5	mg/kg	--	--	--	--	--	--	--
	B9-S-5.0	L15788-33	04/06/2000	5	mg/kg	--	--	--	--	--	--	--
	B9-S-10.0	L15788-34	04/06/2000	10	mg/kg	--	--	--	--	--	--	--
B-10	HC-B10_SB		02/04/1991	0	mg/kg	--	--	--	--	--	--	--
	HC-B10_S4		02/04/1991	10.5	mg/kg	--	2.5 U	--	--	--	--	0.3 U
	HC-B10_S6		02/04/1991	16	mg/kg	--	--	--	--	--	--	--
B-11	HC-B11_S2		02/04/1991	3	mg/kg	--	--	--	--	--	--	--
	HC-B11_S6		02/04/1991	13.5	mg/kg	--	--	--	--	--	--	--
B-12	HC-B12_S2		02/05/1991	3	mg/kg	--	--	--	--	--	--	--
	HC-B12_S6		02/05/1991	13	mg/kg	--	--	--	--	--	--	--
B-13	HC-B13B_S7		02/05/1991	15.5	mg/kg	--	--	--	--	--	--	--
B-14	HC-B14_S4		02/05/1991	8	mg/kg	--	--	--	--	--	--	--
	HC-B14_S6		02/05/1991	13	mg/kg	--	--	--	--	--	--	--
B-15	HC-B15_S2		02/05/1991	3	mg/kg	--	--	--	--	--	--	--
	HC-B15_S7		02/05/1991	15.5	mg/kg	--	--	--	--	--	--	--
B-19	B19-5	B19-5	05/03/1993	5	mg/kg	--	0.28	--	--	--	--	0.39
B-20	B20-20	B20-20	05/03/1993	20	mg/kg	--	--	--	--	--	--	--
B-31	CELL 3-3.5/5.0	K9708881-014	11/26/1997	3.5	mg/kg	--	--	--	--	--	--	0.3 U
	CELL 3-8/9.5	K9708881-013	11/26/1997	8	mg/kg	--	--	--	--	--	--	0.3 U
	CELL 3-15.5/17	K9708881-012	11/26/1997	15.5	mg/kg	--	--	--	--	--	--	0.3 U
B-32	CELL 5-S-6.5	K9709176-011	12/05/1997	6.5	mg/kg	--	--	--	--	--	--	--
	CELL 5-S-14	K9709176-012	12/08/1997	14	mg/kg	--	--	--	--	--	--	0.3 U
B-33	CELL 7 3.5-5.0	K9709014-004	12/04/1997	3.5	mg/kg	--	--	--	--	--	--	0.3 U
	CELL 7 9.5-11.0	K9709014-005	12/04/1997	9.5	mg/kg	--	--	--	--	--	--	0.3 U
	CELL 7 15.5-17.		12/04/1997	15.5	mg/kg	--	--	--	--	--	--	0.3 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
B-34	CELL 9-3.5/5.0	K9708881-015	11/26/1997	3.5	mg/kg	--	--	--	--	--	--	0.3 U
	CELL 9-8.0/9.5	K9708881-016	11/26/1997	8	mg/kg	--	--	--	--	--	--	0.3 U
	CELL 9-17.0/18.		11/26/1997	17	mg/kg	--	--	--	--	--	--	0.3 U
B-35	CELL 11-3.5-5.0	K9708926-006	12/02/1997	3.5	mg/kg	--	--	--	--	--	--	3 U
	CELL 11-11.0-12		12/02/1997	11	mg/kg	--	--	--	--	--	--	3 U
	CELL 11-14.0-15		12/02/1997	14	mg/kg	--	--	--	--	--	--	3 U
B-36	CELL 13 5.0-6.5	K9709014-001	12/03/1997	5	mg/kg	--	--	--	--	--	--	0.3 U
	CELL 13 9.5-11.		12/03/1997	9.5	mg/kg	--	--	--	--	--	--	0.3 U
	CELL 13 15.5-17		12/03/1997	15.5	mg/kg	--	--	--	--	--	--	0.3 U
B-37	CELL 16-5.0-6.5	K9708926-001	12/02/1997	5	mg/kg	--	--	--	--	--	--	3 U
	CELL 16-15.5-17		12/03/1997	15.5	mg/kg	--	--	--	--	--	--	0.3 U
B-38	CELL 19-S-3.5	K9709176-008	12/05/1997	3.5	mg/kg	--	--	--	--	--	--	--
B-39	CELL 21-6.5	K9800342-007	01/19/1998	6.5	mg/kg	--	--	--	--	--	--	--
B-39	CELL 21-12.5	K9800342-008	01/19/1998	12.5	mg/kg	--	--	--	--	--	--	--
B-42	CELL 30-S-8	K9709176-013	12/09/1997	8	mg/kg	--	--	--	--	--	--	--
	CELL 30-S-12.5	K9709176-014	12/09/1997	12.5	mg/kg	--	--	--	--	--	--	0.3 U
B-43	CELL 31-S-3.5	K9708705-007	11/20/1997	3.5	mg/kg	--	--	--	--	--	--	0.0003 U
B-44	CELL 33-S-6.5	K9708705-009	11/20/1997	6.5	mg/kg	--	--	--	--	--	--	0.0003 U
B-45	CELL 34-S-5	K9708655-012	11/19/1997	5	mg/kg	--	--	--	--	--	--	0.3 U
B-46	CELL 35-S-5	K9708655-007	11/19/1997	5	mg/kg	--	--	--	--	--	--	0.3 U
	CELL 35-S-9.5	K9708655-008	11/19/1997	9.5	mg/kg	--	--	--	--	--	--	0.3 U
B-47	CELL 36-S-9.5	K9708655-014	11/18/1997	9.5	mg/kg	--	--	--	--	--	--	0.3 U
B-48	CELL 37-S-3.5	K9708705-005	11/20/1997	3.5	mg/kg	--	--	--	--	--	--	0.0003 U
B-49	CELL 38-S-5	K9708815-004	11/25/1997	5	mg/kg	--	--	--	--	--	--	--
B-50	CELL 39-S-8	K9708704-008	11/21/1997	8	mg/kg	--	--	--	--	--	--	0.3 U
B-51	CELL 40-S-9.5	K9708815-003	11/24/1997	9.5	mg/kg	--	--	--	--	--	--	0.3 U
B-52	CELL 42-S-3.5	K9708704-005	11/20/1997	3.5	mg/kg	--	--	--	--	--	--	0.3 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol		2,3,4,6-Tetra-chlorophenol		2,3,4-Trichloro-phenol		2,3,5,6-Tetra-chlorophenol		2,3,5-Trichloro-phenol		2,3,6-Trichloro-phenol		2,4,5-Trichloro-phenol	
MTCA Method B Cleanup Level						NV		2,400		NV		NV		NV		NV		8,000	
MTCA Method C Cleanup Level						NV		110,000		NV		NV		NV		NV		350,000	
Wildlife Ecological Indicator Concentration						NV		NV		NV		NV		NV		NV		NV	
B-53	CELL 43-9.5	K9800300-013	01/14/1998	9.5	mg/kg	--		--		--		--		--		--		0.3	U
	CELL 43-15.5	K9800300-014	01/14/1998	15.5	mg/kg	--		--		--		--		--		--		0.3	U
B-54	CELL 44-8.0	K9800300-015	01/14/1998	8	mg/kg	--		--		--		--		--		--		0.3	U
B-55	CELL 45-8.0	K9800300-017	01/15/1998	8	mg/kg	--		--		--		--		--		--		0.3	U
B-56	CELL 46-6.5	K9800342-001	01/15/1998	6.5	mg/kg	--		--		--		--		--		--		0.3	U
B-57	CELL 47-8.0	K9800342-003	01/16/1998	8	mg/kg	--		--		--		--		--		--		0.3	U
B-58	CELL 48-6.5	K9800342-005	01/16/1998	6.5	mg/kg	--		--		--		--		--		--		0.3	U
B-58A	B-1-S-5.0	K9803817-001	06/12/1998	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-1-S-17.0	K9803817-002	06/12/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-62	B-5-S-5.0	K9803817-005	06/12/1998	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-5-S-17.0	K9803817-006	06/12/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-63	B-6-S-5.0	K9803817-007	06/12/1998	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-6-S-17.0	K9803817-008	06/12/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-66	B-9-S-5.0	K9803817-009	06/12/1998	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-9-S-17.0	K9803817-010	06/12/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-69	B-12-S-0.5	K9803927-011	06/16/1998	0.5	mg/kg	0.058		--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-12-S-2.5	K9803927-001	06/16/1998	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-12-S-5.0	K9803927-012	06/16/1998	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-12-S-10.0	K9803927-013	06/16/1998	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-12-S-17.0	K9803927-002	06/16/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-72	B-15-S-0.5	K9803927-003	06/17/1998	0.5	mg/kg	10	U	--		10	U	10	U	10	U	10	U	10	U
	B-15-S-5.0	K9803927-004	06/17/1998	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-15-S-10.0	K9803927-005	06/17/1998	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-15-S-17.0	K9803927-006	06/17/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-73	B-73-S-17.0	K9803927-008	06/17/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-74	B-74-S-2.5	K9803927-009	06/17/1998	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-74-S-17.0	K9803927-010	06/17/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetrachlorophenol		2,3,4,6-Tetrachlorophenol		2,3,4-Trichlorophenol		2,3,5,6-Tetrachlorophenol		2,3,5-Trichlorophenol		2,3,6-Trichlorophenol		2,4,5-Trichlorophenol	
MTCA Method B Cleanup Level						NV		2,400		NV		NV		NV		NV		8,000	
MTCA Method C Cleanup Level						NV		110,000		NV		NV		NV		NV		350,000	
Wildlife Ecological Indicator Concentration						NV		NV		NV		NV		NV		NV		NV	
B-75	B-75-S-2.5	K9803927-014	06/17/1998	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-75-S-17.0	K9803927-015	06/17/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-76	B-76-S-10.0	K9803927-016	06/17/1998	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-76-S-27.0	K9803927-017	06/17/1998	27	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-77	B-77-S-2.5	K9803927-018	06/17/1998	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-77-S-5.0	K9803927-019	06/17/1998	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-77-S-17.0	K9803927-020	06/17/1998	17	mg/kg	25	U	--		25	U	25	U	25	U	25	U	25	U
B-78	B-78-S-0.5	K9803979-001	06/18/1998	0.5	mg/kg	0.4		--		0.05	U	0.44		0.093		0.05	U	0.05	U
	B-78-S-17.0	K9803979-002	06/18/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-79	B-79-S-2.5	K9803979-004	06/18/1998	2.5	mg/kg	0.5	U	--		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	B-79-S-10.0	K9803979-006	06/18/1998	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-79-S-17.0	K9803979-007	06/18/1998	17	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-80	B-80-S-2.5	K9803995-001	06/19/1998	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-80-S-15.0	K9803995-002	06/19/1998	15	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-80-S-25.0	K9803995-003	06/19/1998	25	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-81	B-81-S-2.5	K9803995-004	06/19/1998	2.5	mg/kg	0.99		--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-82	B-82-S-10.0	K9803995-005	06/19/1998	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-82-S-20.0	K9803995-006	06/19/1998	20	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-83	B-83-S-5.0	K9804079-001	06/23/1998	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-83-S-17.0	K9804079-002	06/23/1998	17	mg/kg	1	U	--		1	U	1	U	1	U	1	U	1	U
B-84	B-84-S-10.0	K9804079-003	06/23/1998	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-84-S-35.0	K9804079-004	06/23/1998	35	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-85	B-85-S-5.0	K9804079-005	06/23/1998	5	mg/kg	0.35		--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-85-S-10.0	K9804079-006	06/23/1998	10	mg/kg	5	U	--		5	U	5	U	5	U	5	U	5	U
B-86	B-86-S-5.0	K9804079-007	06/23/1998	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B-86-S-15.0	K9804079-008	06/23/1998	15	mg/kg	15		--		1	U	1.1		1	U	1	U	1	U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
B-87	B-87-S-5.0	K9804079-009	06/23/1998	5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-87-S-15.0	K9804079-010	06/23/1998	15	mg/kg	0.18	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-88	B-88-S-5.0	K9804079-011	06/23/1998	5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-88-S-15.0	K9804079-012	06/23/1998	15	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-89	B-89-S-5.0	K9804079-013	06/23/1998	5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-89-S-15.0	K9804079-014	06/23/1998	15	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-90	B-90-S-0.5	K9804079-015	06/23/1998	0.5	mg/kg	1 U	--	1 U	1 U	1 U	1 U	1 U
	B-90-S-17.5	K9804079-016	06/23/1998	17.5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-91	B-91-S-0.5	K9804079-017	06/23/1998	0.5	mg/kg	16	--	0.05 U	0.46	0.05 U	0.05 U	0.05 U
	B-91-S-15.0	K9804079-018	06/23/1998	15	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-92	B-92-S-10.0	K9804079-019	06/23/1998	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-92-S-30.0	K9804079-020	06/23/1998	30	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-93	B-93-S-25.0	K9804129-001	06/24/1998	25	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-93-S-40.0	K9804129-002	06/24/1998	40	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-94	B-94-S-10.0	K9804129-003	06/24/1998	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-94-S-35.0	K9804129-004	06/24/1998	35	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-95	B-95-S-10.0	K9804129-005	06/24/1998	10	mg/kg	0.14	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-95-S-25.0	K9804129-006	06/24/1998	25	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-95-S-32.5	K9804129-007	06/24/1998	32.5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-96	B-96-S-30.0	K9804470-002	07/08/1998	30	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-97	B-97-S-2.5	K9804470-003	07/08/1998	2.5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-98	B-98-S-17.0	K9804470-005	07/08/1998	17	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-99	B-99-S-45.0	K9804470-007	07/08/1998	45	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-99-S-64.0	K9804470-008	07/08/1998	64	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-100	B-100-S-45.0	K9804470-010	07/08/1998	45	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-100-S-65.0	K9804470-011	07/08/1998	65	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
B-101	B-101-S-10.0	K9804470-012	07/08/1998	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B-101-S-33.0	K9804470-013	07/08/1998	33	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-103	B-103-S-2.5	K9804470-014	07/08/1998	2.5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-104	B104-S-5.0	K9903514-001	06/03/1999	5	mg/kg	--	--	--	--	--	--	--
	B104-S-10.0	K9903514-002	06/03/1999	10	mg/kg	--	--	--	--	--	--	--
	B104-S-25.0	K9903514-005	06/03/1999	25	mg/kg	--	--	--	--	--	--	--
B-105	B105-S-5.0	K9903514-010	06/03/1999	5	mg/kg	--	--	--	--	--	--	--
	B105-S-10.0	K9903514-011	06/03/1999	10	mg/kg	--	--	--	--	--	--	--
	B105-S-25.0	K9903514-013	06/03/1999	25	mg/kg	--	--	--	--	--	--	--
B-106	B106-S-5.0	K9903553-001	06/04/1999	5	mg/kg	--	--	--	--	--	--	--
	B106-S-15.0	K9903553-002	06/04/1999	15	mg/kg	--	--	--	--	--	--	--
B-107	B107-S-5.0	K9903553-007	06/04/1999	5	mg/kg	--	--	--	--	--	--	--
	B107-S-15.0	K9903553-009	06/04/1999	15	mg/kg	--	--	--	--	--	--	--
	B107-S-25.0	K9903584-002	06/07/1999	25	mg/kg	--	--	--	--	--	--	--
	B107-S-45.0	K9903584-005	06/07/1999	45	mg/kg	--	--	--	--	--	--	--
B-108	B108-S-5.0	K9903584-008	06/07/1999	5	mg/kg	--	--	--	--	--	--	--
	B108-S-10.0	K9903584-009	06/07/1999	10	mg/kg	--	--	--	--	--	--	--
B-109	B109-S-5.0	K9903616-007	06/08/1999	5	mg/kg	--	--	--	--	--	--	--
	B109-S-10.0	K9903616-008	06/08/1999	10	mg/kg	--	--	--	--	--	--	--
	B109-S-25.0	K9903616-010	06/08/1999	25	mg/kg	--	--	--	--	--	--	--
	B109-S-40.0	K9903616-011	06/08/1999	40	mg/kg	--	--	--	--	--	--	--
B-110	B110-S-5.0	K9903665-001	06/08/1999	5	mg/kg	--	--	--	--	--	--	--
	B110-S-10.0	K9903665-002	06/08/1999	10	mg/kg	--	--	--	--	--	--	--
	B110-S-25.0	K9903665-004	06/08/1999	25	mg/kg	--	--	--	--	--	--	--
	B110-S-43.0	K9903665-009	06/08/1999	43	mg/kg	--	--	--	--	--	--	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
B-111	B111-S-5.0	K9903711-001	06/09/1999	5	mg/kg	--	--	--	--	--	--	--
	B111-S-10.0	K9903711-002	06/09/1999	10	mg/kg	--	--	--	--	--	--	--
	B111-S-30.0	K9903711-004	06/10/1999	30	mg/kg	--	--	--	--	--	--	--
B-112	B112-S-10.0	K9903711-009	06/10/1999	10	mg/kg	--	--	--	--	--	--	--
	B112-S-30.0	K9903711-013	06/10/1999	30	mg/kg	--	--	--	--	--	--	--
B-113	B113-S-5.0	K9903723-001	06/11/1999	5	mg/kg	--	--	--	--	--	--	--
	B113-S-10.0	K9903723-002	06/11/1999	10	mg/kg	--	--	--	--	--	--	--
	B113-S-15.0	K9903723-003	06/11/1999	15	mg/kg	--	--	--	--	--	--	--
	B113-S-25.0	K9903723-005	06/11/1999	25	mg/kg	--	--	--	--	--	--	--
B-114	B114-S-10.0	K9903794-002	06/11/1999	10	mg/kg	--	--	--	--	--	--	--
	B114-S-15.0	K9903794-003	06/11/1999	15	mg/kg	--	--	--	--	--	--	--
	B114-S-30.0	K9903794-007	06/14/1999	30	mg/kg	--	--	--	--	--	--	--
B-115	B115-S-10.0	K9903794-011	06/14/1999	10	mg/kg	--	--	--	--	--	--	--
	B115-S-15.0	K9903794-012	06/14/1999	15	mg/kg	--	--	--	--	--	--	--
B-116	B116-S-10.0	K9903826-002	06/14/1999	10	mg/kg	--	--	--	--	--	--	--
	B116-S-40.0	K9903826-007	06/15/1999	40	mg/kg	--	--	--	--	--	--	--
	B116-S-95.0	K9903826-018	06/15/1999	95	mg/kg	--	--	--	--	--	--	--
B-117	B117-S-5.0	K9903826-021	06/15/1999	5	mg/kg	--	--	--	--	--	--	--
	B117-S-15.0	K9903826-023	06/15/1999	15	mg/kg	--	--	--	--	--	--	--
	B117-S-65.0	K9903871-004	06/16/1999	65	mg/kg	--	--	--	--	--	--	--
	B117-S-90.0	K9903871-008	06/16/1999	90	mg/kg	--	--	--	--	--	--	--
B-118	B118-S-5.0	K9903871-009	06/16/1999	5	mg/kg	--	--	--	--	--	--	--
	B118-S-10.0	K9903871-010	06/16/1999	10	mg/kg	--	--	--	--	--	--	--
B-119	B119-S-2.5	K9903915-001	06/17/1999	2.5	mg/kg	--	--	--	--	--	--	--
	B119-S-5.0	K9903915-002	06/17/1999	5	mg/kg	--	--	--	--	--	--	--
	B119-S-15.0	K9903915-004	06/17/1999	15	mg/kg	--	--	--	--	--	--	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
B-139	B139-S-2.5	K9907039-005	10/04/1999	2.5	mg/kg	--	--	--	--	--	--	--
	B139-S-5.0	K9907039-009	10/04/1999	5	mg/kg	--	--	--	--	--	--	--
	B139-S-20.0	K9907039-006	10/04/1999	20	mg/kg	--	--	--	--	--	--	--
B-140	B140-S-10.0	K9907141-001	10/06/1999	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-141	B141-S-2.5	K9907141-002	10/06/1999	2.5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-142	B142-S-10.0	K9907141-003	10/07/1999	10	mg/kg	0.93	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
B-147	B147-S-10.0	K9907141-004	10/08/1999	10	mg/kg	0.5 U	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	B147-S-20.0	K9907141-005	10/08/1999	20	mg/kg	--	--					--
B-148	B148-S-10.0	K9907141-006	10/08/1999	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B148-S-15.0	K9907141-007	10/08/1999	15	mg/kg	0.37	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-149	B149-S-3.0	K9907141-008	10/08/1999	3	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B149-S-10.0	K9907141-009	10/08/1999	10	mg/kg	0.5 U	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	B149-S-20.0	K9907141-010	10/08/1999	20	mg/kg	--	--	--	--	--	--	--
B-150	B150-S-10.5	K9907223-003	10/11/1999	10.5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-153	B153-S-5.0	K9907223-007	10/11/1999	5	mg/kg	--	--	--	--	--	--	--
	B153-S-10.0	K9907223-008	10/11/1999	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-155	B155-S-5.0	K9907223-009	10/12/1999	5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B155-S-9.0	K9907223-016	10/12/1999	9	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-160	B160-S-10.0	K9907379-011	10/13/1999	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-161	B161-S-10.0	K9907379-010	10/13/1999	10	mg/kg	--	--	--	--	--	--	--
B-162	B162-S-11.5	K9907379-009	10/13/1999	11.5	mg/kg	--	--	--	--	--	--	--
B-165	B165-S-11.5	K9907379-008	10/13/1999	11.5	mg/kg	--	--	--	--	--	--	--
B-167	B167-S-20.0	K9907379-006	10/14/1999	20	mg/kg	--	--	--	--	--	--	--
B-170	B170-S-7.5	K9907379-017	10/15/1999	7.5	mg/kg	--	--	--	--	--	--	--
B-187	B187-S-11.5	K9907559-010	10/21/1999	11.5	mg/kg	--	--	--	--	--	--	--
B-188	B188-S-5.0	K9907559-011	10/21/1999	5	mg/kg	--	--	--	--	--	--	--
	B188-S-11.0	K9907559-012	10/21/1999	11.5	mg/kg	--	--	--	--	--	--	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol		2,3,4,6-Tetra-chlorophenol		2,3,4-Trichloro-phenol		2,3,5,6-Tetra-chlorophenol		2,3,5-Trichloro-phenol		2,3,6-Trichloro-phenol		2,4,5-Trichloro-phenol	
MTCA Method B Cleanup Level						NV		2,400		NV		NV		NV		NV		8,000	
MTCA Method C Cleanup Level						NV		110,000		NV		NV		NV		NV		350,000	
Wildlife Ecological Indicator Concentration						NV		NV		NV		NV		NV		NV		NV	
B-189	B189-S-2.5	K9907607-001	10/22/1999	2.5	mg/kg	--		--		--		--		--		--		--	
	B189-S-12.0	K9907607-002	10/22/1999	12	mg/kg	--		--		--		--		--		--		--	
B-190	B190-S-2.5	K9907700-001	10/25/1999	2.5	mg/kg	--		--		--		--		--		--		--	
	B190-S-5.0	K9907700-002	10/25/1999	5	mg/kg	--		--		--		--		--		--		--	
	B190-S-10.0	K9907700-003	10/25/1999	10	mg/kg	--		--		--		--		--		--		--	
B-191	B191-S-2.5	K9907700-004	10/25/1999	2.5	mg/kg	--		--		--		--		--		--		--	
	B191-S-5.0	K9907700-005	10/25/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-192	B192-S-2.5	K9907700-006	10/25/1999	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B192-S-5.0	K9907700-007	10/25/1999	5	mg/kg	--		--		--		--		--		--		--	
B-193	B193-S-2.5	K9907700-008	10/25/1999	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B193-S-5.0	K9907700-009	10/25/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B193-S-10.0	K9907700-010	10/25/1999	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-194	B194-S-2.5	K9907700-011	10/25/1999	2.5	mg/kg	0.25		--		0.05	U	0.068		0.05	U	0.05	U	0.057	
	B194-S-5.0	K9907700-012	10/25/1999	5	mg/kg	0.05	U	--		0.05	U	0.076		0.12		0.05	U	0.05	U
	B194-S-10.0	K9907700-013	10/25/1999	10	mg/kg	0.12		--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-195	B195-S-2.5	K9907700-014	10/26/1999	2.5	mg/kg	0.072		--		0.05	U	0.074		0.05	U	0.05	U	0.05	U
	B195-S-5.0	K9907700-015	10/26/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B195-S-10.0	K9907700-016	10/26/1999	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-196	B196-S-3.0	K9907700-017	10/26/1999	3	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B196-S-9.0	K9907700-018	10/26/1999	9	mg/kg	0.34		--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-197	B197-S-2.5	K9907767-001	10/26/1999	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B197-S-5.0	K9907767-002	10/26/1999	5	mg/kg	0.071		--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B197-S-10.0	K9907767-003	10/26/1999	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-198	B198-S-2.5	K9907767-004	10/27/1999	2.5	mg/kg	3.5		--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B198-S-5.0	K9907767-005	10/27/1999	5	mg/kg	2.2		--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol		2,3,4,6-Tetra-chlorophenol		2,3,4-Trichloro-phenol		2,3,5,6-Tetra-chlorophenol		2,3,5-Trichloro-phenol		2,3,6-Trichloro-phenol		2,4,5-Trichloro-phenol	
MTCA Method B Cleanup Level						NV		2,400		NV		NV		NV		NV		8,000	
MTCA Method C Cleanup Level						NV		110,000		NV		NV		NV		NV		350,000	
Wildlife Ecological Indicator Concentration						NV		NV		NV		NV		NV		NV		NV	
B-199	B199-S-2.5	K9907767-007	10/27/1999	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B199-S-5.0	K9907767-008	10/27/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B199-S-10.0	K9907767-009	10/27/1999	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B199-S-15.0	K9907767-010	10/27/1999	15	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-200	B200-S-2.5	K9907767-012	10/27/1999	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B200-S-5.0	K9907767-013	10/27/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-201	B201-S-2.5	K9907767-014	10/28/1999	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B201-S-5.0	K9907767-015	10/28/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B201-S-10.0	K9907767-016	10/28/1999	10	mg/kg	--		--		--		--		--		--		--	
	B201-S-15.0	K9907767-017	10/28/1999	15	mg/kg	0.056	UF	--		0.056	UF	0.056	UF	0.056	UF	0.056	UF	0.056	UF
	B201-S-20.0	K9907767-018	10/28/1999	20	mg/kg	0.056		--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-202	B202-S-2.5	K9907767-019	10/28/1999	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B202-S-5.0	K9907767-020	10/28/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B202-S-15.0	K9907767-021	10/28/1999	15	mg/kg	--		--		--		--		--		--		--	
B-203	B203-S-2.5	K9907788-009	10/28/1999	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B203-S-5.0	K9907788-010	10/28/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B203-S-10.0	K9907788-011	10/28/1999	10	mg/kg	0.051		--		0.05	U	0.067		0.05	U	0.05	U	0.05	U
B-221	B221-S-2.5	K9908093-005	11/09/1999	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B221-S-7.5	K9908093-006	11/09/1999	7.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-222	B222-S-2.5	K9908120-001	11/10/1999	2.5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B222-S-5.0	K9908120-002	11/10/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B222-S-10.0	K9908120-003	11/10/1999	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-223	B223-S-2.5	K9908120-005	11/10/1999	2.5	mg/kg	--		--		--		--		--		--		--	
	B223-S-5.0	K9908120-006	11/10/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B223-S-10.0	K9908120-007	11/10/1999	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
B-224	B224-S-2.5	K9908120-008	11/10/1999	2.5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B224-S-5.0	K9908120-009	11/10/1999	5	mg/kg	--	--	--	--	--	--	--
	B224-S-10.0	K9908120-010	11/10/1999	10	mg/kg	--	--	--	--	--	--	--
B-225	B225-S-2.5	K9908120-012	11/10/1999	2.5	mg/kg	--	--	--	--	--	--	--
	B225-S-5.0	K9908120-013	11/10/1999	5	mg/kg	--	--	--	--	--	--	--
B-226	B226-S-2.5	K9908186-001	11/11/1999	2.5	mg/kg	--	--	--	--	--	--	--
	B226-S-5.0	K9908186-002	11/11/1999	5	mg/kg	--	--	--	--	--	--	--
	B226-S-10.0	K9908186-003	11/11/1999	10	mg/kg	--	--	--	--	--	--	--
B-227	B227-S-2.5	K9908186-005	11/11/1999	2.5	mg/kg	--	--	--	--	--	--	--
	B227-S-5.0	K9908186-006	11/11/1999	5	mg/kg	--	--	--	--	--	--	--
B-228	B228-S-1.5	K9908186-008	11/11/1999	1.5	mg/kg	--	--	--	--	--	--	--
	B228-S-5.0	K9908186-010	11/11/1999	5	mg/kg	--	--	--	--	--	--	--
B-230	B230-S-2.5	K9908189-001	11/12/1999	2.5	mg/kg	4.2	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B230-S-5.0	K9908189-003	11/12/1999	5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-231	B231-S-2.5	K9908189-005	11/12/1999	2.5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B231-S-5.0	K9908189-006	11/12/1999	5	mg/kg	--	--	--	--	--	--	--
	B231-S-7.0	K9908189-007	11/12/1999	7	mg/kg	0.21	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-232	B232-S-5.0	K9908806-003	12/07/1999	5	mg/kg	--	--	--	--	--	--	--
	B232-S-25.0	K9908806-007	12/07/1999	25	mg/kg	--	--	--	--	--	--	--
B-233	B233-S-5.0	K9908806-009	12/07/1999	5	mg/kg	--	--	--	--	--	--	--
	B233-S-15.0	K9908806-011	12/07/1999	15	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B233-S-25.0	K9908806-013	12/07/1999	25	mg/kg	--	--	--	--	--	--	--
B-234	B234-S-10.0	K9908806-015	12/07/1999	10	mg/kg	0.5 U	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	B234-S-15.0	K9908806-016	12/07/1999	15	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B234-S-25.0	K9908806-018	12/07/1999	25	mg/kg	--	--	--	--	--	--	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
B-235	B235-S-10.0	K9908924-016	12/08/1999	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B235-S-15.0	K9908924-017	12/08/1999	15	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B235-S-25.0	K9908924-019	12/08/1999	25	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-236	B236-S-10.0	K9908924-023	12/08/1999	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B236-S-15.0	K9908924-024	12/08/1999	15	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B236-S-25.0	K9908924-026	12/08/1999	25	mg/kg	--	--	--	--	--	--	--
B-237	B237-S-5.0	K9908924-028	12/08/1999	5	mg/kg	--	--	--	--	--	--	--
	B237-S-15.0	K9908924-030	12/08/1999	15	mg/kg	--	--	--	--	--	--	--
	B237-S-25.0	K9908924-032	12/08/1999	25	mg/kg	--	--	--	--	--	--	--
B-238	B238-S-10.0	K9908924-003	12/09/1999	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B238-S-15.0	K9908924-004	12/09/1999	15	mg/kg	0.19	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B238-S-25.0	K9908924-006	12/09/1999	25	mg/kg	--	--	--	--	--	--	--
B-239	B239-S-10.0	K9908924-009	12/09/1999	10	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B239-S-15.0	K9908924-010	12/09/1999	15	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B239-S-25.0	K9908924-012	12/09/1999	25	mg/kg	--	--	--	--	--	--	--
B-240	B240-S-5.0	K9908924-034	12/10/1999	5	mg/kg	--	--	--	--	--	--	--
	B240-S-15.0	K9908924-036	12/10/1999	15	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B240-S-25.0	K9908924-038	12/10/1999	25	mg/kg	--	--	--	--	--	--	--
B-241	B241-S-5.0	K9908924-039	12/10/1999	5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B241-S-15.0	K9908924-041	12/10/1999	15	mg/kg	0.35	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B241-S-25.0	K9908924-043	12/10/1999	25	mg/kg	--	--	--	--	--	--	--
B-242	B242-S-25.0	K9908973-007	12/13/1999	25	mg/kg	--	--	--	--	--	--	--
B-243	B243-S-25.0	K9909023-005	12/14/1999	25	mg/kg	--	--	--	--	--	--	--
B-244	B244-S-25.0	K9909069-002	12/15/1999	25	mg/kg	--	--	--	--	--	--	--
	B244-S-35.0	K9909069-005	12/15/1999	35	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-245	B245-S-15.0	K9909069-009	12/15/1999	15	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B245-S-30.0	K9909069-012	12/15/1999	30	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol		2,3,4,6-Tetra-chlorophenol		2,3,4-Trichloro-phenol		2,3,5,6-Tetra-chlorophenol		2,3,5-Trichloro-phenol		2,3,6-Trichloro-phenol		2,4,5-Trichloro-phenol	
MTCA Method B Cleanup Level						NV		2,400		NV		NV		NV		NV		8,000	
MTCA Method C Cleanup Level						NV		110,000		NV		NV		NV		NV		350,000	
Wildlife Ecological Indicator Concentration						NV		NV		NV		NV		NV		NV		NV	
B-246	B246-S-5.0	K9909069-015	12/16/1999	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B246-S-10.0	K9909069-016	12/16/1999	10	mg/kg	--		--		--		--		--		--		--	
	B246-S-20.0	K9909069-018	12/16/1999	20	mg/kg	--		--		--		--		--		--		--	
B-247	B247-S-2.5	K9909148-001	12/17/1999	2.5	mg/kg	--		--		--		--		--		--		--	
	B247-S-5.0	K9909148-002	12/17/1999	5	mg/kg	--		--		--		--		--		--		--	
	B247-S-16.0	K9909148-004	12/17/1999	16	mg/kg	--		--		--		--		--		--		--	
B-248	B248-S-2.5	K9909181-001	12/20/1999	2.5	mg/kg	--		--		--		--		--		--		--	
	B248-S-15.0	K9909181-004	12/20/1999	15	mg/kg	--		--		--		--		--		--		--	
	B248-S-25.0	K9909181-006	12/20/1999	25	mg/kg	--		--		--		--		--		--		--	
B-249	B249-S-2.5	K9909181-008	12/20/1999	2.5	mg/kg	--		--		--		--		--		--		--	
	B249-S-20.0	K9909181-012	12/20/1999	20	mg/kg	--		--		--		--		--		--		--	
	B249-S-25.0	K9909181-013	12/20/1999	25	mg/kg	--		--		--		--		--		--		--	
B-250	B250-S-20.0	K9909223-005	12/21/1999	20	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B250-S-25.0	K9909223-006	12/21/1999	25	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B250-S-35.0	K9909223-004	12/21/1999	35	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-251	B251-S-2.5	K9909277-001	12/22/1999	2.5	mg/kg	--		--		--		--		--		--		--	
	B251-S-10.0	K9909277-003	12/22/1999	10	mg/kg	--		--		--		--		--		--		--	
	B251-S-25.0	K9909277-005	12/22/1999	25	mg/kg	--		--		--		--		--		--		--	
B-252	B252-S-15.0	K9909277-012	12/22/1999	15	mg/kg	0.18		--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B252-S-20.0	K9909277-013	12/22/1999	20	mg/kg	0.45		--		0.05	U	0.96		0.05	U	0.05	U	0.05	U
	B252-S-25.0	K9909277-014	12/22/1999	25	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-253	B253-S-25.0	K9909277-021	12/23/1999	25	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-255	B255-S-10.0	K2000354-003	01/14/2000	10	mg/kg	0.5	U	--		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
	B255-S-15.0	K2000354-004	01/14/2000	15	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B255-S-25.0	K2000354-006	01/14/2000	25	mg/kg	--		--		--		--		--		--		--	

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol		2,3,4,6-Tetra-chlorophenol		2,3,4-Trichloro-phenol		2,3,5,6-Tetra-chlorophenol		2,3,5-Trichloro-phenol		2,3,6-Trichloro-phenol		2,4,5-Trichloro-phenol	
MTCA Method B Cleanup Level						NV		2,400		NV		NV		NV		NV		8,000	
MTCA Method C Cleanup Level						NV		110,000		NV		NV		NV		NV		350,000	
Wildlife Ecological Indicator Concentration						NV		NV		NV		NV		NV		NV		NV	
B-256	B256-S-5.0	K2000354-010	01/14/2000	5	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B256-S-10.0	K2000354-011	01/14/2000	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B256-S-20.0	K2000354-013	01/14/2000	20	mg/kg	--		--		--		--		--		--		--	
B-261	B261-S-10.0	K2000528-003	01/20/2000	10	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B261-S-15.0	K2000528-004	01/20/2000	15	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B261-S-30.0	K2000528-006	01/20/2000	30	mg/kg	0.05	U	--		0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-264	B264-S-2.5	K2106063-001	08/17/2001	2.5	mg/kg	0.066	U	--		0.066	U	0.066	U	0.066	U	0.066	U	0.066	U
	B264-S-10.0	K2106063-003	08/17/2001	10	mg/kg	0.065	U	--		0.065	U	0.065	U	0.065	U	0.065	U	0.065	U
B-265	B265-S-5.0	K2106063-005	08/17/2001	5	mg/kg	0.062	U	--		0.062	U	0.062	U	0.062	U	0.062	U	0.062	U
B-266	B266-S-5.0	K2106063-008	08/17/2001	5	mg/kg	0.08	U	--		0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
B-272	B272-S-5.0	K2106063-023	08/17/2001	5	mg/kg	0.058	U	--		0.058	U	0.058	U	0.058	U	0.058	U	0.058	U
B-273	B273-S-5.0	K2106063-025	08/20/2001	5	mg/kg	0.074	U	--		0.074	U	0.074	U	0.074	U	0.074	U	0.074	U
B-274	B274-S-5.0	K2106063-030	08/20/2001	5	mg/kg	0.07	U	--		0.07	U	0.07	U	0.07	U	0.07	U	0.07	U
B-304	B304-S-10.0	0806067-07A	06/12/2008	10	mg/kg	--		8.76		0.152	U	1.68		0.152	UQ	0.152	UQ	1.63	
	B304-S-19.5	0806067-09A	06/12/2008	19.5	mg/kg	--		0.0456	U	0.0456	U	0.0456	U	0.0456	U	0.0456	U	0.0456	U
B-305	B305-S-10.0	0806067-12A	06/12/2008	10	mg/kg	--		0.0463	U	0.0463	U	0.0463	U	0.0463	U	0.0463	U	0.0463	U
	B305-S-19.0	0806067-14A	06/12/2008	19	mg/kg	--		0.0459	U	0.0459	U	0.0459	U	0.0459	U	0.0459	U	0.0459	U
B-306	B306-S-2.5	1091024001	03/11/2009	2.5	mg/kg	--		--		--		--		--		--		--	
	B306-S-18.0	1091029003	03/11/2009	18	mg/kg	--		--		--		--		--		--		--	
B-308	B308-S-0.5	1091024002	03/11/2009	0.5	mg/kg	--		--		--		--		--		--		--	
	B308-S-2.5	1091024003	03/11/2009	2.5	mg/kg	--		--		--		--		--		--		--	
	B308-S-15.0	1091024004	03/11/2009	15	mg/kg	--		--		--		--		--		--		--	
B-313	B313-S-2.5	0905143-06A	05/21/2009	2.5	mg/kg	--		0.0353	U	0.0353	U	0.0353	U	0.0353	U	0.0353	U	0.0353	U
	B313-S-5.0	0905143-07B	05/21/2009	5	mg/kg	--		0.0358	U	0.0358	U	0.0358	U	0.0358	U	0.0358	U	0.0358	U
	B313-S-10.0	0905143-08B	05/21/2009	10	mg/kg	--		0.043	U	0.043	U	0.043	U	0.043	U	0.043	U	0.043	U
	B313-S-15.0	0905143-09B	05/21/2009	15	mg/kg	--		0.0443	U	0.0443	U	0.0443	U	0.0443	U	0.0443	U	0.0443	U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
CT	HC-CT_01		02/07/1991	0	mg/kg	--	--	--	--	--	--	--
	HC-CT_02		02/07/1991	0	mg/kg	--	--	--	--	--	--	--
DS-E	Dry Shed-East-0		06/18/1997	0	mg/kg	--	--	--	--	--	--	0.3 U
DS-N	Dry Shed-North-		06/18/1997	0	mg/kg	--	--	--	--	--	--	3 U
DS-S	Dry Shed-South-		06/18/1997	0	mg/kg	--	--	--	--	--	--	1.5 U
DS-W	Dry Shed-West-0		06/18/1997	0	mg/kg	--	--	--	--	--	--	0.3 U
GP8	GP8-S-1.4	0905163-05B	05/22/2009	1.4	mg/kg	--	0.175 UQ	0.175 UQ	0.175 UQ	0.175 UQ	0.175 UQ	0.175 UQ
	GP8-S-5.0	0905163-06B	05/22/2009	5	mg/kg	--	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.0392 U
	GP8-S-11.0	0905163-07B	05/22/2009	11	mg/kg	--	0.21 UQ	0.21 UQ	0.21 UQ	0.21 UQ	0.21 UQ	0.21 UQ
	GP8-S-15.0	0905163-08B	05/22/2009	15	mg/kg	--	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
GP11	GP11-S-1.5	0905143-10B	05/21/2009	1.5	mg/kg	--	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.0382 U
	GP11-S-5.0	0905143-11A	05/21/2009	5	mg/kg	--	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0422 U
	GP11-S-10.0	0905143-12A	05/21/2009	10	mg/kg	--	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0455 U
	GP11-S-15.0	0905143-13B	05/21/2009	15	mg/kg	--	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0439 U
MFP-01	MFP-01-00	K9708818-001	11/25/1997	0	mg/kg	--	--	--	--	--	--	--
	MFP-01-03	K9708818-002	11/25/1997	3	mg/kg	--	--	--	--	--	--	--
	MFP-01-06	K9708818-003	11/25/1997	6	mg/kg	--	--	--	--	--	--	--
	MFP-01-09	K9708818-004	11/25/1997	9	mg/kg	--	--	--	--	--	--	--
MFP-02	MFP-02-06	K9708818-008R	11/25/1997	6	mg/kg	--	--	--	--	--	--	--
MFP-04	MFP-04-00	K9708818-011	11/25/1997	0	mg/kg	--	--	--	--	--	--	--
	MFP-04-03-BRN	K9708818-012R	11/25/1997	3	mg/kg	--	--	--	--	--	--	--
MFP-05	MFP-05-00	K9708818-014R	11/25/1997	0	mg/kg	--	--	--	--	--	--	--
	MFP-05-03	K9708818-015	11/25/1997	3	mg/kg	--	--	--	--	--	--	--
	MFP-05-06-BRN	K9708818-016	11/25/1997	6	mg/kg	--	--	--	--	--	--	--
	MFP-05-09	K9708818-018	11/25/1997	9	mg/kg	--	--	--	--	--	--	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
MW-10	HC-W12_S14		02/05/1991	0	mg/kg	--	--	--	--	--	--	--
	HC-W12_S3		02/05/1991	0	mg/kg	--	--	--	--	--	--	--
	HC-W12_SE		02/05/1991	0	mg/kg	--	--	--	--	--	--	--
MW-11S	PR11S,PR11D	K9707902-003	10/23/1997	0	mg/kg	--	--	--	--	--	--	100 U
MW-13	MW13-5	MW13-5	05/03/1993	5	mg/kg	--	0.03 U	--	--	--	--	0.03 U
	MW13-15	MW13-15	05/03/1993	15	mg/kg	--	0.03 U	--	--	--	--	0.03 U
MW-14	MW14-5	MW14-5	05/03/1993	5	mg/kg	--	0.23	--	--	--	--	0.03 U
MW-17	MW17-5	MW17-5	05/03/1993	5	mg/kg	--	0.033	--	--	--	--	0.03 U
MW-18	MW18-10	MW18-10	05/03/1993	10	mg/kg	--	--	--	--	--	--	--
	MW18-15	MW18-15	05/03/1993	15	mg/kg	--	0.099	--	--	--	--	0.05
MW-22	MW22-15	MW22-15	05/03/1993	15	mg/kg	--	0.03 U	--	--	--	--	0.03 U
MW-24	T5070221	T5070221	04/02/1996	0.5	mg/kg	--	1.7 U	--	--	--	--	--
	T5070224	T5070224	04/02/1996	11	mg/kg	--	--	--	--	--	--	--
	T5070226	T5070226	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
MW-25	T5060415	T5060415	04/02/1996	3	mg/kg	--	--	--	--	--	--	--
MW-26	T5070204	T5070204	04/02/1996	8.5	mg/kg	--	2.4 U	--	--	--	--	--
	T5070207	T5070207	04/02/1996	21	mg/kg	--	2.2 U	--	--	--	--	--
MW-30	T5070239	T5070239	04/02/1996	26	mg/kg	--	--	--	--	--	--	--
MW-31	T5070231	T5070231	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
	T5070232	T5070232	04/02/1996	26	mg/kg	--	--	--	--	--	--	--
	T5070233	T5070233	04/02/1996	31	mg/kg	--	--	--	--	--	--	--
MW-32	T5070241	T5070241	04/02/1996	6	mg/kg	--	--	--	--	--	--	--
MW-40	MW40-S-55.0	K2204940-001	07/18/2002	55	mg/kg	--	--	--	--	--	--	--
	MW40-S-61.0	K2204940-002	07/19/2002	61	mg/kg	--	--	--	--	--	--	--
	MW40-S-66.0	K2204940-003	07/19/2002	66	mg/kg	--	--	--	--	--	--	--
MW-55	MW55-S-10.0	0806067-02A	06/10/2008	10	mg/kg	--	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U
	MW55-S-20.0	0806067-04A	06/10/2008	20	mg/kg	--	0.0469 U	0.0469 U	0.0469 U	0.0469 U	0.0469 U	0.0469 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
MW-58D	MW58D-S-10.0	0806103-03A	06/18/2008	10	mg/kg	--	0.0363 U	0.0363 U	0.0363 U	0.0363 U	0.0363 U	0.0363 U
	MW58D-S-13.5	0806103-04A	06/18/2008	13.5	mg/kg	--	0.0497 U	0.0497 U	0.0497 U	0.0497 U	0.0497 U	0.0497 U
NPY-03	HC-NPY_03		02/06/1991	0	mg/kg	--	--	--	--	--	--	--
NPY-04	HC-NPY_04		02/06/1991	0	mg/kg	--	--	--	--	--	--	--
P-01	HC-P/01	HC-P/01	02/06/1991	0	mg/kg	--	--	--	--	--	--	--
P-02	HC-P/02	HC-P/02	02/06/1991	0	mg/kg	--	--	--	--	--	--	--
PP	Press Pit-10 In		06/18/1997	0	mg/kg	--	--	--	--	--	--	3 U
SS-01	HC-SS_01		02/06/1991	0	mg/kg	--	--	--	--	--	--	--
SS-3B	SS-3	0807092-01A	07/16/2008	1.5	mg/kg	--	--	--	--	--	--	--
SS-4B	SS-4	0807092-02A	07/16/2008	0.3	mg/kg	--	--	--	--	--	--	--
SS-9	SS-9	0807092-07A	07/17/2008	0.3	mg/kg	--	--	--	--	--	--	--
SS-13	SS13-S-0.5	0903005-07A	02/26/2009	0.5	mg/kg	--	--	--	--	--	--	--
SS-14	SS14-S-0.5	0903005-08A	02/26/2009	0.5	mg/kg	--	--	--	--	--	--	--
SS-15	SS15-S-0.5	0903005-09A	02/26/2009	0.5	mg/kg	--	--	--	--	--	--	--
SS-16	SS16-S-0.5	0903005-10A	02/26/2009	0.5	mg/kg	--	--	--	--	--	--	--
SS-17	SS17-S-0.5	0903005-11A	02/26/2009	0.5	mg/kg	--	--	--	--	--	--	--
SS-18	SS18-S-0.5	0903005-12A	02/26/2009	0.5	mg/kg	--	--	--	--	--	--	--
SS-19	SS19-S-0.5	0903005-13A	02/26/2009	0.5	mg/kg	--	--	--	--	--	--	--
T-4	T4-S-E	K2005541-003	07/21/2000	1.5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	T4-S-N	K2005541-002	07/21/2000	1.5	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	T4-S-W	K2005541-005	07/21/2000	1.75	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	T4-S	K2005541-001	07/21/2000	2	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	T4-S-S	K2005541-004	07/21/2000	2	mg/kg	0.05 U	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
TP-01	TP01-0.3	TP01-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	--	--	--
	TP01-9.5	TP01-9.5	05/03/1993	9.5	mg/kg	--	0.079	--	--	--	--	0.03 U
TP-02	TP02-0.2	TP02-0.2	05/03/1993	0.2	mg/kg	--	0.03 U	--	--	--	--	0.03 U
	TP02-5	TP02-5	05/03/1993	5	mg/kg	--	0.15	--	--	--	--	0.05

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
TP-03	TP03-0.3	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	--	--	--
	TP03-10	TP03-10	05/03/1993	10	mg/kg	--	0.3	--	--	--	--	0.03 U
TP-04	TP04-5	TP04-5	05/03/1993	5	mg/kg	--	3.6	--	--	--	--	2.3 U
	TP04-10	TP04-10	05/03/1993	10	mg/kg	--	3.1	--	--	--	--	2.3 U
TP-05	TP05-0.5	TP05-0.5	05/03/1993	0.5	mg/kg	--	0.086	--	--	--	--	0.03 U
TP-06	TP06-3	TP06-3	05/03/1993	3	mg/kg	--	--	--	--	--	--	--
TP-09	TP09-0.3	TP09-0.3	05/03/1993	0.3	mg/kg	--	0.48	--	--	--	--	0.23 U
	TP09-4	TP09-4	05/03/1993	4	mg/kg	--	--	--	--	--	--	--
	TP09-9	TP09-9	05/03/1993	9	mg/kg	--	--	--	--	--	--	--
TP-10	TP10-0.2	TP10-0.2	05/03/1993	0.2	mg/kg	--	--	--	--	--	--	--
	TP10-8.5	TP10-8.5	05/03/1993	8.5	mg/kg	--	--	--	--	--	--	--
TP-12	TP12-0.3	TP12-0.3	05/03/1993	0.3	mg/kg	--	0.03 U	--	--	--	--	0.03 U
	TP12-3	TP12-3	05/03/1993	3	mg/kg	--	--	--	--	--	--	--
	TP12-6.5	TP12-6.5	05/03/1993	6.5	mg/kg	--	--	--	--	--	--	--
TP-13	TP13-0.2	TP13-0.2	05/03/1993	0.2	mg/kg	--	0.3	--	--	--	--	0.03 U
	TP13-5.5	TP13-5.5	05/03/1993	5.5	mg/kg	--	0.03 U	--	--	--	--	0.03 U
TP-14	TP14-0.5	TP14-0.5	05/03/1993	0.5	mg/kg	--	0.03	--	--	--	--	0.03 U
TP-15	TP15-0.2	TP15-0.2	05/03/1993	0.2	mg/kg	--	0.032	--	--	--	--	0.03 U
TP-16	TP16-0.3	TP16-0.3	05/03/1993	0.3	mg/kg	--	0.04	--	--	--	--	0.03 U
	TP16-7	TP16-7	05/03/1993	7	mg/kg	--	0.03 U	--	--	--	--	0.03 U
TP-27	TP27-10	TP27-10	05/03/1993	10	mg/kg	--	0.03 U	--	--	--	--	0.03 U
TP-28	TP28-7	TP28-7	05/03/1993	7	mg/kg	--	0.03 U	--	--	--	--	0.03 U
	TP28-9.5	TP28-9.5	05/03/1993	9.5	mg/kg	--	--	--	--	--	--	--
TP-31	TP31-6	TP31-6	05/03/1993	6	mg/kg	--	--	--	--	--	--	--
TP-32	TP32-10	TP32-10	05/03/1993	10	mg/kg	--	0.03 U	--	--	--	--	0.03 U
TP-34	TP34-4	TP34-4	05/03/1993	4	mg/kg	--	--	--	--	--	--	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,3,4,5-Tetra-chlorophenol	2,3,4,6-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol
MTCA Method B Cleanup Level						NV	2,400	NV	NV	NV	NV	8,000
MTCA Method C Cleanup Level						NV	110,000	NV	NV	NV	NV	350,000
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	NV	NV	NV
TP-35	TP35-0.2	TP35-0.2	05/03/1993	0.2	mg/kg	--	1.9	--	--	--	--	0.03 U
	TP35-9	TP35-9	05/03/1993	9	mg/kg	--	4.3	--	--	--	--	2.5 U
TP-36	TP36-7.5	TP36-7.5	05/03/1993	7.5	mg/kg	--	0.25 U	--	--	--	--	0.25 U
	TP36-10	TP36-10	05/03/1993	10	mg/kg	--	0.03 U	--	--	--	--	0.03 U
TP-37	TP37-10	TP37-10	05/03/1993	10	mg/kg	--	0.07	--	--	--	--	0.03 U
W-11	HC-W11_S2		02/04/1991	0	mg/kg	--	--	--	--	--	--	--
	HC-W11_S4		02/04/1991	0	mg/kg	--	--	--	--	--	--	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-1	B1-S-2.5	L15788-1	04/06/2000	2.5	mg/kg	--	--	--	--	0.05 U	--
	B1-S-10.0	L15788-3	04/06/2000	10	mg/kg	--	--	--	--	0.05 U	--
B-2	HC-B2_S2		02/04/1991	3	mg/kg	--	--	--	--	2.5 U	--
	HC-B2_S5		02/04/1991	11	mg/kg	--	--	--	--	2.5 U	--
	B2-S-10.0	L15788-8	04/06/2000	0	mg/kg	--	--	--	--	0.05 U	--
	B2-S-2.5	L15788-6	04/06/2000	2.5	mg/kg	--	--	--	--	0.05 U	--
B-3	HC-B3_S3		02/04/1991	5.5	mg/kg	--	--	--	--	2.5 U	--
	HC-B3_S7		02/04/1991	15	mg/kg	--	--	--	--	2.5 U	--
B-4	HC-B4_S2		02/04/1991	3	mg/kg	--	--	--	--	2.5 U	--
	HC-B4_S6		02/04/1991	12.5	mg/kg	--	--	--	--	2.7	--
B-5	HC-B5_S2		02/04/1991	3	mg/kg	--	--	--	--	2.5 U	--
	HC-B5_S8		02/04/1991	18.5	mg/kg	--	--	--	--	350	--
	B5-S-10.0	L15788-22	04/06/2000	10	mg/kg	--	--	--	--	0.05 U	--
B-6	HC-B6_S2		02/04/1991	3	mg/kg	--	--	--	--	**150**	--
	B6-S-2.5	L15788-23	04/06/2000	2.5	mg/kg	--	--	--	--	0.05 U	--
	B6-S-10.0	L15788-25	04/06/2000	10	mg/kg	--	--	--	--	0.05 U	--
	HC-B6_S14		02/04/1991	33	mg/kg	--	--	--	--	2.5 U	--
B-7	HC-B7_S3		02/04/1991	5.5	mg/kg	--	--	--	--	2.5 U	--
	HC-B7_S6		02/04/1991	13.5	mg/kg	--	--	--	--	2.5 U	--
	B7-S-2.5	L15788-26	04/06/2000	2.5	mg/kg	--	--	--	--	0.05 U	--
	B7-S-10.0	L15788-28	04/06/2000	10	mg/kg	--	--	--	--	0.05 U	--
B-8	HC-B8_S4		02/04/1991	11	mg/kg	--	--	--	--	2.5 U	--
	HC-B8_S5		02/04/1991	16	mg/kg	--	--	--	--	2.5 U	--
	B8-S-2.5	L15788-29	04/06/2000	2.5	mg/kg	--	--	--	--	0.05 U	--
	B8-S-10.0	L15788-31	04/06/2000	10	mg/kg	--	--	--	--	0.05 U	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-9	HC-B9_S3		02/04/1991	5.5	mg/kg	--	--	--	--	**14**	--
	HC-B9_S7		02/04/1991	16	mg/kg	--	--	--	--	2.5 U	--
	B9-S-2.5	L15788-32	04/06/2000	2.5	mg/kg	--	--	--	--	0.05 U	--
	B9-S-5.0	L15788-33	04/06/2000	5	mg/kg	--	--	--	--	0.05 U	--
	B9-S-10.0	L15788-34	04/06/2000	10	mg/kg	--	--	--	--	0.05 U	--
B-10	HC-B10_SB		02/04/1991	0	mg/kg	--	--	--	--	**15**	--
	HC-B10_S4		02/04/1991	10.5	mg/kg	0.3 U	--	--	--	**17**	--
	HC-B10_S6		02/04/1991	16	mg/kg	--	--	--	--	7.7	--
B-11	HC-B11_S2		02/04/1991	3	mg/kg	--	--	--	--	2.5 U	--
	HC-B11_S6		02/04/1991	13.5	mg/kg	--	--	--	--	2.5 U	--
B-12	HC-B12_S2		02/05/1991	3	mg/kg	--	--	--	--	2.5 U	--
	HC-B12_S6		02/05/1991	13	mg/kg	--	--	--	--	2.5 U	--
B-13	HC-B13B_S7		02/05/1991	15.5	mg/kg	--	--	--	--	2.5 U	--
B-14	HC-B14_S4		02/05/1991	8	mg/kg	--	--	--	--	2.5 U	--
	HC-B14_S6		02/05/1991	13	mg/kg	--	--	--	--	2.5 U	--
B-15	HC-B15_S2		02/05/1991	3	mg/kg	--	--	--	--	4.3	--
	HC-B15_S7		02/05/1991	15.5	mg/kg	--	--	--	--	30	--
B-19	B19-5	B19-5	05/03/1993	5	mg/kg	0.048	--	--	--	1.1	--
B-20	B20-20	B20-20	05/03/1993	20	mg/kg	--	--	--	--	--	--
B-31	CELL 3-3.5/5.0	K9708881-014	11/26/1997	3.5	mg/kg	0.005 U	--	--	--	0.24	0.033
	CELL 3-8/9.5	K9708881-013	11/26/1997	8	mg/kg	0.05 U	--	--	--	0.93	0.071
	CELL 3-15.5/17	K9708881-012	11/26/1997	15.5	mg/kg	0.05 U	--	--	--	3.1	0.26
B-32	CELL 5-S-6.5	K9709176-011	12/05/1997	6.5	mg/kg	0.005 U	--	--	--	0.018	0.005 U
	CELL 5-S-14	K9709176-012	12/08/1997	14	mg/kg	0.005 U	--	--	--	0.006	0.005 U
B-33	CELL 7 3.5-5.0	K9709014-004	12/04/1997	3.5	mg/kg	0.05 U	--	--	--	**17**	0.67
	CELL 7 9.5-11.0	K9709014-005	12/04/1997	9.5	mg/kg	0.05 U	--	--	--	3.2	0.094
	CELL 7 15.5-17.		12/04/1997	15.5	mg/kg	0.3 U	--	--	--	--	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-34	CELL 9-3.5/5.0	K9708881-015	11/26/1997	3.5	mg/kg	0.05 U	--	--	--	1.4	0.096
	CELL 9-8.0/9.5	K9708881-016	11/26/1997	8	mg/kg	0.3 U	--	--	--	--	--
	CELL 9-17.0/18.		11/26/1997	17	mg/kg	0.3 U	--	--	--	--	--
B-35	CELL 11-3.5-5.0	K9708926-006	12/02/1997	3.5	mg/kg	3 U	--	--	--	--	--
	CELL 11-11.0-12		12/02/1997	11	mg/kg	3 U	--	--	--	--	--
	CELL 11-14.0-15		12/02/1997	14	mg/kg	3 U	--	--	--	--	--
B-36	CELL 13 5.0-6.5	K9709014-001	12/03/1997	5	mg/kg	0.3 U	--	--	--	--	--
	CELL 13 9.5-11.		12/03/1997	9.5	mg/kg	0.005 U	--	--	--	**34**	1.7
	CELL 13 15.5-17		12/03/1997	15.5	mg/kg	0.3 U	--	--	--	--	--
B-37	CELL 16-5.0-6.5	K9708926-001	12/02/1997	5	mg/kg	3 U	--	--	--	--	--
	CELL 16-15.5-17		12/03/1997	15.5	mg/kg	0.005 U	--	--	--	0.041	0.005 U
B-38	CELL 19-S-3.5	K9709176-008	12/05/1997	3.5	mg/kg	--	--	--	--	--	--
B-39	CELL 21-6.5	K9800342-007	01/19/1998	6.5	mg/kg	5 U	--	--	--	**290**	11
B-39	CELL 21-12.5	K9800342-008	01/19/1998	12.5	mg/kg	5 U	--	--	--	**190**	11
B-42	CELL 30-S-8	K9709176-013	12/09/1997	8	mg/kg	--	--	--	--	--	--
	CELL 30-S-12.5	K9709176-014	12/09/1997	12.5	mg/kg	0.005 U	--	--	--	0.055	0.005 U
B-43	CELL 31-S-3.5	K9708705-007	11/20/1997	3.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-44	CELL 33-S-6.5	K9708705-009	11/20/1997	6.5	mg/kg	0.05 U	--	--	--	5.8	0.21
B-45	CELL 34-S-5	K9708655-012	11/19/1997	5	mg/kg	0.3 U	--	--	--	**40**	1.2
B-46	CELL 35-S-5	K9708655-007	11/19/1997	5	mg/kg	0.3 U	--	--	--	0.17	0.009
	CELL 35-S-9.5	K9708655-008	11/19/1997	9.5	mg/kg	0.3 U	--	--	--	0.033	0.005 U
B-47	CELL 36-S-9.5	K9708655-014	11/18/1997	9.5	mg/kg	0.3 U	--	--	--	1.7	0.066
B-48	CELL 37-S-3.5	K9708705-005	11/20/1997	3.5	mg/kg	0.005 U	--	--	--	0.089	0.03
B-49	CELL 38-S-5	K9708815-004	11/25/1997	5	mg/kg	0.005 U	--	--	--	0.56	0.041
B-50	CELL 39-S-8	K9708704-008	11/21/1997	8	mg/kg	0.005 U	--	--	--	1	0.055
B-51	CELL 40-S-9.5	K9708815-003	11/24/1997	9.5	mg/kg	0.05 U	--	--	--	0.78	0.05 U
B-52	CELL 42-S-3.5	K9708704-005	11/20/1997	3.5	mg/kg	0.005 U	--	--	--	3.7	0.15

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-53	CELL 43-9.5	K9800300-013	01/14/1998	9.5	mg/kg	0.005 U	--	--	--	0.015	0.005 U
	CELL 43-15.5	K9800300-014	01/14/1998	15.5	mg/kg	0.005 U	--	--	--	0.2	0.005 U
B-54	CELL 44-8.0	K9800300-015	01/14/1998	8	mg/kg	0.005 U	--	--	--	0.6	0.119
B-55	CELL 45-8.0	K9800300-017	01/15/1998	8	mg/kg	0.005 U	--	--	--	0.049	0.025
B-56	CELL 46-6.5	K9800342-001	01/15/1998	6.5	mg/kg	0.005 U	--	--	--	0.035	0.005 U
B-57	CELL 47-8.0	K9800342-003	01/16/1998	8	mg/kg	0.005 U	--	--	--	0.031	0.005 U
B-58	CELL 48-6.5	K9800342-005	01/16/1998	6.5	mg/kg	0.005 U	--	--	--	0.069	0.005 U
B-58A	B-1-S-5.0	K9803817-001	06/12/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-1-S-17.0	K9803817-002	06/12/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-62	B-5-S-5.0	K9803817-005	06/12/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-5-S-17.0	K9803817-006	06/12/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-63	B-6-S-5.0	K9803817-007	06/12/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-6-S-17.0	K9803817-008	06/12/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-66	B-9-S-5.0	K9803817-009	06/12/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-9-S-17.0	K9803817-010	06/12/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-69	B-12-S-0.5	K9803927-011	06/16/1998	0.5	mg/kg	0.05 U	--	--	0.05 U	1.3	--
	B-12-S-2.5	K9803927-001	06/16/1998	2.5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-12-S-5.0	K9803927-012	06/16/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-12-S-10.0	K9803927-013	06/16/1998	10	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-12-S-17.0	K9803927-002	06/16/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-72	B-15-S-0.5	K9803927-003	06/17/1998	0.5	mg/kg	10 U	--	--	10 U	20 U	--
	B-15-S-5.0	K9803927-004	06/17/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-15-S-10.0	K9803927-005	06/17/1998	10	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-15-S-17.0	K9803927-006	06/17/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-73	B-73-S-17.0	K9803927-008	06/17/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-74	B-74-S-2.5	K9803927-009	06/17/1998	2.5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-74-S-17.0	K9803927-010	06/17/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-75	B-75-S-2.5	K9803927-014	06/17/1998	2.5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-75-S-17.0	K9803927-015	06/17/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-76	B-76-S-10.0	K9803927-016	06/17/1998	10	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-76-S-27.0	K9803927-017	06/17/1998	27	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-77	B-77-S-2.5	K9803927-018	06/17/1998	2.5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-77-S-5.0	K9803927-019	06/17/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-77-S-17.0	K9803927-020	06/17/1998	17	mg/kg	25 U	--	--	25 U	50 U	--
B-78	B-78-S-0.5	K9803979-001	06/18/1998	0.5	mg/kg	0.05 U	--	--	0.05 U	3.9	--
	B-78-S-17.0	K9803979-002	06/18/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-79	B-79-S-2.5	K9803979-004	06/18/1998	2.5	mg/kg	0.5 U	--	--	0.5 U	1 U	--
	B-79-S-10.0	K9803979-006	06/18/1998	10	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-79-S-17.0	K9803979-007	06/18/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-80	B-80-S-2.5	K9803995-001	06/19/1998	2.5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-80-S-15.0	K9803995-002	06/19/1998	15	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-80-S-25.0	K9803995-003	06/19/1998	25	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-81	B-81-S-2.5	K9803995-004	06/19/1998	2.5	mg/kg	0.05 U	--	--	0.35	**17**	--
B-82	B-82-S-10.0	K9803995-005	06/19/1998	10	mg/kg	0.05 U	--	--	0.05 U	1.1	--
	B-82-S-20.0	K9803995-006	06/19/1998	20	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-83	B-83-S-5.0	K9804079-001	06/23/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-83-S-17.0	K9804079-002	06/23/1998	17	mg/kg	1 U	--	--	1 U	2 U	--
B-84	B-84-S-10.0	K9804079-003	06/23/1998	10	mg/kg	0.05 U	--	--	0.05 U	0.1	--
	B-84-S-35.0	K9804079-004	06/23/1998	35	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-85	B-85-S-5.0	K9804079-005	06/23/1998	5	mg/kg	0.05 U	--	--	0.05 U	6.5	--
	B-85-S-10.0	K9804079-006	06/23/1998	10	mg/kg	5 U	--	--	5 U	**16**	--
B-86	B-86-S-5.0	K9804079-007	06/23/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-86-S-15.0	K9804079-008	06/23/1998	15	mg/kg	1 U	--	--	1 U	**230**	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-87	B-87-S-5.0	K9804079-009	06/23/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-87-S-15.0	K9804079-010	06/23/1998	15	mg/kg	0.05 U	--	--	0.05 U	3.9	--
B-88	B-88-S-5.0	K9804079-011	06/23/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-88-S-15.0	K9804079-012	06/23/1998	15	mg/kg	0.05 U	--	--	0.05 U	0.17	--
B-89	B-89-S-5.0	K9804079-013	06/23/1998	5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-89-S-15.0	K9804079-014	06/23/1998	15	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-90	B-90-S-0.5	K9804079-015	06/23/1998	0.5	mg/kg	1 U	--	--	1 U	7	--
	B-90-S-17.5	K9804079-016	06/23/1998	17.5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-91	B-91-S-0.5	K9804079-017	06/23/1998	0.5	mg/kg	0.05 U	--	--	0.05 U	**510**	--
	B-91-S-15.0	K9804079-018	06/23/1998	15	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-92	B-92-S-10.0	K9804079-019	06/23/1998	10	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-92-S-30.0	K9804079-020	06/23/1998	30	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-93	B-93-S-25.0	K9804129-001	06/24/1998	25	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-93-S-40.0	K9804129-002	06/24/1998	40	mg/kg	0.05 U	--	--	0.05 U	0.62	--
B-94	B-94-S-10.0	K9804129-003	06/24/1998	10	mg/kg	0.05 U	--	--	0.05 U	0.43	--
	B-94-S-35.0	K9804129-004	06/24/1998	35	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-95	B-95-S-10.0	K9804129-005	06/24/1998	10	mg/kg	0.05 U	--	--	0.05 U	1.5	--
	B-95-S-25.0	K9804129-006	06/24/1998	25	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-95-S-32.5	K9804129-007	06/24/1998	32.5	mg/kg	0.05 U	--	--	0.05 U	0.31	--
B-96	B-96-S-30.0	K9804470-002	07/08/1998	30	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-97	B-97-S-2.5	K9804470-003	07/08/1998	2.5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-98	B-98-S-17.0	K9804470-005	07/08/1998	17	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-99	B-99-S-45.0	K9804470-007	07/08/1998	45	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-99-S-64.0	K9804470-008	07/08/1998	64	mg/kg	0.05 U	--	--	0.05 U	0.41	--
B-100	B-100-S-45.0	K9804470-010	07/08/1998	45	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-100-S-65.0	K9804470-011	07/08/1998	65	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-101	B-101-S-10.0	K9804470-012	07/08/1998	10	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
	B-101-S-33.0	K9804470-013	07/08/1998	33	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-103	B-103-S-2.5	K9804470-014	07/08/1998	2.5	mg/kg	0.05 U	--	--	0.05 U	0.1 U	--
B-104	B104-S-5.0	K9903514-001	06/03/1999	5	mg/kg	0.005 U	--	--	--	0.008	0.005 U
	B104-S-10.0	K9903514-002	06/03/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B104-S-25.0	K9903514-005	06/03/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-105	B105-S-5.0	K9903514-010	06/03/1999	5	mg/kg	0.05 U	--	--	--	0.12	0.05 U
	B105-S-10.0	K9903514-011	06/03/1999	10	mg/kg	0.05 U	--	--	--	0.4	0.05 U
	B105-S-25.0	K9903514-013	06/03/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-106	B106-S-5.0	K9903553-001	06/04/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B106-S-15.0	K9903553-002	06/04/1999	15	mg/kg	0.005 U	--	--	--	0.065	0.005 U
B-107	B107-S-5.0	K9903553-007	06/04/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B107-S-15.0	K9903553-009	06/04/1999	15	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B107-S-25.0	K9903584-002	06/07/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B107-S-45.0	K9903584-005	06/07/1999	45	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-108	B108-S-5.0	K9903584-008	06/07/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B108-S-10.0	K9903584-009	06/07/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-109	B109-S-5.0	K9903616-007	06/08/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B109-S-10.0	K9903616-008	06/08/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B109-S-25.0	K9903616-010	06/08/1999	25	mg/kg	0.005 U	--	--	--	0.0063	0.005 U
	B109-S-40.0	K9903616-011	06/08/1999	40	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-110	B110-S-5.0	K9903665-001	06/08/1999	5	mg/kg	0.005 U	--	--	--	0.046 U	0.01
	B110-S-10.0	K9903665-002	06/08/1999	10	mg/kg	0.005 U	--	--	--	0.026	0.005 U
	B110-S-25.0	K9903665-004	06/08/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B110-S-43.0	K9903665-009	06/08/1999	43	mg/kg	0.5 U	--	--	--	0.66	0.5 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-111	B111-S-5.0	K9903711-001	06/09/1999	5	mg/kg	0.05 U	--	--	--	0.11	0.05 U
	B111-S-10.0	K9903711-002	06/09/1999	10	mg/kg	0.05 U	--	--	--	0.089	0.097
	B111-S-30.0	K9903711-004	06/10/1999	30	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-112	B112-S-10.0	K9903711-009	06/10/1999	10	mg/kg	0.05 U	--	--	--	0.065	0.19
	B112-S-30.0	K9903711-013	06/10/1999	30	mg/kg	0.005 U	--	--	--	0.01	0.005 U
B-113	B113-S-5.0	K9903723-001	06/11/1999	5	mg/kg	0.05 U	--	--	--	0.47	0.05 U
	B113-S-10.0	K9903723-002	06/11/1999	10	mg/kg	5 U	--	--	--	**23**	5 U
	B113-S-15.0	K9903723-003	06/11/1999	15	mg/kg	0.05 U	--	--	--	0.93	0.4
	B113-S-25.0	K9903723-005	06/11/1999	25	mg/kg	0.005 U	--	--	--	0.088	0.013
B-114	B114-S-10.0	K9903794-002	06/11/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B114-S-15.0	K9903794-003	06/11/1999	15	mg/kg	0.005 U	--	--	--	0.013	0.005 U
	B114-S-30.0	K9903794-007	06/14/1999	30	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-115	B115-S-10.0	K9903794-011	06/14/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B115-S-15.0	K9903794-012	06/14/1999	15	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-116	B116-S-10.0	K9903826-002	06/14/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B116-S-40.0	K9903826-007	06/15/1999	40	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B116-S-95.0	K9903826-018	06/15/1999	95	mg/kg	0.005 U	--	--	--	0.024	0.005 U
B-117	B117-S-5.0	K9903826-021	06/15/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B117-S-15.0	K9903826-023	06/15/1999	15	mg/kg	0.005 U	--	--	--	0.016	0.005 U
	B117-S-65.0	K9903871-004	06/16/1999	65	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B117-S-90.0	K9903871-008	06/16/1999	90	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-118	B118-S-5.0	K9903871-009	06/16/1999	5	mg/kg	0.05 U	--	--	--	2 C	0.096
	B118-S-10.0	K9903871-010	06/16/1999	10	mg/kg	0.005 U	--	--	--	0.11	0.31
B-119	B119-S-2.5	K9903915-001	06/17/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B119-S-5.0	K9903915-002	06/17/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B119-S-15.0	K9903915-004	06/17/1999	15	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-139	B139-S-2.5	K9907039-005	10/04/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B139-S-5.0	K9907039-009	10/04/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B139-S-20.0	K9907039-006	10/04/1999	20	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-140	B140-S-10.0	K9907141-001	10/06/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.059	0.005 U
B-141	B141-S-2.5	K9907141-002	10/06/1999	2.5	mg/kg	0.5 U	--	--	0.05 U	1.2	0.5 U
B-142	B142-S-10.0	K9907141-003	10/07/1999	10	mg/kg	0.5 U	--	--	0.96	0.74	1.7
B-147	B147-S-10.0	K9907141-004	10/08/1999	10	mg/kg	0.05 U	--	--	0.5 U	0.18	0.05 U
	B147-S-20.0	K9907141-005	10/08/1999	20	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-148	B148-S-10.0	K9907141-006	10/08/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.078	0.04
	B148-S-15.0	K9907141-007	10/08/1999	15	mg/kg	0.05 U	--	--	0.32	0.31	0.67
B-149	B149-S-3.0	K9907141-008	10/08/1999	3	mg/kg	0.005 U	--	--	0.05 U	0.0053	0.005 U
	B149-S-10.0	K9907141-009	10/08/1999	10	mg/kg	0.05 U	--	--	0.5 U	0.21	0.05 U
	B149-S-20.0	K9907141-010	10/08/1999	20	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-150	B150-S-10.5	K9907223-003	10/11/1999	10.5	mg/kg	0.005 U	--	--	0.05 U	0.06	0.019
B-153	B153-S-5.0	K9907223-007	10/11/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B153-S-10.0	K9907223-008	10/11/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.053	0.0087
B-155	B155-S-5.0	K9907223-009	10/12/1999	5	mg/kg	0.005 U	--	--	0.05 U	0.037	0.016
	B155-S-9.0	K9907223-016	10/12/1999	9	mg/kg	0.005 U	--	--	0.05 U	0.0064	0.005 U
B-160	B160-S-10.0	K9907379-011	10/13/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.014	0.005 U
B-161	B161-S-10.0	K9907379-010	10/13/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-162	B162-S-11.5	K9907379-009	10/13/1999	11.5	mg/kg	0.005 U	--	--	--	0.015	0.005 U
B-165	B165-S-11.5	K9907379-008	10/13/1999	11.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-167	B167-S-20.0	K9907379-006	10/14/1999	20	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-170	B170-S-7.5	K9907379-017	10/15/1999	7.5	mg/kg	0.05 U	--	--	--	0.79	0.16
B-187	B187-S-11.5	K9907559-010	10/21/1999	11.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-188	B188-S-5.0	K9907559-011	10/21/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B188-S-11.0	K9907559-012	10/21/1999	11.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-189	B189-S-2.5	K9907607-001	10/22/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B189-S-12.0	K9907607-002	10/22/1999	12	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-190	B190-S-2.5	K9907700-001	10/25/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B190-S-5.0	K9907700-002	10/25/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B190-S-10.0	K9907700-003	10/25/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-191	B191-S-2.5	K9907700-004	10/25/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B191-S-5.0	K9907700-005	10/25/1999	5	mg/kg	0.005 U	--	--	0.05 U	0.005 U	0.005 U
B-192	B192-S-2.5	K9907700-006	10/25/1999	2.5	mg/kg	0.005 U	--	--	0.05 U	0.0055	0.005 U
	B192-S-5.0	K9907700-007	10/25/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-193	B193-S-2.5	K9907700-008	10/25/1999	2.5	mg/kg	0.05 U	--	--	0.05 U	1.2	0.065
	B193-S-5.0	K9907700-009	10/25/1999	5	mg/kg	0.05 U	--	--	0.05 U	0.25	0.05 U
	B193-S-10.0	K9907700-010	10/25/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.0095	0.005 U
B-194	B194-S-2.5	K9907700-011	10/25/1999	2.5	mg/kg	0.5 U	--	--	0.05 U	8.3	0.58
	B194-S-5.0	K9907700-012	10/25/1999	5	mg/kg	0.5 U	--	--	0.05 U	1.9	0.5 U
	B194-S-10.0	K9907700-013	10/25/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.0051	0.005 U
B-195	B195-S-2.5	K9907700-014	10/26/1999	2.5	mg/kg	0.5 U	--	--	0.05 U	2.9	0.5 U
	B195-S-5.0	K9907700-015	10/26/1999	5	mg/kg	0.005 U	--	--	0.05 U	0.027	0.005 U
	B195-S-10.0	K9907700-016	10/26/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.014	0.005 U
B-196	B196-S-3.0	K9907700-017	10/26/1999	3	mg/kg	0.005 U	--	--	0.05 U	0.0096	0.005 U
	B196-S-9.0	K9907700-018	10/26/1999	9	mg/kg	0.5 U	--	--	0.05 U	7.5	0.5 U
B-197	B197-S-2.5	K9907767-001	10/26/1999	2.5	mg/kg	0.05 U	--	--	0.05 U	0.12	0.05 U
	B197-S-5.0	K9907767-002	10/26/1999	5	mg/kg	0.05 U	--	--	0.05 U	0.7	0.11
	B197-S-10.0	K9907767-003	10/26/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.028	0.005 U
B-198	B198-S-2.5	K9907767-004	10/27/1999	2.5	mg/kg	5 U	--	--	0.05 U	**67**	5 U
	B198-S-5.0	K9907767-005	10/27/1999	5	mg/kg	5 U	--	--	0.05 U	**32**	5 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol		2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol		Pentachloro phenol		Tetrachloro-phenols, Total	
MTCA Method B Cleanup Level						91		240	400	NV		8.3		NV	
MTCA Method C Cleanup Level						12,000		64,000	18,000	NV		1,100		NV	
Wildlife Ecological Indicator Concentration						NV		NV	NV	NV		4.5		NV	
B-199	B199-S-2.5	K9907767-007	10/27/1999	2.5	mg/kg	0.05	U	--	--	0.05	U	0.14		0.05	U
	B199-S-5.0	K9907767-008	10/27/1999	5	mg/kg	0.005	U	--	--	0.05	U	0.0053		0.005	U
	B199-S-10.0	K9907767-009	10/27/1999	10	mg/kg	0.05	U	--	--	0.05	U	0.081		0.05	U
	B199-S-15.0	K9907767-010	10/27/1999	15	mg/kg	0.005	U	--	--	0.05	U	0.005	U	0.005	U
B-200	B200-S-2.5	K9907767-012	10/27/1999	2.5	mg/kg	0.005	U	--	--	0.05	U	0.019		0.005	U
	B200-S-5.0	K9907767-013	10/27/1999	5	mg/kg	0.005	U	--	--	0.05	U	0.005	U	0.005	U
B-201	B201-S-2.5	K9907767-014	10/28/1999	2.5	mg/kg	0.005	U	--	--	0.05	U	0.017		0.005	U
	B201-S-5.0	K9907767-015	10/28/1999	5	mg/kg	0.005	U	--	--	0.05	U	0.01		0.005	U
	B201-S-10.0	K9907767-016	10/28/1999	10	mg/kg	0.005	U	--	--	--		0.005	U	0.005	U
	B201-S-15.0	K9907767-017	10/28/1999	15	mg/kg	0.005	U	--	--	0.056	UF	0.019		0.005	U
	B201-S-20.0	K9907767-018	10/28/1999	20	mg/kg	0.005	U	--	--	0.094		0.0099		0.087	
B-202	B202-S-2.5	K9907767-019	10/28/1999	2.5	mg/kg	0.005	U	--	--	0.05	U	0.018		0.005	U
	B202-S-5.0	K9907767-020	10/28/1999	5	mg/kg	0.005	U	--	--	0.05	U	0.005	U	0.005	U
	B202-S-15.0	K9907767-021	10/28/1999	15	mg/kg	0.005	U	--	--	--		0.005	U	0.005	U
B-203	B203-S-2.5	K9907788-009	10/28/1999	2.5	mg/kg	0.005	U	--	--	0.05	U	0.021		0.013	
	B203-S-5.0	K9907788-010	10/28/1999	5	mg/kg	0.005	U	--	--	0.05	U	0.011		0.005	U
	B203-S-10.0	K9907788-011	10/28/1999	10	mg/kg	0.05	U	--	--	0.05	U	0.33		0.05	U
B-221	B221-S-2.5	K9908093-005	11/09/1999	2.5	mg/kg	0.005	U	--	--	0.05	U	0.021		0.005	U
	B221-S-7.5	K9908093-006	11/09/1999	7.5	mg/kg	0.05	U	--	--	0.05	U	0.49		0.05	U
B-222	B222-S-2.5	K9908120-001	11/10/1999	2.5	mg/kg	0.005	U	--	--	0.05	U	0.043		0.012	
	B222-S-5.0	K9908120-002	11/10/1999	5	mg/kg	0.005	U	--	--	0.05	U	0.047		0.012	
	B222-S-10.0	K9908120-003	11/10/1999	10	mg/kg	0.005	U	--	--	0.05	U	0.025		0.005	U
B-223	B223-S-2.5	K9908120-005	11/10/1999	2.5	mg/kg	0.005	U	--	--	--		0.005	U	0.005	U
	B223-S-5.0	K9908120-006	11/10/1999	5	mg/kg	0.005	U	--	--	0.05	U	0.007		0.005	U
	B223-S-10.0	K9908120-007	11/10/1999	10	mg/kg	0.005	U	--	--	0.05	U	0.007		0.005	U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-224	B224-S-2.5	K9908120-008	11/10/1999	2.5	mg/kg	0.005 U	--	--	0.05 U	0.035	0.005 U
	B224-S-5.0	K9908120-009	11/10/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B224-S-10.0	K9908120-010	11/10/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-225	B225-S-2.5	K9908120-012	11/10/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B225-S-5.0	K9908120-013	11/10/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-226	B226-S-2.5	K9908186-001	11/11/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B226-S-5.0	K9908186-002	11/11/1999	5	mg/kg	0.005 U	--	--	--	0.009	0.005 U
	B226-S-10.0	K9908186-003	11/11/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-227	B227-S-2.5	K9908186-005	11/11/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B227-S-5.0	K9908186-006	11/11/1999	5	mg/kg	0.005 U	--	--	--	0.014	0.005 U
B-228	B228-S-1.5	K9908186-008	11/11/1999	1.5	mg/kg	50 U	--	--	--	890	50 U
	B228-S-5.0	K9908186-010	11/11/1999	5	mg/kg	0.005 U	--	--	--	0.14	0.005 U
B-230	B230-S-2.5	K9908189-001	11/12/1999	2.5	mg/kg	0.005 U	--	--	0.05 U	7.3	0.86
	B230-S-5.0	K9908189-003	11/12/1999	5	mg/kg	0.005 U	--	--	0.05 U	0.045	0.005 U
B-231	B231-S-2.5	K9908189-005	11/12/1999	2.5	mg/kg	0.005 U	--	--	0.05 U	0.059	0.005 U
	B231-S-5.0	K9908189-006	11/12/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B231-S-7.0	K9908189-007	11/12/1999	7	mg/kg	0.005 U	--	--	0.05 U	4.5	0.11
B-232	B232-S-5.0	K9908806-003	12/07/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B232-S-25.0	K9908806-007	12/07/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-233	B233-S-5.0	K9908806-009	12/07/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B233-S-15.0	K9908806-011	12/07/1999	15	mg/kg	0.05 U	--	--	0.05 U	0.13	0.05 U
	B233-S-25.0	K9908806-013	12/07/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-234	B234-S-10.0	K9908806-015	12/07/1999	10	mg/kg	0.005 U	--	--	0.5 U	0.046	0.017
	B234-S-15.0	K9908806-016	12/07/1999	15	mg/kg	0.005 U	--	--	0.05 U	0.039	0.0056
	B234-S-25.0	K9908806-018	12/07/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-235	B235-S-10.0	K9908924-016	12/08/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.031	0.005 U
	B235-S-15.0	K9908924-017	12/08/1999	15	mg/kg	0.005 U	--	--	0.05 U	0.062	0.006
	B235-S-25.0	K9908924-019	12/08/1999	25	mg/kg	0.005 U	--	--	0.05 U	0.0054	0.005 U
B-236	B236-S-10.0	K9908924-023	12/08/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.02	0.005 U
	B236-S-15.0	K9908924-024	12/08/1999	15	mg/kg	0.005 U	--	--	0.05 U	0.071	0.018
	B236-S-25.0	K9908924-026	12/08/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-237	B237-S-5.0	K9908924-028	12/08/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B237-S-15.0	K9908924-030	12/08/1999	15	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B237-S-25.0	K9908924-032	12/08/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-238	B238-S-10.0	K9908924-003	12/09/1999	10	mg/kg	0.05 U	--	--	0.079	0.144	0.05 U
	B238-S-15.0	K9908924-004	12/09/1999	15	mg/kg	0.05 U	--	--	0.17	0.1	0.26
	B238-S-25.0	K9908924-006	12/09/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-239	B239-S-10.0	K9908924-009	12/09/1999	10	mg/kg	0.005 U	--	--	0.05 U	0.08	0.005 U
	B239-S-15.0	K9908924-010	12/09/1999	15	mg/kg	0.05 U	--	--	0.05 U	0.27	0.05 U
	B239-S-25.0	K9908924-012	12/09/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-240	B240-S-5.0	K9908924-034	12/10/1999	5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B240-S-15.0	K9908924-036	12/10/1999	15	mg/kg	0.005 U	--	--	0.05 U	0.02	0.009
	B240-S-25.0	K9908924-038	12/10/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-241	B241-S-5.0	K9908924-039	12/10/1999	5	mg/kg	0.005 U	--	--	0.05 U	0.028	0.005 U
	B241-S-15.0	K9908924-041	12/10/1999	15	mg/kg	0.05 U	--	--	0.31	0.091	0.35
	B241-S-25.0	K9908924-043	12/10/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-242	B242-S-25.0	K9908973-007	12/13/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-243	B243-S-25.0	K9909023-005	12/14/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-244	B244-S-25.0	K9909069-002	12/15/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B244-S-35.0	K9909069-005	12/15/1999	35	mg/kg	0.005 U	--	--	0.05 U	0.033	0.005 U
B-245	B245-S-15.0	K9909069-009	12/15/1999	15	mg/kg		--	--	0.05 U	**17**	1.3
	B245-S-30.0	K9909069-012	12/15/1999	30	mg/kg	0.005 U	--	--	0.05 U	0.096	0.009

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
B-246	B246-S-5.0	K9909069-015	12/16/1999	5	mg/kg	0.005 U	--	--	0.05 U	0.009	0.005 U
	B246-S-10.0	K9909069-016	12/16/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B246-S-20.0	K9909069-018	12/16/1999	20	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-247	B247-S-2.5	K9909148-001	12/17/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B247-S-5.0	K9909148-002	12/17/1999	5	mg/kg	0.005 U	--	--	--	0.013	0.005 U
	B247-S-16.0	K9909148-004	12/17/1999	16	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-248	B248-S-2.5	K9909181-001	12/20/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B248-S-15.0	K9909181-004	12/20/1999	15	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B248-S-25.0	K9909181-006	12/20/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-249	B249-S-2.5	K9909181-008	12/20/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B249-S-20.0	K9909181-012	12/20/1999	20	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B249-S-25.0	K9909181-013	12/20/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-250	B250-S-20.0	K9909223-005	12/21/1999	20	mg/kg	0.005 U	--	--	0.05 U	0.025	0.005 U
	B250-S-25.0	K9909223-006	12/21/1999	25	mg/kg	0.005 U	--	--	0.05 U	0.008	0.005 U
	B250-S-35.0	K9909223-004	12/21/1999	35	mg/kg	0.005 U	--	--	0.05 U	0.006	0.005 U
B-251	B251-S-2.5	K9909277-001	12/22/1999	2.5	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B251-S-10.0	K9909277-003	12/22/1999	10	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
	B251-S-25.0	K9909277-005	12/22/1999	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U
B-252	B252-S-15.0	K9909277-012	12/22/1999	15	mg/kg	0.05 U	--	--	0.05 U	0.94	0.08
	B252-S-20.0	K9909277-013	12/22/1999	20	mg/kg	0.5 U	--	--	0.05 U	1.9	0.82
	B252-S-25.0	K9909277-014	12/22/1999	25	mg/kg	0.005 U	--	--	0.05 U	0.04	0.005 U
B-253	B253-S-25.0	K9909277-021	12/23/1999	25	mg/kg	0.05 U	--	--	0.05 U	0.22	0.009
B-255	B255-S-10.0	K2000354-003	01/14/2000	10	mg/kg	0.5 U	--	--	0.5 U	4	0.5 U
	B255-S-15.0	K2000354-004	01/14/2000	15	mg/kg	0.005 U	--	--	0.05 U	0.049	0.005 U
	B255-S-25.0	K2000354-006	01/14/2000	25	mg/kg	0.005 U	--	--	--	0.005 U	0.005 U

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol		2,4-Dichloro-phenol		2-Chlorophenol		3,4,5-Trichloro-phenol		Pentachloro phenol		Tetrachloro-phenols, Total	
MTCA Method B Cleanup Level						91		240		400		NV		8.3		NV	
MTCA Method C Cleanup Level						12,000		64,000		18,000		NV		1,100		NV	
Wildlife Ecological Indicator Concentration						NV		NV		NV		NV		4.5		NV	
B-256	B256-S-5.0	K2000354-010	01/14/2000	5	mg/kg	0.005	U	--		--		0.05	U	0.015		0.005	U
	B256-S-10.0	K2000354-011	01/14/2000	10	mg/kg	0.005	U	--		--		0.05	U	0.014		0.005	U
	B256-S-20.0	K2000354-013	01/14/2000	20	mg/kg	0.005	U	--		--		--		0.005	U	0.005 U	U
B-261	B261-S-10.0	K2000528-003	01/20/2000	10	mg/kg	0.005	U	--		--		0.05	U	0.061		0.005	U
	B261-S-15.0	K2000528-004	01/20/2000	15	mg/kg	0.05	U	--		--		0.05	U	1.8		0.056	
	B261-S-30.0	K2000528-006	01/20/2000	30	mg/kg	0.005	U	--		--		0.05	U	0.096		0.022	
B-264	B264-S-2.5	K2106063-001	08/17/2001	2.5	mg/kg	0.066	U	--		--		0.066	U	0.066	U	--	
	B264-S-10.0	K2106063-003	08/17/2001	10	mg/kg	0.065	U	--		--		0.065	U	0.065	U	--	
B-265	B265-S-5.0	K2106063-005	08/17/2001	5	mg/kg	0.062	U	--		--		0.062	U	0.062	U	--	
B-266	B266-S-5.0	K2106063-008	08/17/2001	5	mg/kg	0.08	U	--		--		0.08	U	0.08	U	--	
B-272	B272-S-5.0	K2106063-023	08/17/2001	5	mg/kg	0.058	U	--		--		0.058	U	0.058	U	--	
B-273	B273-S-5.0	K2106063-025	08/20/2001	5	mg/kg	0.074	U	--		--		0.074	U	0.074	U	--	
B-274	B274-S-5.0	K2106063-030	08/20/2001	5	mg/kg	0.07	U	--		--		0.07	U	0.07	U	--	
B-304	B304-S-10.0	0806067-07A	06/12/2008	10	mg/kg	0.152	UQ	--		--		0.152	UQ	**119**		--	
	B304-S-19.5	0806067-09A	06/12/2008	19.5	mg/kg	0.0456	U	--		--		0.0456	U	0.0684	U	--	
B-305	B305-S-10.0	0806067-12A	06/12/2008	10	mg/kg	0.0463	U	--		--		0.0463	U	0.0694	U	--	
	B305-S-19.0	0806067-14A	06/12/2008	19	mg/kg	0.0459	U	--		--		0.0459	U	0.0689	U	--	
B-306	B306-S-2.5	1091024001	03/11/2009	2.5	mg/kg	--		--		--		--		**46.7**		--	
	B306-S-18.0	1091029003	03/11/2009	18	mg/kg	--		--		--		--		0.853		--	
B-308	B308-S-0.5	1091024002	03/11/2009	0.5	mg/kg	--		--		--		--		0.349	U	--	
	B308-S-2.5	1091024003	03/11/2009	2.5	mg/kg	--		--		--		--		2.73		--	
	B308-S-15.0	1091024004	03/11/2009	15	mg/kg	--		--		--		--		1.55		--	
B-313	B313-S-2.5	0905143-06A	05/21/2009	2.5	mg/kg	0.0353	U	0.0353	U	0.0353	U	0.0353	U	0.053	U	--	
	B313-S-5.0	0905143-07B	05/21/2009	5	mg/kg	0.0358	U	0.0358	U	0.0358	U	0.0358	U	0.0537	U	--	
	B313-S-10.0	0905143-08B	05/21/2009	10	mg/kg	0.043	U	0.043	U	0.043	U	0.043	U	0.0645	U	--	
	B313-S-15.0	0905143-09B	05/21/2009	15	mg/kg	0.0443	U	0.0443	U	0.0443	U	0.0443	U	0.0665	U	--	

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
CT	HC-CT_01		02/07/1991	0	mg/kg	--	--	--	--	**530**	--
	HC-CT_02		02/07/1991	0	mg/kg	--	--	--	--	**610**	--
DS-E	Dry Shed-East-0		06/18/1997	0	mg/kg	0.3 U	0.3 U	0.3 U	--	**13**	--
DS-N	Dry Shed-North-		06/18/1997	0	mg/kg	3 U	3 U	3 U	--	990	--
DS-S	Dry Shed-South-		06/18/1997	0	mg/kg	1.5 U	1.5 U	1.5 U	--	1000	--
DS-W	Dry Shed-West-0		06/18/1997	0	mg/kg	0.3 U	0.3 U	0.3 U	--	5.2	--
GP8	GP8-S-1.4	0905163-05B	05/22/2009	1.4	mg/kg	0.175 UQ	0.175 UQ	0.175 UQ	0.175 UQ	0.726 Q	--
	GP8-S-5.0	0905163-06B	05/22/2009	5	mg/kg	0.0392 U	0.0392 U	0.0392 U	0.0392 U	0.0588 U	--
	GP8-S-11.0	0905163-07B	05/22/2009	11	mg/kg	0.21 UQ	0.21 UQ	0.21 UQ	0.21 UQ	0.315 UQ	--
	GP8-S-15.0	0905163-08B	05/22/2009	15	mg/kg	0.043 U	0.043 U	0.043 U	0.043 U	0.0645 U	--
GP11	GP11-S-1.5	0905143-10B	05/21/2009	1.5	mg/kg	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.368	--
	GP11-S-5.0	0905143-11A	05/21/2009	5	mg/kg	0.0422 U	0.0422 U	0.0422 U	0.0422 U	0.0633 U	--
	GP11-S-10.0	0905143-12A	05/21/2009	10	mg/kg	0.0455 U	0.0455 U	0.0455 U	0.0455 U	0.0682 U	--
	GP11-S-15.0	0905143-13B	05/21/2009	15	mg/kg	0.0439 U	0.0439 U	0.0439 U	0.0439 U	0.0659 U	--
MFP-01	MFP-01-00	K9708818-001	11/25/1997	0	mg/kg	0.05 U	--	--	--	2.2	0.055
	MFP-01-03	K9708818-002	11/25/1997	3	mg/kg	50 U	--	--	--	**2500**	25
	MFP-01-06	K9708818-003	11/25/1997	6	mg/kg	0.5 U	--	--	--	**230**	17
	MFP-01-09	K9708818-004	11/25/1997	9	mg/kg	0.5 U	--	--	--	**180**	14
MFP-02	MFP-02-06	K9708818-008R	11/25/1997	6	mg/kg	0.005 U	--	--	--	0.038	0.02
MFP-04	MFP-04-00	K9708818-011	11/25/1997	0	mg/kg	0.005 U	--	--	--	0.2	0.016
	MFP-04-03-BRN	K9708818-012R	11/25/1997	3	mg/kg	0.005 U	--	--	--	0.023	0.005 U
MFP-05	MFP-05-00	K9708818-014R	11/25/1997	0	mg/kg	0.005 U	--	--	--	0.044	0.005 U
	MFP-05-03	K9708818-015	11/25/1997	3	mg/kg	0.005 U	--	--	--	0.033	0.005 U
	MFP-05-06-BRN	K9708818-016	11/25/1997	6	mg/kg	0.05 U	--	--	--	3.1	0.34
	MFP-05-09	K9708818-018	11/25/1997	9	mg/kg	0.005 U	--	--	--	0.41	0.095

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
MW-10	HC-W12_S14		02/05/1991	0	mg/kg	--	--	--	--	2.5 U	--
	HC-W12_S3		02/05/1991	0	mg/kg	--	--	--	--	2.5 U	--
	HC-W12_SE		02/05/1991	0	mg/kg	--	--	--	--	2.5 U	--
MW-11S	PR11S,PR11D	K9707902-003	10/23/1997	0	mg/kg	150 U	100 U	100 U	--	**1800**	300 U
MW-13	MW13-5	MW13-5	05/03/1993	5	mg/kg	0.03 U	--	--	--	0.046	--
	MW13-15	MW13-15	05/03/1993	15	mg/kg	0.03 U	--	--	--	0.57	--
MW-14	MW14-5	MW14-5	05/03/1993	5	mg/kg	0.03 U	--	--	--	**9.3**	--
MW-17	MW17-5	MW17-5	05/03/1993	5	mg/kg	0.03 U	--	--	--	0.5	--
MW-18	MW18-10	MW18-10	05/03/1993	10	mg/kg	--	--	--	--	16 U	--
	MW18-15	MW18-15	05/03/1993	15	mg/kg	0.03 U	--	--	--	0.78	--
MW-22	MW22-15	MW22-15	05/03/1993	15	mg/kg	0.03 U	--	--	--	0.062	--
MW-24	T5070221	T5070221	04/02/1996	0.5	mg/kg	--	--	--	--	1.7 U	--
	T5070224	T5070224	04/02/1996	11	mg/kg	--	--	--	--	20 U	--
	T5070226	T5070226	04/02/1996	21	mg/kg	--	--	--	--	7.8	--
MW-25	T5060415	T5060415	04/02/1996	3	mg/kg	--	--	--	--	1.1	--
MW-26	T5070204	T5070204	04/02/1996	8.5	mg/kg	--	--	--	--	6.4	--
	T5070207	T5070207	04/02/1996	21	mg/kg	--	--	--	--	1.2	--
MW-30	T5070239	T5070239	04/02/1996	26	mg/kg	--	--	--	--	2 U	--
MW-31	T5070231	T5070231	04/02/1996	21	mg/kg	--	--	--	--	0.073	--
	T5070232	T5070232	04/02/1996	26	mg/kg	--	--	--	--	2.1 U	--
	T5070233	T5070233	04/02/1996	31	mg/kg	--	--	--	--	2 U	--
MW-32	T5070241	T5070241	04/02/1996	6	mg/kg	--	--	--	--	2.1 U	--
MW-40	MW40-S-55.0	K2204940-001	07/18/2002	55	mg/kg	--	--	--	--	--	--
	MW40-S-61.0	K2204940-002	07/19/2002	61	mg/kg	--	--	--	--	--	--
	MW40-S-66.0	K2204940-003	07/19/2002	66	mg/kg	--	--	--	--	--	--
MW-55	MW55-S-10.0	0806067-02A	06/10/2008	10	mg/kg	0.0457 U	--	--	0.0457 U	0.0686 U	--
	MW55-S-20.0	0806067-04A	06/10/2008	20	mg/kg	0.0469 U	--	--	0.0469 U	0.0703 U	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
MW-58D	MW58D-S-10.0	0806103-03A	06/18/2008	10	mg/kg	0.0363 U	--	--	0.0363 U	0.72	--
	MW58D-S-13.5	0806103-04A	06/18/2008	13.5	mg/kg	0.0497 U	--	--	0.0497 U	0.0745 U	--
NPY-03	HC-NPY_03		02/06/1991	0	mg/kg	--	--	--	--	2.5 U	--
NPY-04	HC-NPY_04		02/06/1991	0	mg/kg	--	--	--	--	2.5 U	--
P-01	HC-P/01	HC-P/01	02/06/1991	0	mg/kg	--	--	--	--	**10000**	--
P-02	HC-P/02	HC-P/02	02/06/1991	0	mg/kg	--	--	--	--	**13000**	--
PP	Press Pit-10 In		06/18/1997	0	mg/kg	3 U	3 U	3 U	--	**3700**	--
SS-01	HC-SS_01		02/06/1991	0	mg/kg	--	--	--	--	2.5 U	--
SS-3B	SS-3	0807092-01A	07/16/2008	1.5	mg/kg	--	--	--	--	**55.4**	--
SS-4B	SS-4	0807092-02A	07/16/2008	0.3	mg/kg	--	--	--	--	2.27	--
SS-9	SS-9	0807092-07A	07/17/2008	0.3	mg/kg	--	--	--	--	0.596	--
SS-13	SS13-S-0.5	0903005-07A	02/26/2009	0.5	mg/kg	--	--	--	--	0.355 U	--
SS-14	SS14-S-0.5	0903005-08A	02/26/2009	0.5	mg/kg	--	--	--	--	**21.6**	--
SS-15	SS15-S-0.5	0903005-09A	02/26/2009	0.5	mg/kg	--	--	--	--	0.393 U	--
SS-16	SS16-S-0.5	0903005-10A	02/26/2009	0.5	mg/kg	--	--	--	--	0.399 U	--
SS-17	SS17-S-0.5	0903005-11A	02/26/2009	0.5	mg/kg	--	--	--	--	0.372 U	--
SS-18	SS18-S-0.5	0903005-12A	02/26/2009	0.5	mg/kg	--	--	--	--	0.374 U	--
SS-19	SS19-S-0.5	0903005-13A	02/26/2009	0.5	mg/kg	--	--	--	--	0.821	--
T-4	T4-S-E	K2005541-003	07/21/2000	1.5	mg/kg	0.05 U	--	--	0.05 U	0.04 U	--
	T4-S-N	K2005541-002	07/21/2000	1.5	mg/kg	0.05 U	--	--	0.05 U	0.04 U	--
	T4-S-W	K2005541-005	07/21/2000	1.75	mg/kg	0.05 U	--	--	0.05 U	0.04 U	--
	T4-S	K2005541-001	07/21/2000	2	mg/kg	0.05 U	--	--	0.05 U	0.04 U	--
	T4-S-S	K2005541-004	07/21/2000	2	mg/kg	0.05 U	--	--	0.05 U	0.04 U	--
TP-01	TP01-0.3	TP01-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	**250**	--
	TP01-9.5	TP01-9.5	05/03/1993	9.5	mg/kg	0.03 U	--	--	--	0.66	--
TP-02	TP02-0.2	TP02-0.2	05/03/1993	0.2	mg/kg	0.03 U	--	--	--	0.16	--
	TP02-5	TP02-5	05/03/1993	5	mg/kg	0.03 U	--	--	--	4	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
TP-03	TP03-0.3	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	**2000**	--
	TP03-10	TP03-10	05/03/1993	10	mg/kg	0.03 U	--	--	--	4.6	--
TP-04	TP04-5	TP04-5	05/03/1993	5	mg/kg	2.3 U	--	--	--	**100**	--
	TP04-10	TP04-10	05/03/1993	10	mg/kg	2.3 U	--	--	--	**51**	--
TP-05	TP05-0.5	TP05-0.5	05/03/1993	0.5	mg/kg	0.03 U	--	--	--	1.6	--
TP-06	TP06-3	TP06-3	05/03/1993	3	mg/kg	--	--	--	--	3.6	--
TP-09	TP09-0.3	TP09-0.3	05/03/1993	0.3	mg/kg	0.23 U	--	--	--	**13**	--
	TP09-4	TP09-4	05/03/1993	4	mg/kg	--	--	--	--	1.6 U	--
	TP09-9	TP09-9	05/03/1993	9	mg/kg	--	--	--	--	**130**	--
TP-10	TP10-0.2	TP10-0.2	05/03/1993	0.2	mg/kg	--	--	--	--	**15**	--
	TP10-8.5	TP10-8.5	05/03/1993	8.5	mg/kg	--	--	--	--	250 U	--
TP-12	TP12-0.3	TP12-0.3	05/03/1993	0.3	mg/kg	0.03 U	--	--	--	0.19	--
	TP12-3	TP12-3	05/03/1993	3	mg/kg	--	--	--	--	**110**	--
	TP12-6.5	TP12-6.5	05/03/1993	6.5	mg/kg	--	--	--	--	8.5 U	--
TP-13	TP13-0.2	TP13-0.2	05/03/1993	0.2	mg/kg	0.03 U	--	--	--	**14**	--
	TP13-5.5	TP13-5.5	05/03/1993	5.5	mg/kg	0.03 U	--	--	--	0.085	--
TP-14	TP14-0.5	TP14-0.5	05/03/1993	0.5	mg/kg	0.03 U	--	--	--	0.73	--
TP-15	TP15-0.2	TP15-0.2	05/03/1993	0.2	mg/kg	0.03 U	--	--	--	0.45	--
TP-16	TP16-0.3	TP16-0.3	05/03/1993	0.3	mg/kg	0.03 U	--	--	--	0.62	--
	TP16-7	TP16-7	05/03/1993	7	mg/kg	0.03 U	--	--	--	0.32	--
TP-27	TP27-10	TP27-10	05/03/1993	10	mg/kg	0.03 U	--	--	--	0.035	--
TP-28	TP28-7	TP28-7	05/03/1993	7	mg/kg	0.03 U	--	--	--	0.033	--
	TP28-9.5	TP28-9.5	05/03/1993	9.5	mg/kg	--	--	--	--	330 U	--
TP-31	TP31-6	TP31-6	05/03/1993	6	mg/kg	--	--	--	--	16 U	--
TP-32	TP32-10	TP32-10	05/03/1993	10	mg/kg	0.03 U	--	--	--	0.19	--
TP-34	TP34-4	TP34-4	05/03/1993	4	mg/kg	--	--	--	--	16 U	--

Table E-I-3
Summary of Chlorinated Phenolic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Lab Code	Date	Depth (ft. bgs)	Units	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2-Chlorophenol	3,4,5-Trichloro-phenol	Pentachloro phenol	Tetrachloro-phenols, Total
MTCA Method B Cleanup Level						91	240	400	NV	8.3	NV
MTCA Method C Cleanup Level						12,000	64,000	18,000	NV	1,100	NV
Wildlife Ecological Indicator Concentration						NV	NV	NV	NV	4.5	NV
TP-35	TP35-0.2	TP35-0.2	05/03/1993	0.2	mg/kg	0.03 U	--	--	--	**70**	--
	TP35-9	TP35-9	05/03/1993	9	mg/kg	2.5 U	--	--	--	**69**	--
TP-36	TP36-7.5	TP36-7.5	05/03/1993	7.5	mg/kg	0.25 U	--	--	--	5.9	--
	TP36-10	TP36-10	05/03/1993	10	mg/kg	0.03 U	--	--	--	0.17	--
TP-37	TP37-10	TP37-10	05/03/1993	10	mg/kg	0.03 U	--	--	--	1.7	--
W-11	HC-W11_S2		02/04/1991	0	mg/kg	--	--	--	--	2.5 U	--
	HC-W11_S4		02/04/1991	0	mg/kg	--	--	--	--	2.5 U	--

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,1,1,2-Tetra-chloroethane		1,1,1-Trichloro-ethane		1,1,2,2-Tetra-chloroethane		1,1,2-Trichloro-ethane		1,1-Dichloro-ethane	
MTCA Method B Cleanup Level					38		160,000		5		18		16,000	
MTCA Method C Cleanup Level					5,000		7,000,000		660		2,300		700,000	
Wildlife Ecological Indicator Concentration					NV		NV		NV		NV		NV	
B-139	B139-S-2.5	10/04/1999	2.5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B139-S-5.0	10/04/1999	5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B139-S-20.0	10/04/1999	20	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-150	B150-S-10.5	10/11/1999	10.5	mg/kg	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
B-153	B153-S-10.0	10/11/1999	10	mg/kg	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
B-155	B155-S-5.0	10/12/1999	5	mg/kg	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
	B155-S-9.0	10/12/1999	9	mg/kg	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
B-160	B160-S-10.0	10/13/1999	10	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-167	B167-S-5.0	10/14/1999	5	mg/kg	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
B-189	B189-S-2.5	10/22/1999	2.5	mg/kg	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
	B189-S-12.0	10/22/1999	12	mg/kg	2	U	0.1	U	2	U	0.1	U	0.1	U
B-190	B190-S-2.5	10/25/1999	2.5	mg/kg	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B190-S-5.0	10/25/1999	5	mg/kg	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B190-S-10.0	10/25/1999	10	mg/kg	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-197	B197-S-2.5	10/26/1999	2.5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B197-S-10.0	10/26/1999	10	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-198	B198-S-2.5	10/27/1999	2.5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B198-S-5.0	10/27/1999	5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-199	B199-S-10.0	10/27/1999	10	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B199-S-15.0	10/27/1999	15	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-200	B200-S-5.0	10/27/1999	5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-201	B201-S-10.0	10/28/1999	10	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-202	B202-S-5.0	10/28/1999	5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B202-S-15.0	10/28/1999	15	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane
MTCA Method B Cleanup Level					38	160,000	5	18	16,000
MTCA Method C Cleanup Level					5,000	7,000,000	660	2,300	700,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV
B-231	B231-S-7.0	11/12/1999	7	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-232	B232-S-5.0	12/07/1999	5	mg/kg	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U
	B232-S-25.0	12/07/1999	25	mg/kg	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U
B-244	B244-S-25.0	12/15/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
	B244-S-35.0	12/15/1999	35	mg/kg	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
B-246	B246-S-5.0	12/16/1999	5	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B246-S-10.0	12/16/1999	10	mg/kg	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
	B246-S-20.0	12/16/1999	20	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
B-247	B247-S-2.5	12/17/1999	2.5	mg/kg	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
	B247-S-5.0	12/17/1999	5	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
	B247-S-16.0	12/17/1999	16	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
B-248	B248-S-2.5	12/20/1999	2.5	mg/kg	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U
	B248-S-15.0	12/20/1999	15	mg/kg	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
	B248-S-25.0	12/20/1999	25	mg/kg	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
B-249	B249-S-2.5	12/20/1999	2.5	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B249-S-20.0	12/20/1999	20	mg/kg	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U
	B249-S-25.0	12/20/1999	25	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-250	B250-S-20.0	12/21/1999	20	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B250-S-25.0	12/21/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
	B250-S-35.0	12/21/1999	35	mg/kg	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
B-251	B251-S-2.5	12/22/1999	2.5	mg/kg	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U
	B251-S-10.0	12/22/1999	10	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
	B251-S-25.0	12/22/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane
MTCA Method B Cleanup Level					38	160,000	5	18	16,000
MTCA Method C Cleanup Level					5,000	7,000,000	660	2,300	700,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV
B-304	B304-S-10.0	06/12/2008	10	mg/kg	0.0114 U	0.0114 U	0.0571 U	0.0114 U	0.0114 U
	B304-S-19.5	06/12/2008	19.5	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
B-305	B305-S-10.0	06/12/2008	10	mg/kg	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U
	B305-S-19.0	06/12/2008	19	mg/kg	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U
MW-11S	PR11S,PR11D	10/23/1997	0	mg/kg	45 U	45 U	45 U	45 U	45 U
MW-18	MW18-10	05/03/1993	10	mg/kg	--	--	2.5 U	--	--
MW-22	MW22-10	05/03/1993	10	mg/kg	--	--	--	--	--
MW-24	T5070225	04/02/1996	16	mg/kg	--	--	--	--	--
	T5070226	04/02/1996	21	mg/kg	--	--	--	--	--
MW-25	T5070000	04/02/1996	21	mg/kg	--	--	--	--	--
MW-32	T5070244	04/02/1996	21	mg/kg	--	--	--	--	--
MW-55	MW55-S-10.0	06/10/2008	10	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
	MW55-S-20.0	06/10/2008	20	mg/kg	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U
MW-58D	MW58D-S-10.0	06/18/2008	10	mg/kg	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U
	MW58D-S-13.5	06/18/2008	13.5	mg/kg	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U
TP-03	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	mg/kg	--	--	--	--	--
TP-09	TP09-9	05/03/1993	9	mg/kg	--	--	**14**	--	--
TP-12	TP12-6.5	05/03/1993	6.5	mg/kg	--	--	--	--	--
TP-13	TP13-7.5	05/03/1993	7.5	mg/kg	--	--	0.005 U	--	--
TP-28	TP28-9.5	05/03/1993	9.5	mg/kg	--	--	5 U	--	--
TP-31	TP31-6	05/03/1993	6	mg/kg	--	--	5 U	--	--

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,1-Dichloro-ethene		1,1-Dichloro-propene		1,2,3-Trichloro-benzene		1,2,3-Trichloro-propane		1,2,4-Trichloro-benzene		1,2,4-Trimethyl-benzene	
MTCA Method B Cleanup Level					4,000		NV		NV		0.14		800		4,000	
MTCA Method C Cleanup Level					180,000		NV		NV		19		35,000		180,000	
Wildlife Ecological Indicator Concentration					NV		NV		NV		NV		NV		NV	
B-139	B139-S-2.5	10/04/1999	2.5	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
	B139-S-5.0	10/04/1999	5	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
	B139-S-20.0	10/04/1999	20	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
B-150	B150-S-10.5	10/11/1999	10.5	mg/kg	0.15	U	0.15	U	0.6	U	0.15	U	0.6	U	1.9	
B-153	B153-S-10.0	10/11/1999	10	mg/kg	0.1	U	0.1	U	0.4	U	0.1	U	0.4	U	0.4	U
B-155	B155-S-5.0	10/12/1999	5	mg/kg	0.2	U	0.2	U	0.8	U	0.2	U	0.8	U	0.8	U
	B155-S-9.0	10/12/1999	9	mg/kg	0.2	U	0.2	U	0.8	U	0.2	U	0.8	U	0.8	U
B-160	B160-S-10.0	10/13/1999	10	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
B-167	B167-S-5.0	10/14/1999	5	mg/kg	0.015	U	0.015	U	0.06	U	0.015	U	0.06	U	37	
B-189	B189-S-2.5	10/22/1999	2.5	mg/kg	0.1	U	0.1	U	0.4	U	0.1	U	0.4	U	0.4	U
	B189-S-12.0	10/22/1999	12	mg/kg	0.1	U	0.1	U	2	U	2	U	2	U	2	U
B-190	B190-S-2.5	10/25/1999	2.5	mg/kg	0.05	U	0.05	U	0.2	U	0.05	U	0.2	U	0.2	U
	B190-S-5.0	10/25/1999	5	mg/kg	0.05	U	0.05	U	0.2	U	0.05	U	0.2	U	0.2	U
	B190-S-10.0	10/25/1999	10	mg/kg	0.05	U	0.05	U	0.2	U	0.05	U	0.2	U	0.2	U
B-197	B197-S-2.5	10/26/1999	2.5	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
	B197-S-10.0	10/26/1999	10	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
B-198	B198-S-2.5	10/27/1999	2.5	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
	B198-S-5.0	10/27/1999	5	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
B-199	B199-S-10.0	10/27/1999	10	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
	B199-S-15.0	10/27/1999	15	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
B-200	B200-S-5.0	10/27/1999	5	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
B-201	B201-S-10.0	10/28/1999	10	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
B-202	B202-S-5.0	10/28/1999	5	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
	B202-S-15.0	10/28/1999	15	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,1-Dichloro-ethene		1,1-Dichloro-propene		1,2,3-Trichloro-benzene		1,2,3-Trichloro-propane		1,2,4-Trichloro-benzene		1,2,4-Trimethyl-benzene	
MTCA Method B Cleanup Level					4,000		NV		NV		0.14		800		4,000	
MTCA Method C Cleanup Level					180,000		NV		NV		19		35,000		180,000	
Wildlife Ecological Indicator Concentration					NV		NV		NV		NV		NV		NV	
B-231	B231-S-7.0	11/12/1999	7	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
B-232	B232-S-5.0	12/07/1999	5	mg/kg	0.0065	U	0.0065	U	0.026	U	0.0065	U	0.026	U	0.026	U
	B232-S-25.0	12/07/1999	25	mg/kg	0.0066	U	0.0066	U	0.027	U	0.0066	U	0.027	U	0.027	U
B-244	B244-S-25.0	12/15/1999	25	mg/kg	0.0055	U	0.0055	U	0.022	U	0.0055	U	0.022	U	0.022	U
	B244-S-35.0	12/15/1999	35	mg/kg	0.0053	U	0.0053	U	0.021	U	0.0053	U	0.021	U	0.021	U
B-246	B246-S-5.0	12/16/1999	5	mg/kg	0.0054	U	0.0054	U	0.022	U	0.0054	U	0.022	U	0.022	U
	B246-S-10.0	12/16/1999	10	mg/kg	0.0052	U	0.0052	U	0.021	U	0.0052	U	0.021	U	0.021	U
	B246-S-20.0	12/16/1999	20	mg/kg	0.0056	U	0.0056	U	0.022	U	0.0056	U	0.022	U	0.022	U
B-247	B247-S-2.5	12/17/1999	2.5	mg/kg	0.0059	U	0.0059	U	0.024	U	0.0059	U	0.024	U	0.024	U
	B247-S-5.0	12/17/1999	5	mg/kg	0.0056	U	0.0056	U	0.023	U	0.0056	U	0.023	U	0.023	U
	B247-S-16.0	12/17/1999	16	mg/kg	0.0055	U	0.0055	U	0.022	U	0.0055	U	0.022	U	0.022	U
B-248	B248-S-2.5	12/20/1999	2.5	mg/kg	0.0045	U	0.0045	U	0.018	U	0.0045	U	0.018	U	0.018	U
	B248-S-15.0	12/20/1999	15	mg/kg	0.0052	U	0.0052	U	0.021	U	0.0052	U	0.021	U	0.021	U
	B248-S-25.0	12/20/1999	25	mg/kg	0.0053	U	0.0053	U	0.021	U	0.0053	U	0.021	U	0.021	U
B-249	B249-S-2.5	12/20/1999	2.5	mg/kg	0.0054	U	0.0054	U	0.022	U	0.0054	U	0.022	U	0.022	U
	B249-S-20.0	12/20/1999	20	mg/kg	0.0057	U	0.0057	U	0.023	U	0.0057	U	0.023	U	0.023	U
	B249-S-25.0	12/20/1999	25	mg/kg	0.005	U	0.005	U	0.02	U	0.005	U	0.02	U	0.02	U
B-250	B250-S-20.0	12/21/1999	20	mg/kg	0.0054	U	0.0054	U	0.021	U	0.0054	U	0.021	U	0.021	U
	B250-S-25.0	12/21/1999	25	mg/kg	0.0055	U	0.0055	U	0.022	U	0.0055	U	0.022	U	0.022	U
	B250-S-35.0	12/21/1999	35	mg/kg	0.0059	U	0.0059	U	0.024	U	0.0059	U	0.024	U	0.024	U
B-251	B251-S-2.5	12/22/1999	2.5	mg/kg	0.0061	U	0.0061	U	0.025	U	0.0061	U	0.025	U	0.025	U
	B251-S-10.0	12/22/1999	10	mg/kg	0.0056	U	0.0056	U	0.022	U	0.0056	U	0.022	U	0.022	U
	B251-S-25.0	12/22/1999	25	mg/kg	0.0055	U	0.0055	U	0.022	U	0.0055	U	0.022	U	0.022	U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,1-Dichloro-ethene	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene
MTCA Method B Cleanup Level					4,000	NV	NV	0.14	800	4,000
MTCA Method C Cleanup Level					180,000	NV	NV	19	35,000	180,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV
B-304	B304-S-10.0	06/12/2008	10	mg/kg	0.0114 U	0.0114 U	0.0571 U	0.0571 U	0.0571 U	0.0571 U
	B304-S-19.5	06/12/2008	19.5	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
B-305	B305-S-10.0	06/12/2008	10	mg/kg	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U
	B305-S-19.0	06/12/2008	19	mg/kg	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U
MW-11S	PR11S,PR11D	10/23/1997	0	mg/kg	45 U	45 U	180 U	45 U	180 U	**7700**
MW-18	MW18-10	05/03/1993	10	mg/kg	--	--	--	--	--	--
MW-22	MW22-10	05/03/1993	10	mg/kg	--	--	--	--	--	--
MW-24	T5070225	04/02/1996	16	mg/kg	--	--	--	--	--	--
	T5070226	04/02/1996	21	mg/kg	--	--	--	--	--	--
MW-25	T5070000	04/02/1996	21	mg/kg	--	--	--	--	--	--
MW-32	T5070244	04/02/1996	21	mg/kg	--	--	--	--	--	--
MW-55	MW55-S-10.0	06/10/2008	10	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
	MW55-S-20.0	06/10/2008	20	mg/kg	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U
MW-58D	MW58D-S-10.0	06/18/2008	10	mg/kg	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U
	MW58D-S-13.5	06/18/2008	13.5	mg/kg	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U
TP-03	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	mg/kg	--	--	--	--	--	--
TP-09	TP09-9	05/03/1993	9	mg/kg	--	--	--	--	--	--
TP-12	TP12-6.5	05/03/1993	6.5	mg/kg	--	--	--	--	--	--
TP-13	TP13-7.5	05/03/1993	7.5	mg/kg	--	--	--	--	--	--
TP-28	TP28-9.5	05/03/1993	9.5	mg/kg	--	--	--	--	--	--
TP-31	TP31-6	05/03/1993	6	mg/kg	--	--	--	--	--	--

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene
MTCA Method B Cleanup Level					0.71	0.5	7,200	11	15	4,000	NV
MTCA Method C Cleanup Level					94	66	320,000	1,400	1,900	180,000	NV
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-139	B139-S-2.5	10/04/1999	2.5	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
	B139-S-5.0	10/04/1999	5	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
	B139-S-20.0	10/04/1999	20	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
B-150	B150-S-10.5	10/11/1999	10.5	mg/kg	0.6 U	0.6 U	0.15 U	0.15 U	0.15 U	0.8	0.15 U
B-153	B153-S-10.0	10/11/1999	10	mg/kg	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U	0.1 U
B-155	B155-S-5.0	10/12/1999	5	mg/kg	0.8 U	0.8 U	0.2 U	0.2 U	0.2 U	0.8 U	0.2 U
	B155-S-9.0	10/12/1999	9	mg/kg	0.8 U	0.8 U	0.2 U	0.2 U	0.2 U	0.8 U	0.2 U
B-160	B160-S-10.0	10/13/1999	10	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
B-167	B167-S-5.0	10/14/1999	5	mg/kg	0.06 U	0.06 U	0.015 U	0.015 U	0.015 U	16	0.015 U
B-189	B189-S-2.5	10/22/1999	2.5	mg/kg	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U	0.1 U
	B189-S-12.0	10/22/1999	12	mg/kg	2 U	2 U	2 U	0.1 U	0.1 U	2 U	2 U
B-190	B190-S-2.5	10/25/1999	2.5	mg/kg	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U
	B190-S-5.0	10/25/1999	5	mg/kg	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U
	B190-S-10.0	10/25/1999	10	mg/kg	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U
B-197	B197-S-2.5	10/26/1999	2.5	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
	B197-S-10.0	10/26/1999	10	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
B-198	B198-S-2.5	10/27/1999	2.5	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
	B198-S-5.0	10/27/1999	5	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
B-199	B199-S-10.0	10/27/1999	10	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
	B199-S-15.0	10/27/1999	15	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
B-200	B200-S-5.0	10/27/1999	5	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
B-201	B201-S-10.0	10/28/1999	10	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
B-202	B202-S-5.0	10/28/1999	5	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
	B202-S-15.0	10/28/1999	15	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene
MTCA Method B Cleanup Level					0.71	0.5	7,200	11	15	4,000	NV
MTCA Method C Cleanup Level					94	66	320,000	1,400	1,900	180,000	NV
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-231	B231-S-7.0	11/12/1999	7	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
B-232	B232-S-5.0	12/07/1999	5	mg/kg	0.026 U	0.026 U	0.0065 U	0.0065 U	0.0065 U	0.026 U	0.0065 U
	B232-S-25.0	12/07/1999	25	mg/kg	0.027 U	0.027 U	0.0066 U	0.0066 U	0.0066 U	0.027 U	0.0066 U
B-244	B244-S-25.0	12/15/1999	25	mg/kg	0.022 U	0.022 U	0.0055 U	0.0055 U	0.0055 U	0.022 U	0.0055 U
	B244-S-35.0	12/15/1999	35	mg/kg	0.021 U	0.021 U	0.0053 U	0.0053 U	0.0053 U	0.021 U	0.0053 U
B-246	B246-S-5.0	12/16/1999	5	mg/kg	0.022 U	0.022 U	0.0054 U	0.0054 U	0.0054 U	0.022 U	0.0054 U
	B246-S-10.0	12/16/1999	10	mg/kg	0.021 U	0.021 U	0.0052 U	0.0052 U	0.0052 U	0.021 U	0.0052 U
	B246-S-20.0	12/16/1999	20	mg/kg	0.022 U	0.022 U	0.0056 U	0.0056 U	0.0056 U	0.022 U	0.0056 U
B-247	B247-S-2.5	12/17/1999	2.5	mg/kg	0.024 U	0.024 U	0.0059 U	0.0059 U	0.0059 U	0.024 U	0.0059 U
	B247-S-5.0	12/17/1999	5	mg/kg	0.023 U	0.023 U	0.0056 U	0.0056 U	0.0056 U	0.023 U	0.0056 U
	B247-S-16.0	12/17/1999	16	mg/kg	0.022 U	0.022 U	0.0055 U	0.0055 U	0.0055 U	0.022 U	0.0055 U
B-248	B248-S-2.5	12/20/1999	2.5	mg/kg	0.018 U	0.018 U	0.0045 U	0.0045 U	0.0045 U	0.018 U	0.0045 U
	B248-S-15.0	12/20/1999	15	mg/kg	0.021 U	0.021 U	0.0052 U	0.0052 U	0.0052 U	0.021 U	0.0052 U
	B248-S-25.0	12/20/1999	25	mg/kg	0.021 U	0.021 U	0.0053 U	0.0053 U	0.0053 U	0.021 U	0.0053 U
B-249	B249-S-2.5	12/20/1999	2.5	mg/kg	0.022 U	0.022 U	0.0054 U	0.0054 U	0.0054 U	0.022 U	0.0054 U
	B249-S-20.0	12/20/1999	20	mg/kg	0.023 U	0.023 U	0.0057 U	0.0057 U	0.0057 U	0.023 U	0.0057 U
	B249-S-25.0	12/20/1999	25	mg/kg	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
B-250	B250-S-20.0	12/21/1999	20	mg/kg	0.021 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.021 U	0.0054 U
	B250-S-25.0	12/21/1999	25	mg/kg	0.022 U	0.022 U	0.0055 U	0.0055 U	0.0055 U	0.022 U	0.0055 U
	B250-S-35.0	12/21/1999	35	mg/kg	0.024 U	0.024 U	0.0059 U	0.0059 U	0.0059 U	0.024 U	0.0059 U
B-251	B251-S-2.5	12/22/1999	2.5	mg/kg	0.025 U	0.025 U	0.0061 U	0.0061 U	0.0061 U	0.025 U	0.0061 U
	B251-S-10.0	12/22/1999	10	mg/kg	0.022 U	0.022 U	0.0056 U	0.0056 U	0.0056 U	0.022 U	0.0056 U
	B251-S-25.0	12/22/1999	25	mg/kg	0.022 U	0.022 U	0.0055 U	0.0055 U	0.0055 U	0.022 U	0.0055 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,2-Dibromo-3-chloropropane	1,2-Dibromo-ethane	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene
MTCA Method B Cleanup Level					0.71	0.5	7,200	11	15	4,000	NV
MTCA Method C Cleanup Level					94	66	320,000	1,400	1,900	180,000	NV
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-304	B304-S-10.0	06/12/2008	10	mg/kg	0.0571 U	0.0114 U	0.0571 U	0.0114 U	0.0114 U	0.0571 U	0.0571 U
	B304-S-19.5	06/12/2008	19.5	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
B-305	B305-S-10.0	06/12/2008	10	mg/kg	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U
	B305-S-19.0	06/12/2008	19	mg/kg	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U
MW-11S	PR11S,PR11D	10/23/1997	0	mg/kg	180 U	180 U	45 U	45 U	45 U	2800	45 U
MW-18	MW18-10	05/03/1993	10	mg/kg	--	--	--	--	--	--	--
MW-22	MW22-10	05/03/1993	10	mg/kg	--	--	--	--	--	--	--
MW-24	T5070225	04/02/1996	16	mg/kg	--	--	--	--	--	--	--
	T5070226	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
MW-25	T5070000	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
MW-32	T5070244	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
MW-55	MW55-S-10.0	06/10/2008	10	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
	MW55-S-20.0	06/10/2008	20	mg/kg	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U
MW-58D	MW58D-S-10.0	06/18/2008	10	mg/kg	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U
	MW58D-S-13.5	06/18/2008	13.5	mg/kg	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U
TP-03	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	mg/kg	--	--	--	--	--	--	--
TP-09	TP09-9	05/03/1993	9	mg/kg	--	--	--	--	--	--	--
TP-12	TP12-6.5	05/03/1993	6.5	mg/kg	--	--	--	--	--	--	--
TP-13	TP13-7.5	05/03/1993	7.5	mg/kg	--	--	--	--	--	--	--
TP-28	TP28-9.5	05/03/1993	9.5	mg/kg	--	--	--	--	--	--	--
TP-31	TP31-6	05/03/1993	6	mg/kg	--	--	--	--	--	--	--

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene
MTCA Method B Cleanup Level					15	42	NV	48,000	1,600	NV	NV
MTCA Method C Cleanup Level					1,900	5,500	NV	2,100,00	70,000	NV	NV
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-139	B139-S-2.5	10/04/1999	2.5	mg/kg	0.005 U	0.005 U	0.005 U	0.064	0.02 U	0.02 U	0.02 U
	B139-S-5.0	10/04/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
	B139-S-20.0	10/04/1999	20	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
B-150	B150-S-10.5	10/11/1999	10.5	mg/kg	0.15 U	0.15 U	0.15 U	6 U	0.6 U	6 U	0.6 U
B-153	B153-S-10.0	10/11/1999	10	mg/kg	0.1 U	0.1 U	0.1 U	4 U	0.4 U	4 U	0.4 U
B-155	B155-S-5.0	10/12/1999	5	mg/kg	0.2 U	0.2 U	0.2 U	8 U	0.8 U	8 U	0.8 U
	B155-S-9.0	10/12/1999	9	mg/kg	0.2 U	0.2 U	0.2 U	8 U	0.8 U	8 U	0.8 U
B-160	B160-S-10.0	10/13/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
B-167	B167-S-5.0	10/14/1999	5	mg/kg	0.015 U	0.015 U	0.015 U	0.06 U	0.06 U	0.06 U	0.06 U
B-189	B189-S-2.5	10/22/1999	2.5	mg/kg	0.1 U	0.1 U	0.1 U	4 U	0.4 U	4 U	0.4 U
	B189-S-12.0	10/22/1999	12	mg/kg	0.1 U	2 U	0.1 U	4 U	2 U	4 U	2 U
B-190	B190-S-2.5	10/25/1999	2.5	mg/kg	0.05 U	0.05 U	0.05 U	2 U	0.2 U	2 U	0.2 U
	B190-S-5.0	10/25/1999	5	mg/kg	0.05 U	0.05 U	0.05 U	2 U	0.2 U	2 U	0.2 U
	B190-S-10.0	10/25/1999	10	mg/kg	0.05 U	0.05 U	0.05 U	2 U	0.2 U	2 U	0.2 U
B-197	B197-S-2.5	10/26/1999	2.5	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
	B197-S-10.0	10/26/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.05	0.02 U	0.02 U	0.02 U
B-198	B198-S-2.5	10/27/1999	2.5	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
	B198-S-5.0	10/27/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
B-199	B199-S-10.0	10/27/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
	B199-S-15.0	10/27/1999	15	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
B-200	B200-S-5.0	10/27/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
B-201	B201-S-10.0	10/28/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
B-202	B202-S-5.0	10/28/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
	B202-S-15.0	10/28/1999	15	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene
MTCA Method B Cleanup Level					15	42	NV	48,000	1,600	NV	NV
MTCA Method C Cleanup Level					1,900	5,500	NV	2,100,00	70,000	NV	NV
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-231	B231-S-7.0	11/12/1999	7	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
B-232	B232-S-5.0	12/07/1999	5	mg/kg	0.0065 U	0.0065 U	0.0065 U	0.026 U	0.026 U	0.026 U	0.026 U
	B232-S-25.0	12/07/1999	25	mg/kg	0.0066 U	0.0066 U	0.0066 U	0.027 U	0.027 U	0.027 U	0.027 U
B-244	B244-S-25.0	12/15/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.022 U	0.022 U	0.022 U	0.022 U
	B244-S-35.0	12/15/1999	35	mg/kg	0.0053 U	0.0053 U	0.0053 U	0.021 U	0.021 U	0.021 U	0.021 U
B-246	B246-S-5.0	12/16/1999	5	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.022 U	0.022 U	0.022 U	0.022 U
	B246-S-10.0	12/16/1999	10	mg/kg	0.0052 U	0.0052 U	0.0052 U	0.021 U	0.021 U	0.021 U	0.021 U
	B246-S-20.0	12/16/1999	20	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.022 U	0.022 U	0.022 U	0.022 U
B-247	B247-S-2.5	12/17/1999	2.5	mg/kg	0.0059 U	0.0059 U	0.0059 U	0.024 U	0.024 U	0.024 U	0.024 U
	B247-S-5.0	12/17/1999	5	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.023 U	0.023 U	0.023 U	0.023 U
	B247-S-16.0	12/17/1999	16	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.022 U	0.022 U	0.022 U	0.022 U
B-248	B248-S-2.5	12/20/1999	2.5	mg/kg	0.0045 U	0.0045 U	0.0045 U	0.018 U	0.018 U	0.018 U	0.018 U
	B248-S-15.0	12/20/1999	15	mg/kg	0.0052 U	0.0052 U	0.0052 U	0.021 U	0.021 U	0.021 U	0.021 U
	B248-S-25.0	12/20/1999	25	mg/kg	0.0053 U	0.0053 U	0.0053 U	0.021 U	0.021 U	0.021 U	0.021 U
B-249	B249-S-2.5	12/20/1999	2.5	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.022 U	0.022 U	0.022 U	0.022 U
	B249-S-20.0	12/20/1999	20	mg/kg	0.0057 U	0.0057 U	0.0057 U	0.023 U	0.023 U	0.023 U	0.023 U
	B249-S-25.0	12/20/1999	25	mg/kg	0.005 U	0.005 U	0.005 U	0.02 U	0.02 U	0.02 U	0.02 U
B-250	B250-S-20.0	12/21/1999	20	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.021 U	0.021 U	0.021 U	0.021 U
	B250-S-25.0	12/21/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.022 U	0.022 U	0.022 U	0.022 U
	B250-S-35.0	12/21/1999	35	mg/kg	0.0059 U	0.0059 U	0.0059 U	0.024 U	0.024 U	0.024 U	0.024 U
B-251	B251-S-2.5	12/22/1999	2.5	mg/kg	0.0061 U	0.0061 U	0.0061 U	0.025 U	0.025 U	0.025 U	0.025 U
	B251-S-10.0	12/22/1999	10	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.022 U	0.022 U	0.022 U	0.022 U
	B251-S-25.0	12/22/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.022 U	0.022 U	0.022 U	0.022 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene
MTCA Method B Cleanup Level					15	42	NV	48,000	1,600	NV	NV
MTCA Method C Cleanup Level					1,900	5,500	NV	2,100,00	70,000	NV	NV
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-304	B304-S-10.0	06/12/2008	10	mg/kg	0.0114 U	0.0571 U	--	0.0943	0.0571 U	0.0229 U	0.0571 U
	B304-S-19.5	06/12/2008	19.5	mg/kg	0.0137 U	0.0137 U	--	0.0274 U	0.0137 U	0.0274 U	0.0137 U
B-305	B305-S-10.0	06/12/2008	10	mg/kg	0.0694 U	0.0694 U	--	0.139 U	0.0694 U	0.139 U	0.0694 U
	B305-S-19.0	06/12/2008	19	mg/kg	0.0138 U	0.0138 U	--	0.0275 U	0.0138 U	0.0275 U	0.0138 U
MW-11S	PR11S,PR11D	10/23/1997	0	mg/kg	45 U	45 U	45 U	1800 U	180 U	1800 U	180 U
MW-18	MW18-10	05/03/1993	10	mg/kg	--	--	--	5 U	--	--	--
MW-22	MW22-10	05/03/1993	10	mg/kg	--	--	--	--	--	--	--
MW-24	T5070225	04/02/1996	16	mg/kg	--	--	--	--	--	--	--
	T5070226	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
MW-25	T5070000	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
MW-32	T5070244	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
MW-55	MW55-S-10.0	06/10/2008	10	mg/kg	0.0137 U	0.0137 U	--	0.0354	0.0137 U	0.0274 U	0.0137 U
	MW55-S-20.0	06/10/2008	20	mg/kg	0.0141 U	0.0141 U	--	0.0281 U	0.0141 U	0.0281 U	0.0141 U
MW-58D	MW58D-S-10.0	06/18/2008	10	mg/kg	0.0109 U	0.0109 U	--	0.0218 U	0.0109 U	0.0218 U	0.0109 U
	MW58D-S-13.5	06/18/2008	13.5	mg/kg	0.0149 U	0.0149 U	--	0.0298 U	0.0149 U	0.0298 U	0.0149 U
TP-03	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	mg/kg	--	--	--	--	--	--	--
TP-09	TP09-9	05/03/1993	9	mg/kg	--	--	--	10 U	--	--	--
TP-12	TP12-6.5	05/03/1993	6.5	mg/kg	--	--	--	--	--	--	--
TP-13	TP13-7.5	05/03/1993	7.5	mg/kg	--	--	--	0.036	--	--	--
TP-28	TP28-9.5	05/03/1993	9.5	mg/kg	--	--	--	10 U	--	--	--
TP-31	TP31-6	05/03/1993	6	mg/kg	--	--	--	10 U	--	--	--

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	4-Isopropyl-toluene		4-Methyl-2-pentanone		Acetone		Benzene		Bromo-benzene		Bromodichloro-methane		Bromoform	
MTCA Method B Cleanup Level					NV		6,400		8,000		18		NV		16		130	
MTCA Method C Cleanup Level					NV		280,000		350,000		2,400		NV		2,100		17,000	
Wildlife Ecological Indicator Concentration					NV		NV		NV		NV		NV		NV		NV	
B-139	B139-S-2.5	10/04/1999	2.5	mg/kg	0.02	U	0.02	U	0.3		0.005	U	0.005	U	0.005	U	0.005	U
	B139-S-5.0	10/04/1999	5	mg/kg	0.02	U	0.02	U	0.05	U	0.005	U	0.005	U	0.005	U	0.005	U
	B139-S-20.0	10/04/1999	20	mg/kg	0.02	U	0.02	U	0.05	U	0.005	U	0.005	U	0.005	U	0.005	U
B-150	B150-S-10.5	10/11/1999	10.5	mg/kg	0.6	U	6	U	6	U	0.15	U	0.15	U	0.15	U	0.15	U
B-153	B153-S-10.0	10/11/1999	10	mg/kg	0.4	U	4	U	4	U	0.1	U	0.1	U	0.1	U	0.1	U
B-155	B155-S-5.0	10/12/1999	5	mg/kg	0.8	U	8	U	8	U	0.2	U	0.2	U	0.2	U	0.2	U
	B155-S-9.0	10/12/1999	9	mg/kg	0.8	U	8	U	8	U	0.2	U	0.2	U	0.2	U	0.2	U
B-160	B160-S-10.0	10/13/1999	10	mg/kg	0.02	U	0.02	U	0.05	U	0.005	U	0.005	U	0.005	U	0.005	U
B-167	B167-S-5.0	10/14/1999	5	mg/kg	3		0.06	U	0.15	U	0.015	U	0.015	U	0.015	U	0.015	U
B-189	B189-S-2.5	10/22/1999	2.5	mg/kg	0.4	U	4	U	4	U	0.1	U	0.1	U	0.1	U	0.1	U
	B189-S-12.0	10/22/1999	12	mg/kg	2	U	4	U	4	U	0.1	U	2	U	0.1	U	2	U
B-190	B190-S-2.5	10/25/1999	2.5	mg/kg	0.2	U	2	U	2	U	0.05	U	0.05	U	0.05	U	0.05	U
	B190-S-5.0	10/25/1999	5	mg/kg	0.2	U	2	U	2	U	0.05	U	0.05	U	0.05	U	0.05	U
	B190-S-10.0	10/25/1999	10	mg/kg	0.2	U	2	U	2	U	0.05	U	0.05	U	0.05	U	0.05	U
B-197	B197-S-2.5	10/26/1999	2.5	mg/kg	0.02	U	0.02	U	0.05	U	0.005	U	0.005	U	0.005	U	0.005	U
	B197-S-10.0	10/26/1999	10	mg/kg	0.024		0.02	U	0.26		0.005	U	0.005	U	0.005	U	0.005	U
B-198	B198-S-2.5	10/27/1999	2.5	mg/kg	0.02	U	0.02	U	0.05	U	0.005	U	0.005	U	0.005	U	0.005	U
	B198-S-5.0	10/27/1999	5	mg/kg	0.02	U	0.02	U	0.05	U	0.005	U	0.005	U	0.005	U	0.005	U
B-199	B199-S-10.0	10/27/1999	10	mg/kg	0.02	U	0.02	U	0.05	U	0.005	U	0.005	U	0.005	U	0.005	U
	B199-S-15.0	10/27/1999	15	mg/kg	0.02	U	0.02	U	0.05	U	0.005	U	0.005	U	0.005	U	0.005	U
B-200	B200-S-5.0	10/27/1999	5	mg/kg	0.02	U	0.02	U	0.05	U	0.005	U	0.005	U	0.005	U	0.005	U
B-201	B201-S-10.0	10/28/1999	10	mg/kg	0.02	U	0.02	U	0.077		0.005	U	0.005	U	0.005	U	0.005	U
B-202	B202-S-5.0	10/28/1999	5	mg/kg	0.02	U	0.02	U	0.05	U	0.005	U	0.005	U	0.005	U	0.005	U
	B202-S-15.0	10/28/1999	15	mg/kg	0.02	U	0.02	U	0.1		0.005	U	0.005	U	0.005	U	0.005	U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromodichloro-methane	Bromoform
MTCA Method B Cleanup Level					NV	6,400	8,000	18	NV	16	130
MTCA Method C Cleanup Level					NV	280,000	350,000	2,400	NV	2,100	17,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-231	B231-S-7.0	11/12/1999	7	mg/kg	0.02 U	0.02 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005 U
B-232	B232-S-5.0	12/07/1999	5	mg/kg	0.026 U	0.026 U	0.13	0.008	0.0065 U	0.0065 U	0.0065 U
	B232-S-25.0	12/07/1999	25	mg/kg	0.027 U	0.027 U	0.12	0.0066 U	0.0066 U	0.0066 U	0.0066 U
B-244	B244-S-25.0	12/15/1999	25	mg/kg	0.022 U	0.022 U	0.055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
	B244-S-35.0	12/15/1999	35	mg/kg	0.021 U	0.021 U	0.053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
B-246	B246-S-5.0	12/16/1999	5	mg/kg	0.022 U	0.022 U	0.054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B246-S-10.0	12/16/1999	10	mg/kg	0.021 U	0.021 U	0.052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
	B246-S-20.0	12/16/1999	20	mg/kg	0.022 U	0.022 U	0.056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
B-247	B247-S-2.5	12/17/1999	2.5	mg/kg	0.024 U	0.024 U	0.059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
	B247-S-5.0	12/17/1999	5	mg/kg	0.023 U	0.023 U	0.056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
	B247-S-16.0	12/17/1999	16	mg/kg	0.022 U	0.022 U	0.055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
B-248	B248-S-2.5	12/20/1999	2.5	mg/kg	0.018 U	0.018 U	0.045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U
	B248-S-15.0	12/20/1999	15	mg/kg	0.021 U	0.021 U	0.052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
	B248-S-25.0	12/20/1999	25	mg/kg	0.021 U	0.021 U	0.053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
B-249	B249-S-2.5	12/20/1999	2.5	mg/kg	0.022 U	0.022 U	0.054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B249-S-20.0	12/20/1999	20	mg/kg	0.023 U	0.023 U	0.057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U
	B249-S-25.0	12/20/1999	25	mg/kg	0.02 U	0.02 U	0.12	0.005 U	0.005 U	0.005 U	0.005 U
B-250	B250-S-20.0	12/21/1999	20	mg/kg	0.021 U	0.021 U	0.054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B250-S-25.0	12/21/1999	25	mg/kg	0.022 U	0.022 U	0.055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
	B250-S-35.0	12/21/1999	35	mg/kg	0.024 U	0.024 U	0.065	0.0059 U	0.0059 U	0.0059 U	0.0059 U
B-251	B251-S-2.5	12/22/1999	2.5	mg/kg	0.025 U	0.025 U	0.061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U
	B251-S-10.0	12/22/1999	10	mg/kg	0.022 U	0.022 U	0.056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
	B251-S-25.0	12/22/1999	25	mg/kg	0.022 U	0.022 U	0.055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromodichloro-methane	Bromoform
MTCA Method B Cleanup Level					NV	6,400	8,000	18	NV	16	130
MTCA Method C Cleanup Level					NV	280,000	350,000	2,400	NV	2,100	17,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-304	B304-S-10.0	06/12/2008	10	mg/kg	0.0571 U	0.0229 U	0.242	0.0114 U	0.0571 U	0.0114 U	0.0114 U
	B304-S-19.5	06/12/2008	19.5	mg/kg	0.0137 U	0.0274 U	0.0684 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
B-305	B305-S-10.0	06/12/2008	10	mg/kg	0.0694 U	0.139 U	0.347 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U
	B305-S-19.0	06/12/2008	19	mg/kg	0.0138 U	0.0275 U	0.0689 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U
MW-11S	PR11S,PR11D	10/23/1997	0	mg/kg	810	1800 U	1800 U	45 U	45 U	45 U	45 U
MW-18	MW18-10	05/03/1993	10	mg/kg	--	5 U	5 U	--	--	--	--
MW-22	MW22-10	05/03/1993	10	mg/kg	--	--	5 U	--	--	--	--
MW-24	T5070225	04/02/1996	16	mg/kg	--	--	--	--	--	--	--
	T5070226	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
MW-25	T5070000	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
MW-32	T5070244	04/02/1996	21	mg/kg	--	--	0.019 U	--	--	--	--
MW-55	MW55-S-10.0	06/10/2008	10	mg/kg	0.0137 U	0.0274 U	0.127	0.0137 U	0.0137 U	0.0137 U	0.0137 U
	MW55-S-20.0	06/10/2008	20	mg/kg	0.0141 U	0.0281 U	0.0703 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U
MW-58D	MW58D-S-10.0	06/18/2008	10	mg/kg	0.0109 U	0.0218 U	0.0544 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U
	MW58D-S-13.5	06/18/2008	13.5	mg/kg	0.0149 U	0.0298 U	0.0745 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U
TP-03	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	mg/kg	--	--	--	--	--	--	--
TP-09	TP09-9	05/03/1993	9	mg/kg	--	10 U	10 U	--	--	--	--
TP-12	TP12-6.5	05/03/1993	6.5	mg/kg	--	--	0.076	--	--	--	--
TP-13	TP13-7.5	05/03/1993	7.5	mg/kg	--	0.012	0.44	--	--	--	--
TP-28	TP28-9.5	05/03/1993	9.5	mg/kg	--	10 U	10 U	--	--	--	--
TP-31	TP31-6	05/03/1993	6	mg/kg	--	10 U	10 U	--	--	--	--

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorobromo-methane	Chloro-ethane	Chloroform
MTCA Method B Cleanup Level					110	8,000	7.7	1,600	NV	350	160
MTCA Method C Cleanup Level					4,900	350,000	1,000	70,000	NV	45,000	22,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-139	B139-S-2.5	10/04/1999	2.5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B139-S-5.0	10/04/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B139-S-20.0	10/04/1999	20	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-150	B150-S-10.5	10/11/1999	10.5	mg/kg	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
B-153	B153-S-10.0	10/11/1999	10	mg/kg	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
B-155	B155-S-5.0	10/12/1999	5	mg/kg	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	B155-S-9.0	10/12/1999	9	mg/kg	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
B-160	B160-S-10.0	10/13/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-167	B167-S-5.0	10/14/1999	5	mg/kg	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
B-189	B189-S-2.5	10/22/1999	2.5	mg/kg	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	B189-S-12.0	10/22/1999	12	mg/kg	0.1 U	0.1 U	0.1 U	2 U	0.1 U	0.1 U	0.1 U
B-190	B190-S-2.5	10/25/1999	2.5	mg/kg	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B190-S-5.0	10/25/1999	5	mg/kg	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B190-S-10.0	10/25/1999	10	mg/kg	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-197	B197-S-2.5	10/26/1999	2.5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B197-S-10.0	10/26/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-198	B198-S-2.5	10/27/1999	2.5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B198-S-5.0	10/27/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-199	B199-S-10.0	10/27/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B199-S-15.0	10/27/1999	15	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-200	B200-S-5.0	10/27/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-201	B201-S-10.0	10/28/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-202	B202-S-5.0	10/28/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B202-S-15.0	10/28/1999	15	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorobromo-methane	Chloro-ethane	Chloroform
MTCA Method B Cleanup Level					110	8,000	7.7	1,600	NV	350	160
MTCA Method C Cleanup Level					4,900	350,000	1,000	70,000	NV	45,000	22,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-231	B231-S-7.0	11/12/1999	7	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-232	B232-S-5.0	12/07/1999	5	mg/kg	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U
	B232-S-25.0	12/07/1999	25	mg/kg	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U
B-244	B244-S-25.0	12/15/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
	B244-S-35.0	12/15/1999	35	mg/kg	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
B-246	B246-S-5.0	12/16/1999	5	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B246-S-10.0	12/16/1999	10	mg/kg	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
	B246-S-20.0	12/16/1999	20	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
B-247	B247-S-2.5	12/17/1999	2.5	mg/kg	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
	B247-S-5.0	12/17/1999	5	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
	B247-S-16.0	12/17/1999	16	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
B-248	B248-S-2.5	12/20/1999	2.5	mg/kg	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U
	B248-S-15.0	12/20/1999	15	mg/kg	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
	B248-S-25.0	12/20/1999	25	mg/kg	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
B-249	B249-S-2.5	12/20/1999	2.5	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B249-S-20.0	12/20/1999	20	mg/kg	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U
	B249-S-25.0	12/20/1999	25	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-250	B250-S-20.0	12/21/1999	20	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B250-S-25.0	12/21/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
	B250-S-35.0	12/21/1999	35	mg/kg	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
B-251	B251-S-2.5	12/22/1999	2.5	mg/kg	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U
	B251-S-10.0	12/22/1999	10	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
	B251-S-25.0	12/22/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	Bromo-methane		Carbon Disulfide		Carbon Tetrachloride		Chlorobenzene		Chlorobromo-methane		Chloro-ethane		Chloroform	
MTCA Method B Cleanup Level					110		8,000		7.7		1,600		NV		350		160	
MTCA Method C Cleanup Level					4,900		350,000		1,000		70,000		NV		45,000		22,000	
Wildlife Ecological Indicator Concentration					NV		NV		NV		NV		NV		NV		NV	
B-304	B304-S-10.0	06/12/2008	10	mg/kg	0.0114	U	0.0114	U	0.0114	U	0.0114	U	0.0114	U	0.0114	U	0.0114	U
	B304-S-19.5	06/12/2008	19.5	mg/kg	0.0137	U	0.0137	U	0.0137	U	0.0137	U	0.0137	U	0.0137	U	0.0137	U
B-305	B305-S-10.0	06/12/2008	10	mg/kg	0.0694	U	0.0694	U	0.0694	U	0.0694	U	0.0694	U	0.0694	U	0.0694	U
	B305-S-19.0	06/12/2008	19	mg/kg	0.0138	U	0.0138	U	0.0138	U	0.0138	U	0.0138	U	0.0138	U	0.0138	U
MW-11S	PR11S,PR11D	10/23/1997	0	mg/kg	45	U	45	U	45	U	45	U	45	U	45	U	45	U
MW-18	MW18-10	05/03/1993	10	mg/kg	--		--		--		--		--		--		--	
MW-22	MW22-10	05/03/1993	10	mg/kg	--		--		--		--		--		--		--	
MW-24	T5070225	04/02/1996	16	mg/kg	--		--		--		--		--		--		--	
	T5070226	04/02/1996	21	mg/kg	--		--		--		--		--		--		--	
MW-25	T5070000	04/02/1996	21	mg/kg	--		--		--		--		--		--		--	
MW-32	T5070244	04/02/1996	21	mg/kg	--		--		--		--		--		--		--	
MW-55	MW55-S-10.0	06/10/2008	10	mg/kg	0.0137	U	0.0137	U	0.0137	U	0.0137	U	0.0137	U	0.0137	U	0.0137	U
	MW55-S-20.0	06/10/2008	20	mg/kg	0.0141	U	0.0141	U	0.0141	U	0.0141	U	0.0141	U	0.0141	U	0.0141	U
MW-58D	MW58D-S-10.0	06/18/2008	10	mg/kg	0.0109	U	0.0109	U	0.0109	U	0.0109	U	0.0109	U	0.0109	U	0.0109	U
	MW58D-S-13.5	06/18/2008	13.5	mg/kg	0.0149	U	0.0149	U	0.0149	U	0.0149	U	0.0149	U	0.0149	U	0.0149	U
TP-03	TP03-0.3	05/03/1993	0.3	mg/kg	--		--		--		--		--		--		--	
TP-06	TP06-3	05/03/1993	3	mg/kg	--		--		--		--		--		--		--	
TP-09	TP09-9	05/03/1993	9	mg/kg	--		--		--		--		--		--		--	
TP-12	TP12-6.5	05/03/1993	6.5	mg/kg	--		--		--		--		--		--		--	
TP-13	TP13-7.5	05/03/1993	7.5	mg/kg	--		--		--		--		--		--		--	
TP-28	TP28-9.5	05/03/1993	9.5	mg/kg	--		--		--		--		--		--		--	
TP-31	TP31-6	05/03/1993	6	mg/kg	--		--		--		--		--		--		--	

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	Chloromethane		cis-1,2-Dichloroethene		cis-1,3-Dichloro-propene		Dibromo-chloromethane		Dibromo-methane		Dichloro-difluoromethane	
MTCA Method B Cleanup Level					77		800		5.6		12		NV		16,000	
MTCA Method C Cleanup Level					10,000		35,000		730		1,600		NV		700,000	
Wildlife Ecological Indicator Concentration					NV		NV		NV		NV		NV		NV	
B-139	B139-S-2.5	10/04/1999	2.5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B139-S-5.0	10/04/1999	5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B139-S-20.0	10/04/1999	20	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-150	B150-S-10.5	10/11/1999	10.5	mg/kg	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
B-153	B153-S-10.0	10/11/1999	10	mg/kg	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
B-155	B155-S-5.0	10/12/1999	5	mg/kg	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
	B155-S-9.0	10/12/1999	9	mg/kg	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
B-160	B160-S-10.0	10/13/1999	10	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-167	B167-S-5.0	10/14/1999	5	mg/kg	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
B-189	B189-S-2.5	10/22/1999	2.5	mg/kg	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
	B189-S-12.0	10/22/1999	12	mg/kg	0.1	U	0.1	U	0.1	U	2	U	0.1	U	0.1	U
B-190	B190-S-2.5	10/25/1999	2.5	mg/kg	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B190-S-5.0	10/25/1999	5	mg/kg	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
	B190-S-10.0	10/25/1999	10	mg/kg	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
B-197	B197-S-2.5	10/26/1999	2.5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B197-S-10.0	10/26/1999	10	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-198	B198-S-2.5	10/27/1999	2.5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B198-S-5.0	10/27/1999	5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-199	B199-S-10.0	10/27/1999	10	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B199-S-15.0	10/27/1999	15	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-200	B200-S-5.0	10/27/1999	5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-201	B201-S-10.0	10/28/1999	10	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-202	B202-S-5.0	10/28/1999	5	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
	B202-S-15.0	10/28/1999	15	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloro-propene	Dibromo-chloromethane	Dibromo-methane	Dichloro-difluoromethane
MTCA Method B Cleanup Level					77	800	5.6	12	NV	16,000
MTCA Method C Cleanup Level					10,000	35,000	730	1,600	NV	700,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV
B-231	B231-S-7.0	11/12/1999	7	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-232	B232-S-5.0	12/07/1999	5	mg/kg	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U
	B232-S-25.0	12/07/1999	25	mg/kg	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U
B-244	B244-S-25.0	12/15/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
	B244-S-35.0	12/15/1999	35	mg/kg	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
B-246	B246-S-5.0	12/16/1999	5	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B246-S-10.0	12/16/1999	10	mg/kg	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
	B246-S-20.0	12/16/1999	20	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
B-247	B247-S-2.5	12/17/1999	2.5	mg/kg	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
	B247-S-5.0	12/17/1999	5	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
	B247-S-16.0	12/17/1999	16	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
B-248	B248-S-2.5	12/20/1999	2.5	mg/kg	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U
	B248-S-15.0	12/20/1999	15	mg/kg	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
	B248-S-25.0	12/20/1999	25	mg/kg	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
B-249	B249-S-2.5	12/20/1999	2.5	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B249-S-20.0	12/20/1999	20	mg/kg	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U
	B249-S-25.0	12/20/1999	25	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-250	B250-S-20.0	12/21/1999	20	mg/kg	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
	B250-S-25.0	12/21/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
	B250-S-35.0	12/21/1999	35	mg/kg	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
B-251	B251-S-2.5	12/22/1999	2.5	mg/kg	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U
	B251-S-10.0	12/22/1999	10	mg/kg	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
	B251-S-25.0	12/22/1999	25	mg/kg	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloro-propene	Dibromo-chloromethane	Dibromo-methane	Dichloro-difluoromethane
MTCA Method B Cleanup Level					77	800	5.6	12	NV	16,000
MTCA Method C Cleanup Level					10,000	35,000	730	1,600	NV	700,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV
B-304	B304-S-10.0	06/12/2008	10	mg/kg	0.0114 U	0.0114 U	0.0114 U	0.0114 U	0.0114 U	0.0114 U
	B304-S-19.5	06/12/2008	19.5	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
B-305	B305-S-10.0	06/12/2008	10	mg/kg	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U
	B305-S-19.0	06/12/2008	19	mg/kg	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U
MW-11S	PR11S,PR11D	10/23/1997	0	mg/kg	45 U	45 U	45 U	45 U	45 U	45 U
MW-18	MW18-10	05/03/1993	10	mg/kg	--	--	--	--	--	--
MW-22	MW22-10	05/03/1993	10	mg/kg	--	--	--	--	--	--
MW-24	T5070225	04/02/1996	16	mg/kg	--	--	--	--	--	--
	T5070226	04/02/1996	21	mg/kg	--	--	--	--	--	--
MW-25	T5070000	04/02/1996	21	mg/kg	--	--	--	--	--	--
MW-32	T5070244	04/02/1996	21	mg/kg	--	--	--	--	--	--
MW-55	MW55-S-10.0	06/10/2008	10	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
	MW55-S-20.0	06/10/2008	20	mg/kg	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U
MW-58D	MW58D-S-10.0	06/18/2008	10	mg/kg	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U
	MW58D-S-13.5	06/18/2008	13.5	mg/kg	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U
TP-03	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	mg/kg	--	--	--	--	--	--
TP-09	TP09-9	05/03/1993	9	mg/kg	--	--	--	--	--	--
TP-12	TP12-6.5	05/03/1993	6.5	mg/kg	--	--	--	--	--	--
TP-13	TP13-7.5	05/03/1993	7.5	mg/kg	--	--	--	--	--	--
TP-28	TP28-9.5	05/03/1993	9.5	mg/kg	--	--	--	--	--	--
TP-31	TP31-6	05/03/1993	6	mg/kg	--	--	--	--	--	--

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	Ethylbenzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methyl tert-butyl ether	Methylene chloride	Naphthalene	n-Butyl-benzene
MTCA Method B Cleanup Level					8,000	13	8,000	160,000	560	130	1,600	NV
MTCA Method C Cleanup Level					350,000	700	350,000	7,000,000	73,000	18,000	70,000	NV
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV	NV
B-139	B139-S-2.5	10/04/1999	2.5	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.011	0.02 U	0.02 U
	B139-S-5.0	10/04/1999	5	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
	B139-S-20.0	10/04/1999	20	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
B-150	B150-S-10.5	10/11/1999	10.5	mg/kg	0.54	0.6 U	0.6 U	0.55	--	0.5	200	0.6 U
B-153	B153-S-10.0	10/11/1999	10	mg/kg	0.1 U	0.4 U	0.4 U	0.1 U	--	0.3	0.4 U	0.4 U
B-155	B155-S-5.0	10/12/1999	5	mg/kg	0.2 U	0.8 U	0.8 U	0.2 U	--	0.4 U	4.8	0.8 U
	B155-S-9.0	10/12/1999	9	mg/kg	0.2 U	0.8 U	0.8 U	0.2 U	--	0.4 U	3.7	0.8 U
B-160	B160-S-10.0	10/13/1999	10	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
B-167	B167-S-5.0	10/14/1999	5	mg/kg	2	0.06 U	1.2	5.8	--	0.03 U	830	0.06 U
B-189	B189-S-2.5	10/22/1999	2.5	mg/kg	0.1 U	0.4 U	0.4 U	0.1 U	--	0.2 U	0.4 U	0.4 U
	B189-S-12.0	10/22/1999	12	mg/kg	2 U	2 U	2 U	2 U	--	0.2 U	2 U	2 U
B-190	B190-S-2.5	10/25/1999	2.5	mg/kg	0.05 U	0.2 U	0.2 U	0.05 U	--	0.1 U	0.2 U	0.2 U
	B190-S-5.0	10/25/1999	5	mg/kg	0.05 U	0.2 U	0.2 U	0.05 U	--	0.1 U	0.2 U	0.2 U
	B190-S-10.0	10/25/1999	10	mg/kg	0.05 U	0.2 U	0.2 U	0.05 U	--	0.1 U	0.2 U	0.2 U
B-197	B197-S-2.5	10/26/1999	2.5	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
	B197-S-10.0	10/26/1999	10	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
B-198	B198-S-2.5	10/27/1999	2.5	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
	B198-S-5.0	10/27/1999	5	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
B-199	B199-S-10.0	10/27/1999	10	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
	B199-S-15.0	10/27/1999	15	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
B-200	B200-S-5.0	10/27/1999	5	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
B-201	B201-S-10.0	10/28/1999	10	mg/kg	0.005 U	0.02 U	0.02 U	0.009	--	0.018	0.02 U	0.02 U
B-202	B202-S-5.0	10/28/1999	5	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.02 U	0.02 U
	B202-S-15.0	10/28/1999	15	mg/kg	0.005 U	0.02 U	0.02 U	0.005 U	--	0.01 U	0.14	0.02 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	Ethylbenzene		Hexachloro-butadiene		Isopropyl-benzene		m,p-Xylene		Methyl tert-butyl ether	Methylene chloride		Naphthalene		n-Butyl-benzene	
MTCA Method B Cleanup Level					8,000		13		8,000		160,000		560	130		1,600		NV	
MTCA Method C Cleanup Level					350,000		700		350,000		7,000,000		73,000	18,000		70,000		NV	
Wildlife Ecological Indicator Concentration					NV		NV		NV		NV		NV	NV		NV		NV	
B-231	B231-S-7.0	11/12/1999	7	mg/kg	0.005	U	0.02	U	0.02	U	0.005	U	--	0.01	U	0.02	U	0.02	U
B-232	B232-S-5.0	12/07/1999	5	mg/kg	0.031		0.026	U	0.026	U	0.016		--	0.031		0.026	U	0.026	U
	B232-S-25.0	12/07/1999	25	mg/kg	0.0066	U	0.027	U	0.027	U	0.0066	U	--	0.016		0.095		0.027	U
B-244	B244-S-25.0	12/15/1999	25	mg/kg	0.0055	U	0.022	U	0.022	U	0.0055	U	--	0.011	U	0.022	U	0.022	U
	B244-S-35.0	12/15/1999	35	mg/kg	0.0053	U	0.021	U	0.021	U	0.0053	U	--	0.011	U	0.021	U	0.021	U
B-246	B246-S-5.0	12/16/1999	5	mg/kg	0.0054	U	0.022	U	0.022	U	0.0054	U	--	0.011	U	0.022	U	0.022	U
	B246-S-10.0	12/16/1999	10	mg/kg	0.0052	U	0.021	U	0.021	U	0.0052	U	--	0.01	U	0.021	U	0.021	U
	B246-S-20.0	12/16/1999	20	mg/kg	0.0056	U	0.022	U	0.022	U	0.0056	U	--	0.011	U	0.022	U	0.022	U
B-247	B247-S-2.5	12/17/1999	2.5	mg/kg	0.0059	U	0.024	U	0.024	U	0.0059	U	--	0.012	U	0.024	U	0.024	U
	B247-S-5.0	12/17/1999	5	mg/kg	0.0056	U	0.023	U	0.023	U	0.0056	U	--	0.011	U	0.023	U	0.023	U
	B247-S-16.0	12/17/1999	16	mg/kg	0.0055	U	0.022	U	0.022	U	0.0055	U	--	0.011	U	0.022	U	0.022	U
B-248	B248-S-2.5	12/20/1999	2.5	mg/kg	0.0045	U	0.018	U	0.018	U	0.0045	U	--	0.009	U	0.018	U	0.018	U
	B248-S-15.0	12/20/1999	15	mg/kg	0.0052	U	0.021	U	0.021	U	0.0052	U	--	0.01	U	0.021	U	0.021	U
	B248-S-25.0	12/20/1999	25	mg/kg	0.0053	U	0.021	U	0.021	U	0.0053	U	--	0.011	U	0.021	U	0.021	U
B-249	B249-S-2.5	12/20/1999	2.5	mg/kg	0.0054	U	0.022	U	0.022	U	0.0054	U	--	0.011	U	0.022	U	0.022	U
	B249-S-20.0	12/20/1999	20	mg/kg	0.0057	U	0.023	U	0.023	U	0.0057	U	--	0.011	U	0.023	U	0.023	U
	B249-S-25.0	12/20/1999	25	mg/kg	0.005	U	0.02	U	0.02	U	0.005	U	--	0.0099	U	0.02	U	0.02	U
B-250	B250-S-20.0	12/21/1999	20	mg/kg	0.0054	U	0.021	U	0.021	U	0.0054	U	--	0.011	U	0.021	U	0.021	U
	B250-S-25.0	12/21/1999	25	mg/kg	0.0055	U	0.022	U	0.022	U	0.0055	U	--	0.0022	U	0.022	U	0.022	U
	B250-S-35.0	12/21/1999	35	mg/kg	0.0059	U	0.024	U	0.024	U	0.0059	U	--	0.017		0.024	U	0.024	U
B-251	B251-S-2.5	12/22/1999	2.5	mg/kg	0.0061	U	0.025	U	0.025	U	0.0061	U	--	0.0025	U	0.025	U	0.025	U
	B251-S-10.0	12/22/1999	10	mg/kg	0.0056	U	0.022	U	0.022	U	0.0056	U	--	0.0022	U	0.022	U	0.022	U
	B251-S-25.0	12/22/1999	25	mg/kg	0.0055	U	0.022	U	0.022	U	0.0055	U	--	0.0022	U	0.022	U	0.022	U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	Ethylbenzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methyl tert-butyl ether	Methylene chloride	Naphthalene	n-Butyl-benzene
MTCA Method B Cleanup Level					8,000	13	8,000	160,000	560	130	1,600	NV
MTCA Method C Cleanup Level					350,000	700	350,000	7,000,000	73,000	18,000	70,000	NV
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV	NV
B-304	B304-S-10.0	06/12/2008	10	mg/kg	0.0114 U	0.0571 U	0.0114 U	0.0229 U	0.0114 U	0.0571 U	0.118	0.0571 U
	B304-S-19.5	06/12/2008	19.5	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0274 U	0.0137 U	0.0684 U	0.0137 U	0.0137 U
B-305	B305-S-10.0	06/12/2008	10	mg/kg	0.0694 U	0.0694 U	0.0694 U	0.139 U	0.0694 U	0.347 U	0.0694 U	0.0694 U
	B305-S-19.0	06/12/2008	19	mg/kg	0.0138 U	0.0138 U	0.0138 U	0.0275 U	0.0138 U	0.0689 U	0.0138 U	0.0138 U
MW-11S	PR11S,PR11D	10/23/1997	0	mg/kg	1600	180 U	1100	3600	--	90 U	**56000**	1200
MW-18	MW18-10	05/03/1993	10	mg/kg	3.4	--	--	2.5 U	--	5 U	--	--
MW-22	MW22-10	05/03/1993	10	mg/kg	5 U	--	--	2.7	--	--	--	--
MW-24	T5070225	04/02/1996	16	mg/kg	4.6	--	--	11	--	--	--	--
	T5070226	04/02/1996	21	mg/kg	42	--	--	80	--	--	--	--
MW-25	T5070000	04/02/1996	21	mg/kg	0.0058 U	--	--	0.0058 U	--	--	--	--
MW-32	T5070244	04/02/1996	21	mg/kg	--	--	--	--	--	0.0062 U	--	--
MW-55	MW55-S-10.0	06/10/2008	10	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0274 U	0.0137 U	0.0686 U	0.0137 U	0.0137 U
	MW55-S-20.0	06/10/2008	20	mg/kg	0.0141 U	0.0141 U	0.0141 U	0.0281 U	0.0141 U	0.0703 U	0.601	0.0141 U
MW-58D	MW58D-S-10.0	06/18/2008	10	mg/kg	0.0109 U	0.0109 U	0.0109 U	0.0218 U	0.0109 U	0.0544 U	0.0109 U	0.0109 U
	MW58D-S-13.5	06/18/2008	13.5	mg/kg	0.0149 U	0.0149 U	0.0149 U	0.0298 U	0.0149 U	0.0745 U	0.0149 U	0.0149 U
TP-03	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	3.6	--	--	--	--
TP-06	TP06-3	05/03/1993	3	mg/kg	--	--	--	0.032	--	--	--	--
TP-09	TP09-9	05/03/1993	9	mg/kg	23	--	--	38	--	10 U	--	--
TP-12	TP12-6.5	05/03/1993	6.5	mg/kg	0.13	--	--	0.042	--	--	--	--
TP-13	TP13-7.5	05/03/1993	7.5	mg/kg	0.052	--	--	0.054	--	10 U	--	--
TP-28	TP28-9.5	05/03/1993	9.5	mg/kg	5 U	--	--	7.3	--	9.3	--	--
TP-31	TP31-6	05/03/1993	6	mg/kg	5 U	--	--	5 U	--	7.4	--	--

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetra-chloroethene	Toluene
MTCA Method B Cleanup Level					NV	160,000	NV	33	NV	1.9	6,400
MTCA Method C Cleanup Level					NV	7,000,000	NV	4,400	NV	240	280,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-139	B139-S-2.5	10/04/1999	2.5	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
	B139-S-5.0	10/04/1999	5	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
	B139-S-20.0	10/04/1999	20	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
B-150	B150-S-10.5	10/11/1999	10.5	mg/kg	0.6 U	0.32	0.6 U	0.15 U	0.6 U	0.15 U	0.15 U
B-153	B153-S-10.0	10/11/1999	10	mg/kg	0.4 U	0.1 U	0.4 U	0.1 U	0.4 U	0.1 U	0.1 U
B-155	B155-S-5.0	10/12/1999	5	mg/kg	0.8 U	0.2 U	0.8 U	0.2 U	0.8 U	0.2 U	0.2 U
	B155-S-9.0	10/12/1999	9	mg/kg	0.8 U	0.2 U	0.8 U	0.2 U	0.8 U	0.2 U	0.2 U
B-160	B160-S-10.0	10/13/1999	10	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
B-167	B167-S-5.0	10/14/1999	5	mg/kg	1.1	3.5	1	1.6	0.06 U	0.066	0.015 U
B-189	B189-S-2.5	10/22/1999	2.5	mg/kg	0.4 U	0.1 U	0.4 U	0.1 U	0.4 U	0.1 U	0.1 U
	B189-S-12.0	10/22/1999	12	mg/kg	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U
B-190	B190-S-2.5	10/25/1999	2.5	mg/kg	0.2 U	0.05 U	0.2 U	0.05 U	0.2 U	0.05 U	0.05 U
	B190-S-5.0	10/25/1999	5	mg/kg	0.2 U	0.05 U	0.2 U	0.05 U	0.2 U	0.05 U	0.05 U
	B190-S-10.0	10/25/1999	10	mg/kg	0.2 U	0.05 U	0.2 U	0.05 U	0.2 U	0.05 U	0.05 U
B-197	B197-S-2.5	10/26/1999	2.5	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
	B197-S-10.0	10/26/1999	10	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
B-198	B198-S-2.5	10/27/1999	2.5	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
	B198-S-5.0	10/27/1999	5	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
B-199	B199-S-10.0	10/27/1999	10	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
	B199-S-15.0	10/27/1999	15	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
B-200	B200-S-5.0	10/27/1999	5	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
B-201	B201-S-10.0	10/28/1999	10	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.009
B-202	B202-S-5.0	10/28/1999	5	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
	B202-S-15.0	10/28/1999	15	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetra-chloroethene	Toluene
MTCA Method B Cleanup Level					NV	160,000	NV	33	NV	1.9	6,400
MTCA Method C Cleanup Level					NV	7,000,000	NV	4,400	NV	240	280,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-231	B231-S-7.0	11/12/1999	7	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
B-232	B232-S-5.0	12/07/1999	5	mg/kg	0.026 U	0.021	0.026 U	0.0065 U	0.026 U	0.0065 U	0.0065 U
	B232-S-25.0	12/07/1999	25	mg/kg	0.027 U	0.0066 U	0.027 U	0.0066 U	0.027 U	0.0066 U	0.0066 U
B-244	B244-S-25.0	12/15/1999	25	mg/kg	0.022 U	0.0055 U	0.022 U	0.0055 U	0.022 U	0.0055 U	0.0055 U
	B244-S-35.0	12/15/1999	35	mg/kg	0.021 U	0.0053 U	0.021 U	0.0053 U	0.021 U	0.0053 U	0.0053 U
B-246	B246-S-5.0	12/16/1999	5	mg/kg	0.022 U	0.0054 U	0.022 U	0.0054 U	0.022 U	0.0054 U	0.0054 U
	B246-S-10.0	12/16/1999	10	mg/kg	0.021 U	0.0052 U	0.021 U	0.0052 U	0.021 U	0.0052 U	0.0052 U
	B246-S-20.0	12/16/1999	20	mg/kg	0.022 U	0.0056 U	0.022 U	0.0056 U	0.022 U	0.0056 U	0.0056 U
B-247	B247-S-2.5	12/17/1999	2.5	mg/kg	0.024 U	0.0059 U	0.024 U	0.0059 U	0.024 U	0.0059 U	0.0059 U
	B247-S-5.0	12/17/1999	5	mg/kg	0.023 U	0.0056 U	0.023 U	0.0056 U	0.023 U	0.0056 U	0.0056 U
	B247-S-16.0	12/17/1999	16	mg/kg	0.022 U	0.0055 U	0.022 U	0.0055 U	0.022 U	0.0055 U	0.0055 U
B-248	B248-S-2.5	12/20/1999	2.5	mg/kg	0.018 U	0.0045 U	0.018 U	0.0045 U	0.018 U	0.0045 U	0.0045 U
	B248-S-15.0	12/20/1999	15	mg/kg	0.021 U	0.0052 U	0.021 U	0.0052 U	0.021 U	0.0052 U	0.0052 U
	B248-S-25.0	12/20/1999	25	mg/kg	0.021 U	0.0053 U	0.021 U	0.0053 U	0.021 U	0.0053 U	0.0053 U
B-249	B249-S-2.5	12/20/1999	2.5	mg/kg	0.022 U	0.0054 U	0.022 U	0.0054 U	0.022 U	0.0054 U	0.0054 U
	B249-S-20.0	12/20/1999	20	mg/kg	0.023 U	0.0057 U	0.023 U	0.0057 U	0.023 U	0.0057 U	0.0057 U
	B249-S-25.0	12/20/1999	25	mg/kg	0.02 U	0.005 U	0.02 U	0.005 U	0.02 U	0.005 U	0.005 U
B-250	B250-S-20.0	12/21/1999	20	mg/kg	0.021 U	0.0054 U	0.021 U	0.0054 U	0.021 U	0.0054 U	0.0054 U
	B250-S-25.0	12/21/1999	25	mg/kg	0.022 U	0.0055 U	0.022 U	0.0055 U	0.022 U	0.0055 U	0.0055 U
	B250-S-35.0	12/21/1999	35	mg/kg	0.024 U	0.0059 U	0.024 U	0.0059 U	0.024 U	0.0059 U	0.0059 U
B-251	B251-S-2.5	12/22/1999	2.5	mg/kg	0.025 U	0.0061 U	0.025 U	0.0061 U	0.025 U	0.0061 U	0.0061 U
	B251-S-10.0	12/22/1999	10	mg/kg	0.022 U	0.0056 U	0.022 U	0.0056 U	0.022 U	0.0056 U	0.0056 U
	B251-S-25.0	12/22/1999	25	mg/kg	0.022 U	0.0055 U	0.022 U	0.0055 U	0.022 U	0.0055 U	0.0055 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetra-chloroethene	Toluene
MTCA Method B Cleanup Level					NV	160,000	NV	33	NV	1.9	6,400
MTCA Method C Cleanup Level					NV	7,000,000	NV	4,400	NV	240	280,000
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV	NV	NV
B-304	B304-S-10.0	06/12/2008	10	mg/kg	0.0571 U	0.0114 U	0.0571 U	0.0114 U	0.0571 U	0.0114 U	0.0114 U
	B304-S-19.5	06/12/2008	19.5	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
B-305	B305-S-10.0	06/12/2008	10	mg/kg	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U
	B305-S-19.0	06/12/2008	19	mg/kg	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U
MW-11S	PR11S,PR11D	10/23/1997	0	mg/kg	920	--	690	**330**	180 U	45 U	130
MW-18	MW18-10	05/03/1993	10	mg/kg	--	--	--	4.2	--	--	2.5 U
MW-22	MW22-10	05/03/1993	10	mg/kg	--	--	--	--	--	--	--
MW-24	T5070225	04/02/1996	16	mg/kg	--	--	--	--	--	--	0.75 U
	T5070226	04/02/1996	21	mg/kg	--	--	--	--	--	--	4.3
MW-25	T5070000	04/02/1996	21	mg/kg	--	--	--	--	--	--	0.0058 U
MW-32	T5070244	04/02/1996	21	mg/kg	--	--	--	--	--	--	--
MW-55	MW55-S-10.0	06/10/2008	10	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
	MW55-S-20.0	06/10/2008	20	mg/kg	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U
MW-58D	MW58D-S-10.0	06/18/2008	10	mg/kg	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U
	MW58D-S-13.5	06/18/2008	13.5	mg/kg	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U
TP-03	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	mg/kg	--	--	--	--	--	--	--
TP-09	TP09-9	05/03/1993	9	mg/kg	--	--	--	12	--	--	7.1
TP-12	TP12-6.5	05/03/1993	6.5	mg/kg	--	--	--	--	--	--	--
TP-13	TP13-7.5	05/03/1993	7.5	mg/kg	--	--	--	0.005 U	--	--	0.005 U
TP-28	TP28-9.5	05/03/1993	9.5	mg/kg	--	--	--	5 U	--	--	5 U
TP-31	TP31-6	05/03/1993	6	mg/kg	--	--	--	5 U	--	--	5 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	trans-1,2-Dichloroethene	trans-1,3-Dichloro-propene	Trichloro-ethene	Trichloro-fluoromethane	Vinyl chloride
MTCA Method B Cleanup Level					1,600	5.6	11	24,000	0.67
MTCA Method C Cleanup Level					70,000	730	1,100	1,100,000	88
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV
B-139	B139-S-2.5	10/04/1999	2.5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B139-S-5.0	10/04/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B139-S-20.0	10/04/1999	20	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-150	B150-S-10.5	10/11/1999	10.5	mg/kg	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
B-153	B153-S-10.0	10/11/1999	10	mg/kg	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
B-155	B155-S-5.0	10/12/1999	5	mg/kg	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	B155-S-9.0	10/12/1999	9	mg/kg	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
B-160	B160-S-10.0	10/13/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-167	B167-S-5.0	10/14/1999	5	mg/kg	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
B-189	B189-S-2.5	10/22/1999	2.5	mg/kg	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	B189-S-12.0	10/22/1999	12	mg/kg	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
B-190	B190-S-2.5	10/25/1999	2.5	mg/kg	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B190-S-5.0	10/25/1999	5	mg/kg	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	B190-S-10.0	10/25/1999	10	mg/kg	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
B-197	B197-S-2.5	10/26/1999	2.5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B197-S-10.0	10/26/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-198	B198-S-2.5	10/27/1999	2.5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B198-S-5.0	10/27/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-199	B199-S-10.0	10/27/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B199-S-15.0	10/27/1999	15	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-200	B200-S-5.0	10/27/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-201	B201-S-10.0	10/28/1999	10	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
B-202	B202-S-5.0	10/28/1999	5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	B202-S-15.0	10/28/1999	15	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	trans-1,2-Dichloroethene		trans-1,3-Dichloro-propene		Trichloro-ethene		Trichloro-fluoromethane		Vinyl chloride	
MTCA Method B Cleanup Level					1,600		5.6		11		24,000		0.67	
MTCA Method C Cleanup Level					70,000		730		1,100		1,100,000		88	
Wildlife Ecological Indicator Concentration					NV		NV		NV		NV		NV	
B-231	B231-S-7.0	11/12/1999	7	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-232	B232-S-5.0	12/07/1999	5	mg/kg	0.0065	U	0.0065	U	0.0065	U	0.0065	U	0.0065	U
	B232-S-25.0	12/07/1999	25	mg/kg	0.0066	U	0.0066	U	0.0066	U	0.0066	U	0.0066	U
B-244	B244-S-25.0	12/15/1999	25	mg/kg	0.0055	U	0.0055	U	0.0055	U	0.0055	U	0.0055	U
	B244-S-35.0	12/15/1999	35	mg/kg	0.0053	U	0.0053	U	0.0053	U	0.0053	U	0.0053	U
B-246	B246-S-5.0	12/16/1999	5	mg/kg	0.0054	U	0.0054	U	0.0054	U	0.0054	U	0.0054	U
	B246-S-10.0	12/16/1999	10	mg/kg	0.0052	U	0.0052	U	0.0052	U	0.0052	U	0.0052	U
	B246-S-20.0	12/16/1999	20	mg/kg	0.0056	U	0.0056	U	0.0056	U	0.0056	U	0.0056	U
B-247	B247-S-2.5	12/17/1999	2.5	mg/kg	0.0059	U	0.0059	U	0.0059	U	0.0059	U	0.0059	U
	B247-S-5.0	12/17/1999	5	mg/kg	0.0056	U	0.0056	U	0.0056	U	0.0056	U	0.0056	U
	B247-S-16.0	12/17/1999	16	mg/kg	0.0055	U	0.0055	U	0.0055	U	0.0055	U	0.0055	U
B-248	B248-S-2.5	12/20/1999	2.5	mg/kg	0.0045	U	0.0045	U	0.0045	U	0.0045	U	0.0045	U
	B248-S-15.0	12/20/1999	15	mg/kg	0.0052	U	0.0052	U	0.0052	U	0.0052	U	0.0052	U
	B248-S-25.0	12/20/1999	25	mg/kg	0.0053	U	0.0053	U	0.0053	U	0.0053	U	0.0053	U
B-249	B249-S-2.5	12/20/1999	2.5	mg/kg	0.0054	U	0.0054	U	0.0054	U	0.0054	U	0.0054	U
	B249-S-20.0	12/20/1999	20	mg/kg	0.0057	U	0.0057	U	0.0057	U	0.0057	U	0.0057	U
	B249-S-25.0	12/20/1999	25	mg/kg	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
B-250	B250-S-20.0	12/21/1999	20	mg/kg	0.0054	U	0.0054	U	0.0054	U	0.0054	U	0.0054	U
	B250-S-25.0	12/21/1999	25	mg/kg	0.0055	U	0.0055	U	0.0055	U	0.0055	U	0.0055	U
	B250-S-35.0	12/21/1999	35	mg/kg	0.0059	U	0.0059	U	0.0059	U	0.0059	U	0.0059	U
B-251	B251-S-2.5	12/22/1999	2.5	mg/kg	0.0061	U	0.0061	U	0.0061	U	0.0061	U	0.0061	U
	B251-S-10.0	12/22/1999	10	mg/kg	0.0056	U	0.0056	U	0.0056	U	0.0056	U	0.0056	U
	B251-S-25.0	12/22/1999	25	mg/kg	0.0055	U	0.0055	U	0.0055	U	0.0055	U	0.0055	U

Table E-I-4
Summary of Volatile Organic Compounds in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Units	trans-1,2-Dichloroethene	trans-1,3-Dichloro-propene	Trichloro-ethene	Trichloro-fluoromethane	Vinyl chloride
MTCA Method B Cleanup Level					1,600	5.6	11	24,000	0.67
MTCA Method C Cleanup Level					70,000	730	1,100	1,100,000	88
Wildlife Ecological Indicator Concentration					NV	NV	NV	NV	NV
B-304	B304-S-10.0	06/12/2008	10	mg/kg	0.0114 U	0.0114 U	0.0114 U	0.0114 U	0.0114 U
	B304-S-19.5	06/12/2008	19.5	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
B-305	B305-S-10.0	06/12/2008	10	mg/kg	0.0694 U	0.0694 U	0.0694 U	0.0694 U	0.0694 U
	B305-S-19.0	06/12/2008	19	mg/kg	0.0138 U	0.0138 U	0.0138 U	0.0138 U	0.0138 U
MW-11S	PR11S,PR11D	10/23/1997	0	mg/kg	45 U	45 U	45 U	45 U	45 U
MW-18	MW18-10	05/03/1993	10	mg/kg	--	--	--	--	--
MW-22	MW22-10	05/03/1993	10	mg/kg	--	--	--	--	--
MW-24	T5070225	04/02/1996	16	mg/kg	--	--	--	--	--
	T5070226	04/02/1996	21	mg/kg	--	--	--	--	--
MW-25	T5070000	04/02/1996	21	mg/kg	--	--	--	--	--
MW-32	T5070244	04/02/1996	21	mg/kg	--	--	--	--	--
MW-55	MW55-S-10.0	06/10/2008	10	mg/kg	0.0137 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U
	MW55-S-20.0	06/10/2008	20	mg/kg	0.0141 U	0.0141 U	0.0141 U	0.0141 U	0.0141 U
MW-58D	MW58D-S-10.0	06/18/2008	10	mg/kg	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U
	MW58D-S-13.5	06/18/2008	13.5	mg/kg	0.0149 U	0.0149 U	0.0149 U	0.0149 U	0.0149 U
TP-03	TP03-0.3	05/03/1993	0.3	mg/kg	--	--	--	--	--
TP-06	TP06-3	05/03/1993	3	mg/kg	--	--	--	--	--
TP-09	TP09-9	05/03/1993	9	mg/kg	--	--	--	--	--
TP-12	TP12-6.5	05/03/1993	6.5	mg/kg	--	--	--	--	--
TP-13	TP13-7.5	05/03/1993	7.5	mg/kg	--	--	--	--	--
TP-28	TP28-9.5	05/03/1993	9.5	mg/kg	--	--	--	--	--
TP-31	TP31-6	05/03/1993	6	mg/kg	--	--	--	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
A1	A1	11/07/2000	0	20 U	140	--	--	--	--
A2	A2	11/07/2000	0	20 U	240	--	--	--	--
A3	A3	11/07/2000	0	20 U	110	--	--	--	--
B-1	B1-S-2.5	04/06/2000	2.5	20 U	50 U	--	100 U	--	--
	B1-S-10.0	04/06/2000	10	20 U	50 U	--	100 U	--	--
	B1	11/07/2000	0	20 U	240	--	--	--	--
B-2	B2-S-10.0	04/06/2000	0	20 U	50 U	--	100 U	--	--
	B2-S-2.5	04/06/2000	2.5	20 U	50 U	--	100 U	--	--
	B2	11/07/2000	0	20 U	150	--	--	--	--
B-3	B3	11/07/2000	0	20 U	240	--	--	--	--
B-5	B5-S-10.0	04/06/2000	10	20 U	50 U		100 U	--	--
B-6	B6-S-2.5	04/06/2000	2.5	20 U	50 U	--	100 U	--	--
	B6-S-10.0	04/06/2000	10	20 U	50 U	--	100 U	--	--
B-7	B7-S-2.5	04/06/2000	2.5	20 U	50 U	--	100 U	--	--
	B7-S-10.0	04/06/2000	10	20 U	50 U	--	100 U	--	--
B-8	B8-S-2.5	04/06/2000	2.5	20 U	50 U	--	100 U	--	--
	B8-S-10.0	04/06/2000	10	20 U	50 U	--	100 U	--	--
B-9	B9-S-2.5	04/06/2000	2.5	20 U	50 U	--	100 U	--	--
	B9-S-10.0	04/06/2000	10	20 U	50 U	--	100 U	--	--
B-31	CELL 3-3.5/5.0	11/26/1997	3.5	10 U	10 U	--	--	10 U	10 U
	CELL 3-8/9.5	11/26/1997	8	10 U	10 U	--	--	10 U	10 U
	CELL 3-15.5/17	11/26/1997	15.5	10 U	1100	--	--	10 U	10 U

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-32	CELL 5-S-6.5	12/05/1997	6.5	--	--	--	--	--	--
	CELL 5-S-14	12/08/1997	14	10 U	10 U	--	--	10 U	10 U
B-33	CELL 7 3.5-5.0	12/04/1997	3.5	10 U	1380	--	--	10 U	10 U
	CELL 7 9.5-11.0	12/04/1997	9.5	10 U	151	--	--	10 U	10 U
	CELL 7 15.5-17.	12/04/1997	15.5	10 U	371	--	--	10 U	10 U
B-34	CELL 9-3.5/5.0	11/26/1997	3.5	10 U	38	--	--	10 U	10 U
	CELL 9-8.0/9.5	11/26/1997	8	10 U	734	--	--	10 U	10 U
	CELL 9-17.0/18.	11/26/1997	17	10 U	284	--	--	10 U	10 U
B-35	CELL 11-3.5-5.0	12/02/1997	3.5	10 U	**4430**	--	--	10 U	10 U
	CELL 11-11.0-12	12/02/1997	11	10 U	**2180**	--	--	10 U	10 U
	CELL 11-14.0-15	12/02/1997	14	10 U	**4430**	--	--	10 U	10 U
B-36	CELL 13 5.0-6.5	12/03/1997	5	10 U	**3710**	--	--	10 U	10 U
	CELL 13 9.5-11.	12/03/1997	9.5	10 U	**2010**	--	--	10 U	10 U
	CELL 13 15.5-17	12/03/1997	15.5	10 U	147	--	--	10 U	10 U
B-37	CELL 16-5.0-6.5	12/02/1997	5	10 U	**3630**	--	--	10 U	10 U
	CELL 16-15.5-17	12/03/1997	15.5	10 U	10 U	--	--	10 U	10 U
B-38	CELL 19-S-3.5	12/05/1997	3.5	--	--	--	--	--	--
	CELL 19-S-9.5	12/05/1997	9.5	--	--	--	--	--	--
	CELL 19-S-15.5	12/05/1997	15.5	--	--	--	--	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-40	CELL 24-S-6.5	12/11/1997	6.5	--	--	--	--	--	--
	CELL 24-S-14	12/11/1997	14	--	--	--	--	--	--
B-41	CELL 27-S-5	12/10/1997	5	--	--	--	--	--	--
	CELL 27-S-14	12/10/1997	14	--	--	--	--	--	--
B-42	CELL 30-S-8	12/09/1997	8	--	--	--	--	--	--
	CELL 30-S-12.5	12/09/1997	12.5	10 U	10 U	--	--	10 U	10 U
	CELL 30-S-15.5	12/09/1997	15.5	--	--	--	--	--	--
B-43	CELL 31-S-9.5	11/20/1997	9.5	--	--	--	--	--	--
B-44	CELL 33-S-12.5	11/20/1997	12.5	--	--	--	--	--	--
B-45	CELL 34-S-3.5	11/19/1997	3.5	**415**	249	--	--	10 U	10 U
	CELL 34-S-8.0	11/19/1997	8	--	--	--	--	--	--
B-46	CELL 35-S-5	11/19/1997	5	10 U	10 U	--	--	10 U	10 U
	CELL 35-S-9.5	11/19/1997	9.5	10 U	10 U	--	--	10 U	10 U
B-47	CELL 36-S-3.5	11/18/1997	3.5	--	--	--	--	--	--
	CELL 36-S-15.5	11/18/1997	15.5	--	--	--	--	--	--
B-48	CELL 37-S-12.5	11/20/1997	12.5	--	--	--	--	--	--
B-49	CELL 38-S-5	11/25/1997	5	--	--	--	--	--	--
	CELL 38-S-9.5	11/25/1997	9.5	--	--	--	--	--	--
B-50	CELL 39-S-3.5	11/21/1997	3.5	--	--	--	--	--	--
B-51	CELL 40-S-3.5	11/24/1997	3.5	--	--	--	--	--	--
	CELL 40-S-9.5	11/24/1997	9.5	10 U	10 U	--	--	10 U	10 U

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-52	CELL 42-S-9.5	11/20/1997	9.5	--	--	--	--	--	--
B-54	CELL 44-15.5	01/14/1998	15.5	--	--	--	--	--	--
B-55	CELL 45-17	01/15/1998	17	--	--	--	--	--	--
B-56	CELL 46-12.5	01/15/1998	12.5	--	--	--	--	--	--
B-57	CELL 47-14.0	01/16/1998	14	--	--	--	--	--	--
B-58	CELL 48-14.0	01/16/1998	14	--	--	--	--	--	--
B-69	B-12-S-0.5	06/16/1998	0.5	10 U	10 U	219	25 U	10 U	10 U
	B-12-S-2.5	06/16/1998	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B-12-S-5.0	06/16/1998	5	10 U	10 U	25 U	25 U	10 U	10 U
	B-12-S-10.0	06/16/1998	10	10 U	10 U	25 U	25 U	10 U	10 U
	B-12-S-17.0	06/16/1998	17	10 U	10 U	25 U	25 U	10 U	10 U
B-96	B-96-S-10.0	07/08/1998	10	10 U	10 U	25 U	25 U	10 U	10 U
B-97	B-97-S-10.0	07/08/1998	10	10 U	10 U	25 U	25 U	10 U	10 U
B-99	B-99-S-15.0	07/08/1998	15	10 U	10 U	25 U	25 U	10 U	10 U
B-100	B-100-S-15.0	07/08/1998	15	10 U	10 U	25 U	25 U	10 U	10 U
B-119	B119-S-2.5	06/17/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B119-S-5.0	06/17/1999	5	10 U	10 U	34	25 U	10 U	10 U
	B119-S-15.0	06/17/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-140	B140-S-10.0	10/06/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-141	B141-S-2.5	10/06/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-142	B142-S-10.0	10/07/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-147	B147-S-10.0	10/08/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-148	B148-S-10.0	10/08/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
	B148-S-15.0	10/08/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-149	B149-S-3.0	10/08/1999	3	10 U	10 U	25 U	25 U	10 U	10 U
	B149-S-10.0	10/08/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-150	B150-S-10.5	10/11/1999	10.5	10 U	10 U	25 U	25 U	10 U	10 U
B-153	B153-S-10.0	10/11/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-155	B155-S-5.0	10/12/1999	5	10 U	10 U	110	25 U	10 U	10 U
	B155-S-9.0	10/12/1999	9	10 U	10 U	25 U	25 U	10 U	10 U
B-160	B160-S-10.0	10/13/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-191	B191-S-5.0	10/25/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
B-193	B193-S-2.5	10/25/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B193-S-5.0	10/25/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B193-S-10.0	10/25/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-194	B194-S-2.5	10/25/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B194-S-5.0	10/25/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B194-S-10.0	10/25/1999	10	10 U	10 U	25 U	25 U	10 U	10 U

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-195	B195-S-2.5	10/26/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B195-S-5.0	10/26/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B195-S-10.0	10/26/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-196	B196-S-3.0	10/26/1999	3	10 U	10 U	25 U	25 U	10 U	10 U
	B196-S-9.0	10/26/1999	9	10 U	10 U	25 U	25 U	10 U	10 U
B-197	B197-S-2.5	10/26/1999	2.5	10 U	10 U	140	25 U	10 U	10 U
	B197-S-5.0	10/26/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B197-S-10.0	10/26/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-198	B198-S-2.5	10/27/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B198-S-5.0	10/27/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
B-199	B199-S-2.5	10/27/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B199-S-5.0	10/27/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B199-S-10.0	10/27/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
	B199-S-15.0	10/27/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-200	B200-S-2.5	10/27/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B200-S-5.0	10/27/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
B-201	B201-S-2.5	10/28/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B201-S-5.0	10/28/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B201-S-15.0	10/28/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
	B201-S-20.0	10/28/1999	20	10 U	10 U	25 U	25 U	10 U	10 U

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-202	B202-S-2.5	10/28/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B202-S-5.0	10/28/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B202-S-15.0	10/28/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-203	B203-S-2.5	10/28/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B203-S-5.0	10/28/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B203-S-10.0	10/28/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-221	B221-S-2.5	11/09/1999	2.5	10 U	10 U	65	25 U	10 U	10 U
	B221-S-7.5	11/09/1999	7.5	10 U	10 U	25 U	25 U	10 U	10 U
B-222	B222-S-2.5	11/10/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B222-S-5.0	11/10/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B222-S-10.0	11/10/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-223	B223-S-5.0	11/10/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B223-S-10.0	11/10/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
B-224	B224-S-2.5	11/10/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
B-226	B226-S-5.0	11/11/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
B-227	B227-S-5.0	11/11/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
B-228	B228-S-1.5	11/11/1999	1.5	10 U	10 U	11000	25 U	10 U	10 U
	B228-S-5.0	11/11/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
B-230	B230-S-2.5	11/12/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B230-S-5.0	11/12/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
B-231	B231-S-2.5	11/12/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B231-S-7.0	11/12/1999	7	10 U	10 U	25 U	25 U	10 U	10 U

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-233	B233-S-15.0	12/07/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-234	B234-S-10.0	12/07/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
	B234-S-15.0	12/07/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-235	B235-S-10.0	12/08/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
	B235-S-15.0	12/08/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
	B235-S-25.0	12/08/1999	25	10 U	10 U	25 U	25 U	10 U	10 U
B-236	B236-S-10.0	12/08/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
	B236-S-15.0	12/08/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-238	B238-S-10.0	12/09/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
	B238-S-15.0	12/09/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-239	B239-S-10.0	12/09/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
	B239-S-15.0	12/09/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-240	B240-S-15.0	12/10/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-241	B241-S-5.0	12/10/1999	5	10 U	10 U	25 U	25 U	10 U	10 U
	B241-S-15.0	12/10/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
B-244	B244-S-25.0	12/15/1999	25	10 U	10 U	25 U	25 U	10 U	10 U
	B244-S-30.0	12/15/1999	30	10 U	10 U	25 U	25 U	10 U	10 U
	B244-S-35.0	12/15/1999	35	10 U	10 U	25 U	25 U	10 U	10 U
B-245	B245-S-15.0	12/15/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
	B245-S-30.0	12/15/1999	30	10 U	10 U	25 U	25 U	10 U	10 U
B-246	B246-S-5.0	12/16/1999	5	10 U	10 U	63	25 U	10 U	10 U
	B246-S-10.0	12/16/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
	B246-S-20.0	12/16/1999	20	10 U	10 U	25 U	25 U	10 U	10 U

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-247	B247-S-2.5	12/17/1999	2.5	10 U	10 U	57	25 U	10 U	10 U
	B247-S-5.0	12/17/1999	5	10 U	10 U	86	25 U	10 U	10 U
B-248	B248-S-2.5	12/20/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B248-S-15.0	12/20/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
	B248-S-25.0	12/20/1999	25	10 U	10 U	25 U	25 U	10 U	10 U
B-249	B249-S-2.5	12/20/1999	2.5	10 U	10 U	92	25 U	10 U	10 U
	B249-S-20.0	12/20/1999	20	10 U	10 U	25 U	25 U	10 U	10 U
	B249-S-25.0	12/20/1999	25	10 U	10 U	25 U	25 U	10 U	10 U
B-250	B250-S-20.0	12/21/1999	20	10 U	10 U	25 U	25 U	10 U	10 U
	B250-S-25.0	12/21/1999	25	10 U	10 U	25 U	25 U	10 U	10 U
	B250-S-35.0	12/21/1999	35	10 U	10 U	25 U	25 U	10 U	10 U
B-251	B251-S-2.5	12/22/1999	2.5	10 U	10 U	25 U	25 U	10 U	10 U
	B251-S-10.0	12/22/1999	10	10 U	10 U	25 U	25 U	10 U	10 U
	B251-S-25.0	12/22/1999	25	10 U	10 U	25 U	25 U	10 U	10 U
B-252	B252-S-15.0	12/22/1999	15	10 U	10 U	25 U	25 U	10 U	10 U
	B252-S-20.0	12/22/1999	20	10 U	10 U	25 U	25 U	10 U	10 U
	B252-S-25.0	12/22/1999	25	10 U	10 U	25 U	25 U	10 U	10 U
B-253	B253-S-25.0	12/23/1999	25	10 U	10 U	25 U	25 U	10 U	10 U
B-255	B255-S-10.0	01/14/2000	10	10 U	10 U	25 U	25 U	10 U	10 U
	B255-S-15.0	01/14/2000	15	10 U	10 U	25 U	25 U	10 U	10 U

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-256	B256-S-5.0	01/14/2000	5	10 U	10 U	25 U	25 U	10 U	10 U
	B256-S-10.0	01/14/2000	10	10 U	10 U	25 U	25 U	10 U	10 U
B-261	B261-S-10.0	01/20/2000	10	10 U	10 U	25 U	25 U	10 U	10 U
	B261-S-15.0	01/20/2000	15	10 U	10 U	25 U	25 U	10 U	10 U
	B261-S-30.0	01/20/2000	30	10 U	10 U	25 U	25 U	10 U	10 U
B-264	B264-S-2.5	08/17/2001	2.5	13 U	16	--	--	--	--
	B264-S-10.0	08/17/2001	10	13 U	20	--	--	--	--
B-265	B265-S-5.0	08/17/2001	5	12 U	12 U	--	--	--	--
B-266	B266-S-5.0	08/17/2001	5	16 U	16 U	--	--	--	--
B-272	B272-S-5.0	08/17/2001	5	17	130	--	--	--	--
B-273	B273-S-5.0	08/20/2001	5	18	22	--	--	--	--
B-274	B274-S-5.0	08/20/2001	5	14 U	14 U	--	--	--	--
B-304	B304-S-10.0	06/12/2008	10	--	**11800**	3270	--	--	--
	B304-S-19.5	06/12/2008	19.5	--	25.3	68.4 U	--	--	--
B-305	B305-S-10.0	06/12/2008	10	--	38.8	69.4 U	--	--	--
	B305-S-19.0	06/12/2008	19	--	29.2	68.9 U	--	--	--
B-313	B313-S-2.5	05/21/2009	2.5	--	15.9 U	53 U	--	--	--
	B313-S-10.0	05/21/2009	10	--	19.4 U	80.3	--	--	--
	B313-S-15.0	05/21/2009	15	--	19.9 U	66.5 U	--	--	--
C	C	11/07/2000	0	20 U	240	--	--	--	--
D	D	11/07/2000	0	20 U	300	--	--	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Gasoline	Diesel	Lube Oil Range Hydrocarbons	Heavy Fuel Oil Range Hydrocarbons	Jet fuels	Kerosene
MTCA Method A Cleanup Level				30	2000	NV	NV	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
DS-E	Dry Shed-East-0	06/18/1997	0	10 U	10 U	--	--	10 U	10 U
DS-N	Dry Shed-North-	06/18/1997	0	10 U	**3200**	--	--	10 U	10 U
DS-S	Dry Shed-South-	06/18/1997	0	10 U	10 U	--	--	10 U	10 U
DS-W	Dry Shed-West-0	06/18/1997	0	10 U	10 U	--	--	10 U	10 U
GP8	GP8-S-1.4	05/22/2009	1.4	--	118	389	--	--	--
	GP8-S-5.0	05/22/2009	5	--	17.6 U	58.8 U	--	--	--
	GP8-S-11.0	05/22/2009	11	--	189 U	11100	--	--	--
	GP8-S-15.0	05/22/2009	15	--	21.3 U	71.1 U	--	--	--
GP11	GP11-S-1.5	05/21/2009	1.5	--	128	276	--	--	--
	GP11-S-5.0	05/21/2009	5	--	19 U	63.3 U	--	--	--
	GP11-S-10.0	05/21/2009	10	--	20.5 U	68.2 U	--	--	--
	GP11-S-15.0	05/21/2009	15	--	19.8 U	65.9 U	--	--	--
MW-11S	PR11S,PR11D	10/23/1997	0	2000 U	**960000**	--	--	2000 U	2000 U
MW-24	T5070224	04/02/1996	11	--	--	--	--	--	--
MW-25	T5070000	04/02/1996	21	--	--	--	--	--	--
MW-26	T5070206	04/02/1996	16	--	--	--	--	--	--
MW-27	T5070213	04/02/1996	8.5	--	--	--	--	--	--
MW-30	T5070236	04/02/1996	11	--	--	--	--	--	--
MW-55	MW55-S-10.0	06/10/2008	10	--	26.3	68.6 U	--	--	--
	MW55-S-20.0	06/10/2008	20	--	37	70.3 U	--	--	--
MW-58D	MW58D-S-10.0	06/18/2008	10	--	33.3	103	--	--	--
	MW58D-S-13.5	06/18/2008	13.5	--	74.9	96.8	--	--	--
PP	Press Pit-10 In	06/18/1997	0	10 U	10 U	--	--	10 U	10 U

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
A1	A1	11/07/2000	0	--	--	--	--	--	--	790
A2	A2	11/07/2000	0	--	--	--	--	--	--	1200
A3	A3	11/07/2000	0	--	--	--	--	--	--	670
B-1	B1-S-2.5	04/06/2000	2.5	--	--	--	--	--	--	--
	B1-S-10.0	04/06/2000	10	--	--	--	--	--	--	--
	B1	11/07/2000	0	--	--	--	--	--	--	1200
B-2	B2-S-10.0	04/06/2000	0	--	--	--	--	--	--	--
	B2-S-2.5	04/06/2000	2.5	--	--	--	--	--	--	--
	B2	11/07/2000	0	--	--	--	--	--	--	810
B-3	B3	11/07/2000	0	--	--	--	--	--	--	1300
B-5	B5-S-10.0	04/06/2000	10	--	--	--	--	--	--	--
B-6	B6-S-2.5	04/06/2000	2.5	--	--	--	--	--	--	--
	B6-S-10.0	04/06/2000	10	--	--	--	--	--	--	--
B-7	B7-S-2.5	04/06/2000	2.5	--	--	--	--	--	--	--
	B7-S-10.0	04/06/2000	10	--	--	--	--	--	--	--
B-8	B8-S-2.5	04/06/2000	2.5	--	--	--	--	--	--	--
	B8-S-10.0	04/06/2000	10	--	--	--	--	--	--	--
B-9	B9-S-2.5	04/06/2000	2.5	--	--	--	--	--	--	--
	B9-S-10.0	04/06/2000	10	--	--	--	--	--	--	--
B-31	CELL 3-3.5/5.0	11/26/1997	3.5	10 U	--	--	20 U	--	--	--
	CELL 3-8/9.5	11/26/1997	8	10 U	--	--	20 U	--	--	--
	CELL 3-15.5/17	11/26/1997	15.5	10 U	--	--	20 U	--	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
B-32	CELL 5-S-6.5	12/05/1997	6.5	--	--	--	--	--	--	--
	CELL 5-S-14	12/08/1997	14	10 U	--	--	20 U	--	--	--
B-33	CELL 7 3.5-5.0	12/04/1997	3.5	10 U	--	--	20 U	--	--	--
	CELL 7 9.5-11.0	12/04/1997	9.5	10 U	--	--	20 U	--	--	--
	CELL 7 15.5-17.	12/04/1997	15.5	10 U	--	--	20 U	--	--	--
B-34	CELL 9-3.5/5.0	11/26/1997	3.5	10 U	--	--	20 U	--	--	--
	CELL 9-8.0/9.5	11/26/1997	8	10 U	--	--	20 U	--	--	--
	CELL 9-17.0/18.	11/26/1997	17	10 U	--	--	20 U	--	--	--
B-35	CELL 11-3.5-5.0	12/02/1997	3.5	10 U	--	--	20 U	--	--	--
	CELL 11-11.0-12	12/02/1997	11	10 U	--	--	20 U	--	--	--
	CELL 11-14.0-15	12/02/1997	14	10 U	--	--	20 U	--	--	--
B-36	CELL 13 5.0-6.5	12/03/1997	5	10 U	--	--	20 U	--	--	--
	CELL 13 9.5-11.	12/03/1997	9.5	10 U	--	--	20 U	--	--	--
	CELL 13 15.5-17	12/03/1997	15.5	10 U	--	--	20 U	--	--	--
B-37	CELL 16-5.0-6.5	12/02/1997	5	10 U	--	--	20 U	--	--	--
	CELL 16-15.5-17	12/03/1997	15.5	10 U	--	--	20 U	--	--	--
B-38	CELL 19-S-3.5	12/05/1997	3.5	--	--	--	--	--	--	--
	CELL 19-S-9.5	12/05/1997	9.5	--	--	--	--	--	--	--
	CELL 19-S-15.5	12/05/1997	15.5	--	--	--	--	--	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
B-40	CELL 24-S-6.5	12/11/1997	6.5	--	--	--	--	--	--	--
	CELL 24-S-14	12/11/1997	14	--	--	--	--	--	--	--
B-41	CELL 27-S-5	12/10/1997	5	--	--	--	--	--	--	--
	CELL 27-S-14	12/10/1997	14	--	--	--	--	--	--	--
B-42	CELL 30-S-8	12/09/1997	8	--	--	--	--	--	--	--
	CELL 30-S-12.5	12/09/1997	12.5	10 U	--	--	20 U	--	--	--
	CELL 30-S-15.5	12/09/1997	15.5	--	--	--	--	--	--	--
B-43	CELL 31-S-9.5	11/20/1997	9.5	--	--	--	--	--	--	--
B-44	CELL 33-S-12.5	11/20/1997	12.5	--	--	--	--	--	--	--
B-45	CELL 34-S-3.5	11/19/1997	3.5	10 U	--	--	20 U	--	--	--
	CELL 34-S-8.0	11/19/1997	8	--	--	--	--	--	--	--
B-46	CELL 35-S-5	11/19/1997	5	10 U	--	--	20 U	--	--	--
	CELL 35-S-9.5	11/19/1997	9.5	10 U	--	--	20 U	--	--	--
B-47	CELL 36-S-3.5	11/18/1997	3.5	--	--	--	--	--	--	--
	CELL 36-S-15.5	11/18/1997	15.5	--	--	--	--	--	--	--
B-48	CELL 37-S-12.5	11/20/1997	12.5	--	--	--	--	--	--	--
B-49	CELL 38-S-5	11/25/1997	5	--	--	--	--	--	--	--
	CELL 38-S-9.5	11/25/1997	9.5	--	--	--	--	--	--	--
B-50	CELL 39-S-3.5	11/21/1997	3.5	--	--	--	--	--	--	--
B-51	CELL 40-S-3.5	11/24/1997	3.5	--	--	--	--	--	--	--
	CELL 40-S-9.5	11/24/1997	9.5	10 U			20 U	--	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
B-52	CELL 42-S-9.5	11/20/1997	9.5	--	--	--	--	--	--	--
B-54	CELL 44-15.5	01/14/1998	15.5	--	--	--	--	--	--	--
B-55	CELL 45-17	01/15/1998	17	--	--	--	--	--	--	--
B-56	CELL 46-12.5	01/15/1998	12.5	--	--	--	--	--	--	--
B-57	CELL 47-14.0	01/16/1998	14	--	--	--	--	--	--	--
B-58	CELL 48-14.0	01/16/1998	14	--	--	--	--	--	--	--
B-69	B-12-S-0.5	06/16/1998	0.5	10 U	10 U	50 U	--	25 U	--	--
	B-12-S-2.5	06/16/1998	2.5	10 U	10 U	50 U	--	25 U	--	--
	B-12-S-5.0	06/16/1998	5	10 U	10 U	50 U	--	25 U	--	--
	B-12-S-10.0	06/16/1998	10	10 U	10 U	50 U	--	25 U	--	--
	B-12-S-17.0	06/16/1998	17	10 U	10 U	50 U	--	25 U	--	--
B-96	B-96-S-10.0	07/08/1998	10	10 U	10 U	51	--	25 U	--	--
B-97	B-97-S-10.0	07/08/1998	10	10 U	10 U	50 U	--	2088	--	--
B-99	B-99-S-15.0	07/08/1998	15	10 U	10 U	50 U	--	25 U	--	--
B-100	B-100-S-15.0	07/08/1998	15	10 U	10 U	50 U	--	25 U	--	--
B-119	B119-S-2.5	06/17/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B119-S-5.0	06/17/1999	5	10 U	10 U	50 U	--	25 U	--	--
	B119-S-15.0	06/17/1999	15	10 U	10 U	50 U	--	25 U	--	--
B-140	B140-S-10.0	10/06/1999	10	10 U	10 U	50 U	--	25 U	--	--
B-141	B141-S-2.5	10/06/1999	2.5	10 U	10 U	50 U	--	270	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
B-142	B142-S-10.0	10/07/1999	10	10 U	10 U	**4500**	--	25 U	--	--
B-147	B147-S-10.0	10/08/1999	10	10 U	10 U	**5100**	--	25 U	--	--
B-148	B148-S-10.0	10/08/1999	10	10 U	10 U	1200	--	25 U	--	--
	B148-S-15.0	10/08/1999	15	10 U	10 U	**2100**	--	25 U	--	--
B-149	B149-S-3.0	10/08/1999	3	10 U	10 U	50 U	--	25 U	--	--
	B149-S-10.0	10/08/1999	10	10 U	10 U	**6300**	--	25 U	--	--
B-150	B150-S-10.5	10/11/1999	10.5	10 U	10 U	50 U	--	830	--	--
B-153	B153-S-10.0	10/11/1999	10	10 U	10 U	50 U	--	29	--	--
B-155	B155-S-5.0	10/12/1999	5	10 U	10 U	50 U	--	56	--	--
	B155-S-9.0	10/12/1999	9	10 U	10 U	50 U	--	40	--	--
B-160	B160-S-10.0	10/13/1999	10	10 U	10 U	50 U	--	25 U	--	--
B-191	B191-S-5.0	10/25/1999	5	10 U	10 U	50 U	--	25 U	--	--
B-193	B193-S-2.5	10/25/1999	2.5	10 U	10 U	50 U	--	840	--	--
	B193-S-5.0	10/25/1999	5	10 U	10 U	50 U	--	920	--	--
	B193-S-10.0	10/25/1999	10	10 U	10 U	50 U	--	25 U	--	--
B-194	B194-S-2.5	10/25/1999	2.5	10 U	10 U	180	--	25 U	--	--
	B194-S-5.0	10/25/1999	5	10 U	10 U	100	--	25 U	--	--
	B194-S-10.0	10/25/1999	10	10 U	10 U	420	--	25 U	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
B-195	B195-S-2.5	10/26/1999	2.5	10 U	10 U	50 U	--	890	--	--
	B195-S-5.0	10/26/1999	5	10 U	10 U	50 U	--	230	--	--
	B195-S-10.0	10/26/1999	10	10 U	10 U	110	--	25 U	--	--
B-196	B196-S-3.0	10/26/1999	3	10 U	10 U	50 U	--	25 U	--	--
	B196-S-9.0	10/26/1999	9	10 U	10 U	50 U	--	460	--	--
B-197	B197-S-2.5	10/26/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B197-S-5.0	10/26/1999	5	10 U	10 U	50 U	--	32	--	--
	B197-S-10.0	10/26/1999	10	10 U	10 U	50 U	--	25 U	--	--
B-198	B198-S-2.5	10/27/1999	2.5	10 U	10 U	50 U	--	160	--	--
	B198-S-5.0	10/27/1999	5	10 U	10 U	50 U	--	25 U	--	--
B-199	B199-S-2.5	10/27/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B199-S-5.0	10/27/1999	5	10 U	10 U	50 U	--	25 U	--	--
	B199-S-10.0	10/27/1999	10	10 U	10 U	50 U	--	25 U	--	--
	B199-S-15.0	10/27/1999	15	10 U	10 U	50 U	--	25 U	--	--
B-200	B200-S-2.5	10/27/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B200-S-5.0	10/27/1999	5	10 U	10 U	50 U	--	25 U	--	--
B-201	B201-S-2.5	10/28/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B201-S-5.0	10/28/1999	5	10 U	10 U	50 U	--	25 U	--	--
	B201-S-15.0	10/28/1999	15	10 U	10 U	2000	--	25 U	--	--
	B201-S-20.0	10/28/1999	20	10 U	10 U	50 U	--	25 U	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
B-202	B202-S-2.5	10/28/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B202-S-5.0	10/28/1999	5	10 U	10 U	50 U	--	25 U	--	--
	B202-S-15.0	10/28/1999	15	10 U	10 U	50 U	--	25 U	--	--
B-203	B203-S-2.5	10/28/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B203-S-5.0	10/28/1999	5	10 U	10 U	50 U	--	25 U	--	--
	B203-S-10.0	10/28/1999	10	10 U	10 U	50 U	--	560	--	--
B-221	B221-S-2.5	11/09/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B221-S-7.5	11/09/1999	7.5	10 U	10 U	50 U	--	68	--	--
B-222	B222-S-2.5	11/10/1999	2.5	10 U	10 U	54	--	25 U	--	--
	B222-S-5.0	11/10/1999	5	10 U	10 U	165	--	25 U	--	--
	B222-S-10.0	11/10/1999	10	10 U	10 U	50 U	--	25 U	--	--
B-223	B223-S-5.0	11/10/1999	5	10 U	10 U	50 U	--	29	--	--
	B223-S-10.0	11/10/1999	10	10 U	10 U	50 U	--	25 U	--	--
B-224	B224-S-2.5	11/10/1999	2.5	10 U	10 U	52	--	25 U	--	--
B-226	B226-S-5.0	11/11/1999	5	10 U	10 U	50 U	--	25 U	--	--
B-227	B227-S-5.0	11/11/1999	5	10 U	10 U	50 U	--	25 U	--	--
B-228	B228-S-1.5	11/11/1999	1.5	10 U	10 U	50 U	--	1200	--	--
	B228-S-5.0	11/11/1999	5	10 U	10 U	50 U	--	25 U	--	--
B-230	B230-S-2.5	11/12/1999	2.5	10 U	10 U	50 U	--	60	--	--
	B230-S-5.0	11/12/1999	5	10 U	10 U	50 U	--	25 U	--	--
B-231	B231-S-2.5	11/12/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B231-S-7.0	11/12/1999	7	10 U	10 U	50 U	--	110	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
B-233	B233-S-15.0	12/07/1999	15	10 U	10 U	106	--	25 U	--	--
B-234	B234-S-10.0	12/07/1999	10	10 U	10 U	**7660**	--	25 U	--	--
	B234-S-15.0	12/07/1999	15	10 U	10 U	108	--	25 U	--	--
B-235	B235-S-10.0	12/08/1999	10	10 U	10 U	50 U	--	702	--	--
	B235-S-15.0	12/08/1999	15	10 U	10 U	50 U	--	25 U	--	--
	B235-S-25.0	12/08/1999	25	10 U	10 U	50 U	--	25 U	--	--
B-236	B236-S-10.0	12/08/1999	10	10 U	10 U	50 U	--	148	--	--
	B236-S-15.0	12/08/1999	15	10 U	10 U	50 U	--	25 U	--	--
B-238	B238-S-10.0	12/09/1999	10	10 U	10 U	50 U	--	25 U	--	--
	B238-S-15.0	12/09/1999	15	10 U	10 U	155	--	25 U	--	--
B-239	B239-S-10.0	12/09/1999	10	10 U	10 U	122	--	25 U	--	--
	B239-S-15.0	12/09/1999	15	10 U	10 U	81	--	25 U	--	--
B-240	B240-S-15.0	12/10/1999	15	10 U	10 U	50 U	--	25 U	--	--
B-241	B241-S-5.0	12/10/1999	5	10 U	10 U	50 U	--	120	--	--
	B241-S-15.0	12/10/1999	15	10 U	10 U	71	--	25 U	--	--
B-244	B244-S-25.0	12/15/1999	25	10 U	10 U	50 U	--	25 U	--	--
	B244-S-30.0	12/15/1999	30	10 U	10 U	50 U	--	25 U	--	--
	B244-S-35.0	12/15/1999	35	10 U	10 U	50 U	--	25 U	--	--
B-245	B245-S-15.0	12/15/1999	15	10 U	10 U	50 U	--	5230	--	--
	B245-S-30.0	12/15/1999	30	10 U	10 U	50 U	--	25 U	--	--
B-246	B246-S-5.0	12/16/1999	5	10 U	10 U	50 U	--	25 U	--	--
	B246-S-10.0	12/16/1999	10	10 U	10 U	50 U	--	25 U	--	--
	B246-S-20.0	12/16/1999	20	10 U	10 U	50 U	--	25 U	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
B-247	B247-S-2.5	12/17/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B247-S-5.0	12/17/1999	5	10 U	10 U	50 U	--	25 U	--	--
B-248	B248-S-2.5	12/20/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B248-S-15.0	12/20/1999	15	10 U	10 U	50 U	--	25 U	--	--
	B248-S-25.0	12/20/1999	25	10 U	10 U	50 U	--	25 U	--	--
B-249	B249-S-2.5	12/20/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B249-S-20.0	12/20/1999	20	10 U	10 U	50 U	--	25 U	--	--
	B249-S-25.0	12/20/1999	25	10 U	10 U	50 U	--	25 U	--	--
B-250	B250-S-20.0	12/21/1999	20	10 U	10 U	50 U	--	25	--	--
	B250-S-25.0	12/21/1999	25	10 U	10 U	50 U	--	25 U	--	--
	B250-S-35.0	12/21/1999	35	10 U	10 U	50 U	--	25 U	--	--
B-251	B251-S-2.5	12/22/1999	2.5	10 U	10 U	50 U	--	25 U	--	--
	B251-S-10.0	12/22/1999	10	10 U	10 U	50 U	--	25 U	--	--
	B251-S-25.0	12/22/1999	25	10 U	10 U	50 U	--	25 U	--	--
B-252	B252-S-15.0	12/22/1999	15	10 U	10 U	50 U	--	25 U	--	--
	B252-S-20.0	12/22/1999	20	10 U	10 U	50 U	--	25 U	--	--
	B252-S-25.0	12/22/1999	25	10 U	10 U	50 U	--	25 U	--	--
B-253	B253-S-25.0	12/23/1999	25	10 U	10 U	50 U	--	25 U	--	--
B-255	B255-S-10.0	01/14/2000	10	10 U	10 U	**4400**	--	25 U	--	--
	B255-S-15.0	01/14/2000	15	10 U	10 U	50 U	--	25 U	--	--

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
B-256	B256-S-5.0	01/14/2000	5	10 U	10 U	50 U	--	25 U	--	--
	B256-S-10.0	01/14/2000	10	10 U	10 U	50 U	--	25 U	--	--
B-261	B261-S-10.0	01/20/2000	10	10 U	10 U	50 U	--	25 U	--	--
	B261-S-15.0	01/20/2000	15	10 U	10 U	83	--	25 U	--	--
	B261-S-30.0	01/20/2000	30	10 U	10 U	50 U	--	25 U	--	--
B-264	B264-S-2.5	08/17/2001	2.5	--	--	--	--	--	--	85
	B264-S-10.0	08/17/2001	10	--	--	--	--	--	--	76
B-265	B265-S-5.0	08/17/2001	5	--	--	--	--	--	--	30 U
B-266	B266-S-5.0	08/17/2001	5	--	--	--	--	--	--	100
B-272	B272-S-5.0	08/17/2001	5	--	--	--	--	--	--	170
B-273	B273-S-5.0	08/20/2001	5	--	--	--	--	--	--	49
B-274	B274-S-5.0	08/20/2001	5	--	--	--	--	--	--	35 U
B-304	B304-S-10.0	06/12/2008	10	--	--	--	--	--	--	--
	B304-S-19.5	06/12/2008	19.5	--	--	--	--	--	--	--
B-305	B305-S-10.0	06/12/2008	10	--	--	--	--	--	--	--
	B305-S-19.0	06/12/2008	19	--	--	--	--	--	--	--
B-313	B313-S-2.5	05/21/2009	2.5	--	--	--	--	--	--	--
	B313-S-10.0	05/21/2009	10	--	--	--	--	--	--	--
	B313-S-15.0	05/21/2009	15	--	--	--	--	--	--	--
C	C	11/07/2000	0	--	--	--	--	--	--	1300
D	D	11/07/2000	0	--	--	--	--	--	--	1700

Table E-I-5
Summary of Petroleum Hydorcarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample ID	Date	Depth (ft. bgs)	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	Other Petroleum Hydrocarbons	PHC as Diesel	TPH	TPH (as motor oil)
MTCA Method A Cleanup Level				NV	NV	NV	NV	2000	NV	NV
MTCA Method B Cleanup Level				NV	NV	NV	NV	NV	NV	NV
MTCA Method C Cleanup Level				NV	NV	NV	NV	NV	NV	NV
Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	5,000	NV	NV
DS-E	Dry Shed-East-0	06/18/1997	0	10 U	--	--	1700	--	--	--
DS-N	Dry Shed-North-	06/18/1997	0	1600	--	--	3800	--	--	--
DS-S	Dry Shed-South-	06/18/1997	0	1300	--	--	8400	--	--	--
DS-W	Dry Shed-West-0	06/18/1997	0	10 U	--	--	1600	--	--	--
GP8	GP8-S-1.4	05/22/2009	1.4	--	--	--	--	--	--	--
	GP8-S-5.0	05/22/2009	5	--	--	--	--	--	--	--
	GP8-S-11.0	05/22/2009	11	--	--	--	--	--	--	--
	GP8-S-15.0	05/22/2009	15	--	--	--	--	--	--	--
GP11	GP11-S-1.5	05/21/2009	1.5	--	--	--	--	--	--	--
	GP11-S-5.0	05/21/2009	5	--	--	--	--	--	--	--
	GP11-S-10.0	05/21/2009	10	--	--	--	--	--	--	--
	GP11-S-15.0	05/21/2009	15	--	--	--	--	--	--	--
MW-11S	PR11S,PR11D	10/23/1997	0	2000 U	--	--	2500 U	--	--	--
MW-24	T5070224	04/02/1996	11	--	--	--	--	--	4000	--
MW-25	T5070000	04/02/1996	21	--	--	--	--	--	23 U	--
MW-26	T5070206	04/02/1996	16	--	--	--	--	--	110	--
MW-27	T5070213	04/02/1996	8.5	--	--	--	--	--	26	--
MW-30	T5070236	04/02/1996	11	--	--	--	--	--	29 U	--
MW-55	MW55-S-10.0	06/10/2008	10	--	--	--	--	--	--	--
	MW55-S-20.0	06/10/2008	20	--	--	--	--	--	--	--
MW-58D	MW58D-S-10.0	06/18/2008	10	--	--	--	--	--	--	--
	MW58D-S-13.5	06/18/2008	13.5	--	--	--	--	--	--	--
PP	Press Pit-10 In	06/18/1997	0	2100	--	--	11000	--	--	--

CELL 3

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.1	1	0.1	0.1
July 2004 Soil Characterization							
B-275	B275-S-0.5	07/08/2004	0.5	110	85	**400**	85
	B275-S-5.0	07/08/2004	5	10 U	10 U	10 U	10 U
	B275-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U
B-276	B276-S-0.5	07/13/2004	0.5	10 U	10 U	10 U	10 U
	B276-S-3.0	07/13/2004	3	10 U	10 U	10 U	10 U
B-277	B277-S-0.5	07/09/2004	0.5	9.4 U	9.4 U	9.4 U	9.4 U
	B277-S-2.5	07/09/2004	2.5	10 U	14	33	10 U
	B277-S-5.0	07/09/2004	5	9.6 U	9.6 U	9.6	9.6 U
	B277-S-10.0	07/09/2004	10	9.8 U	9.8 U	9.8 U	9.8 U
B-278	B278-S-0.5	07/09/2004	0.5	**150**	**140**	**400**	110
	B278-S-2.5	07/09/2004	2.5	20	12	26	9.9 U
	B278-S-10.0	07/09/2004	10	10 U	10 U	10 U	10 U
	B278-S-10.0-Dup	07/09/2004	10	9.6 U	9.6 U	9.6 U	9.6 U
B-279	B279-S-0.5	07/09/2004	0.5	10 U	10 U	10 U	10 U
	B279-S-2.5	07/09/2004	2.5	10 U	11	22	10 U
	B279-S-5.0	07/09/2004	5	9.8 U	9.8 U	9.8 U	9.8 U
	B279-S-10.0	07/09/2004	10	10 U	10 U	10 U	10 U
B-280	B280-S-0.5	07/13/2004	0.5	19	34	86	20
	B280-S-5.0	07/13/2004	5	120	**150**	**420**	120
	B280-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U
B-281	B281-S-0.5	07/09/2004	0.5	46	43	**160**	42
	B281-S-2.5	07/09/2004	2.5	37	25	120	30
	B281-S-10.0	07/09/2004	10	9.9 U	9.9 U	9.9 U	9.9 U

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.1	1	0.1	0.1
B-282	B282-S-0.5	07/08/2004	0.5	**360**	**190**	**980**	**300**
	B282-S-5.0	07/08/2004	5	24	10 U	26	10 U
	B282-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U
	B282-S-10.0-Dup	07/08/2004	10	10 U	10 U	17	10 U
B-283	B283-S-0.5	07/12/2004	0.5	9.9 U	9.9 U	9.9 U	9.9 U
	B283-S-2.5	07/12/2004	2.5	10 U	10 U	10 U	10 U
	B283-S-5.0	07/12/2004	5	10 U	10 U	10 U	10 U
B-284	B284-S-0.5	07/13/2004	0.5	**140**	100 U	**280**	100 U
	B284-S-2.5	07/13/2004	2.5	22	18	71	20
	B284-S-5.0	07/13/2004	5	10 U	10 U	10 U	10 U
	B284-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U
B-285	B285-S-0.5	07/13/2004	0.5	**370**	**570**	**1,700**	**460**
	B285-S-5.0	07/13/2004	5	82	91	**210**	53
	B285-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U
B-286	B286-S-0.5	07/08/2004	0.5	**490**	**150**	**1,500**	**480**
	B286-S-2.5	07/08/2004	2.5	12	18	30	10 U
	B286-S-5.0	07/08/2004	5	10 U	10 U	10 U	10 U
	B286-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U
B-287	B287-S-0.5	07/12/2004	0.5	100	**180**	**690**	**160**
	B287-S-2.5	07/12/2004	2.5	17	26	96	22
	B287-S-5.0	07/12/2004	5	45	57	**180**	53
	B287-S-10.0	07/12/2004	10	9.7 U	9.7 U	9.7 U	9.7 U
	B287-S-10.0-Dup	07/12/2004	10	9.9 U	9.9 U	9.9 U	9.9 U
B-288	B288-S-0.5	07/08/2004	0.5	120	89	**320**	76
	B288-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.1	1	0.1	0.1
B-289	B289-S-0.5	07/12/2004	0.5	9.1 U	9.1 U	9.1 U	9.1 U
	B289-S-2.5	07/12/2004	2.5	**2,400**	**810**	**1,300**	**520**
	B289-S-5.0	07/12/2004	5	22	10	19	10 U
	B289-S-10.0	07/12/2004	10	10 U	10 U	10 U	10 U
B-290	B290-S-0.5	07/13/2004	0.5	**180**	**140**	**740**	**170**
	B290-S-2.5	07/13/2004	2.5	**480**	**430**	**2,000**	**500**
	B290-S-5.0	07/13/2004	5	**140**	**170**	**220**	100 U
	B290-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U
	B290-S-10.0-Dup	07/13/2004	10	11 U	11 U	11 U	11 U
B-291	B291-S-0.5	07/12/2004	0.5	120	**250**	**750**	**170**
	B291-S-2.5	07/12/2004	2.5	**260**	**260**	**740**	**210**
	B291-S-5.0	07/12/2004	5	10 U	10 U	17	10 U
	B291-S-10.0	07/12/2004	10	11 U	11 U	11 U	11 U
B-292	B292-S-0.5	07/08/2004	0.5	**190**	**150**	**770**	**180**
	B292-S-2.5	07/08/2004	2.5	10 U	18	10 U	10 U
	B292-S-5.0	07/08/2004	5	10 U	10 U	10 U	10 U
	B292-S-5.0-Dup	07/08/2004	5	9.7 U	9.7 U	9.7 U	9.7 U
	B292-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U
B-293	B293-S-0.5	07/12/2004	0.5	**200**	130	**250**	100
	B293-S-2.5	07/12/2004	2.5	**1,400**	**450**	**1,700**	**580**
	B293-S-5.0	07/12/2004	5	9.9 U	9.9 U	9.9 U	9.9 U
	B293-S-10.0	07/12/2004	10	10 U	10 U	10 U	10 U

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.1	1	0.1	0.1
B-294	B294-S-0.5	07/12/2004	0.5	12	13	79	17
	B294-S-2.5	07/12/2004	2.5	**830**	**450**	**1,100**	**370**
	B294-S-5.0	07/12/2004	5	37	41	100	31
	B294-S-10.0	07/12/2004	10	9.8 U	9.8 U	9.8 U	9.8 U
B-295	B295-S-0.5	07/12/2004	0.5	**210**	**350**	**1,500**	**210**
	B295-S-2.5	07/12/2004	2.5	**210**	110	**290**	96
	B295-S-5.0	07/12/2004	5	10 U	10 U	10 U	10 U
	B295-S-10.0	07/12/2004	10	9.7 U	9.7 U	9.7 U	9.7 U
B-296	B296-S-0.5	07/09/2004	0.5	**2,000**	**2,100**	**7,500**	**2,300**
	B296-S-2.5	07/09/2004	2.5	10 U	10 U	10 U	10 U
	B296-S-5.0	07/09/2004	5	**140**	23	54	17
	B296-S-10.0	07/09/2004	10	15	10	35	10 U
B-297	B297-S-1.0	07/09/2004	1	**1,300**	110	**1,900**	**560**
	B297-S-2.5	07/09/2004	2.5	36	15	130	22
	B297-S-5.0	07/09/2004	5	10 U	10 U	10 U	10 U
	B297-S-10.0	07/09/2004	10	10 U	10 U	10 U	10 U
	B297-S-10.0-Dup	07/09/2004	10	10 U	10 U	10 U	10 U
B-299	B299-S-0.5	07/21/2004	0.5	16	33	83	21
	B299-S-2.5	07/21/2004	2.5	**160**	93	**210**	69
	B299-S-5.0	07/21/2004	5	10 U	14	33	10 U
	B299-S-10.0	07/21/2004	10	**230**	59	130	47
B-300	B300-S-0.5	07/21/2004	0.5	10 U	21	33	10 U
	B300-S-2.5	07/21/2004	2.5	25	31	81	24
	B300-S-10.0	07/21/2004	10	10 U	10 U	10 U	10 U

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.1	1	0.1	0.1
B-301	B301-S-0.5	07/21/2004	0.5	**1,600**	**3,600**	**14,000**	**2,400**
	B301-S-2.5	07/21/2004	2.5	28	43	130	24
	B301-S-5.0	07/21/2004	5	10 U	10 U	10 U	10 U
MW-45D	MW45-S-0.5	07/20/2004	0.5	**220**	**260**	**790**	**220**
	MW45-S-2.5	07/20/2004	2.5	11 U	11 U	11 U	11 U
	MW45-S-5.0	07/20/2004	5	10 U	10 U	10 U	10 U
	MW45-S-10.0	07/20/2004	10	10 U	10 U	10 U	10 U
MW-9S	MW9R-S-0.5	07/14/2004	0.5	**19,000**	**18,000**	**51,000**	**12,000**
	MW9R-S-2.5	07/14/2004	2.5	**2,700**	**890**	**1,500**	**580**
	MW9R-S-5.0	07/14/2004	5	**180**	75	**140**	49
	MW9R-S-10.0	07/14/2004	10	48	15	21	10 U
Historical Characterization							
B-204	B204-S-2.5	10/28/1999	2.5	**1,300 H**	**2,500 H**	**6,300 H**	**4,900 H**
B-205	B205-S-2.5	10/29/1999	2.5	**170 H**	**340 H**	**560 H**	**520 H**
B-206	B206-S-2.5	11/01/1999	2.5	10 U	10 U	27	16
	B206-S-5.0	11/01/1999	5	10 U	10 U	10 U	10 U
	B206-S-10.0	11/01/1999	10	**560 C**	130 C	**210 C**	**150 C**
B-207	B207-S-2.5	11/01/1999	2.5	99	**180 D**	**310 D**	**220 D**
	B207-S-5.0	11/01/1999	5	10 U	10 U	10 U	10 U
	B207-S-10.0	11/01/1999	10	10 U	10 U	15	11
B-208	B208-S-5.0	11/01/1999	5	**480**	**450**	**1,200**	**710**
	B208-S-10.0	11/01/1999	10	10 U	10 U	10 U	10 U
B-209	B209-S-2.5	11/01/1999	2.5	16	12	16	13
	B209-S-10.0	11/01/1999	10	10 U	10 U	10 U	10 U
	B209-S-901	11/01/1999	10	10 U	10 U	10 U	10 U

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.1	1	0.1	0.1
B-210	B210-S-2.5	11/01/1999	2.5	10 U	10 U	13	11
	B210-S-5.0	11/01/1999	5	**340**	110	**370**	**250**
	B210-S-15.0	11/01/1999	15	10 U	10 U	10 U	10 U
B-212	B212-S-5.0	11/02/1999	5	10 U	10	19	11
B-213	B213-S-2.5	11/02/1999	2.5	34	71	**160**	110
B-215	B215-S-2.5	11/04/1999	2.5	110	92	**330**	**250**
	B215-S-5.0	11/04/1999	5	100 U,D	100 U,D	**170 D**	**150 D**
	B215-S-10.0	11/04/1999	10	10 U	10 U	10 U	10 U
B-216	B216-S-5.0	11/04/1999	5	10 U	10 U	10 U	10 U
B-217	B217-S-2.5	11/05/1999	2.5	**420 D**	**390 D**	**540 D**	**560 D**
	B217-S-10.0	11/05/1999	10	120	**140**	**180**	**180**
	B217-S-15.0	11/05/1999	15	10 U	10 U	10 U	10 U
B-218	B218-S-5.0	11/08/1999	5	**1,800**	**1,700**	**2,100**	**2,300**
	B218-S-15.0	11/08/1999	15	10 U	10 U	10 U	10 U
B-219	B219-S-10.0	11/08/1999	10	10 U	10 U	12	11
B-220	B220-S-5.0	11/08/1999	5	**2,000**	**1,200**	**2,700**	**2,300**
	B220-S-10.0	11/08/1999	10	12	10 U	17	16
MW9	HC-W10/S3	02/04/1991	5.5	--	--	--	--
	HC-W10/S9	02/04/1991	20.5	--	--	--	--
MW-28S	T5070182	04/02/1996	0.5	**1,800**	**1,600**	**2,400**	**1,700**
	T5070183	04/02/1996	6	140 U	140 U	70	240 U
SPY-01	HC-SPY/01	02/06/1991	0.5	--	--	--	--
SPY-02	HC-SPY/02	02/06/1991	0.5	--	--	--	--
SPY-03	HC-SPY/03	02/06/1991	0.5	--	--	--	--

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.1	1	0.1	0.1
SPY-04	HC-SPY/04	02/06/1991	0.5	--	--	--	--
TP-17	TP17-0.5	05/03/1993	0.5	1,300 U	1,300 U	1,300 U	1,300 U
TP-18	TP18-3	05/03/1993	3	330 U	330 U	330 U	330 U
	TP18-7	05/03/1993	7	3,300 U	3,300 U	3,300 U	3,300 U
TP-19	TP19-0.5	05/03/1993	0.5	**10,000**	**5,100**	**14,000**	**4,000**
TP-22	TP22-0.5	05/03/1993	0.5	1,700 U	1,700 U	**3200**	1,700 U
B220-S2-ESW	EX-B-220-S2-ESW	04/17/2002	2	67	78	**190**	130
B220-S2-NSW	EX-B-220-S2-NSW	04/17/2002	2	27	15	34	24
B220-S2-SSW	EX-B-220-S2-SSW	04/17/2002	2	11 U	16	27	19
B220-S2-WSW	EX-B-220-S2-WSW	04/17/2002	2	**660**	**410**	**440**	**280**
B220-S4	EX-B-220-S4-COM	04/17/2002	4	**240**	**550**	**1200**	**720**
SPY-01A	EX-SPY-01-S 1A	05/09/2002	1	**35,000**	**14,000**	**32,000**	**26,000**
	EX-SPY-01-S 5A	05/09/2002	5	19	19	63	44
	EX-SPY-01-S 10A	05/09/2002	10	26 U	26 U	26 U	26 U
SPY-01B	EX-SPY-01-S 1B	05/09/2002	1	**300**	**290**	**630**	**440**
	EX-SPY-01-S 5B	05/09/2002	5	**7,900**	**1,600**	**4,100**	**3,400**
	EX-SPY-01-S 10B	05/09/2002	10	**3,500**	**800**	**1,100**	**930**
SPY-01C	EX-SPY-01-S 1C	05/09/2002	1	**1,400**	**2,000**	**3,500**	**2,300**
	EX-SPY-01-S 5C	05/09/2002	5	13 U	13 U	13 U	13 U
	EX-SPY-01-S 10C	05/09/2002	10	13 U	13 U	13 U	13 U
SPY-01D	EX-SPY-01-S 1D	05/09/2002	1	**190**	88	**150**	130
	EX-SPY-01-S 5D	05/09/2002	5	12 U	12 U	12 U	12 U
	EX-SPY-01-S 10D	05/09/2002	10	24 U	24 U	24 U	24 U

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.1	1	0.1	0.1
SPY-01E	EX-SPY-01-S 1E	05/09/2002	1	**660**	**970**	**1,700**	**1,200**
	EX-SPY-01-S 5E	05/09/2002	5	13 U	13 U	29	21
	EX-SPY-01-S 10E	05/09/2002	10	13 U	13 U	13 U	13 U
SPY-01F	EX-SPY-01-S 1F	05/09/2002	1	**180**	**150**	**440**	**260**
	EX-SPY-01-S 5F	05/09/2002	5	11 U	11 U	11 U	11 U
	EX-SPY-01-S 10F	05/09/2002	10	13 U	13 U	13 U	13 U
SPY-01G	EX-SPY-01-S 1G	05/09/2002	1	**540**	**290**	**1,300**	**790**
	EX-SPY-01-S 3G	05/09/2002	3	12 U	12 U	14	12 U
	EX-SPY-01-S 5G	05/09/2002	5	12 U	12 U	12 U	12 U
	EX-SPY-01-S 10G	05/09/2002	10	12 U	12 U	12 U	12 U
SPY-01H	EX-SPY-01-S 1H	05/09/2002	1	110	**180**	**420**	**260**
	EX-SPY-01-S 5H	05/09/2002	5	33	51	130	90
	EX-SPY-01-S 10H	05/09/2002	10	13 U	13 U	13 U	13 U

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Chrysene	Dibenz(a,h)-anthracene	Indeno(1,2,3-cd)-pyrene	cPAH TEQ
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.01	0.1	0.1	NA
July 2004 Soil Characterization							
B-275	B275-S-0.5	07/08/2004	0.5	**210**	54	**330**	**185**
	B275-S-5.0	07/08/2004	5	10 U	10 U	10 U	ND
	B275-S-10.0	07/08/2004	10	10 U	10 U	10 U	ND
B-276	B276-S-0.5	07/13/2004	0.5	10 U	10 U	10 U	ND
	B276-S-3.0	07/13/2004	3	10 U	10 U	10 U	ND
B-277	B277-S-0.5	07/09/2004	0.5	9.4 U	9.4 U	9.4 U	ND
	B277-S-2.5	07/09/2004	2.5	16	10 U	24	16
	B277-S-5.0	07/09/2004	5	9.6 U	9.6 U	9.6 U	ND
	B277-S-10.0	07/09/2004	10	9.8 U	9.8 U	9.8 U	ND
B-278	B278-S-0.5	07/09/2004	0.5	**340**	28	**170**	**340**
	B278-S-2.5	07/09/2004	2.5	37	9.9 U	9.9 U	37
	B278-S-10.0	07/09/2004	10	10 U	10 U	10 U	ND
	B278-S-10.0-Dup	07/09/2004	10	9.6 U	9.6 U	9.6 U	ND
B-279	B279-S-0.5	07/09/2004	0.5	10 U	10 U	10 U	ND
	B279-S-2.5	07/09/2004	2.5	16	10 U	16	16
	B279-S-5.0	07/09/2004	5	9.8 U	9.8 U	9.8 U	ND
	B279-S-10.0	07/09/2004	10	10 U	10 U	10 U	ND
B-280	B280-S-0.5	07/13/2004	0.5	38	10 U	50	38
	B280-S-5.0	07/13/2004	5	**250**	35	**200**	**250**
	B280-S-10.0	07/13/2004	10	10 U	10 U	10 U	ND
B-281	B281-S-0.5	07/09/2004	0.5	88	25	**210**	88
	B281-S-2.5	07/09/2004	2.5	63	13	86	63
	B281-S-10.0	07/09/2004	10	9.9 U	9.9 U	9.9 U	ND

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Chrysene	Dibenz(a,h)-anthracene	Indeno(1,2,3-cd)-pyrene	cPAH TEQ
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.01	0.1	0.1	NA
B-282	B282-S-0.5	07/08/2004	0.5	**890**	100 U	**560**	**890**
	B282-S-5.0	07/08/2004	5	41	10 U	10 U	41
	B282-S-10.0	07/08/2004	10	10 U	10 U	10 U	ND
	B282-S-10.0-Dup	07/08/2004	10	15	10 U	10 U	15.0
B-283	B283-S-0.5	07/12/2004	0.5	9.9 U	9.9 U	9.9 U	ND
	B283-S-2.5	07/12/2004	2.5	10	10 U	10 U	10.0
	B283-S-5.0	07/12/2004	5	10 U	10 U	10 U	ND
B-284	B284-S-0.5	07/13/2004	0.5	**320**	100 U	100 U	110
	B284-S-2.5	07/13/2004	2.5	58	11 U	29	33
	B284-S-5.0	07/13/2004	5	10 U	10 U	10 U	ND
	B284-S-10.0	07/13/2004	10	10 U	10 U	10 U	ND
B-285	B285-S-0.5	07/13/2004	0.5	**1,000**	200 U	**860**	**929**
	B285-S-5.0	07/13/2004	5	**150**	15	76	136
	B285-S-10.0	07/13/2004	10	10 U	10 U	10 U	ND
B-286	B286-S-0.5	07/08/2004	0.5	**1,500**	100 U	**260**	**443**
	B286-S-2.5	07/08/2004	2.5	33	10 U	26	26
	B286-S-5.0	07/08/2004	5	10 U	10 U	10 U	ND
	B286-S-10.0	07/08/2004	10	10 U	10 U	10 U	ND
B-287	B287-S-0.5	07/12/2004	0.5	**310**	51 U	**370**	**318**
	B287-S-2.5	07/12/2004	2.5	82	9.8 U	41	45
	B287-S-5.0	07/12/2004	5	130	11	66	94
	B287-S-10.0	07/12/2004	10	9.7 U	9.7 U	9.7 U	ND
	B287-S-10.0-Dup	07/12/2004	10	9.9 U	9.9 U	9.9 U	ND
B-288	B288-S-0.5	07/08/2004	0.5	**200**	48	**270**	**174**
	B288-S-10.0	07/08/2004	10	10 U	10 U	10 U	ND

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Chrysene	Dibenz(a,h)-anthracene	Indeno(1,2,3-cd)-pyrene	cPAH TEQ
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.01	0.1	0.1	NA
B-289	B289-S-0.5	07/12/2004	0.5	9.1 U	9.1 U	9.1 U	ND
	B289-S-2.5	07/12/2004	2.5	**5,000**	99 U	**260**	**1313**
	B289-S-5.0	07/12/2004	5	46	10 U	10 U	16
	B289-S-10.0	07/12/2004	10	10 U	10 U	10 U	ND
B-290	B290-S-0.5	07/13/2004	0.5	**360**	100 U	**550**	**313**
	B290-S-2.5	07/13/2004	2.5	**1,100**	100 U	**470**	**791**
	B290-S-5.0	07/13/2004	5	**220**	100 U	110	**229**
	B290-S-10.0	07/13/2004	10	10 U	10 U	10 U	ND
	B290-S-10.0-Dup	07/13/2004	10	11 U	11 U	11 U	ND
B-291	B291-S-0.5	07/12/2004	0.5	**310**	100 U	**420**	**404**
	B291-S-2.5	07/12/2004	2.5	**560**	100 U	**390**	**431**
	B291-S-5.0	07/12/2004	5	16	10 U	10	9.4
	B291-S-10.0	07/12/2004	10	11 U	11 U	11 U	ND
B-292	B292-S-0.5	07/08/2004	0.5	**390**	110 U	**340**	**307**
	B292-S-2.5	07/08/2004	2.5	10 U	10 U	25	23
	B292-S-5.0	07/08/2004	5	10 U	10 U	10 U	ND
	B292-S-5.0-Dup	07/08/2004	5	9.7 U	9.7 U	9.7 U	ND
	B292-S-10.0	07/08/2004	10	10 U	10 U	10 U	ND
B-293	B293-S-0.5	07/12/2004	0.5	**270**	30	**200**	**211**
	B293-S-2.5	07/12/2004	2.5	**3,000**	100 U	**340**	**887**
	B293-S-5.0	07/12/2004	5	9.9 U	9.9 U	9.9 U	ND
	B293-S-10.0	07/12/2004	10	10 U	10 U	10 U	ND

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Chrysene	Dibenz(a,h)-anthracene	Indeno(1,2,3-cd)-pyrene	cPAH TEQ
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.01	0.1	0.1	NA
B-294	B294-S-0.5	07/12/2004	0.5	37	10 U	37	28
	B294-S-2.5	07/12/2004	2.5	**1,300**	99 U	**340**	**732**
	B294-S-5.0	07/12/2004	5	85	9.5 U	33	62
	B294-S-10.0	07/12/2004	10	9.8 U	9.8 U	9.8 U	ND
B-295	B295-S-0.5	07/12/2004	0.5	**650**	110 U	**620**	**616**
	B295-S-2.5	07/12/2004	2.5	**260**	19	120	**186**
	B295-S-5.0	07/12/2004	5	10 U	10 U	10 U	ND
	B295-S-10.0	07/12/2004	10	9.7 U	9.7 U	9.7 U	ND
B-296	B296-S-0.5	07/09/2004	0.5	**5,900**	**420**	**2,500**	3631
	B296-S-2.5	07/09/2004	2.5	10 U	10 U	10 U	ND
	B296-S-5.0	07/09/2004	5	**220**	9.9 U	11	48
	B296-S-10.0	07/09/2004	10	44	10 U	12	18
B-297	B297-S-1.0	07/09/2004	1	**1,700**	**190**	**200**	**542**
	B297-S-2.5	07/09/2004	2.5	100	10 U	30	38
	B297-S-5.0	07/09/2004	5	10 U	10 U	10 U	ND
	B297-S-10.0	07/09/2004	10	10 U	10 U	10 U	ND
	B297-S-10.0-Dup	07/09/2004	10	10 U	10 U	10 U	ND
B-299	B299-S-0.5	07/21/2004	0.5	44	10 U	51	51
	B299-S-2.5	07/21/2004	2.5	**250**	14	79	**149**
	B299-S-5.0	07/21/2004	5	22	10 U	14	20
	B299-S-10.0	07/21/2004	10	**270**	10 U	24	105
B-300	B300-S-0.5	07/21/2004	0.5	20	10 U	16	28
	B300-S-2.5	07/21/2004	2.5	46	11 U	67	52
	B300-S-10.0	07/21/2004	10	10 U	10 U	10 U	ND

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Chrysene	Dibenz(a,h)-anthracene	Indeno(1,2,3-cd)-pyrene	cPAH TEQ
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.01	0.1	0.1	NA
B-301	B301-S-0.5	07/21/2004	0.5	**4,600**	**1,100**	**6,600**	**6,216**
	B301-S-2.5	07/21/2004	2.5	48	12	77	71
	B301-S-5.0	07/21/2004	5	10 U	10 U	10 U	ND
MW-45D	MW45-S-0.5	07/20/2004	0.5	**410**	74	**510**	**446**
	MW45-S-2.5	07/20/2004	2.5	11 U	11 U	11 U	ND
	MW45-S-5.0	07/20/2004	5	10 U	10 U	10 U	ND
	MW45-S-10.0	07/20/2004	10	10 U	10 U	10 U	ND
MW-9S	MW9R-S-0.5	07/14/2004	0.5	**38,000**	**3,600**	**29,000**	**29,840**
	MW9R-S-2.5	07/14/2004	2.5	**2,700**	53	500 U	**1,425**
	MW9R-S-5.0	07/14/2004	5	**240**	10 U	44	119
	MW9R-S-10.0	07/14/2004	10	39	10 U	10 U	24
Historical Characterization							
B-204	B204-S-2.5	10/28/1999	2.5	**6,300 H**	**450 H**	**2,100 H**	**4,068**
B-205	B205-S-2.5	10/29/1999	2.5	**390 H**	83 H	**440 H**	**521**
B-206	B206-S-2.5	11/01/1999	2.5	25	10 U	10 U	11
	B206-S-5.0	11/01/1999	5	10 U	10 U	10 U	ND
	B206-S-10.0	11/01/1999	10	**630 C**	100 U,C	100 U,C	**238**
B-207	B207-S-2.5	11/01/1999	2.5	**260**	100 U,D	**210 D**	**272**
	B207-S-5.0	11/01/1999	5	10 U	10 U	10 U	ND
	B207-S-10.0	11/01/1999	10	10 U	10 U	10	9.7
B-208	B208-S-5.0	11/01/1999	5	**1,100**	63	**350**	**741**
	B208-S-10.0	11/01/1999	10	10 U	10 U	10 U	ND
B-209	B209-S-2.5	11/01/1999	2.5	20	10 U	13	19
	B209-S-10.0	11/01/1999	10	10 U	10 U	10 U	ND
	B209-S-901	11/01/1999	10	10 U	10 U	10 U	ND

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Chrysene	Dibenz(a,h)-anthracene	Indeno(1,2,3-cd)-pyrene	cPAH TEQ
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.01	0.1	0.1	NA
B-210	B210-S-2.5	11/01/1999	2.5	14	10 U	11	9.6
	B210-S-5.0	11/01/1999	5	**560**	20	95	**223**
	B210-S-15.0	11/01/1999	15	10 U	10 U	10 U	ND
B-212	B212-S-5.0	11/02/1999	5	15	10 U	14	15.6
B-213	B213-S-2.5	11/02/1999	2.5	91	22	**160**	121
B-215	B215-S-2.5	11/04/1999	2.5	**310**	26	98	**177**
	B215-S-5.0	11/04/1999	5	**240 D**	100 U,D	100 U,D	99
	B215-S-10.0	11/04/1999	10	11	10 U	10 U	7.6
B-216	B216-S-5.0	11/04/1999	5	10 U	10 U	10 U	ND
B-217	B217-S-2.5	11/05/1999	2.5	**680 D**	100 U,D	**380 D**	**592**
	B217-S-10.0	11/05/1999	10	**200**	27	110	**204**
	B217-S-15.0	11/05/1999	15	10 U	10 U	10 U	ND
B-218	B218-S-5.0	11/08/1999	5	**4,900**	**150**	**690**	**2,453**
	B218-S-15.0	11/08/1999	15	10 U	10 U	10 U	ND
B-219	B219-S-10.0	11/08/1999	10	10 U	10 U	10 U	8.9
B-220	B220-S-5.0	11/08/1999	5	**4,400**	120	**620**	**2,018**
	B220-S-10.0	11/08/1999	10	24	10 U	10 U	11
MW9	HC-W10/S3	02/04/1991	5.5	--	--	--	--
	HC-W10/S9	02/04/1991	20.5	--	--	--	--
MW-28S	T5070182	04/02/1996	0.5	**2,000**	**710**	**1,600**	**2,441**
	T5070183	04/02/1996	6	52	200 U	180 U	116
SPY-01	HC-SPY/01	02/06/1991	0.5	--	--	--	--
SPY-02	HC-SPY/02	02/06/1991	0.5	--	--	--	--
SPY-03	HC-SPY/03	02/06/1991	0.5	--	--	--	--

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Chrysene	Dibenz(a,h)-anthracene	Indeno(1,2,3-cd)-pyrene	cPAH TEQ
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.01	0.1	0.1	NA
SPY-04	HC-SPY/04	02/06/1991	0.5	--	--	--	--
TP-17	TP17-0.5	05/03/1993	0.5	1,300 U	--	1,300 U	**917**[a]
TP-18	TP18-3	05/03/1993	3	330 U	--	330 U	**233**[a]
	TP18-7	05/03/1993	7	3,300 U	--	3,300 U	**2,327**[a]
TP-19	TP19-0.5	05/03/1993	0.5	**16,000**	--	4,000 U	**8,260**[a]
TP-22	TP22-0.5	05/03/1993	0.5	**1,700**	--	**2,000**	**1,557**[a]
B220-S2-ESW	EX-B-220-S2-ESW	04/17/2002	2	**180**	12 U	79	127
B220-S2-NSW	EX-B-220-S2-NSW	04/17/2002	2	39	11 U	15	26
B220-S2-SSW	EX-B-220-S2-SSW	04/17/2002	2	20	11 U	24	24
B220-S2-WSW	EX-B-220-S2-WSW	04/17/2002	2	**1,000**	44	130	**575**
B220-S4	EX-B-220-S4-COM	04/17/2002	4	**1,100**	81	**560**	**841**
SPY-01A	EX-SPY-01-S 1A	05/09/2002	1	**61,000**	**2,300**	**14,000**	**25,540**
	EX-SPY-01-S 5A	05/09/2002	5	60	13 U	30	36
	EX-SPY-01-S 10A	05/09/2002	10	26 U	26 U	26 U	ND
SPY-01B	EX-SPY-01-S 1B	05/09/2002	1	**470**	110	**1,200**	**563**
	EX-SPY-01-S 5B	05/09/2002	5	**10,000**	**340**	**1,500**	**3,424**
	EX-SPY-01-S 10B	05/09/2002	10	**3,300**	84	**460**	**1,440**
SPY-01C	EX-SPY-01-S 1C	05/09/2002	1	**8,800**	**460**	**3,600**	**3,214**
	EX-SPY-01-S 5C	05/09/2002	5	13 U	13 U	13	10
	EX-SPY-01-S 10C	05/09/2002	10	13 U	13 U	13 U	ND
SPY-01D	EX-SPY-01-S 1D	05/09/2002	1	**230**	26	**210**	**161**
	EX-SPY-01-S 5D	05/09/2002	5	12 U	12 U	12 U	ND
	EX-SPY-01-S 10D	05/09/2002	10	24 U	24 U	24 U	ND

Table E-3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil (µg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Chrysene	Dibenz(a,h)-anthracene	Indeno(1,2,3-cd)-pyrene	cPAH TEQ
MTCA Method B soil CUL				140	140	140	140
MTCA Method C soil CUL				18,000	18,000	18,000	18,000
Toxicity Equivalent Factor				0.01	0.1	0.1	NA
SPY-01E	EX-SPY-01-S 1E	05/09/2002	1	**1,100**	**240**	**2,500**	**1,611**
	EX-SPY-01-S 5E	05/09/2002	5	18	13 U	26	16
	EX-SPY-01-S 10E	05/09/2002	10	13 U	13 U	13 U	ND
SPY-01F	EX-SPY-01-S 1F	05/09/2002	1	**350**	70	**680**	**317**
	EX-SPY-01-S 5F	05/09/2002	5	11 U	11 U	11 U	ND
	EX-SPY-01-S 10F	05/09/2002	10	13 U	13 U	13 U	ND
SPY-01G	EX-SPY-01-S 1G	05/09/2002	1	**1,400**	100	**560**	**633**
	EX-SPY-01-S 3G	05/09/2002	3	16	12 U	13	11
	EX-SPY-01-S 5G	05/09/2002	5	12 U	12 U	12 U	ND
	EX-SPY-01-S 10G	05/09/2002	10	12 U	12 U	12 U	ND
SPY-01H	EX-SPY-01-S 1H	05/09/2002	1	**220**	75	**620**	**331**
	EX-SPY-01-S 5H	05/09/2002	5	57	29	**250**	105
	EX-SPY-01-S 10H	05/09/2002	10	13 U	13 U	13 U	ND

Table E-3-2 Notes
Carcinogenic Polycyclic Aromatic Hydrocarbons (µg/kg)
Lake River Industrial Site

-- = not analyzed.

Bold values exceed MTCA method B unrestricted land use soil cleanup level for direct contact (ingestion) (Ecology, 2001). Non-detect values ("U") were not compared to cleanup level.

C = MRL is elevated because sample required diluting.

cPAH TEQ = carcinogenic polycyclic aromatic hydrocarbon toxicity equivalent.

CUL = cleanup level.

D = MRL is elevated because of matrix interferences and because sample required diluting.

ft bgs = feet below ground surface.

H = analysis was performed past the recommended hold time.

MTCA = Model Toxics Control Act, Washington State Department of Ecology, November 2001.

µg/kg = micrograms per kilogram.

NA = not applicable.

ND = the cPAH analytes were not detected at or above their respective method reporting limits.

U = analyte was not detected above MRL.

[a] TEQ calculation is missing one or more of the cPAHs.

Tables E-4-2 through E-4-6 Notes
Lake River Industrial Site

-- = not analyzed.

B = boring.

Bold values exceed MTCA method B unrestricted land use soil cleanup level for direct contact (ingestion) (Ecology, 2001) (TPH concentrations are compared against MTCA Method A cleanup levels for unrestricted land use). Non-detect values ("U") were not compared with MTCA method B.

C = MRL is elevated because sample required diluting.

D = MRL is elevated because of matrix interferences and because sample required diluting.

ft bgs = feet below ground surface.

H = analysis was performed past the recommended hold time.

HC = Hart Crowser.

J = Result is an estimated concentration.

JE = result is an estimated concentration because the value exceeds the calibration range.

JN = result is presumptive; analyte was tentatively identified at an estimated concentration, but confirmation analysis was not performed.

JW = post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance. treat as estimated concentration.

mg/kg = milligrams per kilogram.

MRL = method reporting limit.

MTCA = Model Toxics Control Act, Washington State Department of Ecology, November 2001.

MW = monitoring well.

N = result is presumptive; analyte was tentatively identified, but confirmation analysis was not performed.

N*J = result is presumptive and outside control criteria. treat as an estimated concentration.

NA = not applicable/available.

Non-PHC = chemicals identified in the PHC range that did not match a typical TPH chromatograph

PHC = petroleum hydrocarbon.

SPY = south pole yard.

TP = test pit.

U = analyte was not detected above MRL.

ug/kg = micrograms per kilogram.

*Values outside control criteria.

[a]Using MTCA Method B CUL for 1,3-dichloropropene.

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III)
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	32	0.67	5,600	160	80	NA	120000
Clark County Natural Background Concentration						52276	NA	5.81	NA	2.07	0.93	NA	NA
July 2004 Soil Characterization													
B-275	B275-S-0.5	07/08/2004	0.5	K2405093-001	mg/kg	--	--	**6.7**	--	--	--	--	15.3
	B275-S-5.0	07/08/2004	5	K2405093-002	mg/kg	--	--	**7.2**	--	--	--	--	21
	B275-S-10.0	07/08/2004	10	K2405093-003	mg/kg	--	--	**6**	--	--	--	--	15
B-276	B276-S-0.5	07/13/2004	0.5	K2405170-055	mg/kg	--	--	**2.4**	--	--	--	--	15.1
	B276-S-3.0	07/13/2004	3	K2405170-056	mg/kg	--	--	**1.6**	--	--	--	--	30.4
B-277	B277-S-0.5	07/09/2004	0.5	K2405093-037	mg/kg	--	--	2.1 U	--	--	--	--	7.7
	B277-S-2.5	07/09/2004	2.5	K2405093-038	mg/kg	--	--	**2.6**	--	--	--	--	20.2
	B277-S-5.0	07/09/2004	5	K2405093-039	mg/kg	--	--	2.3 U	--	--	--	--	23.1
	B277-S-10.0	07/09/2004	10	K2405093-040	mg/kg	--	--	**2.6**	--	--	--	--	21
B-278	B278-S-0.5	07/09/2004	0.5	K2405093-042	mg/kg	--	--	**6.3**	--	--	--	--	26.1
	B278-S-2.5	07/09/2004	2.5	K2405093-043	mg/kg	--	--	**2.9**	--	--	--	--	12.9
	B278-S-10.0	07/09/2004	10	K2405093-044	mg/kg	--	--	**2.9**	--	--	--	--	26.5
	B278-S-10.0-Dup	07/09/2004	10	K2405093-044	mg/kg	--	--	**2.9**	--	--	--	--	32.7
B-279	B279-S-0.5	07/09/2004	0.5	K2405093-047	mg/kg	--	--	**3**	--	--	--	--	14
	B279-S-2.5	07/09/2004	2.5	K2405093-048	mg/kg	--	--	**3.9**	--	--	--	--	15.1
	B279-S-5.0	07/09/2004	5	K2405093-049	mg/kg	--	--	**5**	--	--	--	--	20.9
	B279-S-10.0	07/09/2004	10	K2405093-050	mg/kg	--	--	**3.4**	--	--	--	--	26.1
B-280	B280-S-0.5	07/13/2004	0.5	K2405170-051	mg/kg	--	--	**4.3**	--	--	--	--	13.5
	B280-S-5.0	07/13/2004	5	K2405170-052	mg/kg	--	--	**5.4**	--	--	--	--	22.2
	B280-S-10.0	07/13/2004	10	K2405170-053	mg/kg	--	--	**2.8**	--	--	--	--	20.3
B-281	B281-S-0.5	07/09/2004	0.5	K2405093-033	mg/kg	--	--	**4.8**	--	--	--	--	17.4
	B281-S-2.5	07/09/2004	2.5	K2405093-034	mg/kg	--	--	**2.9**	--	--	--	--	10.4
	B281-S-10.0	07/09/2004	10	K2405093-035	mg/kg	--	--	**10.1**	--	--	--	--	22.4

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III)
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	32	0.67	5,600	160	80	NA	120000
Clark County Natural Background Concentration						52276	NA	5.81	NA	2.07	0.93	NA	NA
B-282	B282-S-0.5	07/08/2004	0.5	K2405093-004	mg/kg	--	--	**25.9**	--	--	--	--	24
	B282-S-5.0	07/08/2004	5	K2405093-005	mg/kg	--	--	**6.2**	--	--	--	--	20.8
	B282-S-10.0	07/08/2004	10	K2405093-006	mg/kg	--	--	**6.7**	--	--	--	--	15.9
	B282-S-10.0-Dup	07/08/2004	10	K2405093-006	mg/kg	--	--	**6.7**	--	--	--	--	15.2
B-283	B283-S-0.5	07/12/2004	0.5	K2405170-001	mg/kg	--	--	**1.3**	--	--	--	--	11.1
	B283-S-2.5	07/12/2004	2.5	K2405170-002	mg/kg	--	--	1.1 U	--	--	--	--	12.5
	B283-S-5.0	07/12/2004	5	K2405170-003	mg/kg	--	--	**1.4**	--	--	--	--	15.1
B-284	B284-S-0.5	07/13/2004	0.5	K2405170-042	mg/kg	--	--	**17.5**	--	--	--	--	32.2
	B284-S-2.5	07/13/2004	2.5	K2405170-043	mg/kg	--	--	**3.6**	--	--	--	--	19.2
	B284-S-5.0	07/13/2004	5	K2405170-044	mg/kg	--	--	**4.8**	--	--	--	--	26.7
	B284-S-10.0	07/13/2004	10	K2405170-045	mg/kg	--	--	**4.2**	--	--	--	--	26.6
B-285	B285-S-0.5	07/13/2004	0.5	K2405170-047	mg/kg	--	--	**37.2**	--	--	--	--	50.3
	B285-S-5.0	07/13/2004	5	K2405170-048	mg/kg	--	--	**5.6**	--	--	--	--	31.6
	B285-S-10.0	07/13/2004	10	K2405170-049	mg/kg	--	--	**2.9**	--	--	--	--	17.2
B-286	B286-S-0.5	07/08/2004	0.5	K2405093-009	mg/kg	--	--	**8.4**	--	--	--	--	37.8
	B286-S-2.5	07/08/2004	2.5	K2405093-010	mg/kg	--	--	**4.4**	--	--	--	--	20
	B286-S-5.0	07/08/2004	5	K2405093-011	mg/kg	--	--	**3.5**	--	--	--	--	18
	B286-S-10.0	07/08/2004	10	K2405093-012	mg/kg	--	--	**8.2**	--	--	--	--	19.5
B-287	B287-S-0.5	07/12/2004	0.5	K2405170-005	mg/kg	--	--	**7.7**	--	--	--	--	46.1
	B287-S-2.5	07/12/2004	2.5	K2405170-006	mg/kg	--	--	**1.9**	--	--	--	--	16.2
	B287-S-5.0	07/12/2004	5	K2405170-007	mg/kg	--	--	**3.2**	--	--	--	--	29.6
	B287-S-10.0	07/12/2004	10	K2405170-008	mg/kg	--	--	**4.5**	--	--	--	--	32.6
	B287-S-10.0-Dup	07/12/2004	10	K2405170-008	mg/kg	--	--	**5.2**	--	--	--	--	32.4
B-288	B288-S-0.5	07/08/2004	0.5	K2405093-013	mg/kg	--	--	**13.3**	--	--	--	--	21.4
	B288-S-10.0	07/08/2004	10	K2405093-014	mg/kg	--	--	**5.7**	--	--	--	--	13.1

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III)
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	32	0.67	5,600	160	80	NA	120000
Clark County Natural Background Concentration						52276	NA	5.81	NA	2.07	0.93	NA	NA
B-289	B289-S-0.5	07/12/2004	0.5	K2405170-011	mg/kg	--	--	**4.3**	--	--	--	--	9.3
	B289-S-2.5	07/12/2004	2.5	K2405170-012	mg/kg	--	--	**2.4**	--	--	--	--	22
	B289-S-5.0	07/12/2004	5	K2405170-013	mg/kg	--	--	**1.8**	--	--	--	--	16.4
	B289-S-10.0	07/12/2004	10	K2405170-014	mg/kg	--	--	**4.2**	--	--	--	--	49.4
B-290	B290-S-0.5	07/13/2004	0.5	K2405170-036	mg/kg	--	--	**13.8**	--	--	--	--	21.1
	B290-S-2.5	07/13/2004	2.5	K2405170-037	mg/kg	--	--	**28.9**	--	--	--	--	134
	B290-S-5.0	07/13/2004	5	K2405170-038	mg/kg	--	--	**5.6**	--	--	--	--	33.8
	B290-S-10.0	07/13/2004	10	K2405170-039	mg/kg	--	--	**2.8**	--	--	--	--	28.7
	B290-S-10.0-Dup	07/13/2004	10	K2405170-039	mg/kg	--	--	**2.5**	--	--	--	--	27.4
B-291	B291-S-0.5	07/12/2004	0.5	K2405170-031	mg/kg	--	--	**33.5**	--	--	--	--	256
	B291-S-2.5	07/12/2004	2.5	K2405170-032	mg/kg	--	--	**10.4**	--	--	--	--	41.5
	B291-S-5.0	07/12/2004	5	K2405170-033	mg/kg	--	--	**5.2**	--	--	--	--	27.2
	B291-S-10.0	07/12/2004	10	K2405170-034	mg/kg	--	--	**2.6**	--	--	--	--	26.8
B-292	B292-S-0.5	07/08/2004	0.5	K2405093-016	mg/kg	--	--	**14.9**	--	--	--	--	31.6
	B292-S-2.5	07/08/2004	2.5	K2405093-017	mg/kg	--	--	**4.4**	--	--	--	--	19.3
	B292-S-5.0	07/08/2004	5	K2405093-018	mg/kg	--	--	**4.3**	--	--	--	--	19.2
	B292-S-5.0-Dup	07/08/2004	5	K2405093-018	mg/kg	--	--	**5.9**	--	--	--	--	21.5
	B292-S-10.0	07/08/2004	10	K2405093-019	mg/kg	--	--	**7.6**	--	--	--	--	16.4
B-293	B293-S-0.5	07/12/2004	0.5	K2405170-016	mg/kg	--	--	**12.8**	--	--	--	--	14.4
	B293-S-2.5	07/12/2004	2.5	K2405170-017	mg/kg	--	--	**17.2**	--	--	--	--	42
	B293-S-5.0	07/12/2004	5	K2405170-018	mg/kg	--	--	**2.2**	--	--	--	--	18.1
	B293-S-10.0	07/12/2004	10	K2405170-019	mg/kg	--	--	**4.5**	--	--	--	--	29.6
B-294	B294-S-0.5	07/12/2004	0.5	K2405170-021	mg/kg	--	--	**1**	--	--	--	--	10.1
	B294-S-2.5	07/12/2004	2.5	K2405170-022	mg/kg	--	--	**8.9**	--	--	--	--	33.3
	B294-S-5.0	07/12/2004	5	K2405170-023	mg/kg	--	--	**29.4**	--	--	--	--	35.7
	B294-S-10.0	07/12/2004	10	K2405170-024	mg/kg	--	--	**3.1**	--	--	--	--	27.2

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III)
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	32	0.67	5,600	160	80	NA	120000
Clark County Natural Background Concentration						52276	NA	5.81	NA	2.07	0.93	NA	NA
B-295	B295-S-0.5	07/12/2004	0.5	K2405170-026	mg/kg	--	--	**13.8**	--	--	--	--	32.2
	B295-S-2.5	07/12/2004	2.5	K2405170-027	mg/kg	--	--	**2.5**	--	--	--	--	23.8
	B295-S-5.0	07/12/2004	5	K2405170-028	mg/kg	--	--	**3.2**	--	--	--	--	22.4
	B295-S-10.0	07/12/2004	10	K2405170-029	mg/kg	--	--	**3.2**	--	--	--	--	23.5
B-296	B296-S-0.5	07/09/2004	0.5	K2405093-028	mg/kg	--	--	**38.7**	--	--	--	--	95.9
	B296-S-2.5	07/09/2004	2.5	K2405093-029	mg/kg	--	--	**6.3**	--	--	--	--	19.9
	B296-S-5.0	07/09/2004	5	K2405093-030	mg/kg	--	--	**5**	--	--	--	--	31.5
	B296-S-10.0	07/09/2004	10	K2405093-031	mg/kg	--	--	**7.5**	--	--	--	--	15
B-297	B297-S-1.0	07/09/2004	1	K2405093-022	mg/kg	--	--	**27.6**	--	--	--	--	60.9
	B297-S-2.5	07/09/2004	2.5	K2405093-023	mg/kg	--	--	**8.1**	--	--	--	--	23.5
	B297-S-5.0	07/09/2004	5	K2405093-024	mg/kg	--	--	**7.9**	--	--	--	--	21.7
	B297-S-10.0	07/09/2004	10	K2405093-025	mg/kg	--	--	**3.4**	--	--	--	--	29.5
	B297-S-10.0-Dup	07/09/2004	10	K2405093-025	mg/kg	--	--	**4.5**	--	--	--	--	33.9
B-299	B299-S-0.5	07/21/2004	0.5	K2405400-016	mg/kg	--	--	2.1 U	--	--	--	--	21.3
	B299-S-2.5	07/21/2004	2.5	K2405400-017	mg/kg	--	--	**11.2**	--	--	--	--	22.3
	B299-S-5.0	07/21/2004	5	K2405400-018	mg/kg	--	--	**19.6**	--	--	--	--	37.8
	B299-S-10.0	07/21/2004	10	K2405400-019	mg/kg	--	--	**15.5**	--	--	--	--	63.2
B-300	B300-S-0.5	07/21/2004	0.5	K2405400-021	mg/kg	--	--	**2.3**	--	--	--	--	11
	B300-S-2.5	07/21/2004	2.5	K2405400-022	mg/kg	--	--	**6.9**	--	--	--	--	18.9
	B300-S-10.0	07/21/2004	10	K2405400-023	mg/kg	--	--	**5.4**	--	--	--	--	25.4
B-301	B301-S-0.5	07/21/2004	0.5	K2405400-025	mg/kg	--	--	**61.2**	--	--	--	--	125
	B301-S-2.5	07/21/2004	2.5	K2405400-026	mg/kg	--	--	**25.9**	--	--	--	--	40.5
	B301-S-5.0	07/21/2004	5	K2405400-027	mg/kg	--	--	**3**	--	--	--	--	35.3
MW-45D	MW45-S-0.5	07/20/2004	0.5	K2405400-006	mg/kg	--	--	**17.4**	--	--	--	--	35.9
	MW45-S-2.5	07/20/2004	2.5	K2405400-007	mg/kg	--	--	**1.9**	--	--	--	--	19
	MW45-S-5.0	07/20/2004	5	K2405400-008	mg/kg	--	--	**1.8**	--	--	--	--	18.1
	MW45-S-10.0	07/20/2004	10	K2405400-009	mg/kg	--	--	**5.3**	--	--	--	--	26

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III)
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	32	0.67	5,600	160	80	NA	120000
Clark County Natural Background Concentration						52276	NA	5.81	NA	2.07	0.93	NA	NA
MW-9S	MW9R-S-0.5	07/14/2004	0.5	K2405253-001	mg/kg	--	--	**111**	--	--	--	--	207
	MW9R-S-2.5	07/14/2004	2.5	K2405253-002	mg/kg	--	--	**9.3**	--	--	--	--	31.5
	MW9R-S-5.0	07/14/2004	5	K2405253-003	mg/kg	--	--	**8.2**	--	--	--	--	30.5
	MW9R-S-10.0	07/14/2004	10	K2405253-004	mg/kg	--	--	**4.7**	--	--	--	--	23.1
Historical Characterization													
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	mg/Kg	--	--	**11**	--	--	--	--	32
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	mg/Kg	--	--	**3**	--	--	--	--	18
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	mg/Kg	--	--	**5**	--	--	--	--	21
	B206-S-10.0	11/01/99	10	K9907927-003	mg/Kg	--	--	**9**	--	--	--	--	27
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	mg/Kg	--	--	**8**	--	--	--	--	18
	B207-S-5.0	11/01/99	5	K9907927-005	mg/Kg	--	--	**7**	--	--	--	--	31
	B207-S-10.0	11/01/99	10	K9907927-006	mg/Kg	--	--	**4**	--	--	--	--	30
B-208	B208-S-5.0	11/01/99	5	K9907927-008	mg/Kg	--	--	**5**	--	--	--	--	28
B-209	B209-S-10 MSD	11/01/99	10	K9907927-014	mg/Kg	--	--	**5**	--	--	--	--	22
	B209-S-10.0	11/01/99	10	K9907927-012	mg/Kg	--	--	**3**	--	--	--	--	24
B-210	B210-S-5.0	11/01/99	5	K9907927-016	mg/Kg	--	--	**6**	--	--	--	--	29
	B210-S-15.0	11/01/99	15	K9907927-018	mg/Kg	--	--	**5**	--	--	--	--	28
B-212	B212-S-5.0	11/02/99	5	K9907927-025	mg/Kg	--	--	**6**	--	--	--	--	22
B-213	B213-S-2.5	11/02/99	2.5	K9907927-028	mg/Kg	--	--	**7**	--	--	--	--	25
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	mg/Kg	--	--	**6**	--	--	--	--	16
	B215-S-5.0	11/04/99	5	K9907986-002	mg/Kg	--	--	**5**	--	--	--	--	28
	B215-S-10.0	11/04/99	10	K9907986-003	mg/Kg	--	--	**5**	--	--	--	--	20
B-216	B216-S-5.0	11/04/99	5	K9907986-004	mg/Kg	--	--	**5**	--	--	--	--	21
	B216-S-10.0	11/04/99	10	K9907986-005	mg/Kg	--	--	**4**	--	--	--	--	22
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	mg/Kg	--	--	**13**	--	--	--	--	17
	B217-S-10.0	11/05/99	10	K9907986-012	mg/Kg	--	--	**52**	--	--	--	--	32
	B217-S-15.0	11/05/99	15	K9907986-013	mg/Kg	--	--	**6**	--	--	--	--	30

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III)
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	32	0.67	5,600	160	80	NA	120000
Clark County Natural Background Concentration						52276	NA	5.81	NA	2.07	0.93	NA	NA
B-218	B218-S-5.0	11/08/99	5	K9908036-001	mg/Kg	--	--	**11**	--	--	--	--	21
	B218-S-15.0	11/08/99	15	K9908036-003	mg/Kg	--	--	**5**	--	--	--	--	27
B-219	B219-S-10.0	11/08/99	10	K9908036-006	mg/Kg	--	--	**5**	--	--	--	--	23
B-220	B220-S-5.0	11/08/99	5	K9908036-008	mg/Kg	--	--	**6**	--	--	--	--	18
	B220-S-10.0	11/08/99	10	K9908036-010	mg/Kg	--	--	**5**	--	--	--	--	18
MW-19	MW19-5	05/03/93	5	MW19-5	mg/kg	--	--	**5.2**	--	--	--	--	11.2
	MW19-20	05/03/93	20	MW19-20	mg/kg	--	--	**2.8**	--	--	--	--	13.1
MW-20S	MW20-5	05/03/93	5	MW20-5	mg/kg	--	--	**2.8**	--	--	--	--	15.1
	MW20D-5	05/03/93	5	MW20D-5	mg/kg	--	--	**3.8**	--	--	--	--	15.2
	MW20-20	05/03/93	20	MW20-20	mg/kg	--	--	**3.1**	--	--	--	--	15.5
MW-28S	T5070183	04/02/96	6	T5070183	mg/kg	15,500	11.9 U	**3.9 JE**	235	1.4 J	0.63 U	3,480	--
MW-29	T5070010	04/02/96	8.5	T5070010	mg/kg	13,700	14 U,JN	**5.3**	182	1.6	0.75 U	5,800	--
	T5070011	04/02/96	11	T5070011	mg/kg	14,200	13.6 U,JN	**5.9**	180	1.5	0.73 U	5,800	--
	T5070012	04/02/96	16	T5070012	mg/kg	16,200	14.5 U,JN	**6.4**	212	1.7	0.77 U	6,780	--
TP-17	TP17-0.5	05/03/93	0	TP17-0.5	mg/kg	--	--	**9.1**	--	--	--	--	23.8
	TP17-0.5	05/03/93	0.5	TP17-0.5	mg/kg	--	--	**9.1**	--	--	--	--	23.8
	TP17-5	05/03/93	5	TP17-5	mg/kg	--	--	**2.8**	--	--	--	--	18.5
TP-18	TP18-0.3	05/03/93	0	TP18-0.3	mg/kg	--	--	**17.8**	--	--	--	--	31.2
	TP18-0.3	05/03/93	0.3	TP18-0.3	mg/kg	--	--	**17.8**	--	--	--	--	31.2
	TP18-3	05/03/93	3	TP18-3	mg/kg	--	--	**3.1**	--	--	--	--	19.1
	TP18-7	05/03/93	7	TP18-7	mg/kg	--	--	**278**	--	--	--	--	634
TP-19	TP19-0.5	05/03/93	0	TP19-0.5	mg/kg	--	--	**29.6**	--	--	--	--	37
	TP19-0.5	05/03/93	0.5	TP19-0.5	mg/kg	--	--	**29.6**	--	--	--	--	37
	TP19-4.5	05/03/93	4	TP19-4.5	mg/kg	--	--	**1**	--	--	--	--	4.1
	TP19D-4.5	05/03/93	4	TP19D-4.5	mg/kg	--	--	**2.2**	--	--	--	--	22.1
	TP19-4.5	05/03/93	4.5	TP19-4.5	mg/kg	--	--	**1**	--	--	--	--	4.1
	TP19D-4.5	05/03/93	4.5	TP19D-4.5	mg/kg	--	--	**2.2**	--	--	--	--	22.1

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III)
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	32	0.67	5,600	160	80	NA	120000
Clark County Natural Background Concentration						52276	NA	5.81	NA	2.07	0.93	NA	NA
TP-20	TP20-0.2	05/03/93	0	TP20-0.2	mg/kg	--	--	**16.8**	--	--	--	--	20.1
	TP20-0.2	05/03/93	0.2	TP20-0.2	mg/kg	--	--	**16.8**	--	--	--	--	20.1
	TP20-4.5	05/03/93	4	TP20-4.5	mg/kg	--	--	**3.4**	--	--	--	--	24
	TP20-4.5	05/03/93	4.5	TP20-4.5	mg/kg	--	--	**3.4**	--	--	--	--	24
TP-21	TP21-0.5	05/03/93	0.5	TP21-0.5	mg/kg	--	--	**4**	--	--	--	--	11.7
	TP21-5	05/03/93	5	TP21-5	mg/kg	--	--	**3.5**	--	--	--	--	21
TP-22	TP22-0.5	05/03/93	0	TP22-0.5	mg/kg	--	--	**36.7**	--	--	--	--	36.7
	TP22-0.5	05/03/93	0.5	TP22-0.5	mg/kg	--	--	**36.7**	--	--	--	--	36.7
	TP22-6	05/03/93	6	TP22-6	mg/kg	--	--	**3.4**	--	--	--	--	9.6
SPY-01A	EX-SPY-01-S 1A	05/09/02	1	K2203044-041	mg/kg	--	--	**115**	--	--	--	--	136
	EX-SPY-01-S 5A	05/09/02	5	K2203044-042	mg/kg	--	--	**3.1**	--	--	--	--	21.2
	EX-SPY-01-S 10A	05/09/02	10	K2203044-043	mg/kg	--	--	**10.9**	--	--	--	--	23.3
SPY-01B	EX-SPY-01-S 1B	05/09/02	1	K2203044-032	mg/kg	--	--	**15.1**	--	--	--	--	21.7
	EX-SPY-01-S 5B	05/09/02	5	K2203044-033	mg/kg	--	--	**98.6**	--	--	--	--	66.7
	EX-SPY-01-S 10B	05/09/02	10	K2203044-034	mg/kg	--	--	**11.2**	--	--	--	--	31.5
SPY-01C	EX-SPY-01-S 1C	05/09/02	1	K2203044-035	mg/kg	--	--	**27.9**	--	--	--	--	75.4
	EX-SPY-01-S 5C	05/09/02	5	K2203044-036	mg/kg	--	--	**2.3**	--	--	--	--	20.3
	EX-SPY-01-S 10C	05/09/02	10	K2203044-037	mg/kg	--	--	**6.8**	--	--	--	--	17
SPY-01D	EX-SPY-01-S 1D	05/09/02	1	K2203044-038	mg/kg	--	--	**12.9**	--	--	--	--	34.6
	EX-SPY-01-S 5D	05/09/02	5	K2203044-039	mg/kg	--	--	**2.3**	--	--	--	--	20.7
	EX-SPY-01-S 10D	05/09/02	10	K2203044-040	mg/kg	--	--	**5.6**	--	--	--	--	20.3
SPY-01E	EX-SPY-01-S 1E	05/09/02	1	K2203044-022	mg/kg	--	--	**17.3**	--	--	--	--	17.6
	EX-SPY-01-S 5E	05/09/02	5	K2203044-023	mg/kg	--	--	**8**	--	--	--	--	20.7
	EX-SPY-01-S 10E	05/09/02	10	K2203044-024	mg/kg	--	--	**7.9**	--	--	--	--	19.6
SPY-01F	EX-SPY-01-S 1F	05/09/02	1	K2203044-025	mg/kg	--	--	**12**	--	--	--	--	19.1
	EX-SPY-01-S 5F	05/09/02	5	K2203044-026	mg/kg	--	--	**1.4**	--	--	--	--	14.1
	EX-SPY-01-S 10F	05/09/02	10	K2203044-027	mg/kg	--	--	**8**	--	--	--	--	20

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III)
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	32	0.67	5,600	160	80	NA	120000
Clark County Natural Background Concentration						52276	NA	5.81	NA	2.07	0.93	NA	NA
SPY-01G	EX-SPY-01-S 1G	05/09/02	1	K2203044-028	mg/kg	--	--	**16.8**	--	--	--	--	25.1
	EX-SPY-01-S 3G	05/09/02	3	K2203044-031	mg/kg	--	--	**3.5**	--	--	--	--	15.5
	EX-SPY-01-S 5G	05/09/02	5	K2203044-029	mg/kg	--	--	**3.6**	--	--	--	--	19.8
	EX-SPY-01-S 10G	05/09/02	10	K2203044-030	mg/kg	--	--	**6.3**	--	--	--	--	19.9
SPY-01H	EX-SPY-01-S 1H	05/09/02	1	K2203044-019	mg/kg	--	--	**9.4**	--	--	--	--	12.7
	EX-SPY-01-S 5H	05/09/02	5	K2203044-020	mg/kg	--	--	**4.4**	--	--	--	--	16.9
	EX-SPY-01-S 10H	05/09/02	10	K2203044-021	mg/kg	--	--	**5.9**	--	--	--	--	18.4
TP-18A	EX-TP-18-S7A	04/16/02	7	--	mg/kg	--	--	**6.1**	--	--	--	--	--
	EX-TP-18-S9A	04/16/02	9	--	mg/kg	--	--	**7.1**	--	--	--	--	--
TP-18B	EX-TP-18-S7B	04/16/02	7	--	mg/kg	--	--	**4.5**	--	--	--	--	--
	EX-TP-18-S9B	04/16/02	9	--	mg/kg	--	--	**7.1**	--	--	--	--	--
TP-18C	EX-TP-18-S7C	04/16/02	7	--	mg/kg	--	--	**2.9**	--	--	--	--	--
	EX-TP-18-S9C	04/16/02	9	--	mg/kg	--	--	**9.9**	--	--	--	--	--
TP-18Cen	EX-TP-18-S7 cen	04/25/02	7	--	mg/kg	--	--	**12.9**	--	--	--	--	--
	EX-TP-18-S9 cen	04/25/02	9	--	mg/kg	--	--	**8.5**	--	--	--	--	--
TP-18D	EX-TP-18-S7D	04/16/02	7	--	mg/kg	--	--	**1.3**	--	--	--	--	--
	EX-TP-18-S9D	04/16/02	9	--	mg/kg	--	--	**5.3**	--	--	--	--	--
TP-18E	EX-TP-18-S7E	04/16/02	7	--	mg/kg	--	--	**4.9**	--	--	--	--	--
	EX-TP-18-S9E	04/16/02	9	--	mg/kg	--	--	**5.8**	--	--	--	--	--
TP-18F	EX-TP-18-S7F	04/16/02	7	--	mg/kg	--	--	**9.7**	--	--	--	--	--
	EX-TP-18-S9F	04/16/02	9	--	mg/kg	--	--	**6.8**	--	--	--	--	--
TP-18G	EX-TP-18-S7G	04/16/02	7	--	mg/kg	--	--	**5.6**	--	--	--	--	--
	EX-TP-18-S9G	04/16/02	9	--	mg/kg	--	--	**4.4**	--	--	--	--	--
TP-18H	EX-TP-18-S7H	04/16/02	7	--	mg/kg	--	--	**5.6**	--	--	--	--	--
	EX-TP-18-S9H	04/16/02	9	--	mg/kg	--	--	**5.1**	--	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Chromium, Total	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	NA	3,000	NA	NA	NA	11,200	24	1,600
Clark County Natural Background Concentration						26.57	NA	34.43	58665	24.02	NA	1511	0.04	21.04
July 2004 Soil Characterization														
B-275	B275-S-0.5	07/08/2004	0.5	K2405093-001	mg/kg	--	--	24.2	--	20 U	--	--	--	--
	B275-S-5.0	07/08/2004	5	K2405093-002	mg/kg	--	--	17	--	23 U	--	--	--	--
	B275-S-10.0	07/08/2004	10	K2405093-003	mg/kg	--	--	20.7	--	23 U	--	--	--	--
B-276	B276-S-0.5	07/13/2004	0.5	K2405170-055	mg/kg	--	--	32.1	--	22 U	--	--	--	--
	B276-S-3.0	07/13/2004	3	K2405170-056	mg/kg	--	--	20.6	--	22 U	--	--	--	--
B-277	B277-S-0.5	07/09/2004	0.5	K2405093-037	mg/kg	--	--	14.5	--	20 U	--	--	--	--
	B277-S-2.5	07/09/2004	2.5	K2405093-038	mg/kg	--	--	18.7	--	23 U	--	--	--	--
	B277-S-5.0	07/09/2004	5	K2405093-039	mg/kg	--	--	19.9	--	23 U	--	--	--	--
	B277-S-10.0	07/09/2004	10	K2405093-040	mg/kg	--	--	21.7	--	21 U	--	--	--	--
B-278	B278-S-0.5	07/09/2004	0.5	K2405093-042	mg/kg	--	--	29.8	--	21 U	--	--	--	--
	B278-S-2.5	07/09/2004	2.5	K2405093-043	mg/kg	--	--	20.7	--	23 U	--	--	--	--
	B278-S-10.0	07/09/2004	10	K2405093-044	mg/kg	--	--	28.5	--	22 U	--	--	--	--
	B278-S-10.0-Dup	07/09/2004	10	K2405093-044	mg/kg	--	--	29.2	--	21 U	--	--	--	--
B-279	B279-S-0.5	07/09/2004	0.5	K2405093-047	mg/kg	--	--	17.4	--	22 U	--	--	--	--
	B279-S-2.5	07/09/2004	2.5	K2405093-048	mg/kg	--	--	13.8	--	22 U	--	--	--	--
	B279-S-5.0	07/09/2004	5	K2405093-049	mg/kg	--	--	22.8	--	22 U	--	--	--	--
	B279-S-10.0	07/09/2004	10	K2405093-050	mg/kg	--	--	28.2	--	23 U	--	--	--	--
B-280	B280-S-0.5	07/13/2004	0.5	K2405170-051	mg/kg	--	--	44.8	--	20 U	--	--	--	--
	B280-S-5.0	07/13/2004	5	K2405170-052	mg/kg	--	--	32.5	--	69.7	--	--	--	--
	B280-S-10.0	07/13/2004	10	K2405170-053	mg/kg	--	--	21.3	--	22 U	--	--	--	--
B-281	B281-S-0.5	07/09/2004	0.5	K2405093-033	mg/kg	--	--	19.9	--	20 U	--	--	--	--
	B281-S-2.5	07/09/2004	2.5	K2405093-034	mg/kg	--	--	27	--	24 U	--	--	--	--
	B281-S-10.0	07/09/2004	10	K2405093-035	mg/kg	--	--	27.9	--	21 U	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Chromium, Total	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	NA	3,000	NA	NA	NA	11,200	24	1,600
Clark County Natural Background Concentration						26.57	NA	34.43	58665	24.02	NA	1511	0.04	21.04
B-282	B282-S-0.5	07/08/2004	0.5	K2405093-004	mg/kg	--	--	31.7	--	20 U	--	--	--	--
	B282-S-5.0	07/08/2004	5	K2405093-005	mg/kg	--	--	15	--	24 U	--	--	--	--
	B282-S-10.0	07/08/2004	10	K2405093-006	mg/kg	--	--	20.7	--	24 U	--	--	--	--
	B282-S-10.0-Dup	07/08/2004	10	K2405093-006	mg/kg	--	--	17.7	--	24 U	--	--	--	--
B-283	B283-S-0.5	07/12/2004	0.5	K2405170-001	mg/kg	--	--	10.1	--	21 U	--	--	--	--
	B283-S-2.5	07/12/2004	2.5	K2405170-002	mg/kg	--	--	19.5	--	21 U	--	--	--	--
	B283-S-5.0	07/12/2004	5	K2405170-003	mg/kg	--	--	20.9	--	23 U	--	--	--	--
B-284	B284-S-0.5	07/13/2004	0.5	K2405170-042	mg/kg	--	--	44.2	--	21 U	--	--	--	--
	B284-S-2.5	07/13/2004	2.5	K2405170-043	mg/kg	--	--	22.9	--	22 U	--	--	--	--
	B284-S-5.0	07/13/2004	5	K2405170-044	mg/kg	--	--	36.1	--	22 U	--	--	--	--
	B284-S-10.0	07/13/2004	10	K2405170-045	mg/kg	--	--	31	--	23 U	--	--	--	--
B-285	B285-S-0.5	07/13/2004	0.5	K2405170-047	mg/kg	--	--	38.8	--	20 U	--	--	--	--
	B285-S-5.0	07/13/2004	5	K2405170-048	mg/kg	--	--	29.9	--	23 U	--	--	--	--
	B285-S-10.0	07/13/2004	10	K2405170-049	mg/kg	--	--	21.8	--	21 U	--	--	--	--
B-286	B286-S-0.5	07/08/2004	0.5	K2405093-009	mg/kg	--	--	22.9	--	20 U	--	--	--	--
	B286-S-2.5	07/08/2004	2.5	K2405093-010	mg/kg	--	--	22.1	--	23.9	--	--	--	--
	B286-S-5.0	07/08/2004	5	K2405093-011	mg/kg	--	--	12	--	24 U	--	--	--	--
	B286-S-10.0	07/08/2004	10	K2405093-012	mg/kg	--	--	19.5	--	24 U	--	--	--	--
B-287	B287-S-0.5	07/12/2004	0.5	K2405170-005	mg/kg	--	--	27.4	--	21 U	--	--	--	--
	B287-S-2.5	07/12/2004	2.5	K2405170-006	mg/kg	--	--	18.7	--	22 U	--	--	--	--
	B287-S-5.0	07/12/2004	5	K2405170-007	mg/kg	--	--	26.9	--	23 U	--	--	--	--
	B287-S-10.0	07/12/2004	10	K2405170-008	mg/kg	--	--	27.3	--	21 U	--	--	--	--
	B287-S-10.0-Dup	07/12/2004	10	K2405170-008	mg/kg	--	--	28.3	--	22 U	--	--	--	--
B-288	B288-S-0.5	07/08/2004	0.5	K2405093-013	mg/kg	--	--	26.6	--	21 U	--	--	--	--
	B288-S-10.0	07/08/2004	10	K2405093-014	mg/kg	--	--	18.4	--	23 U	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Chromium, Total	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	NA	3,000	NA	NA	NA	11,200	24	1,600
Clark County Natural Background Concentration						26.57	NA	34.43	58665	24.02	NA	1511	0.04	21.04
B-289	B289-S-0.5	07/12/2004	0.5	K2405170-011	mg/kg	--	--	9.8	--	21 U	--	--	--	--
	B289-S-2.5	07/12/2004	2.5	K2405170-012	mg/kg	--	--	22.6	--	23 U	--	--	--	--
	B289-S-5.0	07/12/2004	5	K2405170-013	mg/kg	--	--	17.8	--	23 U	--	--	--	--
	B289-S-10.0	07/12/2004	10	K2405170-014	mg/kg	--	--	28.3	--	22 U	--	--	--	--
B-290	B290-S-0.5	07/13/2004	0.5	K2405170-036	mg/kg	--	--	50.6	--	20 U	--	--	--	--
	B290-S-2.5	07/13/2004	2.5	K2405170-037	mg/kg	--	--	51.9	--	22 U	--	--	--	--
	B290-S-5.0	07/13/2004	5	K2405170-038	mg/kg	--	--	32.5	--	84.4	--	--	--	--
	B290-S-10.0	07/13/2004	10	K2405170-039	mg/kg	--	--	27.1	--	21 U	--	--	--	--
	B290-S-10.0-Dup	07/13/2004	10	K2405170-039	mg/kg	--	--	26.1	--	21 U	--	--	--	--
B-291	B291-S-0.5	07/12/2004	0.5	K2405170-031	mg/kg	--	--	58.5	--	21 U	--	--	--	--
	B291-S-2.5	07/12/2004	2.5	K2405170-032	mg/kg	--	--	38.2	--	27.2	--	--	--	--
	B291-S-5.0	07/12/2004	5	K2405170-033	mg/kg	--	--	25.6	--	23	--	--	--	--
	B291-S-10.0	07/12/2004	10	K2405170-034	mg/kg	--	--	27.9	--	23 U	--	--	--	--
B-292	B292-S-0.5	07/08/2004	0.5	K2405093-016	mg/kg	--	--	26.8	--	21 U	--	--	--	--
	B292-S-2.5	07/08/2004	2.5	K2405093-017	mg/kg	--	--	15.1	--	24 U	--	--	--	--
	B292-S-5.0	07/08/2004	5	K2405093-018	mg/kg	--	--	12.8	--	24 U	--	--	--	--
	B292-S-5.0-Dup	07/08/2004	5	K2405093-018	mg/kg	--	--	14.1	--	24 U	--	--	--	--
	B292-S-10.0	07/08/2004	10	K2405093-019	mg/kg	--	--	19.4	--	21 U	--	--	--	--
B-293	B293-S-0.5	07/12/2004	0.5	K2405170-016	mg/kg	--	--	39.7	--	21 U	--	--	--	--
	B293-S-2.5	07/12/2004	2.5	K2405170-017	mg/kg	--	--	31.3	--	22 U	--	--	--	--
	B293-S-5.0	07/12/2004	5	K2405170-018	mg/kg	--	--	18.3	--	24 U	--	--	--	--
	B293-S-10.0	07/12/2004	10	K2405170-019	mg/kg	--	--	30.9	--	23 U	--	--	--	--
B-294	B294-S-0.5	07/12/2004	0.5	K2405170-021	mg/kg	--	--	19.4	--	20 U	--	--	--	--
	B294-S-2.5	07/12/2004	2.5	K2405170-022	mg/kg	--	--	36.5	--	22 U	--	--	--	--
	B294-S-5.0	07/12/2004	5	K2405170-023	mg/kg	--	--	32.2	--	28.2	--	--	--	--
	B294-S-10.0	07/12/2004	10	K2405170-024	mg/kg	--	--	32.2	--	23 U	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Chromium, Total	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	NA	3,000	NA	NA	NA	11,200	24	1,600
Clark County Natural Background Concentration						26.57	NA	34.43	58665	24.02	NA	1511	0.04	21.04
B-295	B295-S-0.5	07/12/2004	0.5	K2405170-026	mg/kg	--	--	56.3	--	21 U	--	--	--	--
	B295-S-2.5	07/12/2004	2.5	K2405170-027	mg/kg	--	--	25.1	--	22 U	--	--	--	--
	B295-S-5.0	07/12/2004	5	K2405170-028	mg/kg	--	--	22.2	--	21 U	--	--	--	--
	B295-S-10.0	07/12/2004	10	K2405170-029	mg/kg	--	--	29	--	22 U	--	--	--	--
B-296	B296-S-0.5	07/09/2004	0.5	K2405093-028	mg/kg	--	--	115	--	21 U	--	--	--	--
	B296-S-2.5	07/09/2004	2.5	K2405093-029	mg/kg	--	--	16.1	--	23 U	--	--	--	--
	B296-S-5.0	07/09/2004	5	K2405093-030	mg/kg	--	--	22.5	--	33.8	--	--	--	--
	B296-S-10.0	07/09/2004	10	K2405093-031	mg/kg	--	--	25.5	--	63	--	--	--	--
B-297	B297-S-1.0	07/09/2004	1	K2405093-022	mg/kg	--	--	70.3	--	21 U	--	--	--	--
	B297-S-2.5	07/09/2004	2.5	K2405093-023	mg/kg	--	--	17.5	--	24 U	--	--	--	--
	B297-S-5.0	07/09/2004	5	K2405093-024	mg/kg	--	--	19.8	--	25 U	--	--	--	--
	B297-S-10.0	07/09/2004	10	K2405093-025	mg/kg	--	--	25	--	22 U	--	--	--	--
	B297-S-10.0-Dup	07/09/2004	10	K2405093-025	mg/kg	--	--	34.7	--	22 U	--	--	--	--
B-299	B299-S-0.5	07/21/2004	0.5	K2405400-016	mg/kg	--	--	18.3	--	7.3	--	--	--	--
	B299-S-2.5	07/21/2004	2.5	K2405400-017	mg/kg	--	--	20.5	--	12.9	--	--	--	--
	B299-S-5.0	07/21/2004	5	K2405400-018	mg/kg	--	--	26.9	--	16.1	--	--	--	--
	B299-S-10.0	07/21/2004	10	K2405400-019	mg/kg	--	--	33.7	--	16.1	--	--	--	--
B-300	B300-S-0.5	07/21/2004	0.5	K2405400-021	mg/kg	--	--	19.3	--	4.9	--	--	--	--
	B300-S-2.5	07/21/2004	2.5	K2405400-022	mg/kg	--	--	15.7	--	39	--	--	--	--
	B300-S-10.0	07/21/2004	10	K2405400-023	mg/kg	--	--	25.5	--	11.6	--	--	--	--
B-301	B301-S-0.5	07/21/2004	0.5	K2405400-025	mg/kg	--	--	119	--	13.4	--	--	--	--
	B301-S-2.5	07/21/2004	2.5	K2405400-026	mg/kg	--	--	29.9	--	31.1	--	--	--	--
	B301-S-5.0	07/21/2004	5	K2405400-027	mg/kg	--	--	15.3	--	8.7	--	--	--	--
MW-45D	MW45-S-0.5	07/20/2004	0.5	K2405400-006	mg/kg	--	--	62	--	9.1	--	--	--	--
	MW45-S-2.5	07/20/2004	2.5	K2405400-007	mg/kg	--	--	16.9	--	7.9	--	--	--	--
	MW45-S-5.0	07/20/2004	5	K2405400-008	mg/kg	--	--	16.4	--	6.7	--	--	--	--
	MW45-S-10.0	07/20/2004	10	K2405400-009	mg/kg	--	--	27.5	--	10.3	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Chromium, Total	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	NA	3,000	NA	NA	NA	11,200	24	1,600
Clark County Natural Background Concentration						26.57	NA	34.43	58665	24.02	NA	1511	0.04	21.04
MW-9S	MW9R-S-0.5	07/14/2004	0.5	K2405253-001	mg/kg	--	--	243	--	21 U	--	--	--	--
	MW9R-S-2.5	07/14/2004	2.5	K2405253-002	mg/kg	--	--	21.9	--	24 U	--	--	--	--
	MW9R-S-5.0	07/14/2004	5	K2405253-003	mg/kg	--	--	20	--	24 U	--	--	--	--
	MW9R-S-10.0	07/14/2004	10	K2405253-004	mg/kg	--	--	22.6	--	21 U	--	--	--	--
Historical Characterization														
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	mg/Kg	--	--	41	--	--	--	--	--	--
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	mg/Kg	--	--	23	--	--	--	--	--	--
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	mg/Kg	--	--	20	--	--	--	--	--	--
	B206-S-10.0	11/01/99	10	K9907927-003	mg/Kg	--	--	24	--	--	--	--	--	--
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	mg/Kg	--	--	18	--	--	--	--	--	--
	B207-S-5.0	11/01/99	5	K9907927-005	mg/Kg	--	--	27	--	--	--	--	--	--
	B207-S-10.0	11/01/99	10	K9907927-006	mg/Kg	--	--	27	--	--	--	--	--	--
B-208	B208-S-5.0	11/01/99	5	K9907927-008	mg/Kg	--	--	34	--	--	--	--	--	--
B-209	B209-S-10 MSD	11/01/99	10	K9907927-014	mg/Kg	--	--	24	--	--	--	--	--	--
	B209-S-10.0	11/01/99	10	K9907927-012	mg/Kg	--	--	24	--	--	--	--	--	--
B-210	B210-S-5.0	11/01/99	5	K9907927-016	mg/Kg	--	--	20	--	--	--	--	--	--
	B210-S-15.0	11/01/99	15	K9907927-018	mg/Kg	--	--	31	--	--	--	--	--	--
B-212	B212-S-5.0	11/02/99	5	K9907927-025	mg/Kg	--	--	45	--	--	--	--	--	--
B-213	B213-S-2.5	11/02/99	2.5	K9907927-028	mg/Kg	--	--	28	--	--	--	--	--	--
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	mg/Kg	--	--	18	--	--	--	--	--	--
	B215-S-5.0	11/04/99	5	K9907986-002	mg/Kg	--	--	22	--	--	--	--	--	--
	B215-S-10.0	11/04/99	10	K9907986-003	mg/Kg	--	--	23	--	--	--	--	--	--
B-216	B216-S-5.0	11/04/99	5	K9907986-004	mg/Kg	--	--	22	--	--	--	--	--	--
	B216-S-10.0	11/04/99	10	K9907986-005	mg/Kg	--	--	25	--	--	--	--	--	--
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	mg/Kg	--	--	25	--	--	--	--	--	--
	B217-S-10.0	11/05/99	10	K9907986-012	mg/Kg	--	--	70	--	--	--	--	--	--
	B217-S-15.0	11/05/99	15	K9907986-013	mg/Kg	--	--	32	--	--	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Chromium, Total	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	NA	3,000	NA	NA	NA	11,200	24	1,600
Clark County Natural Background Concentration						26.57	NA	34.43	58665	24.02	NA	1511	0.04	21.04
B-218	B218-S-5.0	11/08/99	5	K9908036-001	mg/Kg	--	--	25	--	--	--	--	--	--
	B218-S-15.0	11/08/99	15	K9908036-003	mg/Kg	--	--	24	--	--	--	--	--	--
B-219	B219-S-10.0	11/08/99	10	K9908036-006	mg/Kg	--	--	24	--	--	--	--	--	--
B-220	B220-S-5.0	11/08/99	5	K9908036-008	mg/Kg	--	--	43	--	--	--	--	--	--
	B220-S-10.0	11/08/99	10	K9908036-010	mg/Kg	--	--	22	--	--	--	--	--	--
MW-19	MW19-5	05/03/93	5	MW19-5	mg/kg	--	--	7.4	--	--	--	--	--	--
	MW19-20	05/03/93	20	MW19-20	mg/kg	--	--	15.2	--	--	--	--	--	--
MW-20S	MW20-5	05/03/93	5	MW20-5	mg/kg	--	--	13.4	--	--	--	--	--	--
	MW20D-5	05/03/93	5	MW20D-5	mg/kg	--	--	13	--	--	--	--	--	--
	MW20-20	05/03/93	20	MW20-20	mg/kg	--	--	17.5	--	--	--	--	--	--
MW-28S	T5070183	04/02/96	6	T5070183	mg/kg	10.8	21.7	20.6	28,900	7.6	3,040	584	0.11 U	17.6
MW-29	T5070010	04/02/96	8.5	T5070010	mg/kg	20.3 J	19.6	26.3	25,600	27.1 N*J	6,380	546 JN	0.13 U,JN	27.5
	T5070011	04/02/96	11	T5070011	mg/kg	18.7 J	18.6	24.9	25,800	28.9 N*J	6,380	492 JN	0.13 U,JN	26.6
	T5070012	04/02/96	16	T5070012	mg/kg	22.8 J	22.8	31.4	29,900	16.9 N*J	7,470	737 JN	0.14 U,JN	30.3
TP-17	TP17-0.5	05/03/93	0	TP17-0.5	mg/kg	--	--	24.8	--	--	--	--	--	--
	TP17-0.5	05/03/93	0.5	TP17-0.5	mg/kg	--	--	24.8	--	--	--	--	--	--
	TP17-5	05/03/93	5	TP17-5	mg/kg	--	--	14.2	--	--	--	--	--	--
TP-18	TP18-0.3	05/03/93	0	TP18-0.3	mg/kg	--	--	56.3	--	--	--	--	--	--
	TP18-0.3	05/03/93	0.3	TP18-0.3	mg/kg	--	--	56.3	--	--	--	--	--	--
	TP18-3	05/03/93	3	TP18-3	mg/kg	--	--	12.9	--	--	--	--	--	--
	TP18-7	05/03/93	7	TP18-7	mg/kg	--	--	90.2	--	--	--	--	--	--
TP-19	TP19-0.5	05/03/93	0	TP19-0.5	mg/kg	--	--	59.7	--	--	--	--	--	--
	TP19-0.5	05/03/93	0.5	TP19-0.5	mg/kg	--	--	59.7	--	--	--	--	--	--
	TP19-4.5	05/03/93	4	TP19-4.5	mg/kg	--	--	4.1	--	--	--	--	--	--
	TP19D-4.5	05/03/93	4	TP19D-4.5	mg/kg	--	--	9.6	--	--	--	--	--	--
	TP19-4.5	05/03/93	4.5	TP19-4.5	mg/kg	--	--	4.1	--	--	--	--	--	--
	TP19D-4.5	05/03/93	4.5	TP19D-4.5	mg/kg	--	--	9.6	--	--	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Chromium, Total	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	NA	3,000	NA	NA	NA	11,200	24	1,600
Clark County Natural Background Concentration						26.57	NA	34.43	58665	24.02	NA	1511	0.04	21.04
TP-20	TP20-0.2	05/03/93	0	TP20-0.2	mg/kg	--	--	27	--	--	--	--	--	--
	TP20-0.2	05/03/93	0.2	TP20-0.2	mg/kg	--	--	27	--	--	--	--	--	--
	TP20-4.5	05/03/93	4	TP20-4.5	mg/kg	--	--	20.6	--	--	--	--	--	--
	TP20-4.5	05/03/93	4.5	TP20-4.5	mg/kg	--	--	20.6	--	--	--	--	--	--
TP-21	TP21-0.5	05/03/93	0.5	TP21-0.5	mg/kg	--	--	10.4	--	--	--	--	--	--
	TP21-5	05/03/93	5	TP21-5	mg/kg	--	--	17	--	--	--	--	--	--
TP-22	TP22-0.5	05/03/93	0	TP22-0.5	mg/kg	--	--	48.2	--	--	--	--	--	--
	TP22-0.5	05/03/93	0.5	TP22-0.5	mg/kg	--	--	48.2	--	--	--	--	--	--
	TP22-6	05/03/93	6	TP22-6	mg/kg	--	--	8.1	--	--	--	--	--	--
SPY-01A	EX-SPY-01-S 1A	05/09/02	1	K2203044-041	mg/kg	--	--	148	--	--	--	--	--	--
	EX-SPY-01-S 5A	05/09/02	5	K2203044-042	mg/kg	--	--	19.8	--	--	--	--	--	--
	EX-SPY-01-S 10A	05/09/02	10	K2203044-043	mg/kg	--	--	13	--	--	--	--	--	--
SPY-01B	EX-SPY-01-S 1B	05/09/02	1	K2203044-032	mg/kg	--	--	28.4	--	--	--	--	--	--
	EX-SPY-01-S 5B	05/09/02	5	K2203044-033	mg/kg	--	--	90.3	--	--	--	--	--	--
	EX-SPY-01-S 10B	05/09/02	10	K2203044-034	mg/kg	--	--	21.2	--	--	--	--	--	--
SPY-01C	EX-SPY-01-S 1C	05/09/02	1	K2203044-035	mg/kg	--	--	77	--	--	--	--	--	--
	EX-SPY-01-S 5C	05/09/02	5	K2203044-036	mg/kg	--	--	20.7	--	--	--	--	--	--
	EX-SPY-01-S 10C	05/09/02	10	K2203044-037	mg/kg	--	--	11.6	--	--	--	--	--	--
SPY-01D	EX-SPY-01-S 1D	05/09/02	1	K2203044-038	mg/kg	--	--	23.9	--	--	--	--	--	--
	EX-SPY-01-S 5D	05/09/02	5	K2203044-039	mg/kg	--	--	21	--	--	--	--	--	--
	EX-SPY-01-S 10D	05/09/02	10	K2203044-040	mg/kg	--	--	11.2	--	--	--	--	--	--
SPY-01E	EX-SPY-01-S 1E	05/09/02	1	K2203044-022	mg/kg	--	--	21.8	--	--	--	--	--	--
	EX-SPY-01-S 5E	05/09/02	5	K2203044-023	mg/kg	--	--	16.6	--	--	--	--	--	--
	EX-SPY-01-S 10E	05/09/02	10	K2203044-024	mg/kg	--	--	12.2	--	--	--	--	--	--
SPY-01F	EX-SPY-01-S 1F	05/09/02	1	K2203044-025	mg/kg	--	--	30	--	--	--	--	--	--
	EX-SPY-01-S 5F	05/09/02	5	K2203044-026	mg/kg	--	--	19.9	--	--	--	--	--	--
	EX-SPY-01-S 10F	05/09/02	10	K2203044-027	mg/kg	--	--	12.2	--	--	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Chromium, Total	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	NA	3,000	NA	NA	NA	11,200	24	1,600
Clark County Natural Background Concentration						26.57	NA	34.43	58665	24.02	NA	1511	0.04	21.04
SPY-01G	EX-SPY-01-S 1G	05/09/02	1	K2203044-028	mg/kg	--	--	13.6	--	--	--	--	--	--
	EX-SPY-01-S 3G	05/09/02	3	K2203044-031	mg/kg	--	--	17.7	--	--	--	--	--	--
	EX-SPY-01-S 5G	05/09/02	5	K2203044-029	mg/kg	--	--	16.9	--	--	--	--	--	--
	EX-SPY-01-S 10G	05/09/02	10	K2203044-030	mg/kg	--	--	12	--	--	--	--	--	--
SPY-01H	EX-SPY-01-S 1H	05/09/02	1	K2203044-019	mg/kg	--	--	19.7	--	--	--	--	--	--
	EX-SPY-01-S 5H	05/09/02	5	K2203044-020	mg/kg	--	--	21.6	--	--	--	--	--	--
	EX-SPY-01-S 10H	05/09/02	10	K2203044-021	mg/kg	--	--	10.9	--	--	--	--	--	--
TP-18A	EX-TP-18-S7A	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--	--	--
	EX-TP-18-S9A	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--	--	--
TP-18B	EX-TP-18-S7B	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--	--	--
	EX-TP-18-S9B	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--	--	--
TP-18C	EX-TP-18-S7C	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--	--	--
	EX-TP-18-S9C	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--	--	--
TP-18Cen	EX-TP-18-S7 cen	04/25/02	7	--	mg/kg	--	--	--	--	--	--	--	--	--
	EX-TP-18-S9 cen	04/25/02	9	--	mg/kg	--	--	--	--	--	--	--	--	--
TP-18D	EX-TP-18-S7D	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--	--	--
	EX-TP-18-S9D	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--	--	--
TP-18E	EX-TP-18-S7E	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--	--	--
	EX-TP-18-S9E	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--	--	--
TP-18F	EX-TP-18-S7F	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--	--	--
	EX-TP-18-S9F	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--	--	--
TP-18G	EX-TP-18-S7G	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--	--	--
	EX-TP-18-S9G	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--	--	--
TP-18H	EX-TP-18-S7H	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--	--	--
	EX-TP-18-S9H	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	400	400	NA	5.6	NA	24,000
Clark County Natural Background Concentration						NA	NA	NA	NA	NA	NA	95.52
July 2004 Soil Characterization												
B-275	B275-S-0.5	07/08/2004	0.5	K2405093-001	mg/kg	--	--	--	--	--	--	--
	B275-S-5.0	07/08/2004	5	K2405093-002	mg/kg	--	--	--	--	--	--	--
	B275-S-10.0	07/08/2004	10	K2405093-003	mg/kg	--	--	--	--	--	--	--
B-276	B276-S-0.5	07/13/2004	0.5	K2405170-055	mg/kg	--	--	--	--	--	--	--
	B276-S-3.0	07/13/2004	3	K2405170-056	mg/kg	--	--	--	--	--	--	--
B-277	B277-S-0.5	07/09/2004	0.5	K2405093-037	mg/kg	--	--	--	--	--	--	--
	B277-S-2.5	07/09/2004	2.5	K2405093-038	mg/kg	--	--	--	--	--	--	--
	B277-S-5.0	07/09/2004	5	K2405093-039	mg/kg	--	--	--	--	--	--	--
	B277-S-10.0	07/09/2004	10	K2405093-040	mg/kg	--	--	--	--	--	--	--
B-278	B278-S-0.5	07/09/2004	0.5	K2405093-042	mg/kg	--	--	--	--	--	--	--
	B278-S-2.5	07/09/2004	2.5	K2405093-043	mg/kg	--	--	--	--	--	--	--
	B278-S-10.0	07/09/2004	10	K2405093-044	mg/kg	--	--	--	--	--	--	--
	B278-S-10.0-Dup	07/09/2004	10	K2405093-044	mg/kg	--	--	--	--	--	--	--
B-279	B279-S-0.5	07/09/2004	0.5	K2405093-047	mg/kg	--	--	--	--	--	--	--
	B279-S-2.5	07/09/2004	2.5	K2405093-048	mg/kg	--	--	--	--	--	--	--
	B279-S-5.0	07/09/2004	5	K2405093-049	mg/kg	--	--	--	--	--	--	--
	B279-S-10.0	07/09/2004	10	K2405093-050	mg/kg	--	--	--	--	--	--	--
B-280	B280-S-0.5	07/13/2004	0.5	K2405170-051	mg/kg	--	--	--	--	--	--	--
	B280-S-5.0	07/13/2004	5	K2405170-052	mg/kg	--	--	--	--	--	--	--
	B280-S-10.0	07/13/2004	10	K2405170-053	mg/kg	--	--	--	--	--	--	--
B-281	B281-S-0.5	07/09/2004	0.5	K2405093-033	mg/kg	--	--	--	--	--	--	--
	B281-S-2.5	07/09/2004	2.5	K2405093-034	mg/kg	--	--	--	--	--	--	--
	B281-S-10.0	07/09/2004	10	K2405093-035	mg/kg	--	--	--	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	400	400	NA	5.6	NA	24,000
Clark County Natural Background Concentration						NA	NA	NA	NA	NA	NA	95.52
B-282	B282-S-0.5	07/08/2004	0.5	K2405093-004	mg/kg	--	--	--	--	--	--	--
	B282-S-5.0	07/08/2004	5	K2405093-005	mg/kg	--	--	--	--	--	--	--
	B282-S-10.0	07/08/2004	10	K2405093-006	mg/kg	--	--	--	--	--	--	--
	B282-S-10.0-Dup	07/08/2004	10	K2405093-006	mg/kg	--	--	--	--	--	--	--
B-283	B283-S-0.5	07/12/2004	0.5	K2405170-001	mg/kg	--	--	--	--	--	--	--
	B283-S-2.5	07/12/2004	2.5	K2405170-002	mg/kg	--	--	--	--	--	--	--
	B283-S-5.0	07/12/2004	5	K2405170-003	mg/kg	--	--	--	--	--	--	--
B-284	B284-S-0.5	07/13/2004	0.5	K2405170-042	mg/kg	--	--	--	--	--	--	--
	B284-S-2.5	07/13/2004	2.5	K2405170-043	mg/kg	--	--	--	--	--	--	--
	B284-S-5.0	07/13/2004	5	K2405170-044	mg/kg	--	--	--	--	--	--	--
	B284-S-10.0	07/13/2004	10	K2405170-045	mg/kg	--	--	--	--	--	--	--
B-285	B285-S-0.5	07/13/2004	0.5	K2405170-047	mg/kg	--	--	--	--	--	--	--
	B285-S-5.0	07/13/2004	5	K2405170-048	mg/kg	--	--	--	--	--	--	--
	B285-S-10.0	07/13/2004	10	K2405170-049	mg/kg	--	--	--	--	--	--	--
B-286	B286-S-0.5	07/08/2004	0.5	K2405093-009	mg/kg	--	--	--	--	--	--	--
	B286-S-2.5	07/08/2004	2.5	K2405093-010	mg/kg	--	--	--	--	--	--	--
	B286-S-5.0	07/08/2004	5	K2405093-011	mg/kg	--	--	--	--	--	--	--
	B286-S-10.0	07/08/2004	10	K2405093-012	mg/kg	--	--	--	--	--	--	--
B-287	B287-S-0.5	07/12/2004	0.5	K2405170-005	mg/kg	--	--	--	--	--	--	--
	B287-S-2.5	07/12/2004	2.5	K2405170-006	mg/kg	--	--	--	--	--	--	--
	B287-S-5.0	07/12/2004	5	K2405170-007	mg/kg	--	--	--	--	--	--	--
	B287-S-10.0	07/12/2004	10	K2405170-008	mg/kg	--	--	--	--	--	--	--
	B287-S-10.0-Dup	07/12/2004	10	K2405170-008	mg/kg	--	--	--	--	--	--	--
B-288	B288-S-0.5	07/08/2004	0.5	K2405093-013	mg/kg	--	--	--	--	--	--	--
	B288-S-10.0	07/08/2004	10	K2405093-014	mg/kg	--	--	--	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	400	400	NA	5.6	NA	24,000
Clark County Natural Background Concentration						NA	NA	NA	NA	NA	NA	95.52
B-289	B289-S-0.5	07/12/2004	0.5	K2405170-011	mg/kg	--	--	--	--	--	--	--
	B289-S-2.5	07/12/2004	2.5	K2405170-012	mg/kg	--	--	--	--	--	--	--
	B289-S-5.0	07/12/2004	5	K2405170-013	mg/kg	--	--	--	--	--	--	--
	B289-S-10.0	07/12/2004	10	K2405170-014	mg/kg	--	--	--	--	--	--	--
B-290	B290-S-0.5	07/13/2004	0.5	K2405170-036	mg/kg	--	--	--	--	--	--	--
	B290-S-2.5	07/13/2004	2.5	K2405170-037	mg/kg	--	--	--	--	--	--	--
	B290-S-5.0	07/13/2004	5	K2405170-038	mg/kg	--	--	--	--	--	--	--
	B290-S-10.0	07/13/2004	10	K2405170-039	mg/kg	--	--	--	--	--	--	--
	B290-S-10.0-Dup	07/13/2004	10	K2405170-039	mg/kg	--	--	--	--	--	--	--
B-291	B291-S-0.5	07/12/2004	0.5	K2405170-031	mg/kg	--	--	--	--	--	--	--
	B291-S-2.5	07/12/2004	2.5	K2405170-032	mg/kg	--	--	--	--	--	--	--
	B291-S-5.0	07/12/2004	5	K2405170-033	mg/kg	--	--	--	--	--	--	--
	B291-S-10.0	07/12/2004	10	K2405170-034	mg/kg	--	--	--	--	--	--	--
B-292	B292-S-0.5	07/08/2004	0.5	K2405093-016	mg/kg	--	--	--	--	--	--	--
	B292-S-2.5	07/08/2004	2.5	K2405093-017	mg/kg	--	--	--	--	--	--	--
	B292-S-5.0	07/08/2004	5	K2405093-018	mg/kg	--	--	--	--	--	--	--
	B292-S-5.0-Dup	07/08/2004	5	K2405093-018	mg/kg	--	--	--	--	--	--	--
	B292-S-10.0	07/08/2004	10	K2405093-019	mg/kg	--	--	--	--	--	--	--
B-293	B293-S-0.5	07/12/2004	0.5	K2405170-016	mg/kg	--	--	--	--	--	--	--
	B293-S-2.5	07/12/2004	2.5	K2405170-017	mg/kg	--	--	--	--	--	--	--
	B293-S-5.0	07/12/2004	5	K2405170-018	mg/kg	--	--	--	--	--	--	--
	B293-S-10.0	07/12/2004	10	K2405170-019	mg/kg	--	--	--	--	--	--	--
B-294	B294-S-0.5	07/12/2004	0.5	K2405170-021	mg/kg	--	--	--	--	--	--	--
	B294-S-2.5	07/12/2004	2.5	K2405170-022	mg/kg	--	--	--	--	--	--	--
	B294-S-5.0	07/12/2004	5	K2405170-023	mg/kg	--	--	--	--	--	--	--
	B294-S-10.0	07/12/2004	10	K2405170-024	mg/kg	--	--	--	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	400	400	NA	5.6	NA	24,000
Clark County Natural Background Concentration						NA	NA	NA	NA	NA	NA	95.52
B-295	B295-S-0.5	07/12/2004	0.5	K2405170-026	mg/kg	--	--	--	--	--	--	--
	B295-S-2.5	07/12/2004	2.5	K2405170-027	mg/kg	--	--	--	--	--	--	--
	B295-S-5.0	07/12/2004	5	K2405170-028	mg/kg	--	--	--	--	--	--	--
	B295-S-10.0	07/12/2004	10	K2405170-029	mg/kg	--	--	--	--	--	--	--
B-296	B296-S-0.5	07/09/2004	0.5	K2405093-028	mg/kg	--	--	--	--	--	--	--
	B296-S-2.5	07/09/2004	2.5	K2405093-029	mg/kg	--	--	--	--	--	--	--
	B296-S-5.0	07/09/2004	5	K2405093-030	mg/kg	--	--	--	--	--	--	--
	B296-S-10.0	07/09/2004	10	K2405093-031	mg/kg	--	--	--	--	--	--	--
B-297	B297-S-1.0	07/09/2004	1	K2405093-022	mg/kg	--	--	--	--	--	--	--
	B297-S-2.5	07/09/2004	2.5	K2405093-023	mg/kg	--	--	--	--	--	--	--
	B297-S-5.0	07/09/2004	5	K2405093-024	mg/kg	--	--	--	--	--	--	--
	B297-S-10.0	07/09/2004	10	K2405093-025	mg/kg	--	--	--	--	--	--	--
	B297-S-10.0-Dup	07/09/2004	10	K2405093-025	mg/kg	--	--	--	--	--	--	--
B-299	B299-S-0.5	07/21/2004	0.5	K2405400-016	mg/kg	--	--	--	--	--	--	--
	B299-S-2.5	07/21/2004	2.5	K2405400-017	mg/kg	--	--	--	--	--	--	--
	B299-S-5.0	07/21/2004	5	K2405400-018	mg/kg	--	--	--	--	--	--	--
	B299-S-10.0	07/21/2004	10	K2405400-019	mg/kg	--	--	--	--	--	--	--
B-300	B300-S-0.5	07/21/2004	0.5	K2405400-021	mg/kg	--	--	--	--	--	--	--
	B300-S-2.5	07/21/2004	2.5	K2405400-022	mg/kg	--	--	--	--	--	--	--
	B300-S-10.0	07/21/2004	10	K2405400-023	mg/kg	--	--	--	--	--	--	--
B-301	B301-S-0.5	07/21/2004	0.5	K2405400-025	mg/kg	--	--	--	--	--	--	--
	B301-S-2.5	07/21/2004	2.5	K2405400-026	mg/kg	--	--	--	--	--	--	--
	B301-S-5.0	07/21/2004	5	K2405400-027	mg/kg	--	--	--	--	--	--	--
MW-45D	MW45-S-0.5	07/20/2004	0.5	K2405400-006	mg/kg	--	--	--	--	--	--	--
	MW45-S-2.5	07/20/2004	2.5	K2405400-007	mg/kg	--	--	--	--	--	--	--
	MW45-S-5.0	07/20/2004	5	K2405400-008	mg/kg	--	--	--	--	--	--	--
	MW45-S-10.0	07/20/2004	10	K2405400-009	mg/kg	--	--	--	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	400	400	NA	5.6	NA	24,000
Clark County Natural Background Concentration						NA	NA	NA	NA	NA	NA	95.52
MW-9S	MW9R-S-0.5	07/14/2004	0.5	K2405253-001	mg/kg	--	--	--	--	--	--	--
	MW9R-S-2.5	07/14/2004	2.5	K2405253-002	mg/kg	--	--	--	--	--	--	--
	MW9R-S-5.0	07/14/2004	5	K2405253-003	mg/kg	--	--	--	--	--	--	--
	MW9R-S-10.0	07/14/2004	10	K2405253-004	mg/kg	--	--	--	--	--	--	--
Historical Characterization												
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	mg/Kg	--	--	--	--	--	--	49
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	mg/Kg	--	--	--	--	--	--	58
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	mg/Kg	--	--	--	--	--	--	46
	B206-S-10.0	11/01/99	10	K9907927-003	mg/Kg	--	--	--	--	--	--	62
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	mg/Kg	--	--	--	--	--	--	87
	B207-S-5.0	11/01/99	5	K9907927-005	mg/Kg	--	--	--	--	--	--	79
	B207-S-10.0	11/01/99	10	K9907927-006	mg/Kg	--	--	--	--	--	--	69
B-208	B208-S-5.0	11/01/99	5	K9907927-008	mg/Kg	--	--	--	--	--	--	85
B-209	B209-S-10 MSD	11/01/99	10	K9907927-014	mg/Kg	--	--	--	--	--	--	62
	B209-S-10.0	11/01/99	10	K9907927-012	mg/Kg	--	--	--	--	--	--	66
B-210	B210-S-5.0	11/01/99	5	K9907927-016	mg/Kg	--	--	--	--	--	--	74
	B210-S-15.0	11/01/99	15	K9907927-018	mg/Kg	--	--	--	--	--	--	75
B-212	B212-S-5.0	11/02/99	5	K9907927-025	mg/Kg	--	--	--	--	--	--	181
B-213	B213-S-2.5	11/02/99	2.5	K9907927-028	mg/Kg	--	--	--	--	--	--	80
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	mg/Kg	--	--	--	--	--	--	40
	B215-S-5.0	11/04/99	5	K9907986-002	mg/Kg	--	--	--	--	--	--	53
	B215-S-10.0	11/04/99	10	K9907986-003	mg/Kg	--	--	--	--	--	--	56
B-216	B216-S-5.0	11/04/99	5	K9907986-004	mg/Kg	--	--	--	--	--	--	63
	B216-S-10.0	11/04/99	10	K9907986-005	mg/Kg	--	--	--	--	--	--	63
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	mg/Kg	--	--	--	--	--	--	59
	B217-S-10.0	11/05/99	10	K9907986-012	mg/Kg	--	--	--	--	--	--	163
	B217-S-15.0	11/05/99	15	K9907986-013	mg/Kg	--	--	--	--	--	--	73

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	400	400	NA	5.6	NA	24,000
Clark County Natural Background Concentration						NA	NA	NA	NA	NA	NA	95.52
B-218	B218-S-5.0	11/08/99	5	K9908036-001	mg/Kg	--	--	--	--	--	--	63
	B218-S-15.0	11/08/99	15	K9908036-003	mg/Kg	--	--	--	--	--	--	64
B-219	B219-S-10.0	11/08/99	10	K9908036-006	mg/Kg	--	--	--	--	--	--	64
B-220	B220-S-5.0	11/08/99	5	K9908036-008	mg/Kg	--	--	--	--	--	--	58
	B220-S-10.0	11/08/99	10	K9908036-010	mg/Kg	--	--	--	--	--	--	58
MW-19	MW19-5	05/03/93	5	MW19-5	mg/kg	--	--	--	--	--	--	--
	MW19-20	05/03/93	20	MW19-20	mg/kg	--	--	--	--	--	--	--
MW-20S	MW20-5	05/03/93	5	MW20-5	mg/kg	--	--	--	--	--	--	--
	MW20D-5	05/03/93	5	MW20D-5	mg/kg	--	--	--	--	--	--	--
	MW20-20	05/03/93	20	MW20-20	mg/kg	--	--	--	--	--	--	--
MW-28S	T5070183	04/02/96	6	T5070183	mg/kg	535 U,J	0.45 U,JW	1.9 U	142 U,J	0.39 U,J	71.3	58.5
MW-29	T5070010	04/02/96	8.5	T5070010	mg/kg	905	0.53 U	2.2 U	233	0.27 U	58	65.9 J
	T5070011	04/02/96	11	T5070011	mg/kg	990	0.52 U	2.2 U	200	0.26 U	55.3	75.1 J
	T5070012	04/02/96	16	T5070012	mg/kg	1360	0.55 U	2.4	282	0.28 U	65.4	78.2 J
TP-17	TP17-0.5	05/03/93	0	TP17-0.5	mg/kg	--	--	--	--	--	--	--
	TP17-0.5	05/03/93	0.5	TP17-0.5	mg/kg	--	--	--	--	--	--	--
	TP17-5	05/03/93	5	TP17-5	mg/kg	--	--	--	--	--	--	--
TP-18	TP18-0.3	05/03/93	0	TP18-0.3	mg/kg	--	--	--	--	--	--	--
	TP18-0.3	05/03/93	0.3	TP18-0.3	mg/kg	--	--	--	--	--	--	--
	TP18-3	05/03/93	3	TP18-3	mg/kg	--	--	--	--	--	--	--
	TP18-7	05/03/93	7	TP18-7	mg/kg	--	--	--	--	--	--	--
TP-19	TP19-0.5	05/03/93	0	TP19-0.5	mg/kg	--	--	--	--	--	--	--
	TP19-0.5	05/03/93	0.5	TP19-0.5	mg/kg	--	--	--	--	--	--	--
	TP19-4.5	05/03/93	4	TP19-4.5	mg/kg	--	--	--	--	--	--	--
	TP19D-4.5	05/03/93	4	TP19D-4.5	mg/kg	--	--	--	--	--	--	--
	TP19-4.5	05/03/93	4.5	TP19-4.5	mg/kg	--	--	--	--	--	--	--
	TP19D-4.5	05/03/93	4.5	TP19D-4.5	mg/kg	--	--	--	--	--	--	--

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	400	400	NA	5.6	NA	24,000
Clark County Natural Background Concentration						NA	NA	NA	NA	NA	NA	95.52
TP-20	TP20-0.2	05/03/93	0	TP20-0.2	mg/kg	--	--	--	--	--	--	--
	TP20-0.2	05/03/93	0.2	TP20-0.2	mg/kg	--	--	--	--	--	--	--
	TP20-4.5	05/03/93	4	TP20-4.5	mg/kg	--	--	--	--	--	--	--
	TP20-4.5	05/03/93	4.5	TP20-4.5	mg/kg	--	--	--	--	--	--	--
TP-21	TP21-0.5	05/03/93	0.5	TP21-0.5	mg/kg	--	--	--	--	--	--	--
	TP21-5	05/03/93	5	TP21-5	mg/kg	--	--	--	--	--	--	--
TP-22	TP22-0.5	05/03/93	0	TP22-0.5	mg/kg	--	--	--	--	--	--	--
	TP22-0.5	05/03/93	0.5	TP22-0.5	mg/kg	--	--	--	--	--	--	--
	TP22-6	05/03/93	6	TP22-6	mg/kg	--	--	--	--	--	--	--
SPY-01A	EX-SPY-01-S 1A	05/09/02	1	K2203044-041	mg/kg	--	--	--	--	--	--	69.2
	EX-SPY-01-S 5A	05/09/02	5	K2203044-042	mg/kg	--	--	--	--	--	--	48.7
	EX-SPY-01-S 10A	05/09/02	10	K2203044-043	mg/kg	--	--	--	--	--	--	55.5
SPY-01B	EX-SPY-01-S 1B	05/09/02	1	K2203044-032	mg/kg	--	--	--	--	--	--	70.4
	EX-SPY-01-S 5B	05/09/02	5	K2203044-033	mg/kg	--	--	--	--	--	--	277
	EX-SPY-01-S 10B	05/09/02	10	K2203044-034	mg/kg	--	--	--	--	--	--	73.5
SPY-01C	EX-SPY-01-S 1C	05/09/02	1	K2203044-035	mg/kg	--	--	--	--	--	--	70.5
	EX-SPY-01-S 5C	05/09/02	5	K2203044-036	mg/kg	--	--	--	--	--	--	50.2
	EX-SPY-01-S 10C	05/09/02	10	K2203044-037	mg/kg	--	--	--	--	--	--	60.5
SPY-01D	EX-SPY-01-S 1D	05/09/02	1	K2203044-038	mg/kg	--	--	--	--	--	--	111
	EX-SPY-01-S 5D	05/09/02	5	K2203044-039	mg/kg	--	--	--	--	--	--	59.9
	EX-SPY-01-S 10D	05/09/02	10	K2203044-040	mg/kg	--	--	--	--	--	--	60.3
SPY-01E	EX-SPY-01-S 1E	05/09/02	1	K2203044-022	mg/kg	--	--	--	--	--	--	43.1
	EX-SPY-01-S 5E	05/09/02	5	K2203044-023	mg/kg	--	--	--	--	--	--	80.8
	EX-SPY-01-S 10E	05/09/02	10	K2203044-024	mg/kg	--	--	--	--	--	--	58.9
SPY-01F	EX-SPY-01-S 1F	05/09/02	1	K2203044-025	mg/kg	--	--	--	--	--	--	66.6
	EX-SPY-01-S 5F	05/09/02	5	K2203044-026	mg/kg	--	--	--	--	--	--	43.1
	EX-SPY-01-S 10F	05/09/02	10	K2203044-027	mg/kg	--	--	--	--	--	--	56.4

Table E-4-2
Metals in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Units	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Direct Contact (Ingestion) Method B: Unrestricted Land Use						NA	400	400	NA	5.6	NA	24,000
Clark County Natural Background Concentration						NA	NA	NA	NA	NA	NA	95.52
SPY-01G	EX-SPY-01-S 1G	05/09/02	1	K2203044-028	mg/kg	--	--	--	--	--	--	80.3
	EX-SPY-01-S 3G	05/09/02	3	K2203044-031	mg/kg	--	--	--	--	--	--	54.1
	EX-SPY-01-S 5G	05/09/02	5	K2203044-029	mg/kg	--	--	--	--	--	--	58.7
	EX-SPY-01-S 10G	05/09/02	10	K2203044-030	mg/kg	--	--	--	--	--	--	64.1
SPY-01H	EX-SPY-01-S 1H	05/09/02	1	K2203044-019	mg/kg	--	--	--	--	--	--	35.9
	EX-SPY-01-S 5H	05/09/02	5	K2203044-020	mg/kg	--	--	--	--	--	--	65.5
	EX-SPY-01-S 10H	05/09/02	10	K2203044-021	mg/kg	--	--	--	--	--	--	63.1
TP-18A	EX-TP-18-S7A	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--
	EX-TP-18-S9A	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--
TP-18B	EX-TP-18-S7B	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--
	EX-TP-18-S9B	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--
TP-18C	EX-TP-18-S7C	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--
	EX-TP-18-S9C	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--
TP-18Cen	EX-TP-18-S7 cen	04/25/02	7	--	mg/kg	--	--	--	--	--	--	--
	EX-TP-18-S9 cen	04/25/02	9	--	mg/kg	--	--	--	--	--	--	--
TP-18D	EX-TP-18-S7D	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--
	EX-TP-18-S9D	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--
TP-18E	EX-TP-18-S7E	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--
	EX-TP-18-S9E	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--
TP-18F	EX-TP-18-S7F	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--
	EX-TP-18-S9F	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--
TP-18G	EX-TP-18-S7G	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--
	EX-TP-18-S9G	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--
TP-18H	EX-TP-18-S7H	04/16/02	7	--	mg/kg	--	--	--	--	--	--	--
	EX-TP-18-S9H	04/16/02	9	--	mg/kg	--	--	--	--	--	--	--

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2-Methylphenol	3-Methylphenol	4-Methylphenol	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				4,000,000	4,000,000	400,000	320,000	4,800,000	NA	24,000,000
July 2004 Soil Characterization										
B-275	B275-S-0.5	07/08/2004	0.5	--	--	--	13	10 U	200	310
	B275-S-5.0	07/08/2004	5	--	--	--	10 U	10 U	10 U	10 U
	B275-S-10.0	07/08/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-276	B276-S-0.5	07/13/2004	0.5	--	--	--	10 U	10 U	10 U	10 U
	B276-S-3.0	07/13/2004	3	--	--	--	10 U	10 U	10 U	10 U
B-277	B277-S-0.5	07/09/2004	0.5	--	--	--	9.4 U	9.4 U	9.4 U	9.4 U
	B277-S-2.5	07/09/2004	2.5	--	--	--	10 U	10 U	10 U	27
	B277-S-5.0	07/09/2004	5	--	--	--	9.6 U	9.6 U	9.6 U	9.6 U
	B277-S-10.0	07/09/2004	10	--	--	--	9.8 U	9.8 U	9.8 U	9.8 U
B-278	B278-S-0.5	07/09/2004	0.5	--	--	--	9.8 U	9.8 U	21	400
	B278-S-2.5	07/09/2004	2.5	--	--	--	9.9 U	9.9 U	9.9 U	11
	B278-S-10.0	07/09/2004	10	--	--	--	10 U	10 U	10 U	10 U
	B278-S-10.0-Dup	07/09/2004	10	--	--	--	9.6 U	9.6 U	9.6 U	9.6 U
B-279	B279-S-0.5	07/09/2004	0.5	--	--	--	10 U	10 U	10 U	10 U
	B279-S-2.5	07/09/2004	2.5	--	--	--	10 U	10 U	10 U	10 U
	B279-S-5.0	07/09/2004	5	--	--	--	9.8 U	9.8 U	9.8 U	9.8 U
	B279-S-10.0	07/09/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-280	B280-S-0.5	07/13/2004	0.5	--	--	--	10 U	10 U	16	32
	B280-S-5.0	07/13/2004	5	--	--	--	10 U	10 U	70	100
	B280-S-10.0	07/13/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-281	B281-S-0.5	07/09/2004	0.5	--	--	--	26	14	34	110
	B281-S-2.5	07/09/2004	2.5	--	--	--	150	63	17	59
	B281-S-10.0	07/09/2004	10	--	--	--	9.9 U	9.9 U	9.9 U	9.9 U
B-282	B282-S-0.5	07/08/2004	0.5	--	--	--	100 U	100 U	160	410
	B282-S-5.0	07/08/2004	5	--	--	--	10 U	10 U	10 U	12
	B282-S-10.0	07/08/2004	10	--	--	--	10 U	10 U	10 U	10 U
	B282-S-10.0-Dup	07/08/2004	10	--	--	--	10 U	10 U	10 U	10 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2-Methylphenol	3-Methylphenol	4-Methylphenol	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				4,000,000	4,000,000	400,000	320,000	4,800,000	NA	24,000,000
B-283	B283-S-0.5	07/12/2004	0.5	--	--	--	9.9 U	9.9 U	9.9 U	9.9 U
	B283-S-2.5	07/12/2004	2.5	--	--	--	10 U	10 U	10 U	10 U
	B283-S-5.0	07/12/2004	5	--	--	--	10 U	10 U	10 U	10 U
B-284	B284-S-0.5	07/13/2004	0.5	--	--	--	230	100 U	100 U	100 U
	B284-S-2.5	07/13/2004	2.5	--	--	--	11 U	11 U	11 U	19
	B284-S-5.0	07/13/2004	5	--	--	--	10 U	10 U	10 U	10 U
	B284-S-10.0	07/13/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-285	B285-S-0.5	07/13/2004	0.5	--	--	--	200 U	200 U	220	350
	B285-S-5.0	07/13/2004	5	--	--	--	110	130	25	81
	B285-S-10.0	07/13/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-286	B286-S-0.5	07/08/2004	0.5	--	--	--	100 U	100 U	100 U	240
	B286-S-2.5	07/08/2004	2.5	--	--	--	75	10 U	10 U	10 U
	B286-S-5.0	07/08/2004	5	--	--	--	10 U	10 U	10 U	10 U
	B286-S-10.0	07/08/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-287	B287-S-0.5	07/12/2004	0.5	--	--	--	51 U	51 U	95	210
	B287-S-2.5	07/12/2004	2.5	--	--	--	9.8 U	9.8 U	14	23
	B287-S-5.0	07/12/2004	5	--	--	--	10 U	10 U	17	34
	B287-S-10.0	07/12/2004	10	--	--	--	9.7 U	9.7 U	9.7 U	9.7 U
	B287-S-10.0-Dup	07/12/2004	10	--	--	--	9.9 U	9.9 U	9.9 U	9.9 U
B-288	B288-S-0.5	07/08/2004	0.5	--	--	--	36	10 U	160	320
	B288-S-10.0	07/08/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-289	B289-S-0.5	07/12/2004	0.5	--	--	--	9.1 U	9.1 U	9.1 U	9.1 U
	B289-S-2.5	07/12/2004	2.5	--	--	--	830	99 U	99 U	57,000
	B289-S-5.0	07/12/2004	5	--	--	--	13	10 U	10 U	510
	B289-S-10.0	07/12/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-290	B290-S-0.5	07/13/2004	0.5	--	--	--	100 U	100 U	200	330
	B290-S-2.5	07/13/2004	2.5	--	--	--	120	360	100 U	940
	B290-S-5.0	07/13/2004	5	--	--	--	100 U	210	100 U	100 U
	B290-S-10.0	07/13/2004	10	--	--	--	10 U	10 U	10 U	10 U
	B290-S-10.0-Dup	07/13/2004	10	--	--	--	11 U	11 U	11 U	11 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2-Methylphenol	3-Methylphenol	4-Methylphenol	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				4,000,000	4,000,000	400,000	320,000	4,800,000	NA	24,000,000
B-291	B291-S-0.5	07/12/2004	0.5	--	--	--	100 U	100 U	100 U	200
	B291-S-2.5	07/12/2004	2.5	--	--	--	100 U	110	100 U	250
	B291-S-5.0	07/12/2004	5	--	--	--	10 U	10 U	10 U	10 U
	B291-S-10.0	07/12/2004	10	--	--	--	11 U	11 U	11 U	11 U
B-292	B292-S-0.5	07/08/2004	0.5	--	--	--	110 U	110 U	140	340
	B292-S-2.5	07/08/2004	2.5	--	--	--	10 U	10 U	10 U	10 U
	B292-S-5.0	07/08/2004	5	--	--	--	10 U	10 U	10 U	10 U
	B292-S-5.0-Dup	07/08/2004	5	--	--	--	9.7 U	9.7 U	9.7 U	9.7 U
	B292-S-10.0	07/08/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-293	B293-S-0.5	07/12/2004	0.5	--	--	--	9.6 U	11	65	240
	B293-S-2.5	07/12/2004	2.5	--	--	--	470	290	100 U	2,300
	B293-S-5.0	07/12/2004	5	--	--	--	9.9 U	9.9 U	9.9 U	9.9 U
	B293-S-10.0	07/12/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-294	B294-S-0.5	07/12/2004	0.5	--	--	--	10 U	10 U	13	22
	B294-S-2.5	07/12/2004	2.5	--	--	--	99 U	380	99 U	830
	B294-S-5.0	07/12/2004	5	--	--	--	9.5 U	9.5 U	9.5 U	23
	B294-S-10.0	07/12/2004	10	--	--	--	9.8 U	9.8 U	9.8 U	9.8 U
B-295	B295-S-0.5	07/12/2004	0.5	--	--	--	110 U	110 U	110 U	260
	B295-S-2.5	07/12/2004	2.5	--	--	--	10 U	24	25	120
	B295-S-5.0	07/12/2004	5	--	--	--	10 U	10 U	10 U	10 U
	B295-S-10.0	07/12/2004	10	--	--	--	9.7 U	9.7 U	9.7 U	9.7 U
B-296	B296-S-0.5	07/09/2004	0.5	--	--	--	100 U	100 U	590	2,200
	B296-S-2.5	07/09/2004	2.5	--	--	--	67	10 U	10 U	10 U
	B296-S-5.0	07/09/2004	5	--	--	--	23,000	3,100	130	270
	B296-S-10.0	07/09/2004	10	--	--	--	1,500	690	25	57
B-297	B297-S-1.0	07/09/2004	1	--	--	--	100 U	210	250	1,300
	B297-S-2.5	07/09/2004	2.5	--	--	--	10 U	10 U	10 U	30
	B297-S-5.0	07/09/2004	5	--	--	--	10 U	10 U	10 U	10 U
	B297-S-10.0	07/09/2004	10	--	--	--	10 U	10 U	10 U	10 U
	B297-S-10.0-Dup	07/09/2004	10	--	--	--	10 U	10 U	10 U	10 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2-Methylphenol	3-Methylphenol	4-Methylphenol	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				4,000,000	4,000,000	400,000	320,000	4,800,000	NA	24,000,000
B-299	B299-S-0.5	07/21/2004	0.5	--	--	--	10 U	10 U	10 U	23
	B299-S-2.5	07/21/2004	2.5	--	--	--	10 U	10 U	13	260
	B299-S-5.0	07/21/2004	5	--	--	--	10 U	10 U	10 U	25
	B299-S-10.0	07/21/2004	10	--	--	--	220	700	10 U	410
B-300	B300-S-0.5	07/21/2004	0.5	--	--	--	10 U	54	10 U	37
	B300-S-2.5	07/21/2004	2.5	--	--	--	11 U	11 U	14	38
	B300-S-10.0	07/21/2004	10	--	--	--	10 U	10 U	10 U	10 U
B-301	B301-S-0.5	07/21/2004	0.5	--	--	--	500 U	500 U	1,900	3,500
	B301-S-2.5	07/21/2004	2.5	--	--	--	10 U	10 U	11	42
	B301-S-5.0	07/21/2004	5	--	--	--	10 U	10 U	10 U	10 U
MW-45D	MW45-S-0.5	07/20/2004	0.5	--	--	--	11 U	11 U	200	260
	MW45-S-2.5	07/20/2004	2.5	--	--	--	11 U	11 U	11 U	11 U
	MW45-S-5.0	07/20/2004	5	--	--	--	10 U	10 U	10 U	10 U
	MW45-S-10.0	07/20/2004	10	--	--	--	10 U	10 U	10 U	10 U
MW-9S	MW9R-S-0.5	07/14/2004	0.5	--	--	--	1,000 U	1,300	7,700	25,000
	MW9R-S-2.5	07/14/2004	2.5	--	--	--	4,900	13,000	500 U	7,900
	MW9R-S-5.0	07/14/2004	5	--	--	--	780	2,500	30	1,500
	MW9R-S-10.0	07/14/2004	10	--	--	--	19	78	10 U	190
Historical Characterization										
B-204	B204-S-2.5	10/28/99	2.5	--	--	--	10 U,H	11 H	190 H	420 H
B-205	B205-S-2.5	10/29/99	2.5	--	--	--	18 H	41 H	68 H	180 H
B-206	B206-S-2.5	11/01/99	2.5	--	--	--	10 U	10 U	10 U	10 U
	B206-S-5.0	11/01/99	5	--	--	--	10 U	10 U	50 U	10 U
	B206-S-10.0	11/01/99	10	--	--	--	760 C	110 C	500 U,C	1100 C
B-207	B207-S-2.5	11/01/99	2.5	--	--	--	10 U	24	16	78
	B207-S-5.0	11/01/99	5	--	--	--	10 U	10 U	50 U	10 U
	B207-S-10.0	11/01/99	10	--	--	--	10 U	10 U	10 U	10 U
B-208	B208-S-5.0	11/01/99	5	--	--	--	28	84	25	170
	B208-S-10.0	11/01/99	10	--	--	--	10 U	10 U	50 U	10 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2-Methylphenol	3-Methylphenol	4-Methylphenol	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				4,000,000	4,000,000	400,000	320,000	4,800,000	NA	24,000,000
B-209	B209-S-2.5	11/01/99	2.5	--	--	--	10 U	10 U	50 U	12
	B209-S-10.0	11/01/99	10	--	--	--	10 U	10 U	10 U	10 U
	B209-S-901	11/01/99	10	--	--	--	10 U	10 U	50 U	10 U
B-210	B210-S-2.5	11/01/99	2.5	--	--	--	10 U	10 U	50 U	10 U
	B210-S-5.0	11/01/99	5	--	--	--	10 U	11	50 U	88
	B210-S-15.0	11/01/99	15	--	--	--	10 U	10 U	10 U	10 U
B-212	B212-S-5.0	11/02/99	5	--	--	--	10 U	10 U	50 U	10 U
B-213	B213-S-2.5	11/02/99	2.5	--	--	--	10 U	10 U	50 U	23
B-215	B215-S-2.5	11/04/99	2.5	--	--	--	10 U	10 U	11	28
	B215-S-5.0	11/04/99	5	--	--	--	10 U	10 U	10 U	16
	B215-S-10.0	11/04/99	10	--	--	--	10 U	10 U	10 U	10 U
B-216	B216-S-5.0	11/04/99	5	--	--	--	10 U	10 U	10 U	10 U
B-217	B217-S-2.5	11/05/99	2.5	--	--	--	10 U	55	27	210
	B217-S-10.0	11/05/99	10	--	--	--	30	50	10 U	200
	B217-S-15.0	11/05/99	15	--	--	--	10 U	10 U	10 U	10 U
B-218	B218-S-5.0	11/08/99	5	--	--	--	21	180	68	1100
	B218-S-15.0	11/08/99	15	--	--	--	10 U	10 U	10 U	10 U
B-219	B219-S-10.0	11/08/99	10	--	--	--	10 U	10 U	10 U	10 U
B-220	B220-S-5.0	11/08/99	5	--	--	--	11	45	74	180
	B220-S-10.0	11/08/99	10	--	--	--	10 U	10 U	10 U	10 U
MW9	HC-W10/S3	02/04/91	5.5	2,500 U	2,500 U	2,500 U	--	--	--	--
	HC-W10/S9	02/04/91	20.5	2,500 U	2,500 U	2,500 U	--	--	--	--
MW-28S	T5070182	04/02/96	0.5	--	--	--	--	--	--	300
	T5070183	04/02/96	6	--	--	--	--	380 U	--	380 U
SPY-01	HC-SPY/01	02/06/91	0.5	25,000 U	25,000 U	25,000 U	--	--	--	--
SPY-02	HC-SPY/02	02/06/91	0.5	25,000 U	25,000 U	25,000 U	--	--	--	--
SPY-03	HC-SPY/03	02/06/91	0.5	2,500 U	2,500 U	2,500 U	--	--	--	--
SPY-04	HC-SPY/04	02/06/91	0.5	2,500 U	2,500 U	2,500 U	--	--	--	--
TP-17	TP17-0.5	05/03/93	0.5	--	--	--	--	--	--	1,300 U
TP-18	TP18-3	05/03/93	3	--	--	--	--	--	--	330 U
	TP18-7	05/03/93	7	--	--	--	--	--	--	3,300 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2-Methylphenol	3-Methylphenol	4-Methylphenol	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				4,000,000	4,000,000	400,000	320,000	4,800,000	NA	24,000,000
TP-19	TP19-0.5	05/03/93	0.5	--	--	--	--	--	--	13,000
TP-22	TP22-0.5	05/03/93	0.5	--	--	--	--	--	--	1,700 U
B220-S2-ESW	EX-B-220-S2-ESW	04/17/02	2	--	--	--	12 U	13	12 U	23
B220-S2-NSW	EX-B-220-S2-NSW	04/17/02	2	--	--	--	11 U	11 U	11 U	11 U
B220-S2-SSW	EX-B-220-S2-SSW	04/17/02	2	--	--	--	11 U	11 U	11 U	11 U
B220-S2-WSW	EX-B-220-S2-WSW	04/17/02	2	--	--	--	50	820	23 U	1,600
B220-S4	EX-B-220-S4-COM	04/17/02	4	--	--	--	13 U	13 U	52	130
SPY-01A	EX-SPY-01-S 1A	05/09/02	1	--	--	--	460	8,100	1,200	9,000
	EX-SPY-01-S 5A	05/09/02	5	--	--	--	13 U	13 U	13 U	13 U
	EX-SPY-01-S 10A	05/09/02	10	--	--	--	26 U	26 U	26 U	26 U
SPY-01B	EX-SPY-01-S 1B	05/09/02	1	--	--	--	11 U	11 U	180	360
	EX-SPY-01-S 5B	05/09/02	5	--	--	--	300	1,600	680 U	870
	EX-SPY-01-S 10B	05/09/02	10	--	--	--	2,100	12,000	300	4,800
SPY-01C	EX-SPY-01-S 1C	05/09/02	1	--	--	--	11 U	16	170	1,100
	EX-SPY-01-S 5C	05/09/02	5	--	--	--	13 U	13 U	13 U	13 U
	EX-SPY-01-S 10C	05/09/02	10	--	--	--	13 U	13 U	13 U	13 U
SPY-01D	EX-SPY-01-S 1D	05/09/02	1	--	--	--	31	77	22	210
	EX-SPY-01-S 5D	05/09/02	5	--	--	--	12 U	12 U	12 U	12 U
	EX-SPY-01-S 10D	05/09/02	10	--	--	--	24 U	24 U	24 U	24 U
SPY-01E	EX-SPY-01-S 1E	05/09/02	1	--	--	--	11 U	32	340	340
	EX-SPY-01-S 5E	05/09/02	5	--	--	--	22	13 U	13 U	13 U
	EX-SPY-01-S 10E	05/09/02	10	--	--	--	13 U	13 U	13 U	13 U
SPY-01F	EX-SPY-01-S 1F	05/09/02	1	--	--	--	11 U	11 U	52	150
	EX-SPY-01-S 5F	05/09/02	5	--	--	--	11 U	11 U	11 U	11 U
	EX-SPY-01-S 10F	05/09/02	10	--	--	--	13 U	13 U	13 U	13 U
SPY-01G	EX-SPY-01-S 1G	05/09/02	1	--	--	--	58 U	90	58 U	220
	EX-SPY-01-S 3G	05/09/02	3	--	--	--	12 U	12 U	12 U	12 U
	EX-SPY-01-S 5G	05/09/02	5	--	--	--	12 U	12 U	12 U	12 U
	EX-SPY-01-S 10G	05/09/02	10	--	--	--	12 U	12 U	12 U	12 U
SPY-01H	EX-SPY-01-S 1H	05/09/02	1	--	--	--	11 U	11 U	70	160
	EX-SPY-01-S 5H	05/09/02	5	--	--	--	13 U	13 U	22	50
	EX-SPY-01-S 10H	05/09/02	10	--	--	--	13 U	13 U	13 U	13 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)fluoranthene	Carbazole	Chrysene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	140	140	NA	140	50,000	140
July 2004 Soil Characterization										
B-275	B275-S-0.5	07/08/2004	0.5	110	85	**400**	72	85	47	**210**
	B275-S-5.0	07/08/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B275-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-276	B276-S-0.5	07/13/2004	0.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B276-S-3.0	07/13/2004	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-277	B277-S-0.5	07/09/2004	0.5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
	B277-S-2.5	07/09/2004	2.5	10 U	14	33	19	10 U	10 U	16
	B277-S-5.0	07/09/2004	5	9.6 U	9.6 U	9.6	9.6 U	9.6 U	9.6 U	9.6 U
	B277-S-10.0	07/09/2004	10	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U
B-278	B278-S-0.5	07/09/2004	0.5	**150**	**140**	**400**	120	110	100	**340**
	B278-S-2.5	07/09/2004	2.5	20	12	26	9.9 U	9.9 U	9.9 U	37
	B278-S-10.0	07/09/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B278-S-10.0-Dup	07/09/2004	10	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U
B-279	B279-S-0.5	07/09/2004	0.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B279-S-2.5	07/09/2004	2.5	10 U	11	22	15	10 U	10 U	16
	B279-S-5.0	07/09/2004	5	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U
	B279-S-10.0	07/09/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-280	B280-S-0.5	07/13/2004	0.5	19	34	86	50	20	10 U	38
	B280-S-5.0	07/13/2004	5	120	**150**	**420**	150	120	43	**250**
	B280-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-281	B281-S-0.5	07/09/2004	0.5	46	43	**160**	210	42	37	88
	B281-S-2.5	07/09/2004	2.5	37	25	120	61	30	10	63
	B281-S-10.0	07/09/2004	10	9.9 U	9.9 U	9.9 U	12	9.9 U	9.9 U	9.9 U
B-282	B282-S-0.5	07/08/2004	0.5	**360**	**190**	**980**	560	**300**	100 U	**890**
	B282-S-5.0	07/08/2004	5	24	10 U	26	10 U	10 U	10 U	41
	B282-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B282-S-10.0-Dup	07/08/2004	10	10 U	10 U	17	10 U	10 U	10 U	15

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)fluoranthene	Carbazole	Chrysene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	140	140	NA	140	50,000	140
B-283	B283-S-0.5	07/12/2004	0.5	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
	B283-S-2.5	07/12/2004	2.5	10 U	10 U	10 U	10 U	10 U	10 U	10
	B283-S-5.0	07/12/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-284	B284-S-0.5	07/13/2004	0.5	**140**	100 U	**280**	100 U	100 U	100 U	**320**
	B284-S-2.5	07/13/2004	2.5	22	18	71	13	20	11 U	58
	B284-S-5.0	07/13/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B284-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-285	B285-S-0.5	07/13/2004	0.5	**370**	**570**	**1,700**	610	**460**	200 U	**1,000**
	B285-S-5.0	07/13/2004	5	82	91	**210**	66	53	20	**150**
	B285-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-286	B286-S-0.5	07/08/2004	0.5	**490**	**150**	**1,500**	100 U	**480**	130	**1,500**
	B286-S-2.5	07/08/2004	2.5	12	18	30	10 U	10 U	10 U	33
	B286-S-5.0	07/08/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B286-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-287	B287-S-0.5	07/12/2004	0.5	100	**180**	**690**	290	**160**	51 U	**310**
	B287-S-2.5	07/12/2004	2.5	17	26	96	33	22	9.8 U	82
	B287-S-5.0	07/12/2004	5	45	57	**180**	47	53	13	130
	B287-S-10.0	07/12/2004	10	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U
	B287-S-10.0-Dup	07/12/2004	10	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
B-288	B288-S-0.5	07/08/2004	0.5	120	89	**320**	280	76	49	**200**
	B288-S-10.0	07/08/2004	10	10 U	10 U	10 U	11	10 U	10 U	10 U
B-289	B289-S-0.5	07/12/2004	0.5	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U
	B289-S-2.5	07/12/2004	2.5	**2,400**	**810**	**1,300**	110	**520**	13,000	**5,000**
	B289-S-5.0	07/12/2004	5	22	10	19	17	10 U	140	46
	B289-S-10.0	07/12/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-290	B290-S-0.5	07/13/2004	0.5	**180**	**140**	**740**	530	**170**	100 U	**360**
	B290-S-2.5	07/13/2004	2.5	**480**	**430**	**2,000**	330	**500**	300	**1,100**
	B290-S-5.0	07/13/2004	5	**140**	**170**	**220**	100 U	100 U	100 U	**220**
	B290-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B290-S-10.0-Dup	07/13/2004	10	11 U	11 U	11 U	11 U	11 U	11 U	11 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)fluoranthene	Carbazole	Chrysene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	140	140	NA	140	50,000	140
B-291	B291-S-0.5	07/12/2004	0.5	120	**250**	**750**	300	**170**	100 U	**310**
	B291-S-2.5	07/12/2004	2.5	**260**	**260**	**740**	320	**210**	100 U	**560**
	B291-S-5.0	07/12/2004	5	10 U	10 U	17	10	10 U	10 U	16
	B291-S-10.0	07/12/2004	10	11 U	11 U	11 U	11 U	11 U	11 U	11 U
B-292	B292-S-0.5	07/08/2004	0.5	**190**	**150**	**770**	110 U	**180**	110 U	**390**
	B292-S-2.5	07/08/2004	2.5	10 U	18	10 U	10 U	10 U	10 U	10 U
	B292-S-5.0	07/08/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B292-S-5.0-Dup	07/08/2004	5	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U
	B292-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-293	B293-S-0.5	07/12/2004	0.5	**200**	130	**250**	270	100	34	**270**
	B293-S-2.5	07/12/2004	2.5	**1,400**	**450**	**1,700**	250	**580**	740	**3,000**
	B293-S-5.0	07/12/2004	5	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
	B293-S-10.0	07/12/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-294	B294-S-0.5	07/12/2004	0.5	12	13	79	30	17	10 U	37
	B294-S-2.5	07/12/2004	2.5	**830**	**450**	**1,100**	240	**370**	120	**1,300**
	B294-S-5.0	07/12/2004	5	37	41	100	26	31	9.5 U	85
	B294-S-10.0	07/12/2004	10	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U
B-295	B295-S-0.5	07/12/2004	0.5	**210**	**350**	**1,500**	420	**210**	110 U	**650**
	B295-S-2.5	07/12/2004	2.5	**210**	110	**290**	94	96	10 U	**260**
	B295-S-5.0	07/12/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B295-S-10.0	07/12/2004	10	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U
B-296	B296-S-0.5	07/09/2004	0.5	**2,000**	**2,100**	**7,500**	1,600	**2,300**	680	**5,900**
	B296-S-2.5	07/09/2004	2.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B296-S-5.0	07/09/2004	5	**140**	23	54	16	17	200 U	**220**
	B296-S-10.0	07/09/2004	10	15	10	35	10 U	10 U	11	44
B-297	B297-S-1.0	07/09/2004	1	**1,300**	110	**1,900**	100 U	**560**	170	**1,700**
	B297-S-2.5	07/09/2004	2.5	36	15	130	10 U	22	10 U	100
	B297-S-5.0	07/09/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B297-S-10.0	07/09/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B297-S-10.0-Dup	07/09/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)fluoranthene	Carbazole	Chrysene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	140	140	NA	140	50,000	140
B-299	B299-S-0.5	07/21/2004	0.5	16	33	83	41	21	10	44
	B299-S-2.5	07/21/2004	2.5	**160**	93	**210**	61	69	29	**250**
	B299-S-5.0	07/21/2004	5	10 U	14	33	11	10 U	10 U	22
	B299-S-10.0	07/21/2004	10	**230**	59	130	17	47	120	**270**
B-300	B300-S-0.5	07/21/2004	0.5	10 U	21	33	15	10 U	10 U	20
	B300-S-2.5	07/21/2004	2.5	25	31	81	74	24	12	46
	B300-S-10.0	07/21/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-301	B301-S-0.5	07/21/2004	0.5	**1,600**	**3,600**	**14,000**	1,100	**2,400**	1,000	**4,600**
	B301-S-2.5	07/21/2004	2.5	28	43	130	64	24	13	48
	B301-S-5.0	07/21/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-45D	MW45-S-0.5	07/20/2004	0.5	**220**	**260**	**790**	490	**220**	110	**410**
	MW45-S-2.5	07/20/2004	2.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
	MW45-S-5.0	07/20/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	MW45-S-10.0	07/20/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-9S	MW9R-S-0.5	07/14/2004	0.5	**19,000**	**18,000**	**51,000**	18,000	**12,000**	4,400	**38,000**
	MW9R-S-2.5	07/14/2004	2.5	**2,700**	**890**	**1,500**	200	**580**	2,100	**2,700**
	MW9R-S-5.0	07/14/2004	5	**180**	75	**140**	31	49	1,100	**240**
	MW9R-S-10.0	07/14/2004	10	48	15	21	10 U	10 U	110	39
Historical Characterization										
B-204	B204-S-2.5	10/28/99	2.5	**1,300 H**	**2,500 H**	**6,300 H**	1,600 H	**4,900 H**	190 H	**6,300 H**
B-205	B205-S-2.5	10/29/99	2.5	**170 H**	**340 H**	**560 H**	370 H	**520 H**	84 H	**390 H**
B-206	B206-S-2.5	11/01/99	2.5	10 U	10 U	27	10 U	16	10 U	25
	B206-S-5.0	11/01/99	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B206-S-10.0	11/01/99	10	**560 C**	130 C	**210 C**	100 U,C	**150 C**	140 C	**630 C**
B-207	B207-S-2.5	11/01/99	2.5	99	**180 D**	**310 D**	150 D	**220 D**	20	**260**
	B207-S-5.0	11/01/99	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B207-S-10.0	11/01/99	10	10 U	10 U	15	10 U	11	10 U	10 U
B-208	B208-S-5.0	11/01/99	5	**480**	**450**	**1,200**	180	**710**	94	**1,100**
	B208-S-10.0	11/01/99	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)fluoranthene	Carbazole	Chrysene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	140	140	NA	140	50,000	140
B-209	B209-S-2.5	11/01/99	2.5	16	12	16	10 U	13	10 U	20
	B209-S-10.0	11/01/99	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B209-S-901	11/01/99	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-210	B210-S-2.5	11/01/99	2.5	10 U	10 U	13	10 U	11	10 U	14
	B210-S-5.0	11/01/99	5	**340**	110	**370**	51	**250**	36	**560**
	B210-S-15.0	11/01/99	15	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-212	B212-S-5.0	11/02/99	5	10 U	10	19	10 U	11	10 U	15
B-213	B213-S-2.5	11/02/99	2.5	34	71	**160**	85	110	13	91
B-215	B215-S-2.5	11/04/99	2.5	110	92	**330**	94	**250**	21	**310**
	B215-S-5.0	11/04/99	5	100 U,D	100 U,D	**170 D**	100 U,D	**150 D**	12	**240 D**
	B215-S-10.0	11/04/99	10	10 U	10 U	10 U	10 U	10 U	10 U	11
B-216	B216-S-5.0	11/04/99	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-217	B217-S-2.5	11/05/99	2.5	**420 D**	**390 D**	**540 D**	370 D	**560 D**	42	**680 D**
	B217-S-10.0	11/05/99	10	120	**140**	**180**	98	**180**	47	**200**
	B217-S-15.0	11/05/99	15	10 U	10 U	10 U	10 U	10 U	60	10 U
B-218	B218-S-5.0	11/08/99	5	**1,800**	**1,700**	**2,100**	520	**2,300**	240	**4,900**
	B218-S-15.0	11/08/99	15	10 U	10 U	10 U	10 U	10 U	49	10 U
B-219	B219-S-10.0	11/08/99	10	10 U	10 U	12	10 U	11	10 U	10 U
B-220	B220-S-5.0	11/08/99	5	**2,000**	**1,200**	**2,700**	300	**2,300**	46	**4,400**
	B220-S-10.0	11/08/99	10	12	10 U	17	10 U	16	10 U	24
MW9	HC-W10/S3	02/04/91	5.5	--	--	--	--	--	--	--
	HC-W10/S9	02/04/91	20.5	--	--	--	--	--	--	--
MW-28S	T5070182	04/02/96	0.5	**1,800**	**1,600**	**2,400**	1,500	**1,700**	--	**2,000**
	T5070183	04/02/96	6	140 U	140 U	70	380 U	240 U	--	52
SPY-01	HC-SPY/01	02/06/91	0.5	--	--	--	--	--	--	--
SPY-02	HC-SPY/02	02/06/91	0.5	--	--	--	--	--	--	--
SPY-03	HC-SPY/03	02/06/91	0.5	--	--	--	--	--	--	--
SPY-04	HC-SPY/04	02/06/91	0.5	--	--	--	--	--	--	--
TP-17	TP17-0.5	05/03/93	0.5	1,300 U	1,300 U	1,300 U	--	1,300 U	1,300 U	1,300 U
TP-18	TP18-3	05/03/93	3	330 U	330 U	330 U	--	330 U	330 U	330 U
	TP18-7	05/03/93	7	3,300 U	3,300 U	3,300 U	--	3,300 U	3,300 U	3,300 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)fluoranthene	Carbazole	Chrysene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	140	140	NA	140	50,000	140
TP-19	TP19-0.5	05/03/93	0.5	**10,000**	**5,100**	**14,000**	--	**4,000**	4,200	**16,000**
TP-22	TP22-0.5	05/03/93	0.5	1,700 U	1,700 U	**3200**	--	1,700 U	1,700 U	**1,700**
B220-S2-ESW	EX-B-220-S2-ESW	04/17/02	2	67	78	**190**	35	130	12 U	**180**
B220-S2-NSW	EX-B-220-S2-NSW	04/17/02	2	27	15	34	11 U	24	11 U	39
B220-S2-SSW	EX-B-220-S2-SSW	04/17/02	2	11 U	16	27	12	19	11 U	20
B220-S2-WSW	EX-B-220-S2-WSW	04/17/02	2	**660**	**410**	**440**	130	**280**	190	**1,000**
B220-S4	EX-B-220-S4-COM	04/17/02	4	**240**	**550**	**1200**	290	**720**	29	**1,100**
SPY-01A	EX-SPY-01-S 1A	05/09/02	1	**35,000**	**14,000**	**32,000**	6,600	**26,000**	1,900	**61,000**
	EX-SPY-01-S 5A	05/09/02	5	19	19	63	16	44	13 U	60
	EX-SPY-01-S 10A	05/09/02	10	26 U	26 U	26 U	26 U	26 U	26 U	26 U
SPY-01B	EX-SPY-01-S 1B	05/09/02	1	**300**	**290**	**630**	850	**440**	92	**470**
	EX-SPY-01-S 5B	05/09/02	5	**7,900**	**1,600**	**4,100**	700	**3,400**	850	**10,000**
	EX-SPY-01-S 10B	05/09/02	10	**3,500**	**800**	**1,100**	210	**930**	130 U	**3,300**
SPY-01C	EX-SPY-01-S 1C	05/09/02	1	**1,400**	**2,000**	**3,500**	1,800	**2,300**	350	**8,800**
	EX-SPY-01-S 5C	05/09/02	5	13 U	13 U	13 U	13 U	13 U	13 U	13 U
	EX-SPY-01-S 10C	05/09/02	10	13 U	13 U	13 U	13 U	13 U	13 U	13 U
SPY-01D	EX-SPY-01-S 1D	05/09/02	1	**190**	88	**150**	120	130	65	**230**
	EX-SPY-01-S 5D	05/09/02	5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
	EX-SPY-01-S 10D	05/09/02	10	24 U	24 U	24 U	24 U	24 U	24 U	24 U
SPY-01E	EX-SPY-01-S 1E	05/09/02	1	**660**	**970**	**1,700**	1,400	**1,200**	130	**1,100**
	EX-SPY-01-S 5E	05/09/02	5	13 U	13 U	29	15	21	13 U	18
	EX-SPY-01-S 10E	05/09/02	10	13 U	13 U	13 U	13 U	13 U	13 U	13 U
SPY-01F	EX-SPY-01-S 1F	05/09/02	1	**180**	**150**	**440**	390	**260**	50	**350**
	EX-SPY-01-S 5F	05/09/02	5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
	EX-SPY-01-S 10F	05/09/02	10	13 U	13 U	13 U	13 U	13 U	13 U	13 U
SPY-01G	EX-SPY-01-S 1G	05/09/02	1	**540**	**290**	**1,300**	240	**790**	58 U	**1,400**
	EX-SPY-01-S 3G	05/09/02	3	12 U	12 U	14	12 U	12 U	12 U	16
	EX-SPY-01-S 5G	05/09/02	5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
	EX-SPY-01-S 10G	05/09/02	10	12 U	12 U	12 U	12 U	12 U	12 U	12 U
SPY-01H	EX-SPY-01-S 1H	05/09/02	1	110	**180**	**420**	370	**260**	30	**220**
	EX-SPY-01-S 5H	05/09/02	5	33	51	130	130	90	13 U	57
	EX-SPY-01-S 10H	05/09/02	10	13 U	13 U	13 U	13 U	13 U	13 U	13 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Dibenz(a,h)-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)-pyrene	Naphthalene	Phenanthrene	Pyrene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	160,000	3,200,000	3,200,000	140	1,600,000	NA	2,400,000
July 2004 Soil Characterization											
B-275	B275-S-0.5	07/08/2004	0.5	54	10 U	140	11	**330**	36	42	180
	B275-S-5.0	07/08/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B275-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-276	B276-S-0.5	07/13/2004	0.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B276-S-3.0	07/13/2004	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-277	B277-S-0.5	07/09/2004	0.5	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
	B277-S-2.5	07/09/2004	2.5	10 U	10 U	13	10 U	24	10 U	28	10 U
	B277-S-5.0	07/09/2004	5	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U
	B277-S-10.0	07/09/2004	10	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	11	9.8 U	10
B-278	B278-S-0.5	07/09/2004	0.5	28	12	220	29	**170**	13	120	240
	B278-S-2.5	07/09/2004	2.5	9.9 U	9.9 U	57	11	9.9 U	9.9 U	24	88
	B278-S-10.0	07/09/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B278-S-10.0-Dup	07/09/2004	10	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U
B-279	B279-S-0.5	07/09/2004	0.5	10 U	10 U	15	10 U	10 U	48	10 U	16
	B279-S-2.5	07/09/2004	2.5	10 U	10 U	17	10 U	16	10 U	10 U	20
	B279-S-5.0	07/09/2004	5	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U
	B279-S-10.0	07/09/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-280	B280-S-0.5	07/13/2004	0.5	10 U	10 U	40	10 U	50	26	27	47
	B280-S-5.0	07/13/2004	5	35	10 U	150	10 U	**200**	10 U	19	190
	B280-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-281	B281-S-0.5	07/09/2004	0.5	25	16	130	11	**210**	63	62	110
	B281-S-2.5	07/09/2004	2.5	13	38	150	26	86	320	84	130
	B281-S-10.0	07/09/2004	10	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
B-282	B282-S-0.5	07/08/2004	0.5	100 U	100 U	2,000	100 U	**560**	100 U	160	3500
	B282-S-5.0	07/08/2004	5	10 U	10 U	210	10 U	10 U	10 U	17	200
	B282-S-10.0	07/08/2004	10	10 U	10 U	33	10 U	10 U	10 U	10 U	33
	B282-S-10.0-Dup	07/08/2004	10	10 U	10 U	47	10 U	10 U	10 U	10 U	10 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Dibenz(a,h)-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)-pyrene	Naphthalene	Phenanthrene	Pyrene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	160,000	3,200,000	3,200,000	140	1,600,000	NA	2,400,000
B-283	B283-S-0.5	07/12/2004	0.5	9.9 U	9.9 U	16	9.9 U	9.9 U	9.9 U	22	14
	B283-S-2.5	07/12/2004	2.5	10 U	10 U	19	10 U	10 U	10 U	12	19
	B283-S-5.0	07/12/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-284	B284-S-0.5	07/13/2004	0.5	100 U	100 U	880	100 U	100 U	220	490	710
	B284-S-2.5	07/13/2004	2.5	11 U	11 U	120	11 U	29	13	49	100
	B284-S-5.0	07/13/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B284-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-285	B285-S-0.5	07/13/2004	0.5	200 U	200 U	760	200 U	**860**	200 U	200 U	790
	B285-S-5.0	07/13/2004	5	15	140	460	85	76	85	370	400
	B285-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-286	B286-S-0.5	07/08/2004	0.5	100 U	100 U	8,900	100 U	**260**	100 U	530	7700
	B286-S-2.5	07/08/2004	2.5	10 U	24	92	10 U	26	71	64	420
	B286-S-5.0	07/08/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B286-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-287	B287-S-0.5	07/12/2004	0.5	51 U	51 U	270	51 U	**370**	51 U	130	250
	B287-S-2.5	07/12/2004	2.5	9.8 U	9.8 U	29	9.8 U	41	9.8 U	9.8 U	33
	B287-S-5.0	07/12/2004	5	11	10 U	64	10 U	66	10 U	20	65
	B287-S-10.0	07/12/2004	10	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U
	B287-S-10.0-Dup	07/12/2004	10	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
B-288	B288-S-0.5	07/08/2004	0.5	48	24	180	13	**270**	120	72	220
	B288-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-289	B289-S-0.5	07/12/2004	0.5	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U
	B289-S-2.5	07/12/2004	2.5	99 U	1,400	10,000	5,600	**260**	410	12,000	9,200
	B289-S-5.0	07/12/2004	5	10 U	19	57	54	10 U	10 U	100	53
	B289-S-10.0	07/12/2004	10	10 U	10 U	13	11	10 U	10 U	10 U	10 U
B-290	B290-S-0.5	07/13/2004	0.5	100 U	100 U	360	100 U	**550**	100 U	110	310
	B290-S-2.5	07/13/2004	2.5	100 U	240	2,100	440	**470**	370	1,100	2,200
	B290-S-5.0	07/13/2004	5	100 U	100 U	320	100 U	110	100 U	120	340
	B290-S-10.0	07/13/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B290-S-10.0-Dup	07/13/2004	10	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Dibenz(a,h)-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)-pyrene	Naphthalene	Phenanthrene	Pyrene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	160,000	3,200,000	3,200,000	140	1,600,000	NA	2,400,000
B-291	B291-S-0.5	07/12/2004	0.5	100 U	100 U	220	100 U	**420**	100 U	100 U	380
	B291-S-2.5	07/12/2004	2.5	100 U	100 U	1,400	100	**390**	100 U	430	1,400
	B291-S-5.0	07/12/2004	5	10 U	10 U	32	10 U	10	10 U	18	37
	B291-S-10.0	07/12/2004	10	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
B-292	B292-S-0.5	07/08/2004	0.5	110 U	110 U	720	110 U	**340**	110 U	230	1,000
	B292-S-2.5	07/08/2004	2.5	10 U	10 U	10 U	10 U	25	10 U	10 U	53
	B292-S-5.0	07/08/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B292-S-5.0-Dup	07/08/2004	5	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U
	B292-S-10.0	07/08/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-293	B293-S-0.5	07/12/2004	0.5	30	12	600	19	**200**	9.6 U	230	510
	B293-S-2.5	07/12/2004	2.5	100 U	260	14,000	480	**340**	1,000	1,900	11,000
	B293-S-5.0	07/12/2004	5	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U	9.9 U
	B293-S-10.0	07/12/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-294	B294-S-0.5	07/12/2004	0.5	10 U	10 U	20	10 U	37	10 U	10 U	20
	B294-S-2.5	07/12/2004	2.5	99 U	120	6,200	240	**340**	99 U	1,400	6,800
	B294-S-5.0	07/12/2004	5	9.5 U	9.5 U	73	9.5 U	33	9.5 U	17	87
	B294-S-10.0	07/12/2004	10	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U
B-295	B295-S-0.5	07/12/2004	0.5	110 U	110 U	550	110 U	**620**	110 U	110 U	630
	B295-S-2.5	07/12/2004	2.5	19	10 U	1,300	16	120	10 U	160	1,200
	B295-S-5.0	07/12/2004	5	10 U	10 U	12	10 U	10 U	10 U	10 U	10 U
	B295-S-10.0	07/12/2004	10	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U
B-296	B296-S-0.5	07/09/2004	0.5	**420**	100 U	6,000	100 U	**2,500**	100 U	920	5,300
	B296-S-2.5	07/09/2004	2.5	10 U	22	10 U	10 U	10 U	1,900	10 U	10 U
	B296-S-5.0	07/09/2004	5	9.9 U	2,700	590	1,800	11	110,000	2,600	460
	B296-S-10.0	07/09/2004	10	10 U	400	71	270	12	4,400	290	59
B-297	B297-S-1.0	07/09/2004	1	**190**	160	4,300	450	**200**	100 U	2,500	1,300
	B297-S-2.5	07/09/2004	2.5	10 U	10 U	230	10 U	30	10 U	89	180
	B297-S-5.0	07/09/2004	5	10 U	10 U	12	10 U	10 U	10 U	10 U	13
	B297-S-10.0	07/09/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B297-S-10.0-Dup	07/09/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Dibenz(a,h)-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)-pyrene	Naphthalene	Phenanthrene	Pyrene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	160,000	3,200,000	3,200,000	140	1,600,000	NA	2,400,000
B-299	B299-S-0.5	07/21/2004	0.5	10 U	10 U	39	10 U	51	10 U	10 U	36
	B299-S-2.5	07/21/2004	2.5	14	34	1,000	73	79	10 U	240	800
	B299-S-5.0	07/21/2004	5	10 U	10 U	31	10 U	14	10 U	10 U	31
	B299-S-10.0	07/21/2004	10	10 U	400	1,700	650	24	660	2,500	1,300
B-300	B300-S-0.5	07/21/2004	0.5	10 U	10 U	32	10 U	16	57	10 U	14
	B300-S-2.5	07/21/2004	2.5	11 U	11 U	40	11 U	67	11 U	11 U	38
	B300-S-10.0	07/21/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-301	B301-S-0.5	07/21/2004	0.5	**1,100**	500 U	2,300	500 U	**6,600**	500 U	500 U	2,100
	B301-S-2.5	07/21/2004	2.5	12	10 U	100	10 U	77	10 U	22	130
	B301-S-5.0	07/21/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-45D	MW45-S-0.5	07/20/2004	0.5	74	11 U	310	16	**510**	11 U	69	370
	MW45-S-2.5	07/20/2004	2.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
	MW45-S-5.0	07/20/2004	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	MW45-S-10.0	07/20/2004	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-9S	MW9R-S-0.5	07/14/2004	0.5	**3,600**	1,000 U	50,000	2,500	**29,000**	1000 U	16,000	41,000
	MW9R-S-2.5	07/14/2004	2.5	53	8,200	17,000	11,000	500 U	3,500	33,000	13,000
	MW9R-S-5.0	07/14/2004	5	10 U	2,100	1,700	2,200	44	860	5,600	1,300
	MW9R-S-10.0	07/14/2004	10	10 U	140	280	130	10 U	15	240	210
Historical Characterization											
B-204	B204-S-2.5	10/28/99	2.5	**450 H**	11 H	1,600 H	16 H	**2,100 H**	10 U,H	200 H	9,700 H
B-205	B205-S-2.5	10/29/99	2.5	83 H	17 H	250 H	34 H	**440 H**	53 H	160 H	300 H
B-206	B206-S-2.5	11/01/99	2.5	10 U	10 U	43	10 U	10 U	10 U	40	39
	B206-S-5.0	11/01/99	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B206-S-10.0	11/01/99	10	100 U,C	170 C	2,000 C	440 C	100 U,C	1,600 C	2,700 C	1,700 C
B-207	B207-S-2.5	11/01/99	2.5	100 U,D	10 U	380	25	**210 D**	10 U	68	470
	B207-S-5.0	11/01/99	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B207-S-10.0	11/01/99	10	10 U	10 U	10 U	10 U	10	10 U	10 U	22
B-208	B208-S-5.0	11/01/99	5	63	52	940	110	**350**	20	490	950
	B208-S-10.0	11/01/99	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Dibenz(a,h)-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)-pyrene	Naphthalene	Phenanthrene	Pyrene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	160,000	3,200,000	3,200,000	140	1,600,000	NA	2,400,000
B-209	B209-S-2.5	11/01/99	2.5	10 U	10 U	51	10 U	13	12	29	63
	B209-S-10.0	11/01/99	10	10 U	10 U	11	10 U	10 U	10 U	10 U	10
	B209-S-901	11/01/99	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-210	B210-S-2.5	11/01/99	2.5	10 U	10 U	34	10 U	11	10 U	10 U	38
	B210-S-5.0	11/01/99	5	20	30	2,000	71	95	10 U	150	1,800
	B210-S-15.0	11/01/99	15	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-212	B212-S-5.0	11/02/99	5	10 U	10 U	23	10 U	14	10 U	15	22
B-213	B213-S-2.5	11/02/99	2.5	22	10 U	52	10 U	**160**	10 U	11	60
B-215	B215-S-2.5	11/04/99	2.5	26	10 U	230	10 U	98	10 U	66	230
	B215-S-5.0	11/04/99	5	100 U,D	10 U	180 D	10 U	100 U,D	10 U	37	170 D
	B215-S-10.0	11/04/99	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	12
B-216	B216-S-5.0	11/04/99	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-217	B217-S-2.5	11/05/99	2.5	100 U,D	28	1,400 D	91	**380 D**	10 U	170	1,300 D
	B217-S-10.0	11/05/99	10	27	36	450	86	110	30	470	430
	B217-S-15.0	11/05/99	15	10 U	33	10 U	43	10 U	10 U	10 U	10 U
B-218	B218-S-5.0	11/08/99	5	**150**	200	7,400	790	**690**	10 U	1,900	7,800
	B218-S-15.0	11/08/99	15	10 U	110	10 U	140	10 U	10 U	10 U	10 U
B-219	B219-S-10.0	11/08/99	10	10 U	10 U	10	10 U	10 U	10 U	10 U	10
B-220	B220-S-5.0	11/08/99	5	120	39	1,300	52	**620**	12	310	10,000
	B220-S-10.0	11/08/99	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	58
MW9	HC-W10/S3	02/04/91	5.5	--	--	--	--	--	--	--	--
	HC-W10/S9	02/04/91	20.5	--	--	--	--	--	--	--	--
MW-28S	T5070182	04/02/96	0.5	**710**	--	1,200	--	**1,600**	--	230	2,200
	T5070183	04/02/96	6	200 U	--	93	--	180 U	--	66	86
SPY-01	HC-SPY/01	02/06/91	0.5	--	--	--	--	--	--	--	--
SPY-02	HC-SPY/02	02/06/91	0.5	--	--	--	--	--	--	--	--
SPY-03	HC-SPY/03	02/06/91	0.5	--	--	--	--	--	--	--	--
SPY-04	HC-SPY/04	02/06/91	0.5	--	--	--	--	--	--	--	--
TP-17	TP17-0.5	05/03/93	0.5	--	1,300 U	1,300 U	--	1,300 U	1,300 U	1,300 U	1,300 U
TP-18	TP18-3	05/03/93	3	--	330 U	370	--	330 U	330 U	330 U	350
	TP18-7	05/03/93	7	--	5,200	6,200	--	3,300 U	3,500	13,000	4,600

Table E-4-3
Polycyclic Aromatic Hydrocarbons in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Dibenz(a,h)-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)-pyrene	Naphthalene	Phenanthrene	Pyrene
Direct Contact (Ingestion) Method B: Unrestricted Land Use				140	160,000	3,200,000	3,200,000	140	1,600,000	NA	2,400,000
TP-19	TP19-0.5	05/03/93	0.5	--	4,000 U	41,000	--	4,000 U	4,000 U	9,400	38,000
TP-22	TP22-0.5	05/03/93	0.5	--	1,700 U	1,700 U	--	**2,000**	1,700 U	1,700 U	1,700 U
B220-S2-ESW	EX-B-220-S2-ESW	04/17/02	2	12 U	12 U	200	12 U	79	12 U	43	800
B220-S2-NSW	EX-B-220-S2-NSW	04/17/02	2	11 U	11 U	60	11 U	15	11 U	11 U	120
B220-S2-SSW	EX-B-220-S2-SSW	04/17/02	2	11 U	11 U	23	11 U	24	11 U	13	41
B220-S2-WSW	EX-B-220-S2-WSW	04/17/02	2	44	130	3400	490	130	43	1200	3400
B220-S4	EX-B-220-S4-COM	04/17/02	4	81	13 U	170	13 U	**560**	13 U	30	2000
SPY-01A	EX-SPY-01-S 1A	05/09/02	1	**2,300**	3,100	190,000	5,400	**14,000**	210	15,000	170,000
	EX-SPY-01-S 5A	05/09/02	5	13 U	13 U	68	13 U	30	13 U	13 U	120
	EX-SPY-01-S 10A	05/09/02	10	26 U	26 U	26 U	26 U	26 U	26 U	26 U	26 U
SPY-01B	EX-SPY-01-S 1B	05/09/02	1	110	11 U	420	11 U	**1,200**	11 U	91	450
	EX-SPY-01-S 5B	05/09/02	5	**340**	860	84,000	750	**1,500**	1,600	4,400	61,000
	EX-SPY-01-S 10B	05/09/02	10	84	7,900	26,000	11,000	**460**	170	38,000	19,000
SPY-01C	EX-SPY-01-S 1C	05/09/02	1	**460**	11 U	1,300	22	**3,600**	11 U	180	1,400
	EX-SPY-01-S 5C	05/09/02	5	13 U	13 U	13 U	13 U	13	13 U	13 U	13 U
	EX-SPY-01-S 10C	05/09/02	10	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
SPY-01D	EX-SPY-01-S 1D	05/09/02	1	26	68	840	96	**210**	44	730	730
	EX-SPY-01-S 5D	05/09/02	5	12 U	12 U	12 U	12 U	12 U	12 U	12 U	17
	EX-SPY-01-S 10D	05/09/02	10	24 U	24 U	24 U	24 U	24 U	24 U	24 U	24 U
SPY-01E	EX-SPY-01-S 1E	05/09/02	1	**240**	14	1,800	26	**2,500**	11 U	270	2,000
	EX-SPY-01-S 5E	05/09/02	5	13 U	13 U	13 U	13 U	26	16	13 U	37
	EX-SPY-01-S 10E	05/09/02	10	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
SPY-01F	EX-SPY-01-S 1F	05/09/02	1	70	11 U	490	11 U	**680**	11 U	31	440
	EX-SPY-01-S 5F	05/09/02	5	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
	EX-SPY-01-S 10F	05/09/02	10	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
SPY-01G	EX-SPY-01-S 1G	05/09/02	1	100	66	2,100	170	**560**	58 U	920	6,900
	EX-SPY-01-S 3G	05/09/02	3	12 U	12 U	15	12 U	13	12 U	12 U	30
	EX-SPY-01-S 5G	05/09/02	5	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
	EX-SPY-01-S 10G	05/09/02	10	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
SPY-01H	EX-SPY-01-S 1H	05/09/02	1	75	11 U	190	11 U	**620**	11 U	45	200
	EX-SPY-01-S 5H	05/09/02	5	29	13 U	63	13 U	**250**	13 U	24	62
	EX-SPY-01-S 10H	05/09/02	10	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
Direct Contact (Ingestion) Method B: Unrestricted Land Use				2,400,000	NA	NA	NA	NA	NA
July 2004 Soil Characterization									
B-275	B275-S-0.5	07/08/2004	0.5	--	74	50 U	50 U	50 U	50 U
	B275-S-5.0	07/08/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B275-S-10.0	07/08/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-276	B276-S-0.5	07/13/2004	0.5	--	50 U	50 U	50 U	50 U	50 U
	B276-S-3.0	07/13/2004	3	--	50 U	50 U	50 U	50 U	50 U
B-277	B277-S-0.5	07/09/2004	0.5	--	47 U	47 U	47 U	47 U	47 U
	B277-S-2.5	07/09/2004	2.5	--	50 U	50 U	50 U	50 U	50 U
	B277-S-5.0	07/09/2004	5	--	48 U	48 U	48 U	48 U	48 U
	B277-S-10.0	07/09/2004	10	--	49 U	49 U	49 U	49 U	49 U
B-278	B278-S-0.5	07/09/2004	0.5	--	49 U	49 U	49 U	49 U	49 U
	B278-S-2.5	07/09/2004	2.5	--	50 U	50 U	50 U	50 U	50 U
	B278-S-10.0	07/09/2004	10	--	50 U	50 U	50 U	50 U	50 U
	B278-S-10.0-Dup	07/09/2004	10	--	48 U	48 U	48 U	48 U	48 U
B-279	B279-S-0.5	07/09/2004	0.5	--	50 U	50 U	50 U	50 U	50 U
	B279-S-2.5	07/09/2004	2.5	--	50 U	50 U	50 U	50 U	50 U
	B279-S-5.0	07/09/2004	5	--	49 U	49 U	49 U	49 U	49 U
	B279-S-10.0	07/09/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-280	B280-S-0.5	07/13/2004	0.5	--	50 U	50 U	50 U	50 U	50 U
	B280-S-5.0	07/13/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B280-S-10.0	07/13/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-281	B281-S-0.5	07/09/2004	0.5	--	57	50 U	50 U	50 U	50 U
	B281-S-2.5	07/09/2004	2.5	--	50 U	50 U	50 U	50 U	50 U
	B281-S-10.0	07/09/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-282	B282-S-0.5	07/08/2004	0.5	--	1,400	500 U	500 U	500 U	500 U
	B282-S-5.0	07/08/2004	5	--	140	50 U	50 U	50 U	50 U
	B282-S-10.0	07/08/2004	10	--	50 U	50 U	50 U	50 U	50 U
	B282-S-10.0-Dup	07/08/2004	10	--	50 U	50 U	50 U	50 U	50 U

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
Direct Contact (Ingestion) Method B: Unrestricted Land Use				2,400,000	NA	NA	NA	NA	NA
B-283	B283-S-0.5	07/12/2004	0.5	--	50 U	50 U	50 U	50 U	50 U
	B283-S-2.5	07/12/2004	2.5	--	50 U	50 U	50 U	50 U	50 U
	B283-S-5.0	07/12/2004	5	--	50 U	50 U	50 U	50 U	50 U
B-284	B284-S-0.5	07/13/2004	0.5	--	3,500	500 U	500 U	500 U	500 U
	B284-S-2.5	07/13/2004	2.5	--	230	51 U	51 U	51 U	51 U
	B284-S-5.0	07/13/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B284-S-10.0	07/13/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-285	B285-S-0.5	07/13/2004	0.5	--	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
	B285-S-5.0	07/13/2004	5	--	230	50 U	85	50 U	50 U
	B285-S-10.0	07/13/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-286	B286-S-0.5	07/08/2004	0.5	--	6,300	500 U	500 U	500 U	500 U
	B286-S-2.5	07/08/2004	2.5	--	50 U	50 U	50 U	50 U	50 U
	B286-S-5.0	07/08/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B286-S-10.0	07/08/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-287	B287-S-0.5	07/12/2004	0.5	--	260 U	260 U	260 U	260 U	260 U
	B287-S-2.5	07/12/2004	2.5	--	49 U	49 U	49 U	49 U	49 U
	B287-S-5.0	07/12/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B287-S-10.0	07/12/2004	10	--	49 U	49 U	49 U	49 U	49 U
	B287-S-10.0-Dup	07/12/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-288	B288-S-0.5	07/08/2004	0.5	--	52	50 U	50 U	50 U	50 U
	B288-S-10.0	07/08/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-289	B289-S-0.5	07/12/2004	0.5	--	46 U	46 U	46 U	46 U	46 U
	B289-S-2.5	07/12/2004	2.5	--	500 U	500 U	500 U	500 U	500 U
	B289-S-5.0	07/12/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B289-S-10.0	07/12/2004	10	--	50 U	50 U	50 U	50 U	50 U

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
Direct Contact (Ingestion) Method B: Unrestricted Land Use				2,400,000	NA	NA	NA	NA	NA
B-290	B290-S-0.5	07/13/2004	0.5	--	500 U	500 U	500 U	500 U	500 U
	B290-S-2.5	07/13/2004	2.5	--	500 U	500 U	500 U	500 U	500 U
	B290-S-5.0	07/13/2004	5	--	500 U	500 U	500 U	500 U	500 U
	B290-S-10.0	07/13/2004	10	--	50 U	50 U	50 U	50 U	50 U
	B290-S-10.0-Dup	07/13/2004	10	--	51 U	51 U	51 U	51 U	51 U
B-291	B291-S-0.5	07/12/2004	0.5	--	500 U	500 U	500 U	500 U	500 U
	B291-S-2.5	07/12/2004	2.5	--	500 U	500 U	500 U	500 U	500 U
	B291-S-5.0	07/12/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B291-S-10.0	07/12/2004	10	--	51 U	51 U	51 U	51 U	51 U
B-292	B292-S-0.5	07/08/2004	0.5	--	630	510 U	510 U	510 U	510 U
	B292-S-2.5	07/08/2004	2.5	--	50 U	50 U	50 U	50 U	50 U
	B292-S-5.0	07/08/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B292-S-5.0-Dup	07/08/2004	5	--	49 U	49 U	49 U	49 U	49 U
	B292-S-10.0	07/08/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-293	B293-S-0.5	07/12/2004	0.5	--	48 U	48 U	48 U	48 U	48 U
	B293-S-2.5	07/12/2004	2.5	--	3,300	500 U	500 U	500 U	500 U
	B293-S-5.0	07/12/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B293-S-10.0	07/12/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-294	B294-S-0.5	07/12/2004	0.5	--	50 U	50 U	50 U	50 U	50 U
	B294-S-2.5	07/12/2004	2.5	--	500 U	500 U	500 U	500 U	500 U
	B294-S-5.0	07/12/2004	5	--	48 U	48 U	48 U	48 U	48 U
	B294-S-10.0	07/12/2004	10	--	49 U	49 U	49 U	49 U	49 U
B-295	B295-S-0.5	07/12/2004	0.5	--	510 U	510 U	510 U	510 U	510 U
	B295-S-2.5	07/12/2004	2.5	--	58	50 U	50 U	50 U	50 U
	B295-S-5.0	07/12/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B295-S-10.0	07/12/2004	10	--	49 U	49 U	49 U	49 U	49 U

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
Direct Contact (Ingestion) Method B: Unrestricted Land Use				2,400,000	NA	NA	NA	NA	NA
B-296	B296-S-0.5	07/09/2004	0.5	--	500 U	500 U	500 U	500 U	500 U
	B296-S-2.5	07/09/2004	2.5	--	1,400	50 U	60	50 U	50 U
	B296-S-5.0	07/09/2004	5	--	17,000	50 U	200	50 U	50 U
	B296-S-10.0	07/09/2004	10	--	680	50 U	50 U	50 U	50 U
B-297	B297-S-1.0	07/09/2004	1	--	500 U	500 U	500 U	500 U	500 U
	B297-S-2.5	07/09/2004	2.5	--	50 U	50 U	50 U	50 U	50 U
	B297-S-5.0	07/09/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B297-S-10.0	07/09/2004	10	--	50 U	50 U	50 U	50 U	50 U
	B297-S-10.0-Dup	07/09/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-299	B299-S-0.5	07/21/2004	0.5	--	50 U	50 U	50 U	50 U	50 U
	B299-S-2.5	07/21/2004	2.5	--	50 U	50 U	50 U	50 U	50 U
	B299-S-5.0	07/21/2004	5	--	50 U	50 U	50 U	50 U	50 U
	B299-S-10.0	07/21/2004	10	--	51	50 U	50 U	50 U	50 U
B-300	B300-S-0.5	07/21/2004	0.5	--	50 U	50 U	50 U	50 U	50 U
	B300-S-2.5	07/21/2004	2.5	--	51 U	51 U	51 U	51 U	51 U
	B300-S-10.0	07/21/2004	10	--	50 U	50 U	50 U	50 U	50 U
B-301	B301-S-0.5	07/21/2004	0.5	--	2,500 U	2,500 U	2,500 U	2,500 U	2,500 U
	B301-S-2.5	07/21/2004	2.5	--	67	50 U	54	50 U	50 U
	B301-S-5.0	07/21/2004	5	--	50 U	50 U	50 U	50 U	50 U
MW-45D	MW45-S-0.5	07/20/2004	0.5	--	110	51 U	51 U	51 U	51 U
	MW45-S-2.5	07/20/2004	2.5	--	51 U	51 U	51 U	51 U	51 U
	MW45-S-5.0	07/20/2004	5	--	50 U	50 U	50 U	50 U	50 U
	MW45-S-10.0	07/20/2004	10	--	50 U	50 U	50 U	50 U	50 U
MW-9S	MW9R-S-0.5	07/14/2004	0.5	--	5,000 U	5,000 U	5,000 U	5,000 U	5,000 U
	MW9R-S-2.5	07/14/2004	2.5	--	2,500 U	2,500 U	2,500 U	2,500 U	2,500 U
	MW9R-S-5.0	07/14/2004	5	--	220	50 U	100	50 U	50 U
	MW9R-S-10.0	07/14/2004	10	--	50 U	50 U	50 U	50 U	50 U

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
Direct Contact (Ingestion) Method B: Unrestricted Land Use				2,400,000	NA	NA	NA	NA	NA
Historical Characterization									
B-204	B204-S-2.5	10/28/99	2.5	--	94 H	50 U,H	50 U,H	50 U,H	50 U,H
	B204-S-5.0	10/28/99	5	--	--	--	--	--	--
	B204-S-10.0	10/28/99	10	--	--	--	--	--	--
B-205	B205-S-2.5	10/29/99	2.5	--	50 U,H	50 U,H	50 U,H	50 U,H	50 U,H
	B205-S-5.0	10/29/99	5	--	--	--	--	--	--
	B205-S-10.0	10/29/99	10	--	--	--	--	--	--
B-206	B206-S-2.5	11/01/99	2.5	--	50 U	50 U	50 U	50 U	50 U
	B206-S-5.0	11/01/99	5	--	50 U	50 U	50 U	50 U	50 U
	B206-S-10.0	11/01/99	10	--	16000 C	500 U,C	500 U,C	500 U,C	500 U,C
B-207	B207-S-2.5	11/01/99	2.5	--	50 U	50 U	50 U	50 U	50 U
	B207-S-5.0	11/01/99	5	--	50 U	50 U	50 U	50 U	50 U
	B207-S-10.0	11/01/99	10	--	50 U	50 U	50 U	50 U	50 U
B-208	B208-S-5.0	11/01/99	5	--	50 U	50 U	50 U	50 U	50 U
	B208-S-10.0	11/01/99	10	--	50 U	50 U	50 U	50 U	50 U
B-209	B209-S-2.5	11/01/99	2.5	--	50 U	50 U	50 U	50 U	50 U
	B209-S-5.0	11/01/99	5	--	--	--	--	--	--
	B209-S-10 MSD	11/01/99	10	--	50 U	50 U	50 U	50 U	50 U
	B209-S-10.0	11/01/99	10	--	50 U	50 U	50 U	50 U	50 U
	B209-S-901	11/01/99	10	--	50 U	50 U	50 U	50 U	50 U
B-210	B210-S-2.5	11/01/99	2.5	--	50 U	50 U	50 U	50 U	50 U
	B210-S-5.0	11/01/99	5	--	50 U	50 U	93	50 U	50 U
	B210-S-15.0	11/01/99	15	--	50 U	50 U	50 U	50 U	50 U
B-212	B212-S-2.5	11/02/99	2.5	--	--	--	--	--	--
	B212-S-5.0	11/02/99	5	--	50 U	50 U	50 U	50 U	50 U
	B212-S-10.0	11/02/99	10	--	--	--	--	--	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
Direct Contact (Ingestion) Method B: Unrestricted Land Use				2,400,000	NA	NA	NA	NA	NA
B-213	B213-S-2.5	11/02/99	2.5	--	50 U	50 U	50 U	50 U	50 U
	B213-S-5.0	11/02/99	5	--	--	--	--	--	--
	B213-S-10.0	11/02/99	10	--	--	--	--	--	--
B-214	B214-S-2.5	11/03/99	2.5	--	--	--	--	--	--
	B214-S-5.0	11/03/99	5	--	--	--	--	--	--
	B214-S-10.0	11/03/99	10	--	--	--	--	--	--
B-215	B215-S-2.5	11/04/99	2.5	--	50 U	50 U	50 U	50 U	50 U
	B215-S-5.0	11/04/99	5	--	50 U	50 U	50 U	50 U	50 U
	B215-S-10.0	11/04/99	10	--	50 U	50 U	50 U	50 U	50 U
B-216	B216-S-5.0	11/04/99	5	--	50 U	50 U	50 U	50 U	50 U
	B216-S-10.0	11/04/99	10	--	--	--	--	--	--
B-217	B217-S-2.5	11/05/99	2.5	--	50 U	50 U	50 U	50 U	50 U
	B217-S-10.0	11/05/99	10	--	50 U	50 U	50 U	50 U	50 U
	B217-S-15.0	11/05/99	15	--	250	50 U	180	50 U	50 U
B-218	B218-S-5.0	11/08/99	5	--	100	50 U	76	50 U	50 U
	B218-S-10.0	11/08/99	10	--	--	--	--	--	--
	B218-S-15.0	11/08/99	15	--	210	50 U	130	50 U	50 U
B-219	B219-S-2.5	11/08/99	2.5	--	--	--	--	--	--
	B219-S-5.0	11/08/99	5	--	--	--	--	--	--
	B219-S-10.0	11/08/99	10	--	50 U	50 U	50 U	50 U	50 U
B-220	B220-S-5.0	11/08/99	5	--	52	50 U	50 U	50 U	50 U
	B220-S-10.0	11/08/99	10	--	50 U	50 U	50 U	50 U	50 U
MW9	HC-W10/S3	02/04/91	5.5	--	--	--	--	--	--
	HC-W10/S9	02/04/91	20.5	--	--	--	--	--	--
MW-28S	T5070182	04/02/96	0.5	--	--	--	--	--	--
	T5070183	04/02/96	6	--	--	--	--	--	--
SPY-01	HC-SPY/01	02/06/91	0.5	--	--	--	--	--	--
SPY-02	HC-SPY/02	02/06/91	0.5	--	--	--	--	--	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
Direct Contact (Ingestion) Method B: Unrestricted Land Use				2,400,000	NA	NA	NA	NA	NA
SPY-03	HC-SPY/03	02/06/91	0.5	--	--	--	--	--	--
SPY-04	HC-SPY/04	02/06/91	0.5	--	--	--	--	--	--
TP-17	TP17-0.5	05/03/93	0.5	--	--	--	--	--	--
TP-18	TP18-0.3	05/03/93	0.3	38	--	--	--	--	--
	TP18-3	05/03/93	3	--	--	--	--	--	--
	TP18-7	05/03/93	7	--	--	--	--	--	--
TP-19	TP19-0.5	05/03/93	0.5	--	--	--	--	--	--
TP-21	TP21-0.5	05/03/93	0.5	30 U	--	--	--	--	--
TP-22	TP22-0.5	05/03/93	0.5	--	--	--	--	--	--
B220-S2-ESW	EX-B-220-S2-ESW	04/17/02	2	--	56 U	56 U	56 U	56 U	56 U
B220-S2-NSW	EX-B-220-S2-NSW	04/17/02	2	--	54 U	54 U	54 U	54 U	54 U
B220-S2-SSW	EX-B-220-S2-SSW	04/17/02	2	--	55 U	55 U	55 U	55 U	55 U
B220-S2-WSW	EX-B-220-S2-WSW	04/17/02	2	--	120 U	120 U	120 U	120 U	120 U
B220-S4	EX-B-220-S4-COM	04/17/02	4	--	62 U	62 U	62 U	62 U	62 U
SPY-01A	EX-SPY-01-S 1A	05/09/02	1	--	5,700	540 U	5,400	540 U	540 U
	EX-SPY-01-S 5A	05/09/02	5	--	62 U	62 U	62 U	62 U	62 U
	EX-SPY-01-S 10A	05/09/02	10	--	130 U	130 U	130 U	130 U	130 U
SPY-01B	EX-SPY-01-S 1B	05/09/02	1	--	53 U	53 U	53 U	53 U	53 U
	EX-SPY-01-S 5B	05/09/02	5	--	7,500	3,400 U	5,300	3,400 U	3,400 U
	EX-SPY-01-S 10B	05/09/02	10	--	4,500	650 U	650 U	650 U	650 U
SPY-01C	EX-SPY-01-S 1C	05/09/02	1	--	150	55 U	55 U	55 U	55 U
	EX-SPY-01-S 5C	05/09/02	5	--	63 U	63 U	63 U	63 U	63 U
	EX-SPY-01-S 10C	05/09/02	10	--	61 U	61 U	61 U	61 U	61 U
SPY-01D	EX-SPY-01-S 1D	05/09/02	1	--	190	55 U	55 U	55 U	55 U
	EX-SPY-01-S 5D	05/09/02	5	--	56 U	56 U	56 U	56 U	56 U
	EX-SPY-01-S 10D	05/09/02	10	--	120 U	120 U	120 U	120 U	120 U

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
Direct Contact (Ingestion) Method B: Unrestricted Land Use				2,400,000	NA	NA	NA	NA	NA
SPY-01E	EX-SPY-01-S 1E	05/09/02	1	--	79	54 U	54 U	54 U	54 U
	EX-SPY-01-S 5E	05/09/02	5	--	61 U	61 U	61 U	61 U	61 U
	EX-SPY-01-S 10E	05/09/02	10	--	61 U	61 U	61 U	61 U	61 U
SPY-01F	EX-SPY-01-S 1F	05/09/02	1	--	54 U	54 U	54 U	54 U	54 U
	EX-SPY-01-S 5F	05/09/02	5	--	54 U	54 U	54 U	54 U	54 U
	EX-SPY-01-S 10F	05/09/02	10	--	61 U	61 U	61 U	61 U	61 U
SPY-01G	EX-SPY-01-S 1G	05/09/02	1	--	3800	290 U	290 U	290 U	290 U
	EX-SPY-01-S 3G	05/09/02	3	--	60 U	60 U	60 U	60 U	60 U
	EX-SPY-01-S 5G	05/09/02	5	--	57 U	57 U	57 U	57 U	57 U
	EX-SPY-01-S 10G	05/09/02	10	--	59 U	59 U	59 U	59 U	59 U
SPY-01H	EX-SPY-01-S 1H	05/09/02	1	--	52 U	52 U	52 U	52 U	52 U
	EX-SPY-01-S 5H	05/09/02	5	--	62 U	62 U	62 U	62 U	62 U
	EX-SPY-01-S 10H	05/09/02	10	--	62 U	62 U	62 U	62 U	62 U
SPY-02A	EX-SPY-02-S .5A	05/09/02	0.5	--	11 U	--	11 U	--	--
	EXSPY-02-S-1.5A	05/09/02	1.5	--	12 U	--	12 U	--	--
SPY-02B	EX-SPY-02-S .5B	05/09/02	0.5	--	120 U	--	120 U	--	--
	EXSPY-02-S-1.5B	05/09/02	1.5	--	12 U	--	12 U	--	--
SPY-02C	EX-SPY-02-S.5C	05/09/02	0.5	--	530 U	--	530 U	--	--
	EXSPY-02-S-1.5C	05/09/02	1.5	--	11,000 U	--	11,000 U	--	--
SPY-02D	EX-SPY-02-S .5D	05/09/02	0.5	--	120 U	--	120 U	--	--
	EXSPY-02-S-1.5D	05/09/02	1.5	--	54,000 U	--	54,000 U	--	--
SPY-02E	EX-SPY-02-S .5E	05/09/02	0.5	--	110 U	--	110 U	--	--
	EXSPY-02-S-1.5E	05/09/02	1.5	--	110 U	--	110 U	--	--
SPY-02F	EX-SPY-02-S .5F	05/09/02	0.5	--	110 U	--	110 U	--	--
	EXSPY-02-S-1.5F	05/09/02	1.5	--	12,000 U	--	12,000 U	--	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
Direct Contact (Ingestion) Method B: Unrestricted Land Use				2,400,000	NA	NA	NA	NA	NA
SPY-02G	EX-SPY-02-S .5G	05/09/02	0.5	--	920	--	520 U	--	--
	EXSPY-02-S-1.5G	05/09/02	1.5	--	120 U	--	120 U	--	--
SPY-02H	EX-SPY-02-S .5H	05/09/02	0.5	--	1,100 U	--	1,100 U	--	--
	EXSPY-02-S-1.5H	05/09/02	1.5	--	11,000 U	--	11,000 U	--	--
SPY-02I	EX-SPY-02-S .5I	05/09/02	0.5	--	600	--	110 U	--	--
	EXSPY-02-S-1.5I	05/09/02	1.5	--	120 U	--	120 U	--	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol	Tetrachloro-phenols, Total
Direct Contact (Ingestion) Method B: Unrestricted Land Use				8,000,000	91,000	NA	8,300	NA
July 2004 Soil Characterization								
B-275	B275-S-0.5	07/08/2004	0.5	50 U	50 U	50 U	1,200	--
	B275-S-5.0	07/08/2004	5	50 U	50 U	50 U	50 U	--
	B275-S-10.0	07/08/2004	10	50 U	50 U	50 U	50 U	--
B-276	B276-S-0.5	07/13/2004	0.5	50 U	50 U	50 U	50 U	--
	B276-S-3.0	07/13/2004	3	50 U	50 U	50 U	50 U	--
B-277	B277-S-0.5	07/09/2004	0.5	47 U	47 U	47 U	47 U	--
	B277-S-2.5	07/09/2004	2.5	50 U	50 U	50 U	50 U	--
	B277-S-5.0	07/09/2004	5	48 U	48 U	48 U	48 U	--
	B277-S-10.0	07/09/2004	10	49 U	49 U	49 U	49 U	--
B-278	B278-S-0.5	07/09/2004	0.5	49 U	49 U	49 U	600	--
	B278-S-2.5	07/09/2004	2.5	50 U	50 U	50 U	120	--
	B278-S-10.0	07/09/2004	10	50 U	50 U	50 U	50 U	--
	B278-S-10.0-Dup	07/09/2004	10	48 U	48 U	48 U	48 U	--
B-279	B279-S-0.5	07/09/2004	0.5	50 U	50 U	50 U	50 U	--
	B279-S-2.5	07/09/2004	2.5	50 U	50 U	50 U	50 U	--
	B279-S-5.0	07/09/2004	5	49 U	49 U	49 U	49 U	--
	B279-S-10.0	07/09/2004	10	50 U	50 U	50 U	50 U	--
B-280	B280-S-0.5	07/13/2004	0.5	50 U	50 U	50 U	200	--
	B280-S-5.0	07/13/2004	5	50 U	50 U	50 U	280	--
	B280-S-10.0	07/13/2004	10	50 U	50 U	50 U	50 U	--
B-281	B281-S-0.5	07/09/2004	0.5	50 U	50 U	50 U	1,300	--
	B281-S-2.5	07/09/2004	2.5	50 U	50 U	50 U	1,400	--
	B281-S-10.0	07/09/2004	10	50 U	50 U	50 U	270	--
B-282	B282-S-0.5	07/08/2004	0.5	500 U	500 U	500 U	**31,000**	--
	B282-S-5.0	07/08/2004	5	50 U	50 U	50 U	3,600	--
	B282-S-10.0	07/08/2004	10	50 U	50 U	50 U	540	--
	B282-S-10.0-Dup	07/08/2004	10	50 U	50 U	50 U	380	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol	Tetrachloro-phenols, Total
Direct Contact (Ingestion) Method B: Unrestricted Land Use				8,000,000	91,000	NA	8,300	NA
B-283	B283-S-0.5	07/12/2004	0.5	50 U	50 U	50 U	50 U	--
	B283-S-2.5	07/12/2004	2.5	50 U	50 U	50 U	350	--
	B283-S-5.0	07/12/2004	5	50 U	50 U	50 U	50 U	--
B-284	B284-S-0.5	07/13/2004	0.5	500 U	500 U	500 U	**110,000**	--
	B284-S-2.5	07/13/2004	2.5	51 U	51 U	51 U	6,800	--
	B284-S-5.0	07/13/2004	5	50 U	50 U	50 U	50 U	--
	B284-S-10.0	07/13/2004	10	50 U	50 U	50 U	50 U	--
B-285	B285-S-0.5	07/13/2004	0.5	1,000 U	1,000 U	1,000 U	**8,900**	--
	B285-S-5.0	07/13/2004	5	50 U	50 U	50 U	3,900	--
	B285-S-10.0	07/13/2004	10	50 U	50 U	50 U	50 U	--
B-286	B286-S-0.5	07/08/2004	0.5	500 U	500 U	500 U	**110,000**	--
	B286-S-2.5	07/08/2004	2.5	50 U	50 U	50 U	1,100	--
	B286-S-5.0	07/08/2004	5	50 U	50 U	50 U	50 U	--
	B286-S-10.0	07/08/2004	10	50 U	50 U	50 U	50 U	--
B-287	B287-S-0.5	07/12/2004	0.5	260 U	260 U	260 U	950	--
	B287-S-2.5	07/12/2004	2.5	49 U	49 U	49 U	160	--
	B287-S-5.0	07/12/2004	5	50 U	50 U	50 U	250	--
	B287-S-10.0	07/12/2004	10	49 U	49 U	49 U	95	--
	B287-S-10.0-Dup	07/12/2004	10	50 U	50 U	50 U	79	--
B-288	B288-S-0.5	07/08/2004	0.5	50 U	50 U	50 U	1,100	--
	B288-S-10.0	07/08/2004	10	50 U	50 U	50 U	50 U	--
B-289	B289-S-0.5	07/12/2004	0.5	46 U	46 U	46 U	46 U	--
	B289-S-2.5	07/12/2004	2.5	500 U	500 U	500 U	500 U	--
	B289-S-5.0	07/12/2004	5	50 U	50 U	50 U	50 U	--
	B289-S-10.0	07/12/2004	10	50 U	50 U	50 U	50 U	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol	Tetrachloro-phenols, Total
Direct Contact (Ingestion) Method B: Unrestricted Land Use				8,000,000	91,000	NA	8,300	NA
B-290	B290-S-0.5	07/13/2004	0.5	500 U	500 U	500 U	690	--
	B290-S-2.5	07/13/2004	2.5	500 U	500 U	500 U	7,200	--
	B290-S-5.0	07/13/2004	5	500 U	500 U	500 U	500 U	--
	B290-S-10.0	07/13/2004	10	50 U	50 U	50 U	50 U	--
	B290-S-10.0-Dup	07/13/2004	10	51 U	51 U	51 U	51 U	--
B-291	B291-S-0.5	07/12/2004	0.5	500 U	500 U	500 U	730	--
	B291-S-2.5	07/12/2004	2.5	500 U	500 U	500 U	**12,000**	--
	B291-S-5.0	07/12/2004	5	50 U	50 U	50 U	110	--
	B291-S-10.0	07/12/2004	10	51 U	51 U	51 U	51 U	--
B-292	B292-S-0.5	07/08/2004	0.5	510 U	510 U	510 U	**16,000**	--
	B292-S-2.5	07/08/2004	2.5	50 U	50 U	50 U	50 U	--
	B292-S-5.0	07/08/2004	5	50 U	50 U	50 U	50 U	--
	B292-S-5.0-Dup	07/08/2004	5	49 U	49 U	49 U	49 U	--
	B292-S-10.0	07/08/2004	10	50 U	50 U	50 U	50 U	--
B-293	B293-S-0.5	07/12/2004	0.5	48 U	48 U	48 U	370	--
	B293-S-2.5	07/12/2004	2.5	500 U	500 U	500 U	**130,000**	--
	B293-S-5.0	07/12/2004	5	50 U	50 U	50 U	76	--
	B293-S-10.0	07/12/2004	10	50 U	50 U	50 U	50 U	--
B-294	B294-S-0.5	07/12/2004	0.5	50 U	50 U	50 U	89	--
	B294-S-2.5	07/12/2004	2.5	500 U	500 U	500 U	3,300	--
	B294-S-5.0	07/12/2004	5	48 U	48 U	48 U	240	--
	B294-S-10.0	07/12/2004	10	49 U	49 U	49 U	49 U	--
B-295	B295-S-0.5	07/12/2004	0.5	510 U	510 U	510 U	4,200	--
	B295-S-2.5	07/12/2004	2.5	50 U	50 U	50 U	1,700	--
	B295-S-5.0	07/12/2004	5	50 U	50 U	50 U	50 U	--
	B295-S-10.0	07/12/2004	10	49 U	49 U	49 U	49 U	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol	Tetrachloro-phenols, Total
Direct Contact (Ingestion) Method B: Unrestricted Land Use				8,000,000	91,000	NA	8,300	NA
B-296	B296-S-0.5	07/09/2004	0.5	500 U	500 U	500 U	**11,000**	--
	B296-S-2.5	07/09/2004	2.5	50 U	50 U	50 U	**120,000**	--
	B296-S-5.0	07/09/2004	5	50 U	50 U	50 U	**620,000**	--
	B296-S-10.0	07/09/2004	10	50 U	50 U	50 U	**27,000**	--
B-297	B297-S-1.0	07/09/2004	1	500 U	500 U	500 U	7,800	--
	B297-S-2.5	07/09/2004	2.5	50 U	50 U	50 U	200	--
	B297-S-5.0	07/09/2004	5	50 U	50 U	50 U	50 U	--
	B297-S-10.0	07/09/2004	10	50 U	50 U	50 U	50 U	--
	B297-S-10.0-Dup	07/09/2004	10	50 U	50 U	50 U	50 U	--
B-299	B299-S-0.5	07/21/2004	0.5	50 U	50 U	50 U	120	--
	B299-S-2.5	07/21/2004	2.5	50 U	50 U	50 U	270	--
	B299-S-5.0	07/21/2004	5	50 U	50 U	50 U	91	--
	B299-S-10.0	07/21/2004	10	50 U	50 U	100	1,200	--
B-300	B300-S-0.5	07/21/2004	0.5	50 U	50 U	50 U	120	--
	B300-S-2.5	07/21/2004	2.5	51 U	51 U	51 U	130	--
	B300-S-10.0	07/21/2004	10	50 U	50 U	50 U	50 U	--
B-301	B301-S-0.5	07/21/2004	0.5	2,500 U	2,500 U	2,500 U	**15,000**	--
	B301-S-2.5	07/21/2004	2.5	50 U	50 U	50 U	1,100	--
	B301-S-5.0	07/21/2004	5	50 U	50 U	50 U	50 U	--
MW-45D	MW45-S-0.5	07/20/2004	0.5	51 U	51 U	51 U	1,900	--
	MW45-S-2.5	07/20/2004	2.5	51 U	51 U	51 U	51 U	--
	MW45-S-5.0	07/20/2004	5	50 U	50 U	50 U	50 U	--
	MW45-S-10.0	07/20/2004	10	50 U	50 U	50 U	50 U	--
MW-9S	MW9R-S-0.5	07/14/2004	0.5	5,000 U	5,000 U	5,000 U	**39,000**	--
	MW9R-S-2.5	07/14/2004	2.5	2,500 U	2,500 U	2,500 U	4,600	--
	MW9R-S-5.0	07/14/2004	5	66	50 U	64	5,600	--
	MW9R-S-10.0	07/14/2004	10	50 U	50 U	50 U	89	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol	Tetrachloro-phenols, Total
Direct Contact (Ingestion) Method B: Unrestricted Land Use				8,000,000	91,000	NA	8,300	NA
Historical Characterization								
B-204	B204-S-2.5	10/28/99	2.5	50 U,H	50 U,H	50 U,H	4,300 H	--
	B204-S-5.0	10/28/99	5	--	5 U	--	5 U	5 U
	B204-S-10.0	10/28/99	10	--	5 U	--	5 U	5 U
B-205	B205-S-2.5	10/29/99	2.5	50 U,H	50 U,H	50 U,H	330 H	--
	B205-S-5.0	10/29/99	5	--	5 U	--	5 U	5 U
	B205-S-10.0	10/29/99	10	--	5 U	--	5 U	5 U
B-206	B206-S-2.5	11/01/99	2.5	50 U	50 U	50 U	1,200	--
	B206-S-5.0	11/01/99	5	50 U	50 U	50 U	40 U	--
	B206-S-10.0	11/01/99	10	500 U,C	500 U,C	500 U,C	**340,000 C**	--
B-207	B207-S-2.5	11/01/99	2.5	50 U	50 U	50 U	1,100	--
	B207-S-5.0	11/01/99	5	50 U	50 U	50 U	40 U	--
	B207-S-10.0	11/01/99	10	50 U	50 U	50 U	40 U	--
B-208	B208-S-5.0	11/01/99	5	50 U	50 U	50 U	950	--
	B208-S-10.0	11/01/99	10	50 U	50 U	50 U	40 U	--
B-209	B209-S-2.5	11/01/99	2.5	50 U	50 U	50 U	40 U	--
	B209-S-5.0	11/01/99	5	--	5 U	--	5 U	5 U
	B209-S-10 MSD	11/01/99	10	50 U	50 U	50 U	40 U	--
	B209-S-10.0	11/01/99	10	50 U	50 U	50 U	40 U	--
	B209-S-901	11/01/99	10	50 U	50 U	50 U	40 U	--
B-210	B210-S-2.5	11/01/99	2.5	50 U	50 U	50 U	47	--
	B210-S-5.0	11/01/99	5	50 U	50 U	50 U	1,400	--
	B210-S-15.0	11/01/99	15	50 U	50 U	50 U	40 U	--
B-212	B212-S-2.5	11/02/99	2.5	--	5 U	--	5 U	5 U
	B212-S-5.0	11/02/99	5	50 U	50 U	50 U	40 U	--
	B212-S-10.0	11/02/99	10	--	5 U	--	5 U	5 U

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol	Tetrachloro-phenols, Total
Direct Contact (Ingestion) Method B: Unrestricted Land Use				8,000,000	91,000	NA	8,300	NA
B-213	B213-S-2.5	11/02/99	2.5	50 U	50 U	50 U	43	--
	B213-S-5.0	11/02/99	5	--	5 U	--	5 U	5 U
	B213-S-10.0	11/02/99	10	--	5 U	--	5 U	5 U
B-214	B214-S-2.5	11/03/99	2.5	--	5 U	--	5 U	5 U
	B214-S-5.0	11/03/99	5	--	5 U	--	5 U	5 U
	B214-S-10.0	11/03/99	10	--	5 U	--	5 U	5 U
B-215	B215-S-2.5	11/04/99	2.5	50 U	50 U	50 U	620	--
	B215-S-5.0	11/04/99	5	50 U	50 U	50 U	430	--
	B215-S-10.0	11/04/99	10	50 U	50 U	50 U	780	--
B-216	B216-S-5.0	11/04/99	5	50 U	50 U	50 U	40 U	--
	B216-S-10.0	11/04/99	10	--	5 U	--	5 U	5 U
B-217	B217-S-2.5	11/05/99	2.5	50 U	50 U	57	500	--
	B217-S-10.0	11/05/99	10	50 U	50 U	50 U	180	--
	B217-S-15.0	11/05/99	15	50 U	50 U	59	1,400	--
B-218	B218-S-5.0	11/08/99	5	50 U	50 U	50 U	4,000	--
	B218-S-10.0	11/08/99	10	--	5 U	--	5 U	5 U
	B218-S-15.0	11/08/99	15	50 U	50 U	50 U	1,200	--
B-219	B219-S-2.5	11/08/99	2.5	--	5 U	--	5 U	5 U
	B219-S-5.0	11/08/99	5	--	5 U	--	5 U	5 U
	B219-S-10.0	11/08/99	10	50 U	50 U	50 U	40 U	--
B-220	B220-S-5.0	11/08/99	5	50 U	50 U	50 U	2,700	--
	B220-S-10.0	11/08/99	10	50 U	50 U	50 U	40 U	--
MW9	HC-W10/S3	02/04/91	5.5	--	--	--	2,500 U	--
	HC-W10/S9	02/04/91	20.5	--	--	--	2,500 U	--
MW-28S	T5070182	04/02/96	0.5	--	--	--	230	--
	T5070183	04/02/96	6	--	--	--	66	--
SPY-01	HC-SPY/01	02/06/91	0.5	--	--	--	**160,000**	--
SPY-02	HC-SPY/02	02/06/91	0.5	--	--	--	**1,900,000**	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol	Tetrachloro-phenols, Total
Direct Contact (Ingestion) Method B: Unrestricted Land Use				8,000,000	91,000	NA	8,300	NA
SPY-03	HC-SPY/03	02/06/91	0.5	--	--	--	**8,400**	--
SPY-04	HC-SPY/04	02/06/91	0.5	--	--	--	**14,000**	--
TP-17	TP17-0.5	05/03/93	0.5	--	--	--	**72,000**	--
TP-18	TP18-0.3	05/03/93	0.3	30 U	30 U	--	560	--
	TP18-3	05/03/93	3	--	--	--	1,600 U	--
	TP18-7	05/03/93	7	--	--	--	**150,000**	--
TP-19	TP19-0.5	05/03/93	0.5	--	--	--	**22,000**	--
TP-21	TP21-0.5	05/03/93	0.5	30 U	30 U	--	77	--
TP-22	TP22-0.5	05/03/93	0.5	--	--	--	8,300 U	--
B220-S2-ESW	EX-B-220-S2-ESW	04/17/02	2	56 U	56 U	56 U	830	--
B220-S2-NSW	EX-B-220-S2-NSW	04/17/02	2	54 U	54 U	54 U	54 U	--
B220-S2-SSW	EX-B-220-S2-SSW	04/17/02	2	55 U	55 U	55 U	170	--
B220-S2-WSW	EX-B-220-S2-WSW	04/17/02	2	120 U	120 U	120 U	1300	--
B220-S4	EX-B-220-S4-COM	04/17/02	4	62 U	62 U	62 U	530	--
SPY-01A	EX-SPY-01-S 1A	05/09/02	1	540 U	540 U	540 U	**87,000**	--
	EX-SPY-01-S 5A	05/09/02	5	62 U	62 U	62 U	62 U	--
	EX-SPY-01-S 10A	05/09/02	10	130 U	130 U	130 U	130 U	--
SPY-01B	EX-SPY-01-S 1B	05/09/02	1	53 U	53 U	53 U	660	--
	EX-SPY-01-S 5B	05/09/02	5	3,400 U	3,400 U	3,400 U	**350,000**	--
	EX-SPY-01-S 10B	05/09/02	10	650 U	650 U	650 U	**130,000**	--
SPY-01C	EX-SPY-01-S 1C	05/09/02	1	55 U	55 U	55 U	3,600	--
	EX-SPY-01-S 5C	05/09/02	5	63 U	63 U	63 U	63 U	--
	EX-SPY-01-S 10C	05/09/02	10	61 U	61 U	61 U	61 U	--
SPY-01D	EX-SPY-01-S 1D	05/09/02	1	55 U	55 U	55 U	4,900	--
	EX-SPY-01-S 5D	05/09/02	5	56 U	56 U	56 U	140	--
	EX-SPY-01-S 10D	05/09/02	10	120 U	120 U	120 U	120 U	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol	Tetrachloro-phenols, Total
Direct Contact (Ingestion) Method B: Unrestricted Land Use				8,000,000	91,000	NA	8,300	NA
SPY-01E	EX-SPY-01-S 1E	05/09/02	1	54 U	54 U	54 U	1,700	--
	EX-SPY-01-S 5E	05/09/02	5	61 U	61 U	61 U	61 U	--
	EX-SPY-01-S 10E	05/09/02	10	61 U	61 U	61 U	61 U	--
SPY-01F	EX-SPY-01-S 1F	05/09/02	1	54 U	54 U	54 U	660	--
	EX-SPY-01-S 5F	05/09/02	5	54 U	54 U	54 U	54 U	--
	EX-SPY-01-S 10F	05/09/02	10	61 U	61 U	61 U	61 U	--
SPY-01G	EX-SPY-01-S 1G	05/09/02	1	290 U	290 U	290 U	**130,000**	--
	EX-SPY-01-S 3G	05/09/02	3	60 U	60 U	60 U	220	--
	EX-SPY-01-S 5G	05/09/02	5	57 U	57 U	57 U	57 U	--
	EX-SPY-01-S 10G	05/09/02	10	59 U	59 U	59 U	59 U	--
SPY-01H	EX-SPY-01-S 1H	05/09/02	1	52 U	52 U	52 U	390	--
	EX-SPY-01-S 5H	05/09/02	5	62 U	62 U	62 U	350	--
	EX-SPY-01-S 10H	05/09/02	10	62 U	62 U	62 U	62 U	--
SPY-02A	EX-SPY-02-S .5A	05/09/02	0.5	--	5.5 U	--	170	--
	EXSPY-02-S-1.5A	05/09/02	1.5	--	5.8 U	--	130	--
SPY-02B	EX-SPY-02-S .5B	05/09/02	0.5	--	56 U	--	650	--
	EXSPY-02-S-1.5B	05/09/02	1.5	--	5.6 U	--	80	--
SPY-02C	EX-SPY-02-S.5C	05/09/02	0.5	--	270 U	--	2,600	--
	EXSPY-02-S-1.5C	05/09/02	1.5	--	5,200 U	--	**63,000**	--
SPY-02D	EX-SPY-02-S .5D	05/09/02	0.5	--	56 U	--	630	--
	EXSPY-02-S-1.5D	05/09/02	1.5	--	27,000 U	--	**470,000**	--
SPY-02E	EX-SPY-02-S .5E	05/09/02	0.5	--	55 U	--	1,500	--
	EXSPY-02-S-1.5E	05/09/02	1.5	--	54 U	--	570	--
SPY-02F	EX-SPY-02-S .5F	05/09/02	0.5	--	53 U	--	780	--
	EXSPY-02-S-1.5F	05/09/02	1.5	--	5,700 U	--	**320,000**	--

Table E-4-4
Chlorinated Phenolics in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol	Tetrachloro-phenols, Total
Direct Contact (Ingestion) Method B: Unrestricted Land Use				8,000,000	91,000	NA	8,300	NA
SPY-02G	EX-SPY-02-S .5G	05/09/02	0.5	--	260 U	--	2,400	--
	EXSPY-02-S-1.5G	05/09/02	1.5	--	57 U	--	1,400	--
SPY-02H	EX-SPY-02-S .5H	05/09/02	0.5	--	510 U	--	**16,000**	--
	EXSPY-02-S-1.5H	05/09/02	1.5	--	5,200 U	--	**68,000**	--
SPY-02I	EX-SPY-02-S .5I	05/09/02	0.5	--	51 U	--	550	--
	EXSPY-02-S-1.5I	05/09/02	1.5	--	84 U	--	1,300	--

Table E-4-5
Petroleum Hydrocarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Diesel-Range Organics	Gasoline-Range Organics	Residual-Range Organics	Jet Fuel as Jet A	Jet Fuel as JP-4	Kerosene	Lube Oil	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	PHC as Diesel	Total Petroleum Hydrocarbons
MTCA Method A Cleanup Levels for Unrestricted Land Uses				2,000	30	2,000	30	30	2,000	2,000	4,000	2,000	2,000	2,000	NA
July 2004 Soil Characterization															
B-275	B275-S-0.5	07/08/2004	0.5	33	--	130	--	--	--	--	--	--	--	--	--
	B275-S-5.0	07/08/2004	5	15 U	--	57 U	--	--	--	--	--	--	--	--	--
	B275-S-10.0	07/08/2004	10	15 U	--	60 U	--	--	--	--	--	--	--	--	--
B-276	B276-S-0.5	07/13/2004	0.5	13 U	--	71	--	--	--	--	--	--	--	--	--
	B276-S-3.0	07/13/2004	3	13 U	--	50 U	--	--	--	--	--	--	--	--	--
B-277	B277-S-0.5	07/09/2004	0.5	13 U	--	51 U	--	--	--	--	--	--	--	--	--
	B277-S-2.5	07/09/2004	2.5	15 U	--	58 U	--	--	--	--	--	--	--	--	--
	B277-S-5.0	07/09/2004	5	15 U	--	58 U	--	--	--	--	--	--	--	--	--
	B277-S-10.0	07/09/2004	10	16 U	--	62 U	--	--	--	--	--	--	--	--	--
B-278	B278-S-0.5	07/09/2004	0.5	44	--	97	--	--	--	--	--	--	--	--	--
	B278-S-2.5	07/09/2004	2.5	25	--	57 U	--	--	--	--	--	--	--	--	--
	B278-S-10.0	07/09/2004	10	16 U	--	64 U	--	--	--	--	--	--	--	--	--
	B278-S-10.0-Dup	07/09/2004	10	17 U	--	66 U	--	--	--	--	--	--	--	--	--
B-279	B279-S-0.5	07/09/2004	0.5	14 U	--	55 U	--	--	--	--	--	--	--	--	--
	B279-S-2.5	07/09/2004	2.5	14 U	--	54 U	--	--	--	--	--	--	--	--	--
	B279-S-5.0	07/09/2004	5	17 U	--	67 U	--	--	--	--	--	--	--	--	--
	B279-S-10.0	07/09/2004	10	17 U	--	67 U	--	--	--	--	--	--	--	--	--
B-280	B280-S-0.5	07/13/2004	0.5	13 U	--	50 U	--	--	--	--	--	--	--	--	--
	B280-S-5.0	07/13/2004	5	43	--	110	--	--	--	--	--	--	--	--	--
	B280-S-10.0	07/13/2004	10	13 U	--	50 U	--	--	--	--	--	--	--	--	--
B-281	B281-S-0.5	07/09/2004	0.5	22	--	55	--	--	--	--	--	--	--	--	--
	B281-S-2.5	07/09/2004	2.5	23	--	60 U	--	--	--	--	--	--	--	--	--
	B281-S-10.0	07/09/2004	10	16 U	--	63 U	--	--	--	--	--	--	--	--	--
B-282	B282-S-0.5	07/08/2004	0.5	290	--	390	--	--	--	--	--	--	--	--	--
	B282-S-5.0	07/08/2004	5	160	--	58 U	--	--	--	--	--	--	--	--	--
	B282-S-10.0	07/08/2004	10	15 U	--	59 U	--	--	--	--	--	--	--	--	--
	B282-S-10.0-Dup	07/08/2004	10	16 U	--	61 U	--	--	--	--	--	--	--	--	--

Table E-4-5
Petroleum Hydrocarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Diesel-Range Organics	Gasoline-Range Organics	Residual-Range Organics	Jet Fuel as Jet A	Jet Fuel as JP-4	Kerosene	Lube Oil	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	PHC as Diesel	Total Petroleum Hydrocarbons
MTCA Method A Cleanup Levels for Unrestricted Land Uses				2,000	30	2,000	30	30	2,000	2,000	4,000	2,000	2,000	2,000	NA
B-283	B283-S-0.5	07/12/2004	0.5	13 U	--	50 U	--	--	--	--	--	--	--	--	--
	B283-S-2.5	07/12/2004	2.5	92	--	50 U	--	--	--	--	--	--	--	--	--
	B283-S-5.0	07/12/2004	5	13 U	--	49 U	--	--	--	--	--	--	--	--	--
B-284	B284-S-0.5	07/13/2004	0.5	330	--	230	--	--	--	--	--	--	--	--	--
	B284-S-2.5	07/13/2004	2.5	36	--	50 U	--	--	--	--	--	--	--	--	--
	B284-S-5.0	07/13/2004	5	13 U	--	50 U	--	--	--	--	--	--	--	--	--
	B284-S-10.0	07/13/2004	10	13 U	--	50 U	--	--	--	--	--	--	--	--	--
B-285	B285-S-0.5	07/13/2004	0.5	140	--	580	--	--	--	--	--	--	--	--	--
	B285-S-5.0	07/13/2004	5	200	--	600	--	--	--	--	--	--	--	--	--
	B285-S-10.0	07/13/2004	10	13 U	--	50 U	--	--	--	--	--	--	--	--	--
B-286	B286-S-0.5	07/08/2004	0.5	**5,100**	--	**3,900**	--	--	--	--	--	--	--	--	--
	B286-S-2.5	07/08/2004	2.5	24	--	57 U	--	--	--	--	--	--	--	--	--
	B286-S-5.0	07/08/2004	5	16 U	--	61 U	--	--	--	--	--	--	--	--	--
	B286-S-10.0	07/08/2004	10	15 U	--	60 U	--	--	--	--	--	--	--	--	--
B-287	B287-S-0.5	07/12/2004	0.5	60	--	140	--	--	--	--	--	--	--	--	--
	B287-S-2.5	07/12/2004	2.5	13 U	--	50 U	--	--	--	--	--	--	--	--	--
	B287-S-5.0	07/12/2004	5	19	--	50 U	--	--	--	--	--	--	--	--	--
	B287-S-10.0	07/12/2004	10	13 U	--	50 U	--	--	--	--	--	--	--	--	--
	B287-S-10.0-Dup	07/12/2004	10	16 U	--	61 U	--	--	--	--	--	--	--	--	--
B-288	B288-S-0.5	07/08/2004	0.5	67	--	260	--	--	--	--	--	--	--	--	--
	B288-S-10.0	07/08/2004	10	15 U	--	58 U	--	--	--	--	--	--	--	--	--
B-289	B289-S-0.5	07/12/2004	0.5	140	--	240	--	--	--	--	--	--	--	--	--
	B289-S-2.5	07/12/2004	2.5	13 U	--	49 U	--	--	--	--	--	--	--	--	--
	B289-S-5.0	07/12/2004	5	13 U	--	49 U	--	--	--	--	--	--	--	--	--
	B289-S-10.0	07/12/2004	10	15 U	--	59 U	--	--	--	--	--	--	--	--	--

Table E-4-5
Petroleum Hydrocarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Diesel-Range Organics	Gasoline-Range Organics	Residual-Range Organics	Jet Fuel as Jet A	Jet Fuel as JP-4	Kerosene	Lube Oil	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	PHC as Diesel	Total Petroleum Hydrocarbons
MTCA Method A Cleanup Levels for Unrestricted Land Uses				2,000	30	2,000	30	30	2,000	2,000	4,000	2,000	2,000	2,000	NA
B-290	B290-S-0.5	07/13/2004	0.5	89	--	240	--	--	--	--	--	--	--	--	--
	B290-S-2.5	07/13/2004	2.5	650	--	640	--	--	--	--	--	--	--	--	--
	B290-S-5.0	07/13/2004	5	88	--	72	--	--	--	--	--	--	--	--	--
	B290-S-10.0	07/13/2004	10	13 U	--	50 U	--	--	--	--	--	--	--	--	--
	B290-S-10.0-Dup	07/13/2004	10	13 U	--	50 U	--	--	--	--	--	--	--	--	--
B-291	B291-S-0.5	07/12/2004	0.5	97	--	190	--	--	--	--	--	--	--	--	--
	B291-S-2.5	07/12/2004	2.5	450	--	1,000	--	--	--	--	--	--	--	--	--
	B291-S-5.0	07/12/2004	5	58	--	94	--	--	--	--	--	--	--	--	--
	B291-S-10.0	07/12/2004	10	42	--	200	--	--	--	--	--	--	--	--	--
B-292	B292-S-0.5	07/08/2004	0.5	230	--	190	--	--	--	--	--	--	--	--	--
	B292-S-2.5	07/08/2004	2.5	16 U	--	62 U	--	--	--	--	--	--	--	--	--
	B292-S-5.0	07/08/2004	5	67	--	59 U	--	--	--	--	--	--	--	--	--
	B292-S-5.0-Dup	07/08/2004	5	15 U	--	60 U	--	--	--	--	--	--	--	--	--
	B292-S-10.0	07/08/2004	10	16 U	--	63 U	--	--	--	--	--	--	--	--	--
B-293	B293-S-0.5	07/12/2004	0.5	37	--	82	--	--	--	--	--	--	--	--	--
	B293-S-2.5	07/12/2004	2.5	840	--	280	--	--	--	--	--	--	--	--	--
	B293-S-5.0	07/12/2004	5	13 U	--	50 U	--	--	--	--	--	--	--	--	--
	B293-S-10.0	07/12/2004	10	13 U	--	50 U	--	--	--	--	--	--	--	--	--
B-294	B294-S-0.5	07/12/2004	0.5	13 U	--	51 U	--	--	--	--	--	--	--	--	--
	B294-S-2.5	07/12/2004	2.5	36	--	50 U	--	--	--	--	--	--	--	--	--
	B294-S-5.0	07/12/2004	5	330	--	500	--	--	--	--	--	--	--	--	--
	B294-S-10.0	07/12/2004	10	13 U	--	51 U	--	--	--	--	--	--	--	--	--
B-295	B295-S-0.5	07/12/2004	0.5	310	--	160	--	--	--	--	--	--	--	--	--
	B295-S-2.5	07/12/2004	2.5	64	--	51 U	--	--	--	--	--	--	--	--	--
	B295-S-5.0	07/12/2004	5	17	--	50 U	--	--	--	--	--	--	--	--	--
	B295-S-10.0	07/12/2004	10	13 U	--	50 U	--	--	--	--	--	--	--	--	--

Table E-4-5
Petroleum Hydrocarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Diesel-Range Organics	Gasoline-Range Organics	Residual-Range Organics	Jet Fuel as Jet A	Jet Fuel as JP-4	Kerosene	Lube Oil	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	PHC as Diesel	Total Petroleum Hydrocarbons
MTCA Method A Cleanup Levels for Unrestricted Land Uses				2,000	30	2,000	30	30	2,000	2,000	4,000	2,000	2,000	2,000	NA
B-296	B296-S-0.5	07/09/2004	0.5	110	--	130	--	--	--	--	--	--	--	--	--
	B296-S-2.5	07/09/2004	2.5	28	--	58 U	--	--	--	--	--	--	--	--	--
	B296-S-5.0	07/09/2004	5	1,800	--	590	--	--	--	--	--	--	--	--	--
	B296-S-10.0	07/09/2004	10	41	--	61 U	--	--	--	--	--	--	--	--	--
B-297	B297-S-1.0	07/09/2004	1	560	--	890	--	--	--	--	--	--	--	--	--
	B297-S-2.5	07/09/2004	2.5	16 U	--	61 U	--	--	--	--	--	--	--	--	--
	B297-S-5.0	07/09/2004	5	16 U	--	62 U	--	--	--	--	--	--	--	--	--
	B297-S-10.0	07/09/2004	10	17 U	--	66 U	--	--	--	--	--	--	--	--	--
	B297-S-10.0-Dup	07/09/2004	10	17 U	--	67 U	--	--	--	--	--	--	--	--	--
B-299	B299-S-0.5	07/21/2004	0.5	14 U	--	54 U	--	--	--	--	--	--	--	--	--
	B299-S-2.5	07/21/2004	2.5	150	--	190	--	--	--	--	--	--	--	--	--
	B299-S-5.0	07/21/2004	5	330	--	270	--	--	--	--	--	--	--	--	--
	B299-S-10.0	07/21/2004	10	560	--	120	--	--	--	--	--	--	--	--	--
B-300	B300-S-0.5	07/21/2004	0.5	14 U	--	54 U	--	--	--	--	--	--	--	--	--
	B300-S-2.5	07/21/2004	2.5	29	--	84	--	--	--	--	--	--	--	--	--
	B300-S-10.0	07/21/2004	10	17 U	--	65 U	--	--	--	--	--	--	--	--	--
B-301	B301-S-0.5	07/21/2004	0.5	730	--	1,800	--	--	--	--	--	--	--	--	--
	B301-S-2.5	07/21/2004	2.5	170	--	360	--	--	--	--	--	--	--	--	--
	B301-S-5.0	07/21/2004	5	15 U	--	57 U	--	--	--	--	--	--	--	--	--
MW-45D	MW45-S-0.5	07/20/2004	0.5	130	--	520	--	--	--	--	--	--	--	--	--
	MW45-S-2.5	07/20/2004	2.5	15 U	--	58 U	--	--	--	--	--	--	--	--	--
	MW45-S-5.0	07/20/2004	5	15 U	--	62	--	--	--	--	--	--	--	--	--
	MW45-S-10.0	07/20/2004	10	17 U	--	66 U	--	--	--	--	--	--	--	--	--
MW-9S	MW9R-S-0.5	07/14/2004	0.5	840	--	1,100	--	--	--	--	--	--	--	--	--
	MW9R-S-2.5	07/14/2004	2.5	**4,500**	--	540	--	--	--	--	--	--	--	--	--
	MW9R-S-5.0	07/14/2004	5	78	--	56	--	--	--	--	--	--	--	--	--
	MW9R-S-10.0	07/14/2004	10	13 U	--	51 U	--	--	--	--	--	--	--	--	--

Table E-4-5
Petroleum Hydrocarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Diesel-Range Organics	Gasoline-Range Organics	Residual-Range Organics	Jet Fuel as Jet A	Jet Fuel as JP-4	Kerosene	Lube Oil	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	PHC as Diesel	Total Petroleum Hydrocarbons
MTCA Method A Cleanup Levels for Unrestricted Land Uses				2,000	30	2,000	30	30	2,000	2,000	4,000	2,000	2,000	2,000	NA
Historical Characterization															
B-204	B204-S-2.5	10/28/99	2.5	10 U,H	10 U,H	25 U,H	10 U,H	10 U,H	10 U,H	25 U,H	10 U,H	10 U,H	50 U,H	670 H	--
B-205	B205-S-2.5	10/29/99	2.5	10 U,H	10 U,H	25 U,H	10 U,H	10 U,H	10 U,H	25 U,H	10 U,H	10 U,H	50 U,H	160 H	--
B-206	B206-S-2.5	11/01/99	2.5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	112	--
	B206-S-10.0	11/01/99	10	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	1,090	--
B-207	B207-S-2.5	11/01/99	2.5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	884	--
	B207-S-5.0	11/01/99	5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
	B207-S-10.0	11/01/99	10	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
B-208	B208-S-5.0	11/01/99	5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	214	--
B-209	B209-S-10 MSD	11/01/99	10	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
	B209-S-10.0	11/01/99	10	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
	B209-S-901	11/01/99	10	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
B-210	B210-S-5.0	11/01/99	5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	190	10 U	10 U,*	50 U	25 U	--
	B210-S-15.0	11/01/99	15	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
B-212	B212-S-5.0	11/02/99	5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	297	10 U	10 U,*	50 U	25 U	--
B-215	B215-S-2.5	11/04/99	2.5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	250	--
	B215-S-5.0	11/04/99	5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	82	--
	B215-S-10.0	11/04/99	10	10 U	10 U,*	25 U	10 U	10 U,*	10 U	500	10 U	10 U,*	50 U	25 U	--
B-216	B216-S-5.0	11/04/99	5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
	B216-S-10.0	11/04/99	10	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
B-217	B217-S-2.5	11/05/99	2.5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	520	--
	B217-S-10.0	11/05/99	10	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	150	25 U	--
	B217-S-15.0	11/05/99	15	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--

Table E-4-5
Petroleum Hydrocarbons in Soil (mg/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Diesel-Range Organics	Gasoline-Range Organics	Residual-Range Organics	Jet Fuel as Jet A	Jet Fuel as JP-4	Kerosene	Lube Oil	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	PHC as Diesel	Total Petroleum Hydrocarbons
MTCA Method A Cleanup Levels for Unrestricted Land Uses				2,000	30	2,000	30	30	2,000	2,000	4,000	2,000	2,000	2,000	NA
B-218	B218-S-5.0	11/08/99	5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	1,400	--
	B218-S-15.0	11/08/99	15	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
B-219	B219-S-10.0	11/08/99	10	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
B-220	B220-S-5.0	11/08/99	5	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	270	--
	B220-S-10.0	11/08/99	10	10 U	10 U,*	25 U	10 U	10 U,*	10 U	25 U	10 U	10 U,*	50 U	25 U	--
MW-28S	T5070184	04/02/96	11	--	--	--	--	--	--	--	--	--	--	--	24 U
MW-29	T5070015	04/02/96	31	--	--	--	--	--	--	--	--	--	--	--	27 U
B-208-S4-Comp	EX-B-208-S4 Com	04/18/02	0	60	--	--	--	--	--	--	--	--	--	--	150
B-208-S3-E30	EX-B-208-S3-E30	05/01/02	0	950	--	--	--	--	--	--	--	--	--	--	460
B-208-S3-N10	EX-B-208-S3-N10	05/01/02	0	85	--	--	--	--	--	--	--	--	--	--	160
B-208-S3-N20	EX-B-208-S3-N20	04/25/02	3	1,300	--	--	--	--	--	--	--	--	--	--	1,200
B-208-S3-S1-S10	EX-B-208-S3-S-1	05/01/02	3	160	--	--	--	--	--	--	--	--	--	--	190
B-208-S3-S20	EX-B-208-S3-S20	04/25/02	3	350	--	--	--	--	--	--	--	--	--	--	490
B-208-S3-W10	EX-B-208-S3-W10	04/25/02	3	36	--	--	--	--	--	--	--	--	--	--	120 U
B-208-S3-W20	EX-B-208-S3-W20	04/25/02	3	43	--	--	--	--	--	--	--	--	--	--	130

Table E-4-6
Volatile Organic Compounds in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane (TCA)	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane (1,1-DCA)	1,1-Dichloro-ethene (1,1-DCE)	1,1-Dichloro-propene
Direct Contact (Ingestion) Method B: Unrestricted Land Use					38,000	72,000,000	5,000	18,000	8,000,000	1,700	NA
Historical Characterization											
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B204-S-5.0	10/28/99	5	K9907788-002	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B205-S-5.0	10/29/99	5	K9907788-006	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B206-S-5.0	11/01/99	5	K9907927-002	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-208	B208-S-5.0	11/01/99	5	K9907927-008	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-210	B210-S-2.5	11/01/99	2.5	K9907927-015	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B210-S-5.0	11/01/99	5	K9907927-016	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-212	B212-S-2.5	11/02/99	2.5	K9907927-024	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B212-S-5.0	11/02/99	5	K9907927-025	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-214	B214-S-2.5	11/03/99	2.5	K9907922-004	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B214-S-5.0	11/03/99	5	K9907922-005	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B215-S-5.0	11/04/99	5	K9907986-002	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-216	B216-S-5.0	11/04/99	5	K9907986-004	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-218	B218-S-5.0	11/08/99	5	K9908036-001	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-219	B219-S-2.5	11/08/99	2.5	K9908036-004	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B219-S-5.0	11/08/99	5	K9908036-005	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-220	B220-S-5.0	11/08/99	5	K9908036-008	5 U	5 U	5 U	5 U	5 U	5 U	5 U
TP-18	TP18-7	05/03/93	7	TP18-7	--	--	--	--	--	--	--

Table E-4-6
Volatile Organic Compounds in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromo-ethane (EDB)	1,2-Dichloro-benzene
Direct Contact (Ingestion) Method B: Unrestricted Land Use					NA	140	800,000	4,000,000	710	12	7,200,000
Historical Characterization											
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	20 U	5 U	20 U	20 U	20 U	20 U	5 U
	B204-S-5.0	10/28/99	5	K9907788-002	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	20 U	5 U	20 U	20 U	20 U	20 U	5 U
	B205-S-5.0	10/29/99	5	K9907788-006	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	20 U	5 U	20 U	20 U	20 U	20 U	5 U
	B206-S-5.0	11/01/99	5	K9907927-002	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-208	B208-S-5.0	11/01/99	5	K9907927-008	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-210	B210-S-2.5	11/01/99	2.5	K9907927-015	20 U	5 U	20 U	20 U	20 U	20 U	5 U
	B210-S-5.0	11/01/99	5	K9907927-016	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-212	B212-S-2.5	11/02/99	2.5	K9907927-024	20 U	5 U	20 U	20 U	20 U	20 U	5 U
	B212-S-5.0	11/02/99	5	K9907927-025	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-214	B214-S-2.5	11/03/99	2.5	K9907922-004	20 U	5 U	20 U	20 U	20 U	20 U	5 U
	B214-S-5.0	11/03/99	5	K9907922-005	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	20 U	5 U	20 U	20 U	20 U	20 U	5 U
	B215-S-5.0	11/04/99	5	K9907986-002	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-216	B216-S-5.0	11/04/99	5	K9907986-004	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-218	B218-S-5.0	11/08/99	5	K9908036-001	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-219	B219-S-2.5	11/08/99	2.5	K9908036-004	20 U	5 U	20 U	20 U	20 U	20 U	5 U
	B219-S-5.0	11/08/99	5	K9908036-005	20 U	5 U	20 U	20 U	20 U	20 U	5 U
B-220	B220-S-5.0	11/08/99	5	K9908036-008	20 U	5 U	20 U	20 U	20 U	20 U	5 U
TP-18	TP18-7	05/03/93	7	TP18-7	--	--	--	--	--	--	--

Table E-4-6
Volatile Organic Compounds in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	1,2-Dichloroethane (EDC)	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)
Direct Contact (Ingestion) Method B: Unrestricted Land Use					11,000	15,000	4,000,000	NA	NA	42,000	NA	48,000,000
Historical Characterization												
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
	B204-S-5.0	10/28/99	5	K9907788-002	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
	B205-S-5.0	10/29/99	5	K9907788-006	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
	B206-S-5.0	11/01/99	5	K9907927-002	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-208	B208-S-5.0	11/01/99	5	K9907927-008	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20
B-210	B210-S-2.5	11/01/99	2.5	K9907927-015	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
	B210-S-5.0	11/01/99	5	K9907927-016	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-212	B212-S-2.5	11/02/99	2.5	K9907927-024	5 U	5 U	20 U	5 U	5 U	5 U	5 U	36
	B212-S-5.0	11/02/99	5	K9907927-025	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-214	B214-S-2.5	11/03/99	2.5	K9907922-004	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
	B214-S-5.0	11/03/99	5	K9907922-005	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
	B215-S-5.0	11/04/99	5	K9907986-002	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-216	B216-S-5.0	11/04/99	5	K9907986-004	5 U	5 U	20 U	5 U	5 U	5 U	5 U	50
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-218	B218-S-5.0	11/08/99	5	K9908036-001	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-219	B219-S-2.5	11/08/99	2.5	K9908036-004	5 U	5 U	20 U	5 U	5 U	5 U	5 U	25
	B219-S-5.0	11/08/99	5	K9908036-005	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
B-220	B220-S-5.0	11/08/99	5	K9908036-008	5 U	5 U	20 U	5 U	5 U	5 U	5 U	20 U
TP-18	TP18-7	05/03/93	7	TP18-7	--	--	--	--	--	--	--	62

Table E-4-6
Volatile Organic Compounds in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Isopropyl-toluene	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene
Direct Contact (Ingestion) Method B: Unrestricted Land Use					1,600,000	NA	NA	NA	6,400,000	8,000,000	18,000
Historical Characterization											
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	20 U	20 U	20 U	20 U	20 U	50 U	5 U
	B204-S-5.0	10/28/99	5	K9907788-002	20 U	20 U	20 U	20 U	20 U	82	5 U
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	20 U	20 U	20 U	20 U	20 U	50 U	5 U
	B205-S-5.0	10/29/99	5	K9907788-006	20 U	20 U	20 U	20 U	20 U	110	5 U
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	20 U	20 U	20 U	20 U	20 U	50 U	5 U
	B206-S-5.0	11/01/99	5	K9907927-002	20 U	20 U	20 U	20 U	20 U	81	5 U
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	20 U	20 U	20 U	20 U	20 U	50 U	5 U
B-208	B208-S-5.0	11/01/99	5	K9907927-008	20 U	20 U	20 U	20 U	20 U	98	5 U
B-210	B210-S-2.5	11/01/99	2.5	K9907927-015	20 U	20 U	20 U	20 U	20 U	50 U	5 U
	B210-S-5.0	11/01/99	5	K9907927-016	20 U	20 U	20 U	20 U	20 U	50 U	5 U
B-212	B212-S-2.5	11/02/99	2.5	K9907927-024	20 U	20 U	20 U	20 U	20 U	180	5 U
	B212-S-5.0	11/02/99	5	K9907927-025	20 U	20 U	20 U	20 U	20 U	50 U	5 U
B-214	B214-S-2.5	11/03/99	2.5	K9907922-004	20 U	20 U	20 U	20 U	20 U	50 U	5 U
	B214-S-5.0	11/03/99	5	K9907922-005	20 U	20 U	20 U	20 U	20 U	50 U	5 U
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	20 U	20 U	20 U	20 U	20 U	50 U	5 U
	B215-S-5.0	11/04/99	5	K9907986-002	20 U	20 U	20 U	20 U	20 U	50 U	5 U
B-216	B216-S-5.0	11/04/99	5	K9907986-004	20 U	20 U	20 U	20 U	20 U	220	5 U
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	20 U	20 U	20 U	20 U	20 U	50 U	5 U
B-218	B218-S-5.0	11/08/99	5	K9908036-001	20 U	20 U	20 U	20 U	20 U	50 U	5 U
B-219	B219-S-2.5	11/08/99	2.5	K9908036-004	20 U	20 U	20 U	20 U	20 U	130	5 U
	B219-S-5.0	11/08/99	5	K9908036-005	20 U	20 U	20 U	20 U	20 U	74	5 U
B-220	B220-S-5.0	11/08/99	5	K9908036-008	20 U	20 U	20 U	20 U	20 U	50 U	5 U
TP-18	TP18-7	05/03/93	7	TP18-7	--	--	--	--	--	370	--

Table E-4-6
Volatile Organic Compounds in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Disulfide
Direct Contact (Ingestion) Method B: Unrestricted Land Use					NA	NA	16,000	130,000	110,000	8,000,000
Historical Characterization										
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	5 U	5 U	5 U	5 U	5 U	5 U
	B204-S-5.0	10/28/99	5	K9907788-002	5 U	5 U	5 U	5 U	5 U	5 U
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	5 U	5 U	5 U	5 U	5 U	5 U
	B205-S-5.0	10/29/99	5	K9907788-006	5 U	5 U	5 U	5 U	5 U	5 U
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	5 U	5 U	5 U	5 U	5 U	5 U
	B206-S-5.0	11/01/99	5	K9907927-002	5 U	5 U	5 U	5 U	5 U	5 U
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	5 U	5 U	5 U	5 U	5 U	5 U
B-208	B208-S-5.0	11/01/99	5	K9907927-008	5 U	5 U	5 U	5 U	5 U	5 U
B-210	B210-S-2.5	11/01/99	2.5	K9907927-015	5 U	5 U	5 U	5 U	5 U	5 U
	B210-S-5.0	11/01/99	5	K9907927-016	5 U	5 U	5 U	5 U	5 U	5 U
B-212	B212-S-2.5	11/02/99	2.5	K9907927-024	5 U	5 U	5 U	5 U	5 U	5 U
	B212-S-5.0	11/02/99	5	K9907927-025	5 U	5 U	5 U	5 U	5 U	5 U
B-214	B214-S-2.5	11/03/99	2.5	K9907922-004	5 U	5 U	5 U	5 U	5 U	5 U
	B214-S-5.0	11/03/99	5	K9907922-005	5 U	5 U	5 U	5 U	5 U	5 U
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	5 U	5 U	5 U	5 U	5 U	5 U
	B215-S-5.0	11/04/99	5	K9907986-002	5 U	5 U	5 U	5 U	5 U	5 U
B-216	B216-S-5.0	11/04/99	5	K9907986-004	5 U	5 U	5 U	5 U	5 U	5 U
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	5 U	5 U	5 U	5 U	5 U	5 U
B-218	B218-S-5.0	11/08/99	5	K9908036-001	5 U	5 U	5 U	5 U	5 U	5 U
B-219	B219-S-2.5	11/08/99	2.5	K9908036-004	5 U	5 U	5 U	5 U	5 U	5 U
	B219-S-5.0	11/08/99	5	K9908036-005	5 U	5 U	5 U	5 U	5 U	5 U
B-220	B220-S-5.0	11/08/99	5	K9908036-008	5 U	5 U	5 U	5 U	5 U	5 U
TP-18	TP18-7	05/03/93	7	TP18-7	--	--	--	--	--	--

Table E-4-6
Volatile Organic Compounds in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene
Direct Contact (Ingestion) Method B: Unrestricted Land Use					7,700	1,600,000	350,000	160,000	77,000	800,000
Historical Characterization										
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	5 U	5 U	5 U	5 U	5 U	5 U
	B204-S-5.0	10/28/99	5	K9907788-002	5 U	5 U	5 U	5 U	5 U	5 U
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	5 U	5 U	5 U	5 U	5 U	5 U
	B205-S-5.0	10/29/99	5	K9907788-006	5 U	5 U	5 U	5 U	5 U	5 U
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	5 U	5 U	5 U	5 U	5 U	5 U
	B206-S-5.0	11/01/99	5	K9907927-002	5 U	5 U	5 U	5 U	5 U	5 U
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	5 U	5 U	5 U	5 U	5 U	5 U
B-208	B208-S-5.0	11/01/99	5	K9907927-008	5 U	5 U	5 U	5 U	5 U	5 U
B-210	B210-S-2.5	11/01/99	2.5	K9907927-015	5 U	5 U	5 U	5 U	5 U	5 U
	B210-S-5.0	11/01/99	5	K9907927-016	5 U	5 U	5 U	5 U	5 U	5 U
B-212	B212-S-2.5	11/02/99	2.5	K9907927-024	5 U	5 U	5 U	5 U	5 U	5 U
	B212-S-5.0	11/02/99	5	K9907927-025	5 U	5 U	5 U	5 U	5 U	5 U
B-214	B214-S-2.5	11/03/99	2.5	K9907922-004	5 U	5 U	5 U	5 U	5 U	5 U
	B214-S-5.0	11/03/99	5	K9907922-005	5 U	5 U	5 U	5 U	5 U	5 U
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	5 U	5 U	5 U	5 U	5 U	5 U
	B215-S-5.0	11/04/99	5	K9907986-002	5 U	5 U	5 U	5 U	5 U	5 U
B-216	B216-S-5.0	11/04/99	5	K9907986-004	5 U	5 U	5 U	5 U	5 U	5 U
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	5 U	5 U	5 U	5 U	5 U	5 U
B-218	B218-S-5.0	11/08/99	5	K9908036-001	5 U	5 U	5 U	5 U	5 U	5 U
B-219	B219-S-2.5	11/08/99	2.5	K9908036-004	5 U	5 U	5 U	5 U	5 U	5 U
	B219-S-5.0	11/08/99	5	K9908036-005	5 U	5 U	5 U	5 U	5 U	5 U
B-220	B220-S-5.0	11/08/99	5	K9908036-008	5 U	5 U	5 U	5 U	5 U	5 U
TP-18	TP18-7	05/03/93	7	TP18-7	--	--	--	--	--	--

Table E-4-6
Volatile Organic Compounds in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	cis-1,3-Dichloro-propene	Dibromo-chloromethane	Dibromo-methane	Dichlorodifluoro-methane (CFC 12)	Dichloromethane (Methylene Chloride)	Ethylbenzene
Direct Contact (Ingestion) Method B: Unrestricted Land Use					5600[a]	12,000	800,000	16,000,000	130,000	8,000,000
Historical Characterization										
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	5 U	5 U	5 U	5 U	10 U	5 U
	B204-S-5.0	10/28/99	5	K9907788-002	5 U	5 U	5 U	5 U	10 U	5 U
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	5 U	5 U	5 U	5 U	10 U	5 U
	B205-S-5.0	10/29/99	5	K9907788-006	5 U	5 U	5 U	5 U	10 U	5 U
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	5 U	5 U	5 U	5 U	10 U	5 U
	B206-S-5.0	11/01/99	5	K9907927-002	5 U	5 U	5 U	5 U	10 U	5 U
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	5 U	5 U	5 U	5 U	10 U	5 U
B-208	B208-S-5.0	11/01/99	5	K9907927-008	5 U	5 U	5 U	5 U	10 U	5 U
B-210	B210-S-2.5	11/01/99	2.5	K9907927-015	5 U	5 U	5 U	5 U	10 U	5 U
	B210-S-5.0	11/01/99	5	K9907927-016	5 U	5 U	5 U	5 U	10 U	5 U
B-212	B212-S-2.5	11/02/99	2.5	K9907927-024	5 U	5 U	5 U	5 U	10 U	5 U
	B212-S-5.0	11/02/99	5	K9907927-025	5 U	5 U	5 U	5 U	10 U	5 U
B-214	B214-S-2.5	11/03/99	2.5	K9907922-004	5 U	5 U	5 U	5 U	10 U	5 U
	B214-S-5.0	11/03/99	5	K9907922-005	5 U	5 U	5 U	5 U	10 U	5 U
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	5 U	5 U	5 U	5 U	10 U	5 U
	B215-S-5.0	11/04/99	5	K9907986-002	5 U	5 U	5 U	5 U	10 U	5 U
B-216	B216-S-5.0	11/04/99	5	K9907986-004	5 U	5 U	5 U	5 U	10 U	5 U
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	5 U	5 U	5 U	5 U	10 U	5 U
B-218	B218-S-5.0	11/08/99	5	K9908036-001	5 U	5 U	5 U	5 U	10 U	5 U
B-219	B219-S-2.5	11/08/99	2.5	K9908036-004	5 U	5 U	5 U	5 U	10 U	5 U
	B219-S-5.0	11/08/99	5	K9908036-005	5 U	5 U	5 U	5 U	10 U	5 U
B-220	B220-S-5.0	11/08/99	5	K9908036-008	5 U	5 U	5 U	5 U	10 U	5 U
TP-18	TP18-7	05/03/93	7	TP18-7	--	--	--	--	--	--

Table E-4-6
Volatile Organic Compounds in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylenes	Naphthalene	n-Butyl-benzene	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene
Direct Contact (Ingestion) Method B: Unrestricted Land Use					13,000	8,000,000	160,000,000	1,600,000	NA	NA	160,000,000	NA
Historical Characterization												
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
	B204-S-5.0	10/28/99	5	K9907788-002	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
	B205-S-5.0	10/29/99	5	K9907788-006	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
	B206-S-5.0	11/01/99	5	K9907927-002	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-208	B208-S-5.0	11/01/99	5	K9907927-008	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-210	B210-S-2.5	11/01/99	2.5	K9907927-015	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
	B210-S-5.0	11/01/99	5	K9907927-016	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-212	B212-S-2.5	11/02/99	2.5	K9907927-024	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
	B212-S-5.0	11/02/99	5	K9907927-025	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-214	B214-S-2.5	11/03/99	2.5	K9907922-004	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
	B214-S-5.0	11/03/99	5	K9907922-005	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
	B215-S-5.0	11/04/99	5	K9907986-002	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-216	B216-S-5.0	11/04/99	5	K9907986-004	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-218	B218-S-5.0	11/08/99	5	K9908036-001	20 U	20 U	8	20 U	20 U	20 U	6	20 U
B-219	B219-S-2.5	11/08/99	2.5	K9908036-004	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
	B219-S-5.0	11/08/99	5	K9908036-005	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
B-220	B220-S-5.0	11/08/99	5	K9908036-008	20 U	20 U	5 U	20 U	20 U	20 U	5 U	20 U
TP-18	TP18-7	05/03/93	7	TP18-7	--	--	--	--	--	--	--	--

Table E-4-6
Volatile Organic Compounds in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Styrene	tert-Butyl-benzene	Tetra-chloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloro-propene	Trichloro-ethene (TCE)
Direct Contact (Ingestion) Method B: Unrestricted Land Use					33,000	NA	19,000	6,400,000	1,600,000	5600^{a}	2,500
Historical Characterization											
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	5 U	20 U	5 U	5 U	5 U	5 U	5 U
	B204-S-5.0	10/28/99	5	K9907788-002	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	5 U	20 U	5 U	5 U	5 U	5 U	5 U
	B205-S-5.0	10/29/99	5	K9907788-006	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	5 U	20 U	5 U	5 U	5 U	5 U	5 U
	B206-S-5.0	11/01/99	5	K9907927-002	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-208	B208-S-5.0	11/01/99	5	K9907927-008	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-210	B210-S-2.5	11/01/99	2.5	K9907927-015	5 U	20 U	5 U	5 U	5 U	5 U	5 U
	B210-S-5.0	11/01/99	5	K9907927-016	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-212	B212-S-2.5	11/02/99	2.5	K9907927-024	5 U	20 U	5 U	5 U	5 U	5 U	5 U
	B212-S-5.0	11/02/99	5	K9907927-025	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-214	B214-S-2.5	11/03/99	2.5	K9907922-004	5 U	20 U	5 U	5 U	5 U	5 U	5 U
	B214-S-5.0	11/03/99	5	K9907922-005	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	5 U	20 U	5 U	5 U	5 U	5 U	5 U
	B215-S-5.0	11/04/99	5	K9907986-002	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-216	B216-S-5.0	11/04/99	5	K9907986-004	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-218	B218-S-5.0	11/08/99	5	K9908036-001	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-219	B219-S-2.5	11/08/99	2.5	K9908036-004	5 U	20 U	5 U	5 U	5 U	5 U	5 U
	B219-S-5.0	11/08/99	5	K9908036-005	5 U	20 U	5 U	5 U	5 U	5 U	5 U
B-220	B220-S-5.0	11/08/99	5	K9908036-008	5 U	20 U	5 U	5 U	5 U	5 U	5 U
TP-18	TP18-7	05/03/93	7	TP18-7	--	--	--	--	--	--	--

Table E-4-6
Volatile Organic Compounds in Soil (ug/kg)
Lake River Industrial Site

Location	Sample	Date Collected	Depth (ft. bgs)	Lab Code	Trichloro-fluoromethane (CFC 11)	Vinyl chloride
Direct Contact (Ingestion) Method B: Unrestricted Land Use					24,000,000	670
Historical Characterization						
B-204	B204-S-2.5	10/28/99	2.5	K9907788-001	5 U	5 U
	B204-S-5.0	10/28/99	5	K9907788-002	5 U	5 U
B-205	B205-S-2.5	10/29/99	2.5	K9907788-005	5 U	5 U
	B205-S-5.0	10/29/99	5	K9907788-006	5 U	5 U
B-206	B206-S-2.5	11/01/99	2.5	K9907927-001	5 U	5 U
	B206-S-5.0	11/01/99	5	K9907927-002	5 U	5 U
B-207	B207-S-2.5	11/01/99	2.5	K9907927-004	5 U	5 U
B-208	B208-S-5.0	11/01/99	5	K9907927-008	5 U	5 U
B-210	B210-S-2.5	11/01/99	2.5	K9907927-015	5 U	5 U
	B210-S-5.0	11/01/99	5	K9907927-016	5 U	5 U
B-212	B212-S-2.5	11/02/99	2.5	K9907927-024	5 U	5 U
	B212-S-5.0	11/02/99	5	K9907927-025	5 U	5 U
B-214	B214-S-2.5	11/03/99	2.5	K9907922-004	5 U	5 U
	B214-S-5.0	11/03/99	5	K9907922-005	5 U	5 U
B-215	B215-S-2.5	11/04/99	2.5	K9907986-001	5 U	5 U
	B215-S-5.0	11/04/99	5	K9907986-002	5 U	5 U
B-216	B216-S-5.0	11/04/99	5	K9907986-004	5 U	5 U
B-217	B217-S-2.5	11/05/99	2.5	K9907986-011	5 U	5 U
B-218	B218-S-5.0	11/08/99	5	K9908036-001	5 U	5 U
B-219	B219-S-2.5	11/08/99	2.5	K9908036-004	5 U	5 U
	B219-S-5.0	11/08/99	5	K9908036-005	5 U	5 U
B-220	B220-S-5.0	11/08/99	5	K9908036-008	5 U	5 U
TP-18	TP18-7	05/03/93	7	TP18-7	--	--

CELL 4

Tables E-5-1 through E-5-5 Notes
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

-- = not analyzed.

Bold number indicates a detected concentration that exceeds MTCA Method B CUL, except for arsenic and dioxin concentrations, which are compared to natural background concentrations.

Highlighted cells indicate concentrations exceeding wildlife ecological criteria.

cPAH = carcinogenic polycyclic aromatic hydrocarbon, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

cPAH TEQ = carcinogenic polycyclic aromatic hydrocarbon toxicity equivalent.

CULs = cleanup levels.

ft. bgs = feet below ground surface.

H = estimated concentration--sample analyzed outside recommended holding time.

J = estimated concentration.

mg/kg = milligrams per kilogram (parts per million).

MTCA = Washington State Model Toxics Control Act.

µg/kg = micrograms per kilogram (parts per billion).

ng/kg = nanogram per kilogram (parts per trillion).

Non-PHC = chemicals identified in the PHC range that did not match a typical TPH chromatograph.

ND = the cPAH analytes were not detected at or above their respective method reporting limits.

NV = no values.

PHC = petroleum hydrocarbons.

REL = remediation level, as discussed in Cell 4 RI/FS report as being MTCA Method C soil CUL.

TPH = total petroleum hydrocarbons.

U = not detected at or above method reporting limit.

UJ = Because of matrix interference, analyte could not be quantified; concentration is not greater than elevated method reporting limit presented on table.

[a] Used hexavalent chromium screening criteria.

[b] Used trivalent chromium screening criteria.

[c] Arsenic III values.

[d] Gasoline mixture without benzene present.

[e] Value is outside control criteria.

[f] Used 1,3-dichloropropene screening criteria.

Table E-5-1
Soil Data for Metals (mg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Arsenic	Total Chromium	Copper	Zinc
MTCA Method B soil CULs for Human Health				0.67	240[a]/120,000[b]	3,000	24,000
MTCA Method B protection of GW CULs				0.0339	18.4[a]/480,000[b]	262	5,970
USEPA Region 6 screening levels (res)				0.39	210	2,900	23,000
USEPA Region 6 screening levels (indoor ind)				3.8	450	76,000	100,000
USEPA Region 6 screening levels (outdoor ind)				1.8	500	42,000	100,000
MTCA Table 749-2 for Ecological Receptors		Unrestricted Land Use		20[c]	42	100	270
		Industrial/Commercial Use		20[c]	135	550	570
MTCA Wildlife Ecological Indicator Concentration				7[c]	67	217	360
MTCA Table 749-3 for Ecological Receptors		Plants		NV	42[c]	100	86[c]
		Soil Biota		NV	42[c]	50	200
		Wildlife		7[d]	67	217	360
Clark County Natural Background Concentration				5.81	26.57	34.43	95.52
Cell 4 preliminary RELs				88	11,000[a]	130,000	1,050,000
B-122	B122-S-2.5	09/21/1999	2.5	**9**	13	21	67
B-124	B124-S-2.5	09/23/1999	2.5	4	15	19	61
B-125	B125-S-2.5	09/24/1999	2.5	5	12	17	53
	B125-S-10.0	09/24/1999	10	4	15	19	45
	B125-S-15.0	09/24/1999	15	2	13	26	43
	B125-S-20.0	09/24/1999	20	3	13	22	36
B-126	B126-S-5.0	09/24/1999	5	3	12	14	47
B-129	B129-S-2.5	09/28/1999	2.5	4	14	24	47
B-131	B131-S-2.5	09/29/1999	2.5	**9**	14	22	54
B-132	B132-S-2.5	09/29/1999	2.5	3	20	19	36
B-133	B133-S-2.5	09/29/1999	2.5	2	18	14	37
B-134	B134-S-3.0	09/30/1999	3	2	17	23	55
	B134-S-901	09/30/1999	5	5	17	18	73
	B134-S-10.0	09/30/1999	10	**10**	26	18	59
	B134-S-20.0	09/30/1999	20	3	19	27	48
B-138	B138-S-901	10/04/1999	5	4	23	20	50
B-211	B211-S-20.0	11/02/1999	20	2	9	24	40
SS-4B	SS-4	07/16/2008	0.3	**20.3**	33.3	43	242
SS-5	SS-5	07/16/2008	0.3	5.62	17.6	14.1	50.7
SS-20	SS20-S-0.5	02/18/2009	0.5	2.4	16.2	14.8	49.4
SS-21	SS21-S-0.5	02/18/2009	0.5	2.54	8.59	13.8	40.8
SS-22	SS22-S-0.5	02/18/2009	0.5	1.51	7.68	5.1	17.2

Table E-5-1
Soil Data for Metals (mg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Arsenic	Total Chromium	Copper	Zinc
MTCA Method B soil CULs for Human Health				0.67	240[a]/120,000[b]	3,000	24,000
MTCA Method B protection of GW CULs				0.0339	18.4[a]/480,000[b]	262	5,970
USEPA Region 6 screening levels (res)				0.39	210	2,900	23,000
USEPA Region 6 screening levels (indoor ind)				3.8	450	76,000	100,000
USEPA Region 6 screening levels (outdoor ind)				1.8	500	42,000	100,000
MTCA Table 749-2 for Ecological Receptors		Unrestricted Land Use		20[c]	42	100	270
		Industrial/Commercial Use		20[c]	135	550	570
MTCA Wildlife Ecological Indicator Concentration				7[c]	67	217	360
MTCA Table 749-3 for Ecological Receptors		Plants		NV	42[c]	100	86[c]
		Soil Biota		NV	42[c]	50	200
		Wildlife		7[d]	67	217	360
Clark County Natural Background Concentration				5.81	26.57	34.43	95.52
Cell 4 preliminary RELs				88	11,000[a]	130,000	1,050,000
SS-23	SS23-S-0.5	02/18/2009	0.5	3.04	13.8	18.2	98.8
SS-24	SS24-S-0.5	02/18/2009	0.5	**6.26**	13.5	15.2	50.1
SS-25	SS25-S-0.5	02/18/2009	0.5	1.58	6.49	39.1	41
SS-26	SS26-S-0.5	02/18/2009	0.5	3.37	19.6	17.2	65.6
SS-27	SS27-S-0.5	02/18/2009	0.5	**7.46**	8.19	11.3	34.6
SS-28	SS28-S-0.5	02/18/2009	0.5	1.45	2.61	36.1	35.7
SS-29	SS29-S-0.5	02/19/2009	0.5	3.83	5.18	14.7	38.5
SS-30	SS30-S-0.5	02/19/2009	0.5	**63.8**	58	60.8	119
SS-30	SS30-S-1.5	02/19/2009	1.5	**15.7**	24.2	17.7	61
TP-23	TP23-0.3	05/03/1993	0.3	1.9	9.4	13.8	--
	TP23-4	05/03/1993	4	4.4	12.8	8.5	--
	TP23D-4	05/03/1993	4	5.3	11.3	8.2	--
TP-24	TP24-0.5	05/03/1993	0.5	**14.9**	9.6	39.5	--
	TP24-3	05/03/1993	3	3.1	11	12.8	--
TP-25	TP25-0.5	05/03/1993	0.5	**59.2**	57.6	65	--
	TP25-5	05/03/1993	5	5.1	14.6	13.8	--
TP-26	TP26-0.4	05/03/1993	0.4	**10.4**	14.2	18	--
	TP26-4.5	05/03/1993	4.5	5.6	7.6	13.4	--
Off-Site Samples							
SS-31	SS31-S-0.5	02/26/2009	0.5	5.08	17.7	8.46	74.9
SS-32	SS32-S-0.5	02/26/2009	0.5	4.49	13.9	6.18	76.5
SS-33	SS33-S-0.5	02/26/2009	0.5	4.19	14.4	5.8	60.4

Table E-5-2
Soil Data for Semivolatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	1-Methyl naphthalene	2-Methyl-naphthalene	2-Methyl-phenol	3-Methyl-phenol	4-Methyl-phenol	Acenaph-thene	Acenaph-thylene	Anthracene
MTCA Method B soil CULs for Human Health				24,000	320,000	4,000,000	4,000,000	400,000	4,800,000	NV	24,000,000
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				1,100,000	14,000,000	180,000,000	180,000,000	18,000,000	210,000,000	NA	1,050,000,000
B-122	B122-S-2.5	09/21/1999	2.5	--	10 U	--	--	--	10 U	10 U	10 U
	B122-S-15.0	09/21/1999	15	--	10 U	--	--	--	10 U	50 U	10 U
	B122-S-20.0	09/21/1999	20	--	10 U,H	--	--	--	10 U,H	10 U,H	10 U,H
B-123	B123-S-5.0	09/22/1999	5	--	10 U	--	--	--	10 U	10 U	10 U
B-124	B124-S-2.5	09/23/1999	2.5	--	10 U	--	--	--	10 U	10 U	10 U
B-125	B125-S-2.5	09/24/1999	2.5	--	10 U	--	--	--	10 U	50 U	10 U
	B125-S-10.0	09/24/1999	10	--	34	--	--	--	18	50 U	10 U
	B125-S-15.0	09/24/1999	15	--	10 U	--	--	--	10 U	50 U	10 U
	B125-S-20.0	09/24/1999	20	--	10 U	--	--	--	10 U	50 U	10 U
B-126	B126-S-5.0	09/24/1999	5	--	10 U	--	--	--	10 U	50 U	16
B-129	B129-S-2.5	09/28/1999	2.5	--	5 U	--	--	--	5 U	56	160
B-131	B131-S-2.5	09/29/1999	2.5	--	5 U	--	--	--	5 U	5 U	5 U
B-132	B132-S-2.5	09/29/1999	2.5	--	5 U	--	--	--	5 U	5 U	5 U
B-133	B133-S-2.5	09/29/1999	2.5	--	5 U	--	--	--	5 U	5 U	6
B-134	B134-S-3.0	09/30/1999	3	--	41	--	--	--	120	11	140
	B134-S-901	09/30/1999	5	--	81	--	--	--	150	20	140
	B134-S-10.0	09/30/1999	10	--	32	--	--	--	660	6	68
	B134-S-20.0	09/30/1999	20	--	11	--	--	--	33	5 U	16
B-138	B138-S-901	10/04/1999	5	--	10 U	--	--	--	10 U	10 U	10 U
B-211	B211-S-20.0	11/02/1999	20	--	10 U	--	--	--	10 U	50 U	10 U
NPY-01	HC-NPY/01	02/06/1991	0.5	--	--	2,500 U	2,500 U	2,500 U	--	--	--
NPY-02	HC-NPY/02	02/06/1991	0.5	--	--	2,500 U	2,500 U	2,500 U	--	--	--
TP-25	TP25-0.5	05/03/1993	0.5	--	--	--	--	--	--	--	--

Table E-5-2
Soil Data for Semivolatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	1-Methyl naphthalene	2-Methyl-naphthalene	2-Methyl-phenol	3-Methyl-phenol	4-Methyl-phenol	Acenaph-thene	Acenaph-thylene	Anthracene
MTCA Method B soil CULs for Human Health				24,000	320,000	4,000,000	4,000,000	400,000	4,800,000	NV	24,000,000
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV
SS-4B	SS-4	07/16/2008	0.3	28.4	61.0	--	--	--	34.7	104	233
SS-5	SS-5	07/16/2008	0.3	7.1 U	7.1 U	--	--	--	8.51	31.2	49.7
SS-20	SS20-S-0.5	02/18/2009	0.5	--	--	--	--	--	7.83 U	7.83 U	7.83 U
SS-21	SS21-S-0.5	02/18/2009	0.5	--	--	--	--	--	7.31 U	7.31 U	7.31 U
SS-22	SS22-S-0.5	02/18/2009	0.5	--	--	--	--	--	8.08 U	8.08 U	8.08 U
SS-23	SS23-S-0.5	02/18/2009	0.5	--	--	--	--	--	7.36 U	7.36 U	7.36 U
SS-24	SS24-S-0.5	02/18/2009	0.5	--	--	--	--	--	7.14 U	8.57	44.3
SS-25	SS25-S-0.5	02/18/2009	0.5	--	--	--	--	--	7.92 U	7.92 U	9.50
SS-26	SS26-S-0.5	02/18/2009	0.5	--	--	--	--	--	7.89 U	7.89 U	7.89 U
SS-27	SS27-S-0.5	02/18/2009	0.5	--	--	--	--	--	7.13 U	7.13 U	8.56
SS-28	SS28-S-0.5	02/18/2009	0.5	--	--	--	--	--	7.46 U	7.46 U	7.46 U
SS-29	SS29-S-0.5	02/19/2009	0.5	--	--	--	--	--	7.39 U	7.39 U	12.6
SS-30	SS30-S-0.5	02/19/2009	0.5	--	--	--	--	--	16.4	275	605
	SS30-S-1.5	02/19/2009	1.5	--	--	--	--	--	7.74 U	8.51	34.8
W9	HC-W9/S2	02/04/1991	3	--	--	2,500 U	2,500 U	2,500 U	--	--	--
	HC-W9/S4	02/04/1991	8	--	--	2,500 U	2,500 U	2,500 U	--	--	--
Off-Site Samples											
SS-31	SS31-S-0.5	02/26/2009	0.5	--	--	--	--	--	8.95 U	8.95 U	8.95 U
SS-32	SS32-S-0.5	02/26/2009	0.5	--	--	--	--	--	8.63 U	8.63 U	8.63 U
SS-33	SS33-S-0.5	02/26/2009	0.5	--	--	--	--	--	8.76 U	8.76 U	8.76 U

Table E-5-2
Soil Data for Semivolatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Carbazole	Chrysene	Dibenz(a,h) anthracene
MTCA Method B soil CULs for Human Health				NV	140	NV	NV	NV	50,000	NV	NV
MTCA Wildlife Ecological Indicator Concentration				NV	12,000	NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				NV	18,000	NV	NV	NV	6,600,000	NV	NV
B-122	B122-S-2.5	09/21/1999	2.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B122-S-15.0	09/21/1999	15	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B122-S-20.0	09/21/1999	20	10 U,H	10 U,H	10 U,H	10 U,H	10 U,H	10 U,H	10 U,H	10 U,H
B-123	B123-S-5.0	09/22/1999	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-124	B124-S-2.5	09/23/1999	2.5	12	10 U	16	10 U	17	10 U	24	10 U
B-125	B125-S-2.5	09/24/1999	2.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B125-S-10.0	09/24/1999	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B125-S-15.0	09/24/1999	15	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	B125-S-20.0	09/24/1999	20	14	10 U	16	10 U	16	10 U	17	10 U
B-126	B126-S-5.0	09/24/1999	5	180	120	200	56	200	12	290	17
B-129	B129-S-2.5	09/28/1999	2.5	120	110	280	160	290	--	510	19
B-131	B131-S-2.5	09/29/1999	2.5	5 U	5 U	9	5 U	8	--	8	5 U
B-132	B132-S-2.5	09/29/1999	2.5	6	7	9	8	10	--	10	5 U
B-133	B133-S-2.5	09/29/1999	2.5	8	5	18	6	18	--	20	5 U
B-134	B134-S-3.0	09/30/1999	3	280	120	200	64	220	--	440	14
	B134-S-901	09/30/1999	5	270	**200**	270	94	270	--	530	21
	B134-S-10.0	09/30/1999	10	54	17	33	11	39	--	85	5 U
	B134-S-20.0	09/30/1999	20	20	6	13	5 U	16	--	41	5 U
B-138	B138-S-901	10/04/1999	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
B-211	B211-S-20.0	11/02/1999	20	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
NPY-01	HC-NPY/01	02/06/1991	0.5	--	--	--	--	--	--	--	--
NPY-02	HC-NPY/02	02/06/1991	0.5	--	--	--	--	--	--	--	--
TP-25	TP25-0.5	05/03/1993	0.5	--	--	640	--	--	--	1,100	--

Table E-5-2
Soil Data for Semivolatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Carbazole	Chrysene	Dibenz(a,h) anthracene
MTCA Method B soil CULs for Human Health				NV	140	NV	NV	NV	50,000	NV	NV
MTCA Wildlife Ecological Indicator Concentration				NV	12,000	NV	NV	NV	NV	NV	NV
SS-4B	SS-4	07/16/2008	0.3	658	**467**	2,160	393	447	--	1,890	232
SS-5	SS-5	07/16/2008	0.3	110	116	400	83.7	75.9	--	205	43.3
SS-20	SS20-S-0.5	02/18/2009	0.5	15.7 U	15.7 U	15.7 U	15.7 U	15.7 U	--	15.7 U	15.7 U
SS-21	SS21-S-0.5	02/18/2009	0.5	13.1	13.9	46.7	17.5	19.0	--	29.2	7.31 U
SS-22	SS22-S-0.5	02/18/2009	0.5	16.2 U	16.2 U	16.2 U	16.2 U	16.2 U	--	16.2 U	16.2 U
SS-23	SS23-S-0.5	02/18/2009	0.5	7.36 U	7.36 U	11.0	7.36 U	7.36 U	--	7.36 U	7.36 U
SS-24	SS24-S-0.5	02/18/2009	0.5	15.0	33.5	80.7	79.9	21.4	--	39.3	32.8
SS-25	SS25-S-0.5	02/18/2009	0.5	26.1	29.3	72.8	24.5	23.0	--	58.6	11.9
SS-26	SS26-S-0.5	02/18/2009	0.5	7.89 U	7.89 U	22.9	7.89 U	22.1	--	7.89 U	7.89 U
SS-27	SS27-S-0.5	02/18/2009	0.5	13.5	14.3 U	20.0	28.5	14.3 U	--	7.13 U	15.7
SS-28	SS28-S-0.5	02/18/2009	0.5	7.46 U	7.46 U	7.46 U	7.46 U	7.46 U	--	7.46 U	7.46 U
SS-29	SS29-S-0.5	02/19/2009	0.5	8.12	28.1	44.3	53.2	19.2	--	10.3	25.1
SS-30	SS30-S-0.5	02/19/2009	0.5	907	**1250**	3310	864	924	--	2340	445
	SS30-S-1.5	02/19/2009	1.5	82.0	73.5	258	55.7	118	--	275	28.6
W9	HC-W9/S2	02/04/1991	3	--	--	--	--	--	--	--	--
	HC-W9/S4	02/04/1991	8	--	--	--	--	--	--	--	--
Off-Site Samples											
SS-31	SS31-S-0.5	02/26/2009	0.5	8.95 U	8.95 U	10.7	14.3	8.95 U	--	11.6	8.95 U
SS-32	SS32-S-0.5	02/26/2009	0.5	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	--	8.63 U	8.63 U
SS-33	SS33-S-0.5	02/26/2009	0.5	8.76 U	8.76 U	8.76 U	8.76 U	8.76 U	--	8.76 U	8.76 U

Table E-5-2
Soil Data for Semivolatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Dibenzo-furan	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	cPAH TEQ
MTCA Method B soil CULs for Human Health				160,000	3,200,000	3,200,000	NV	1,600,000	NV	2,400,000	140
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				7,000,000	140,000,000	140,000,000	NV	70,000,000	NV	105,000,000	18,000
B-122	B122-S-2.5	09/21/1999	2.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
	B122-S-15.0	09/21/1999	15	10 U	10 U	10 U	10 U	10 U	50 U	10 U	ND
	B122-S-20.0	09/21/1999	20	10 U,H	10 U,H	10 U,H	10 U,H	10 U,H	10 U,H	10 U,H	ND
B-123	B123-S-5.0	09/22/1999	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
B-124	B124-S-2.5	09/23/1999	2.5	10 U	73	10 U	10 U	10 U	10 U	62	11
B-125	B125-S-2.5	09/24/1999	2.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
	B125-S-10.0	09/24/1999	10	11	10 U	10	10 U	40	21	10 U	ND
	B125-S-15.0	09/24/1999	15	10 U	10 U	10 U	10 U	10 U	23	10 U	ND
	B125-S-20.0	09/24/1999	20	10 U	18	10 U	10 U	21	10 U	27	11
B-126	B126-S-5.0	09/24/1999	5	10 U	380	10 U	73	10 U	24	880	**190**
B-129	B129-S-2.5	09/28/1999	2.5	5 U	430	5 U	150	5 U	29	370	**201**
B-131	B131-S-2.5	09/29/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.0
B-132	B132-S-2.5	09/29/1999	2.5	5 U	12	5 U	7	5 U	6	9	11
B-133	B133-S-2.5	09/29/1999	2.5	5 U	28	5 U	7	5 U	12	24	11
B-134	B134-S-3.0	09/30/1999	3	93	1,700	170	77	60	820	1,100	**204**
	B134-S-901	09/30/1999	5	83	1,700	150	110	870	550	1,000	**299**
	B134-S-10.0	09/30/1999	10	300	440	260	12	140	150	300	31.9
	B134-S-20.0	09/30/1999	20	20	240	26	5 U	39	85	150	11.8
B-138	B138-S-901	10/04/1999	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
B-211	B211-S-20.0	11/02/1999	20	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
NPY-01	HC-NPY/01	02/06/1991	0.5	--	--	--	--	--	--	--	--
NPY-02	HC-NPY/02	02/06/1991	0.5	--	--	--	--	--	--	--	--
TP-25	TP25-0.5	05/03/1993	0.5	--	4,900	--	--	--	4,200	2,600	**1740**

Table E-5-2
Soil Data for Semivolatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	cPAH TEQ
MTCA Method B soil CULs for Human Health				160,000	3,200,000	3,200,000	NV	1,600,000	NV	2,400,000	140
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV	NV
SS-4B	SS-4	07/16/2008	0.3	--	1,920	40.9	446	157	472	1,580	**880**
SS-5	SS-5	07/16/2008	0.3	--	514	14.9	91.5	7.80	175	392	**190**
SS-20	SS20-S-0.5	02/18/2009	0.5	--	7.83 U	7.83 U	15.7 U	7.83 U	7.83 U	15.7 U	ND
SS-21	SS21-S-0.5	02/18/2009	0.5	--	40.2	7.31 U	16.1	7.31 U	7.31 U	31.4	24.0
SS-22	SS22-S-0.5	02/18/2009	0.5	--	8.08 U	8.08 U	16.2 U	8.08 U	8.08 U	16.2 U	ND
SS-23	SS23-S-0.5	02/18/2009	0.5	--	7.36 U	7.36 U	7.36 U	7.36 U	7.36 U	7.36 U	6.30
SS-24	SS24-S-0.5	02/18/2009	0.5	--	34.3	7.14 U	49.3	7.14 U	7.85	42.8	53.8
SS-25	SS25-S-0.5	02/18/2009	0.5	--	26.9	7.92 U	24.5	7.92 U	11.1	21.4	45.7
SS-26	SS26-S-0.5	02/18/2009	0.5	--	7.89 U	7.89 U	7.89 U	7.89 U	7.89 U	7.89 U	9.67
SS-27	SS27-S-0.5	02/18/2009	0.5	--	12.1	7.13 U	18.5	7.13 U	7.13 U	10.7	14.70
SS-28	SS28-S-0.5	02/18/2009	0.5	--	7.46 U	7.46 U	7.46 U	7.46 U	7.46 U	7.46 U	ND
SS-29	SS29-S-0.5	02/19/2009	0.5	--	17.0	7.39 U	42.8	7.39 U	7.39 U	17.0	42.2
SS-30	SS30-S-0.5	02/19/2009	0.5	--	2800	46.6	959	8.64 U	560	2500	**1930**
	SS30-S-1.5	02/19/2009	1.5	--	321	7.74 U	58.8	7.74 U	61.9	370	131
W9	HC-W9/S2	02/04/1991	3	--	--	--	--	--	--	--	--
	HC-W9/S4	02/04/1991	8	--	--	--	--	--	--	--	--
Off-Site Samples											
SS-31	SS31-S-0.5	02/26/2009	0.5	--	11.6	8.95 U	9.84	8.95 U	8.95 U	11.6	7.99
SS-32	SS32-S-0.5	02/26/2009	0.5	--	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	8.63 U	ND
SS-33	SS33-S-0.5	02/26/2009	0.5	--	8.76	8.76 U	8.76 U	8.76 U	8.76 U	8.76 U	ND

Table E-5-3
Soil Data for Chlorinated Phenolics (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
MTCA Method B soil CULs for Human Health				2,400,000	NV	NV	NV	NV	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				110,000,000	NV	NV	NV	NV	NV
B-120	B120-S-2.5	06/17/1999	2.5	--	--	--	--	--	--
	B120-S-5.0	06/17/1999	5	--	--	--	--	--	--
	B120-S-15.0	06/17/1999	15	--	--	--	--	--	--
B-121	B121-S-2.5	06/18/1999	2.5	--	--	--	--	--	--
	B121-S-5.0	06/18/1999	5	--	--	--	--	--	--
	B121-S-20.0	06/18/1999	20	--	--	--	--	--	--
B-122	B122-S-2.5	09/21/1999	2.5	--	50 U	50 U	50 U	50 U	50 U
	B122-S-2.5	09/21/1999	2.5	--	--	--	--	--	--
	B122-S-15.0	09/21/1999	15	--	50 U	50 U	50 U	50 U	50 U
	B122-S-15.0	09/21/1999	15	--	--	--	--	--	--
	B122-S-20.0	09/21/1999	20	--	50 U,H	50 U,H	50 U,H	50 U,H	50 U,H
	B122-S-20.0	09/21/1999	20	--	--	--	--	--	--
B-123	B123-S-2.5	09/22/1999	2.5	--	--	--	--	--	--
	B123-S-5.0	09/22/1999	5	--	50 U	50 U	50 U	50 U	50 U
	B123-S-5.0	09/22/1999	5	--	--	--	--	--	--
	B123-S-10.0	09/22/1999	10	--	--	--	--	--	--
	B123-S-15.0	09/22/1999	15	--	--	--	--	--	--
	B123-S-20.0	09/22/1999	20	--	--	--	--	--	--
B-124	B124-S-2.5	09/23/1999	2.5	--	50 U	50 U	50 U	50 U	50 U
	B124-S-2.5	09/23/1999	2.5	--	--	--	--	--	--
	B124-S-5.0	09/23/1999	5	--	--	--	--	--	--
	B124-S-10.0	09/23/1999	10	--	--	--	--	--	--

Table E-5-3
Soil Data for Chlorinated Phenolics (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
MTCA Method B soil CULs for Human Health				2,400,000	NV	NV	NV	NV	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				110,000,000	NV	NV	NV	NV	NV
B-125	B125-S-2.5	09/24/1999	2.5	--	50 U	50 U	50 U	50 U	50 U
	B125-S-2.5	09/24/1999	2.5	--	--	--	--	--	--
	B125-S-5.0	09/24/1999	5	--	--	--	--	--	--
	B125-S-10.0	09/24/1999	10	--	50 U	50 U	50 U	50 U	50 U
	B125-S-10.0	09/24/1999	10	--	--	--	--	--	--
	B125-S-15.0	09/24/1999	15	--	50 U	50 U	50 U	50 U	50 U
	B125-S-15.0	09/24/1999	15	--	--	--	--	--	--
	B125-S-20.0	09/24/1999	20	--	50 U	50 U	50 U	50 U	50 U
	B125-S-20.0	09/24/1999	20	--	--	--	--	--	--
B-126	B126-S-5.0	09/24/1999	5	--	50 U	50 U	50 U	50 U	50 U
	B126-S-5.0	09/24/1999	5	--	--	--	--	--	--
	B126-S-10.0	09/24/1999	10	--	--	--	--	--	--
	B126-S-15.0	09/24/1999	15	--	--	--	--	--	--
	B126-S-20.0	09/24/1999	20	--	--	--	--	--	--
B-127	B127-S-2.5	09/27/1999	2.5	--	--	--	--	--	--
	B127-S-5.0	09/27/1999	5	--	--	--	--	--	--
	B127-S-10.0	09/27/1999	10	--	--	--	--	--	--
	B127-S-15.0	09/27/1999	15	--	--	--	--	--	--
	B127-S-20.0	09/27/1999	20	--	--	--	--	--	--
B-128	B128-S-5.0	09/27/1999	5	--	--	--	--	--	--
	B128-S-10.0	09/27/1999	10	--	--	--	--	--	--
	B128-S-20.0	09/27/1999	20	--	--	--	--	--	--

Table E-5-3
Soil Data for Chlorinated Phenolics (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
MTCA Method B soil CULs for Human Health				2,400,000	NV	NV	NV	NV	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				110,000,000	NV	NV	NV	NV	NV
B-129	B129-S-2.5	09/28/1999	2.5	--	--	--	--	--	--
	B129-S-5.0	09/28/1999	5	--	--	--	--	--	--
	B129-S-20.0	09/28/1999	20	--	--	--	--	--	--
B-130	B130-S-2.5	09/28/1999	2.5	--	--	--	--	--	--
	B130-S-5.0	09/28/1999	5	--	--	--	--	--	--
	B130-S-15.0	09/28/1999	15	--	--	--	--	--	--
B-131	B131-S-2.5	09/29/1999	2.5	--	--	--	--	--	--
	B131-S-5.0	09/29/1999	5	--	--	--	--	--	--
	B131-S-20.0	09/29/1999	20	--	--	--	--	--	--
B-132	B132-S-2.5	09/29/1999	2.5	--	--	--	--	--	--
	B132-S-5.0	09/29/1999	5	--	--	--	--	--	--
	B132-S-20.0	09/29/1999	20	--	--	--	--	--	--
B-133	B133-S-2.5	09/29/1999	2.5	--	--	--	--	--	--
	B133-S-10.0	09/29/1999	10	--	--	--	--	--	--
	B133-S-20.0	09/29/1999	20	--	--	--	--	--	--
B-134	B134-S-10.0	09/30/1999	10	--	--	--	--	--	--
	B134-S-20.0	09/30/1999	20	--	--	--	--	--	--
B-135	B135-S-2.5	09/30/1999	2.5	--	--	--	--	--	--
	B135-S-10.0	09/30/1999	10	--	--	--	--	--	--
	B135-S-20.0	09/30/1999	20	--	--	--	--	--	--
B-136	B136-S-901	09/30/1999	2.5	--	--	--	--	--	--

Table E-5-3
Soil Data for Chlorinated Phenolics (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
MTCA Method B soil CULs for Human Health				2,400,000	NV	NV	NV	NV	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				110,000,000	NV	NV	NV	NV	NV
B-137	B137-S-2.5	10/04/1999	2.5	--	--	--	--	--	--
	B137-S-5.0	10/04/1999	5	--	--	--	--	--	--
	B137-S-20.0	10/04/1999	20	--	--	--	--	--	--
	B137-S-901	10/04/1999	20	--	--	--	--	--	--
B-138	B138-S-2.5	10/04/1999	2.5	--	--	--	--	--	--
	B138-S-5.0	10/04/1999	5	--	--	--	--	--	--
	B138-S-901	10/04/1999	5	--	50 U	50 U	50 U	50 U	50 U
	B138-S-901	10/04/1999	5	--	--	--	--	--	--
	B138-S-20.0	10/04/1999	20	--	--	--	--	--	--
B-211	B211-S-2.5	11/02/1999	2.5	--	--	--	--	--	--
	B211-S-5.0	11/02/1999	5	--	--	--	--	--	--
	B211-S-10.0	11/02/1999	10	--	--	--	--	--	--
	B211-S-20.0	11/02/1999	20	--	50 U	50 U	50 U	50 U	50 U
	B211-S-20.0	11/02/1999	20	--	--	--	--	--	--
NPY-01	HC-NPY/01	02/06/1991	0.5	--	--	--	--	--	--
NPY-02	HC-NPY/02	02/06/1991	0.5	--	--	--	--	--	--
SS-4B	SS-4	07/16/2008	0.3	--	--	--	--	--	--
SS-5	SS-5	07/16/2008	0.3	--	--	--	--	--	--
SS-20	SS20-S-0.5	02/18/2009	0.5	--	--	--	--	--	--
SS-21	SS21-S-0.5	02/18/2009	0.5	--	--	--	--	--	--
SS-22	SS22-S-0.5	02/18/2009	0.5	--	--	--	--	--	--
SS-23	SS23-S-0.5	02/18/2009	0.5	--	--	--	--	--	--

Table E-5-3
Soil Data for Chlorinated Phenolics (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	2,3,4,6-Tetra-chlorophenol	2,3,4,5-Tetra-chlorophenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol
MTCA Method B soil CULs for Human Health				2,400,000	NV	NV	NV	NV	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				110,000,000	NV	NV	NV	NV	NV
SS-24	SS24-S-0.5	02/18/2009	0.5	--	--	--	--	--	--
SS-25	SS25-S-0.5	02/18/2009	0.5	--	--	--	--	--	--
SS-26	SS26-S-0.5	02/18/2009	0.5	--	--	--	--	--	--
SS-27	SS27-S-0.5	02/18/2009	0.5	--	--	--	--	--	--
SS-28	SS28-S-0.5	02/18/2009	0.5	--	--	--	--	--	--
SS-29	SS29-S-0.5	02/19/2009	0.5	--	--	--	--	--	--
SS-30	SS30-S-0.5	02/19/2009	0.5	--	--	--	--	--	--
	SS30-S-1.5	02/19/2009	1.5	--	--	--	--	--	--
TP-23	TP23-0.3	05/03/1993	0.3	88	--	--	--	--	--
TP-24	TP24-0.5	05/03/1993	0.5	100	--	--	--	--	--
W9	HC-W9/S2	02/04/1991	3	--	--	--	--	--	--
	HC-W9/S4	02/04/1991	8	--	--	--	--	--	--
Off-Site Samples									
SS-31	SS31-S-0.5	02/26/2009	0.5		--	--	--	--	--
SS-32	SS32-S-0.5	02/26/2009	0.5		--	--	--	--	--
SS-33	SS33-S-0.5	02/26/2009	0.5		--	--	--	--	--

Table E-5-3
Soil Data for Chlorinated Phenolics (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol (PCP)	Tetrachloro-phenols, Total
MTCA Method B soil CULs for Human Health				8,000,000	91,000	NV	8,300	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	4,500	NV
Cell 4 preliminary RELs				350,000,000	11,900,000	NV	1,100,000	NV
B-120	B120-S-2.5	06/17/1999	2.5	--	5 U	--	9	5 U
	B120-S-5.0	06/17/1999	5	--	5 U	--	10	5 U
	B120-S-15.0	06/17/1999	15	--	5 U	--	6	5 U
B-121	B121-S-2.5	06/18/1999	2.5	--	5 U	--	5 U	5 U
	B121-S-5.0	06/18/1999	5	--	5 U	--	5 U	5 U
	B121-S-20.0	06/18/1999	20	--	5 U	--	5 U	5 U
B-122	B122-S-2.5	09/21/1999	2.5	50 U	50 U	50 U	50 U	--
	B122-S-2.5	09/21/1999	2.5	--	5 U	--	6	5 U
	B122-S-15.0	09/21/1999	15	50 U	50 U	50 U	10 U	--
	B122-S-15.0	09/21/1999	15	--	5 U	--	5 U	5 U
	B122-S-20.0	09/21/1999	20	50 U,H	50 U,H	50 U,H	50 U,H	--
	B122-S-20.0	09/21/1999	20	--	5 U	--	5 U	5 U
B-123	B123-S-2.5	09/22/1999	2.5	--	5 U	--	5 U	5 U
	B123-S-5.0	09/22/1999	5	50 U	50 U	50 U	50 U	--
	B123-S-5.0	09/22/1999	5	--	5 U	--	5 U	5 U
	B123-S-10.0	09/22/1999	10	--	5 U	--	5 U	5 U
	B123-S-15.0	09/22/1999	15	--	5 U	--	5 U	5 U
	B123-S-20.0	09/22/1999	20	--	5 U	--	5 U	5 U
B-124	B124-S-2.5	09/23/1999	2.5	50 U	50 U	50 U	50 U	--
	B124-S-2.5	09/23/1999	2.5	--	5 U	--	20	20
	B124-S-5.0	09/23/1999	5	--	5 U	--	5 U	5 U
	B124-S-10.0	09/23/1999	10	--	5 U	--	5 U	5 U

Table E-5-3
Soil Data for Chlorinated Phenolics (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol (PCP)	Tetrachloro-phenols, Total
MTCA Method B soil CULs for Human Health				8,000,000	91,000	NV	8,300	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	4,500	NV
Cell 4 preliminary RELs				350,000,000	11,900,000	NV	1,100,000	NV
B-125	B125-S-2.5	09/24/1999	2.5	50 U	50 U	50 U	130	--
	B125-S-2.5	09/24/1999	2.5	--	50 U	--	340	50 U
	B125-S-5.0	09/24/1999	5	--	5 U	--	5 U	5 U
	B125-S-10.0	09/24/1999	10	50 U	50 U	50 U	50 U	--
	B125-S-10.0	09/24/1999	10	--	5 U	--	22	5 U
	B125-S-15.0	09/24/1999	15	50 U	50 U	50 U	50 U	--
	B125-S-15.0	09/24/1999	15	--	5 U	--	11	5 U
	B125-S-20.0	09/24/1999	20	50 U	50 U	50 U	50 U	--
	B125-S-20.0	09/24/1999	20	--	5 U	--	9	5 U
B-126	B126-S-5.0	09/24/1999	5	50 U	50 U	50 U	250	--
	B126-S-5.0	09/24/1999	5	--	50 U	--	160	50 U
	B126-S-10.0	09/24/1999	10	--	5 U	--	5 U	5 U
	B126-S-15.0	09/24/1999	15	--	5 U	--	5 U	5 U
	B126-S-20.0	09/24/1999	20	--	5 U	--	5 U	5 U
B-127	B127-S-2.5	09/27/1999	2.5	--	5 U	--	5 U	5 U
	B127-S-5.0	09/27/1999	5	--	5 U	--	5 U	5 U
	B127-S-10.0	09/27/1999	10	--	5 U	--	5 U	5 U
	B127-S-15.0	09/27/1999	15	--	5 U	--	5 U	5 U
	B127-S-20.0	09/27/1999	20	--	5 U	--	5 U	5 U
B-128	B128-S-5.0	09/27/1999	5	--	5 U	--	5 U	5 U
	B128-S-10.0	09/27/1999	10	--	5 U	--	5 U	5 U
	B128-S-20.0	09/27/1999	20	--	5 U	--	5 U	5 U

Table E-5-3
Soil Data for Chlorinated Phenolics (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol (PCP)	Tetrachloro-phenols, Total
MTCA Method B soil CULs for Human Health				8,000,000	91,000	NV	8,300	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	4,500	NV
Cell 4 preliminary RELs				350,000,000	11,900,000	NV	1,100,000	NV
B-129	B129-S-2.5	09/28/1999	2.5	--	5 U	--	34	5 U
	B129-S-5.0	09/28/1999	5	--	5 U	--	5 U	5 U
	B129-S-20.0	09/28/1999	20	--	5 U	--	5 U	5 U
B-130	B130-S-2.5	09/28/1999	2.5	--	5 U	--	5 U	5 U
	B130-S-5.0	09/28/1999	5	--	5 U	--	5 U	5 U
	B130-S-15.0	09/28/1999	15	--	5 U	--	5 U	5 U
B-131	B131-S-2.5	09/29/1999	2.5	--	5 U	--	18	5 U
	B131-S-5.0	09/29/1999	5	--	5 U	--	5 U	5 U
	B131-S-20.0	09/29/1999	20	--	5 U	--	5 U	5 U
B-132	B132-S-2.5	09/29/1999	2.5	--	5 U	--	5.3	5 U
	B132-S-5.0	09/29/1999	5	--	5 U	--	5 U	5 U
	B132-S-20.0	09/29/1999	20	--	5 U	--	5 U	5 U
B-133	B133-S-2.5	09/29/1999	2.5	--	5 U	--	5.1	5 U
	B133-S-10.0	09/29/1999	10	--	5 U	--	5 U	5 U
	B133-S-20.0	09/29/1999	20	--	5 U	--	5 U	5 U
B-134	B134-S-10.0	09/30/1999	10	--	50 U	--	470	50 U
	B134-S-20.0	09/30/1999	20	--	5 U	--	130	7.4
B-135	B135-S-2.5	09/30/1999	2.5	--	5 U	--	5 U	5 U
	B135-S-10.0	09/30/1999	10	--	5 U	--	5 U	5 U
	B135-S-20.0	09/30/1999	20	--	5 U	--	5 U	5 U
B-136	B136-S-901	09/30/1999	2.5	--	5 U	--	5 U	5 U

Table E-5-3
Soil Data for Chlorinated Phenolics (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol (PCP)	Tetrachloro-phenols, Total
MTCA Method B soil CULs for Human Health				8,000,000	91,000	NV	8,300	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	4,500	NV
Cell 4 preliminary RELs				350,000,000	11,900,000	NV	1,100,000	NV
B-137	B137-S-2.5	10/04/1999	2.5	--	5 U	--	5 U	5 U
	B137-S-5.0	10/04/1999	5	--	5 U	--	5 U	5 U
	B137-S-20.0	10/04/1999	20	--	5 U	--	5 U	5 U
	B137-S-901	10/04/1999	20	--	5 U	--	5 U	5 U
B-138	B138-S-2.5	10/04/1999	2.5	--	5 U	--	5 U	5 U
	B138-S-5.0	10/04/1999	5	--	5 U	--	5 U	5 U
	B138-S-901	10/04/1999	5	50 U	50 U	50 U	50 U	--
	B138-S-901	10/04/1999	5	--	5 U	--	5.4	5 U
	B138-S-20.0	10/04/1999	20	--	5 U	--	5 U	5 U
B-211	B211-S-2.5	11/02/1999	2.5	--	5 U	--	5 U	5 U
	B211-S-5.0	11/02/1999	5	--	5 U	--	5 U	5 U
	B211-S-10.0	11/02/1999	10	--	5 U	--	5 U	5 U
	B211-S-20.0	11/02/1999	20	50 U	50 U	50 U	40 U	--
	B211-S-20.0	11/02/1999	20	--	5 U	--	5.3	5 U
NPY-01	HC-NPY/01	02/06/1991	0.5	--	--	--	2,500	--
NPY-02	HC-NPY/02	02/06/1991	0.5	--	--	--	8,000	--
SS-4B	SS-4	07/16/2008	0.3	--	--	--	2,270	--
SS-5	SS-5	07/16/2008	0.3	--	--	--	116	--
SS-20	SS20-S-0.5	02/18/2009	0.5	--	--	--	391 U	--
SS-21	SS21-S-0.5	02/18/2009	0.5	--	--	--	365 U	--
SS-22	SS22-S-0.5	02/18/2009	0.5	--	--	--	404 U	--
SS-23	SS23-S-0.5	02/18/2009	0.5	--	--	--	367 U	--

Table E-5-3
Soil Data for Chlorinated Phenolics (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachlorophenol (PCP)	Tetrachloro-phenols, Total
MTCA Method B soil CULs for Human Health				8,000,000	91,000	NV	8,300	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	4,500	NV
Cell 4 preliminary RELs				350,000,000	11,900,000	NV	1,100,000	NV
SS-24	SS24-S-0.5	02/18/2009	0.5	--	--	--	1540	--
SS-25	SS25-S-0.5	02/18/2009	0.5	--	--	--	395 U	--
SS-26	SS26-S-0.5	02/18/2009	0.5	--	--	--	394 U	--
SS-27	SS27-S-0.5	02/18/2009	0.5	--	--	--	356 U	--
SS-28	SS28-S-0.5	02/18/2009	0.5	--	--	--	372 U	--
SS-29	SS29-S-0.5	02/19/2009	0.5	--	--	--	369 U	--
SS-30	SS30-S-0.5	02/19/2009	0.5	--	--	--	5780	--
	SS30-S-1.5	02/19/2009	1.5	--	--	--	386 U	--
TP-23	TP23-0.3	05/03/1993	0.3	30 U	30 U	--	1,100	--
TP-24	TP24-0.5	05/03/1993	0.5	30 U	30 U	--	4,400	--
W9	HC-W9/S2	02/04/1991	3	--	--	--	2,500 U	--
	HC-W9/S4	02/04/1991	8	--	--	--	2,500 U	--
Off-Site Samples								
SS-31	SS31-S-0.5	02/26/2009	0.5	--	--	--	447 U	--
SS-32	SS32-S-0.5	02/26/2009	0.5	--	--	--	431 U	--
SS-33	SS33-S-0.5	02/26/2009	0.5	--	--	--	438 U	--

Table E-5-4
Soil Data for Petroleum Hydrocarbons (mg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Diesel	Gasoline	Heavy Fuel Oil	Jet Fuel as Jet A	Jet Fuel as JP-4	Kerosene
MTCA Method A soil CULs				2,000	100[d]	2,000	100[d]	100[d]	2,000
MTCA Residual Saturation Levels for TPH				2,000	1,000	2,000	NV	NV	NV
MTCA Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-120	B120-S-2.5	06/17/1999	2.5	10 U	10 U	25 U	10 U	10 U	10 U
	B120-S-5.0	06/17/1999	5	10 U	10 U	25 U	10 U	10 U	10 U
	B120-S-15.0	06/17/1999	15	10 U	10 U	25 U	10 U	10 U	10 U
B-121	B121-S-2.5	06/18/1999	2.5	10 U	10 U	25 U	10 U	10 U	10 U
	B121-S-5.0	06/18/1999	5	10 U	10 U	25 U	10 U	10 U	10 U
	B121-S-20.0	06/18/1999	20	10 U	10 U	25 U	10 U	10 U	10 U
B-122	B122-S-2.5	09/21/1999	2.5	10 U,H	10 U,H	25 U,H	10 U,H	10 U,H	10 U,H
B-124	B124-S-2.5	09/23/1999	2.5	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U
B-125	B125-S-2.5	09/24/1999	2.5	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U
	B125-S-10.0	09/24/1999	10	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U
	B125-S-15.0	09/24/1999	15	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U
	B125-S-20.0	09/24/1999	20	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U
B-126	B126-S-5.0	09/24/1999	5	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U
B-127	B127-S-2.5	09/27/1999	2.5	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U
	B127-S-10.0	09/27/1999	10	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U
	B127-S-20.0	09/27/1999	20	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U
B-128	B128-S-10.0	09/27/1999	10	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U
	B128-S-20.0	09/27/1999	20	10 U	10 U[e]	25 U	10 U	10 U[e]	10 U

Table E-5-4
Soil Data for Petroleum Hydrocarbons (mg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Diesel	Gasoline	Heavy Fuel Oil	Jet Fuel as Jet A	Jet Fuel as JP-4	Kerosene
MTCA Method A soil CULs				2,000	100^{d}	2,000	100^{d}	100^{d}	2,000
MTCA Residual Saturation Levels for TPH				2,000	1,000	2,000	NV	NV	NV
MTCA Wildlife Ecological Indicator Concentration				6,000	5,000	NV	NV	NV	NV
B-129	B129-S-2.5	09/28/1999	2.5	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
	B129-S-5.0	09/28/1999	5	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
	B129-S-20.0	09/28/1999	20	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
B-130	B130-S-2.5	09/28/1999	2.5	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
B-131	B131-S-2.5	09/29/1999	2.5	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
B-132	B132-S-2.5	09/29/1999	2.5	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
	B132-S-5.0	09/29/1999	5	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
B-133	B133-S-2.5	09/29/1999	2.5	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
	B133-S-10.0	09/29/1999	10	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
B-134	B134-S-3.0	09/30/1999	3	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
	B134-S-901	09/30/1999	5	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
	B134-S-10.0	09/30/1999	10	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
	B134-S-20.0	09/30/1999	20	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U
B-138	B138-S-901	10/04/1999	5	10 U	10 U	25 U	10 U	10 U	10 U
B-211	B211-S-20.0	11/02/1999	20	10 U	10 U^{e}	25 U	10 U	10 U^{e}	10 U

Table E-5-4
Soil Data for Petroleum Hydrocarbons (mg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Lube Oil	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	PHC as Diesel
MTCA Method A soil CULs				2,000	4,000	2,000	2,000	2,000
MTCA Residual Saturation Levels for TPH				NV	NV	NV	2,000	2,000
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	6,000
B-120	B120-S-2.5	06/17/1999	2.5	25 U	10 U	10 U	50 U	25 U
	B120-S-5.0	06/17/1999	5	25 U	10 U	10 U	50 U	25 U
	B120-S-15.0	06/17/1999	15	25 U	10 U	10 U	50 U	25 U
B-121	B121-S-2.5	06/18/1999	2.5	25 U	10 U	10 U	50 U	25 U
	B121-S-5.0	06/18/1999	5	25 U	10 U	10 U	50 U	25 U
	B121-S-20.0	06/18/1999	20	25 U	10 U	10 U	50 U	25 U
B-122	B122-S-2.5	09/21/1999	2.5	25 U,H	10 U,H	10 U,H	50 U,H	25 U,H
B-124	B124-S-2.5	09/23/1999	2.5	25 U	10 U	10 U[e]	50 U	25 U
B-125	B125-S-2.5	09/24/1999	2.5	25 U	10 U	10 U[e]	50 U	25 U
	B125-S-10.0	09/24/1999	10	25 U	10 U	10 U[e]	50 U	25 U
	B125-S-15.0	09/24/1999	15	25 U	10 U	10 U[e]	50 U	25 U
	B125-S-20.0	09/24/1999	20	25 U	10 U	10 U[e]	50 U	25 U
B-126	B126-S-5.0	09/24/1999	5	25 U	10 U	10 U[e]	50 U	25 U
B-127	B127-S-2.5	09/27/1999	2.5	25 U	10 U	10 U[e]	50 U	25 U
	B127-S-10.0	09/27/1999	10	25 U	10 U	10 U[e]	50 U	25 U
	B127-S-20.0	09/27/1999	20	25 U	10 U	10 U[e]	50 U	25 U
B-128	B128-S-10.0	09/27/1999	10	25 U	10 U	10 U[e]	50 U	25 U
	B128-S-20.0	09/27/1999	20	25 U	10 U	10 U[e]	50 U	25 U

Table E-5-4
Soil Data for Petroleum Hydrocarbons (mg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Lube Oil	Mineral Spirits	Naphtha Distillate	Non-PHC as Diesel	PHC as Diesel
MTCA Method A soil CULs				2,000	4,000	2,000	2,000	2,000
MTCA Residual Saturation Levels for TPH				NV	NV	NV	2,000	2,000
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	6,000
B-129	B129-S-2.5	09/28/1999	2.5	180	10 U	10 U^{e}	50 U	25 U
	B129-S-5.0	09/28/1999	5	25 U	10 U	10 U^{e}	50 U	25 U
	B129-S-20.0	09/28/1999	20	25 U	10 U	10 U^{e}	50 U	25 U
B-130	B130-S-2.5	09/28/1999	2.5	25 U	10 U	10 U^{e}	50 U	25 U
B-131	B131-S-2.5	09/29/1999	2.5	25 U	10 U	10 U^{e}	50 U	25 U
B-132	B132-S-2.5	09/29/1999	2.5	25 U	10 U	10 U^{e}	50 U	25 U
	B132-S-5.0	09/29/1999	5	25 U	10 U	10 U^{e}	50 U	25 U
B-133	B133-S-2.5	09/29/1999	2.5	25 U	10 U	10 U^{e}	50 U	25 U
	B133-S-10.0	09/29/1999	10	25 U	10 U	10 U^{e}	50 U	25 U
B-134	B134-S-3.0	09/30/1999	3	25 U	10 U	10 U^{e}	50 U	89
	B134-S-901	09/30/1999	5	25 U	10 U	10 U^{e}	50 U	300
	B134-S-10.0	09/30/1999	10	64	10 U	10 U^{e}	50 U	70
	B134-S-20.0	09/30/1999	20	25 U	10 U	10 U^{e}	50 U	25 U
B-138	B138-S-901	10/04/1999	5	25 U	10 U	10 U	50 U	25 U
B-211	B211-S-20.0	11/02/1999	20	25 U	10 U	10 U^{e}	50 U	25 U

Table E-5-5
Soil Data for Volatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane (TCA)	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane (1,1-DCA)	1,1-Dichloro-ethene (1,1-DCE)
MTCA Method B soil CULs for Human Health				38,000	72,000,000	5,000	18,000	8,000,000	1,700
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				5,050,000	3,150,000,000	656,000	2,300,000	350,000,000	219,000
B-127	B127-S-2.5	09/27/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
B-128	B128-S-5.0	09/27/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B128-S-10.0	09/27/1999	10	5 U	5 U	5 U	5 U	5 U	5 U
B-132	B132-S-5.0	09/29/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B132-S-15.0	09/29/1999	15	5 U	5 U	5 U	5 U	5 U	5 U
B-133	B133-S-10.0	09/29/1999	10	5 U	5 U	5 U	5 U	5 U	5 U
	B133-S-20.0	09/29/1999	20	5 U	5 U	5 U	5 U	5 U	5 U
B-134	B134-S-3.0	09/30/1999	3	5 U	5 U	5 U	5 U	5 U	5 U
	B134-S-10.0	09/30/1999	10	5 U	5 U	5 U	5 U	5 U	5 U
B-135	B135-S-2.5	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B135-S-5.0	09/30/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
B-136	B136-S-2.5	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B136-S-901	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B136-S-5.0	09/30/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
B-137	B137-S-2.5	10/04/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-5.0	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-20.0	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-901	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U
B-138	B138-S-2.5	10/04/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-5.0	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-901	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-20.0	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U

Table E-5-5
Soil Data for Volatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane (DBCP)
MTCA Method B soil CULs for Human Health				NV	NV	140	800,000	4,000,000	710
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				NV	NV	18,800	35,000,000	180,000,000	93,800
B-127	B127-S-2.5	09/27/1999	2.5	5 U	20 U	5 U	20 U	20 U	20 U
B-128	B128-S-5.0	09/27/1999	5	5 U	20 U	5 U	20 U	20 U	20 U
	B128-S-10.0	09/27/1999	10	5 U	20 U	5 U	20 U	20 U	20 U
B-132	B132-S-5.0	09/29/1999	5	5 U	20 U	5 U	20 U	20 U	20 U
	B132-S-15.0	09/29/1999	15	5 U	20 U	5 U	20 U	20 U	20 U
B-133	B133-S-10.0	09/29/1999	10	5 U	20 U	5 U	20 U	20 U	20 U
	B133-S-20.0	09/29/1999	20	5 U	20 U	5 U	20 U	20 U	20 U
B-134	B134-S-3.0	09/30/1999	3	5 U	20 U	5 U	20 U	20 U	20 U
	B134-S-10.0	09/30/1999	10	5 U	20 U	5 U	20 U	20 U	20 U
B-135	B135-S-2.5	09/30/1999	2.5	5 U	20 U	5 U	20 U	20 U	20 U
	B135-S-5.0	09/30/1999	5	5 U	20 U	5 U	20 U	20 U	20 U
B-136	B136-S-2.5	09/30/1999	2.5	5 U	20 U	5 U	20 U	20 U	20 U
	B136-S-901	09/30/1999	2.5	5 U	20 U	5 U	20 U	20 U	20 U
	B136-S-5.0	09/30/1999	5	5 U	20 U	5 U	20 U	20 U	20 U
B-137	B137-S-2.5	10/04/1999	2.5	5 U	20 U	5 U	20 U	20 U	20 U
	B137-S-5.0	10/04/1999	5	5 U	20 U	5 U	20 U	20 U	20 U
	B137-S-20.0	10/04/1999	20	5 U	20 U	5 U	20 U	20 U	20 U
	B137-S-901	10/04/1999	20	5 U	20 U	5 U	20 U	20 U	20 U
B-138	B138-S-2.5	10/04/1999	2.5	5 U	20 U	5 U	20 U	20 U	20 U
	B138-S-5.0	10/04/1999	5	5 U	20 U	5 U	20 U	20 U	20 U
	B138-S-901	10/04/1999	5	5 U	20 U	5 U	20 U	20 U	20 U
	B138-S-20.0	10/04/1999	20	5 U	20 U	5 U	20 U	20 U	20 U

Table E-5-5
Soil Data for Volatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,2-Dibromo-ethane (EDB)	1,2-Dichloro-benzene	1,2-Dichloro-ethane (EDC)	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene
MTCA Method B soil CULs for Human Health				12	7,200,000	11,000	15,000	4,000,000	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				1,540	315,000,000	1,440,000	1,930,000	180,000,000	NV
B-127	B127-S-2.5	09/27/1999	2.5	20 U	5 U	5 U	5 U	20 U	5 U
B-128	B128-S-5.0	09/27/1999	5	20 U	5 U	5 U	5 U	20 U	5 U
	B128-S-10.0	09/27/1999	10	20 U	5 U	5 U	5 U	20 U	5 U
B-132	B132-S-5.0	09/29/1999	5	20 U	5 U	5 U	5 U	20 U	5 U
	B132-S-15.0	09/29/1999	15	20 U	5 U	5 U	5 U	20 U	5 U
B-133	B133-S-10.0	09/29/1999	10	20 U	5 U	5 U	5 U	20 U	5 U
	B133-S-20.0	09/29/1999	20	20 U	5 U	5 U	5 U	20 U	5 U
B-134	B134-S-3.0	09/30/1999	3	20 U	5 U	5 U	5 U	20 U	5 U
	B134-S-10.0	09/30/1999	10	20 U	5 U	5 U	5 U	20 U	5 U
B-135	B135-S-2.5	09/30/1999	2.5	20 U	5 U	5 U	5 U	20 U	5 U
	B135-S-5.0	09/30/1999	5	20 U	5 U	5 U	5 U	20 U	5 U
B-136	B136-S-2.5	09/30/1999	2.5	20 U	5 U	5 U	5 U	20 U	5 U
	B136-S-901	09/30/1999	2.5	20 U	5 U	5 U	5 U	20 U	5 U
	B136-S-5.0	09/30/1999	5	20 U	5 U	5 U	5 U	20 U	5 U
B-137	B137-S-2.5	10/04/1999	2.5	20 U	5 U	5 U	5 U	20 U	5 U
	B137-S-5.0	10/04/1999	5	20 U	5 U	5 U	5 U	20 U	5 U
	B137-S-20.0	10/04/1999	20	20 U	5 U	5 U	5 U	20 U	5 U
	B137-S-901	10/04/1999	20	20 U	5 U	5 U	5 U	20 U	5 U
B-138	B138-S-2.5	10/04/1999	2.5	20 U	5 U	5 U	5 U	20 U	5 U
	B138-S-5.0	10/04/1999	5	20 U	5 U	5 U	5 U	20 U	5 U
	B138-S-901	10/04/1999	5	20 U	5 U	5 U	5 U	20 U	5 U
	B138-S-20.0	10/04/1999	20	20 U	5 U	5 U	5 U	20 U	5 U

Table E-5-5
Soil Data for Volatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	2-Butanone (MEK)	2-Chloro-toluene	2-Hexanone	4-Chloro-toluene
MTCA Method B soil CULs for Human Health				NV	42,000	NV	48,000,000	1,600,000	NV	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				NV	5,470,000	NV	2,100,000,000	70,000,000	NV	NV
B-127	B127-S-2.5	09/27/1999	2.5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
B-128	B128-S-5.0	09/27/1999	5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B128-S-10.0	09/27/1999	10	5 U	5 U	5 U	20 U	20 U	20 U	20 U
B-132	B132-S-5.0	09/29/1999	5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B132-S-15.0	09/29/1999	15	5 U	5 U	5 U	20 U	20 U	20 U	20 U
B-133	B133-S-10.0	09/29/1999	10	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B133-S-20.0	09/29/1999	20	5 U	5 U	5 U	20 U	20 U	20 U	20 U
B-134	B134-S-3.0	09/30/1999	3	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B134-S-10.0	09/30/1999	10	5 U	5 U	5 U	20 U	20 U	20 U	20 U
B-135	B135-S-2.5	09/30/1999	2.5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B135-S-5.0	09/30/1999	5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
B-136	B136-S-2.5	09/30/1999	2.5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B136-S-901	09/30/1999	2.5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B136-S-5.0	09/30/1999	5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
B-137	B137-S-2.5	10/04/1999	2.5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B137-S-5.0	10/04/1999	5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B137-S-20.0	10/04/1999	20	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B137-S-901	10/04/1999	20	5 U	5 U	5 U	20 U	20 U	20 U	20 U
B-138	B138-S-2.5	10/04/1999	2.5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B138-S-5.0	10/04/1999	5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B138-S-901	10/04/1999	5	5 U	5 U	5 U	20 U	20 U	20 U	20 U
	B138-S-20.0	10/04/1999	20	5 U	5 U	5 U	20 U	20 U	20 U	20 U

Table E-5-5
Soil Data for Volatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	4-Isopropyl-toluene	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane
MTCA Method B soil CULs for Human Health				NV	6,400,000	8,000,000	18,000	NV	NV	16,000
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				NV	280,000,000	350,000,000	2,390,000	NV	NV	2,120,000
B-127	B127-S-2.5	09/27/1999	2.5	20 U	20 U	50 U	5 U	5 U	5 U	5 U
B-128	B128-S-5.0	09/27/1999	5	20 U	20 U	50 U	5 U	5 U	5 U	5 U
	B128-S-10.0	09/27/1999	10	20 U	20 U	50 U	5 U	5 U	5 U	5 U
B-132	B132-S-5.0	09/29/1999	5	20 U	20 U	50 U	5 U	5 U	5 U	5 U
	B132-S-15.0	09/29/1999	15	20 U	20 U	50 U	5 U	5 U	5 U	5 U
B-133	B133-S-10.0	09/29/1999	10	20 U	20 U	50 U	5 U	5 U	5 U	5 U
	B133-S-20.0	09/29/1999	20	20 U	20 U	50 U	5 U	5 U	5 U	5 U
B-134	B134-S-3.0	09/30/1999	3	20 U	20 U	50 U	5 U	5 U	5 U	5 U
	B134-S-10.0	09/30/1999	10	20 U	20 U	50 U	5 U	5 U	5 U	5 U
B-135	B135-S-2.5	09/30/1999	2.5	20 U	20 U	50 U	5 U	5 U	5 U	5 U
	B135-S-5.0	09/30/1999	5	20 U	20 U	50 U	5 U	5 U	5 U	5 U
B-136	B136-S-2.5	09/30/1999	2.5	20 U	20 U	50 U	5 U	5 U	5 U	5 U
	B136-S-901	09/30/1999	2.5	20 U	20 U	68	5 U	5 U	5 U	5 U
	B136-S-5.0	09/30/1999	5	20 U	20 U	50 U	5 U	5 U	5 U	5 U
B-137	B137-S-2.5	10/04/1999	2.5	20 U	20 U	50 U	5 U	5 U	5 U	5 U
	B137-S-5.0	10/04/1999	5	20 U	20 U	50 U	5 U	5 U	5 U	5 U
	B137-S-20.0	10/04/1999	20	20 U	20 U	50 U	5 U	5 U	5 U	5 U
	B137-S-901	10/04/1999	20	20 U	20 U	50 U	5 U	5 U	5 U	5 U
B-138	B138-S-2.5	10/04/1999	2.5	20 U	20 U	84	5 U	5 U	5 U	5 U
	B138-S-5.0	10/04/1999	5	20 U	20 U	150	5 U	5 U	5 U	5 U
	B138-S-901	10/04/1999	5	20 U	20 U	50 U	5 U	5 U	5 U	5 U
	B138-S-20.0	10/04/1999	20	20 U	20 U	50 U	5 U	5 U	5 U	5 U

Table E-5-5
Soil Data for Volatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Bromoform	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-ethane	Chloroform
MTCA Method B soil CULs for Human Health				130,000	110,000	8,000,000	7,700	1,600,000	350,000	160,000
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				16,600,000	4,900,000	350,000,000	1,010,000	70,000,000	NV	21,500,000
B-127	B127-S-2.5	09/27/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-128	B128-S-5.0	09/27/1999	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B128-S-10.0	09/27/1999	10	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-132	B132-S-5.0	09/29/1999	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B132-S-15.0	09/29/1999	15	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-133	B133-S-10.0	09/29/1999	10	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B133-S-20.0	09/29/1999	20	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-134	B134-S-3.0	09/30/1999	3	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B134-S-10.0	09/30/1999	10	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-135	B135-S-2.5	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B135-S-5.0	09/30/1999	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-136	B136-S-2.5	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B136-S-901	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B136-S-5.0	09/30/1999	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-137	B137-S-2.5	10/04/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-5.0	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-20.0	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-901	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U	5 U
B-138	B138-S-2.5	10/04/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-5.0	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-901	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-20.0	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table E-5-5
Soil Data for Volatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Chloro-methane	cis-1,2-Dichloroethene	cis-1,3-Dichloro-propene	Dibromo-chloromethane	Dibromo-methane	Dichlorodifluoro-methane (CFC 12)
MTCA Method B soil CULs for Human Health				77,000	800,000	5,600[f]	12,000	800,000	16,000,000
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				10,100,000	35,000,000	730,000[b]	1,560,000	35,000,000	700,000,000
B-127	B127-S-2.5	09/27/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
B-128	B128-S-5.0	09/27/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B128-S-10.0	09/27/1999	10	5 U	5 U	5 U	5 U	5 U	5 U
B-132	B132-S-5.0	09/29/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B132-S-15.0	09/29/1999	15	5 U	5 U	5 U	5 U	5 U	5 U
B-133	B133-S-10.0	09/29/1999	10	5 U	5 U	5 U	5 U	5 U	5 U
	B133-S-20.0	09/29/1999	20	5 U	5 U	5 U	5 U	5 U	5 U
B-134	B134-S-3.0	09/30/1999	3	5 U	5 U	5 U	5 U	5 U	5 U
	B134-S-10.0	09/30/1999	10	5 U	5 U	5 U	5 U	5 U	5 U
B-135	B135-S-2.5	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B135-S-5.0	09/30/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
B-136	B136-S-2.5	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B136-S-901	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B136-S-5.0	09/30/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
B-137	B137-S-2.5	10/04/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-5.0	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-20.0	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-901	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U
B-138	B138-S-2.5	10/04/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-5.0	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-901	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-20.0	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U

Table E-5-5
Soil Data for Volatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Dichloromethane (Methylene Chloride)	Ethylbenzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylenes	Naphthalene	n-Butyl-benzene
MTCA Method B soil CULs for Human Health				130,000	8,000,000	13,000	8,000,000	160,000,000	1,600,000	NV
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				17,500,000	350,000,000	1,680,000	350,000,000	7,000,000,000	70,000,000	NV
B-127	B127-S-2.5	09/27/1999	2.5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
B-128	B128-S-5.0	09/27/1999	5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B128-S-10.0	09/27/1999	10	10 U	5 U	20 U	20 U	5 U	20 U	20 U
B-132	B132-S-5.0	09/29/1999	5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B132-S-15.0	09/29/1999	15	10 U	5 U	20 U	20 U	5 U	20 U	20 U
B-133	B133-S-10.0	09/29/1999	10	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B133-S-20.0	09/29/1999	20	10 U	5 U	20 U	20 U	5 U	20 U	20 U
B-134	B134-S-3.0	09/30/1999	3	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B134-S-10.0	09/30/1999	10	10 U	5 U	20 U	20 U	5 U	48	20 U
B-135	B135-S-2.5	09/30/1999	2.5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B135-S-5.0	09/30/1999	5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
B-136	B136-S-2.5	09/30/1999	2.5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B136-S-901	09/30/1999	2.5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B136-S-5.0	09/30/1999	5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
B-137	B137-S-2.5	10/04/1999	2.5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B137-S-5.0	10/04/1999	5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B137-S-20.0	10/04/1999	20	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B137-S-901	10/04/1999	20	10 U	5 U	20 U	20 U	5 U	20 U	20 U
B-138	B138-S-2.5	10/04/1999	2.5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B138-S-5.0	10/04/1999	5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B138-S-901	10/04/1999	5	10 U	5 U	20 U	20 U	5 U	20 U	20 U
	B138-S-20.0	10/04/1999	20	10 U	5 U	20 U	20 U	5 U	20 U	20 U

Table E-5-5
Soil Data for Volatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetra-chloroethene (PCE)
MTCA Method B soil CULs for Human Health				NV	160,000,000	NV	33,000	NV	1,900
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				NV	7,000,000,000	NV	4,380,000	NV	240,000
B-127	B127-S-2.5	09/27/1999	2.5	20 U	5 U	20 U	5 U	20 U	5 U
B-128	B128-S-5.0	09/27/1999	5	20 U	5 U	20 U	5 U	20 U	5 U
	B128-S-10.0	09/27/1999	10	20 U	5 U	20 U	5 U	20 U	5 U
B-132	B132-S-5.0	09/29/1999	5	20 U	5 U	20 U	5 U	20 U	5 U
	B132-S-15.0	09/29/1999	15	20 U	5 U	20 U	5 U	20 U	5 U
B-133	B133-S-10.0	09/29/1999	10	20 U	5 U	20 U	5 U	20 U	5 U
	B133-S-20.0	09/29/1999	20	20 U	5 U	20 U	5 U	20 U	5 U
B-134	B134-S-3.0	09/30/1999	3	20 U	5 U	20 U	5 U	20 U	5 U
	B134-S-10.0	09/30/1999	10	20 U	5 U	20 U	5 U	20 U	5 U
B-135	B135-S-2.5	09/30/1999	2.5	20 U	5 U	20 U	5 U	20 U	5 U
	B135-S-5.0	09/30/1999	5	20 U	5 U	20 U	5 U	20 U	5 U
B-136	B136-S-2.5	09/30/1999	2.5	20 U	5 U	20 U	5 U	20 U	5 U
	B136-S-901	09/30/1999	2.5	20 U	5 U	20 U	5 U	20 U	5 U
	B136-S-5.0	09/30/1999	5	20 U	5 U	20 U	5 U	20 U	5 U
B-137	B137-S-2.5	10/04/1999	2.5	20 U	5 U	20 U	5 U	20 U	5 U
	B137-S-5.0	10/04/1999	5	20 U	5 U	20 U	5 U	20 U	5 U
	B137-S-20.0	10/04/1999	20	20 U	5 U	20 U	5 U	20 U	5 U
	B137-S-901	10/04/1999	20	20 U	5 U	20 U	5 U	20 U	5 U
B-138	B138-S-2.5	10/04/1999	2.5	20 U	5 U	20 U	5 U	20 U	5 U
	B138-S-5.0	10/04/1999	5	20 U	5 U	20 U	5 U	20 U	5 U
	B138-S-901	10/04/1999	5	20 U	5 U	20 U	5 U	20 U	5 U
	B138-S-20.0	10/04/1999	20	20 U	5 U	20 U	5 U	20 U	5 U

Table E-5-5
Soil Data for Volatile Organic Compounds (µg/kg)
Cell 4 Remedial Investigation and Feasibility Study
Port of Ridgefield
Ridgefield, Washington

Location	Sample Name	Date Collected	Depth (ft. bgs)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloro-propene	Trichloro-ethene (TCE)	Trichlorofluoro-methane (CFC 11)	Vinyl Chloride
MTCA Method B soil CULs for Human Health				6,400,000	1,600,000	5,600[g]	11,000	24,000,000	670
MTCA Wildlife Ecological Indicator Concentration				NV	NV	NV	NV	NV	NV
Cell 4 preliminary RELs				700,000,000	70,000,000	730,000[b]	11,000,000	1,050,000,000	87,500
B-127	B127-S-2.5	09/27/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
B-128	B128-S-5.0	09/27/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B128-S-10.0	09/27/1999	10	5 U	5 U	5 U	5 U	5 U	5 U
B-132	B132-S-5.0	09/29/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B132-S-15.0	09/29/1999	15	5 U	5 U	5 U	5 U	5 U	5 U
B-133	B133-S-10.0	09/29/1999	10	5 U	5 U	5 U	5 U	5 U	5 U
	B133-S-20.0	09/29/1999	20	5 U	5 U	5 U	5 U	5 U	5 U
B-134	B134-S-3.0	09/30/1999	3	5 U	5 U	5 U	5 U	5 U	5 U
	B134-S-10.0	09/30/1999	10	5 U	5 U	5 U	5 U	5 U	5 U
B-135	B135-S-2.5	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B135-S-5.0	09/30/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
B-136	B136-S-2.5	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B136-S-901	09/30/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B136-S-5.0	09/30/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
B-137	B137-S-2.5	10/04/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-5.0	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-20.0	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U
	B137-S-901	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U
B-138	B138-S-2.5	10/04/1999	2.5	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-5.0	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-901	10/04/1999	5	5 U	5 U	5 U	5 U	5 U	5 U
	B138-S-20.0	10/04/1999	20	5 U	5 U	5 U	5 U	5 U	5 U

APPENDIX F

DIOXIN AND FURAN ANALYSIS, DATA VALIDATION, AND TEQ CALCULATION RULES

APPENDIX F DIOXIN AND FURAN ANALYSIS, DATA VALIDATION, AND TEQ CALCULATION RULES CONTENTS

This appendix consists of the Dioxin and Furan Analysis, Data Validation, and TEQ Calculation Rules memorandum. Dioxin data presented in the RI/FS has been updated to ensure consistent treatment of interferences and non-detects during data qualification and calculation of TEQs. Updated TEQs are calculated according to the methodology developed in coordination with Ecology and is described in this appendix. Dioxin data are presented with two significant digits.

The methodology described in this appendix was used for all dioxin data when the required information was available; in some cases, the required detection limits (estimated detection limits, or EDLs) were unavailable for historical data. If EDLs were unavailable, method detections limits (MDLs) were used. In cases where EDLs and MDLs were unavailable, the method reporting limits (MRLs) were used. Because MRLs and MDLs are greater than EDLs, using these in place of the EDLs results in a higher dioxin TEQ result. Therefore, all dioxin TEQs for which EDLs were unavailable were calculated in a way that results in a conservative estimate of dioxin TEQ concentrations. In all cases, dioxin data was validated and calculated according to the methodology described in the appendix.

MAUL
FOSTER
ALONGI

MEMORANDUM

To: File

Date: June 27, 2013

From: Erik Naylor

Project: 9003.01.49

RE: Dioxin and Furan Analysis, Data Validation, and TEQ Calculation Rules

The term dioxin is used to refer to a family of toxic chemicals that share a similar chemical structure and a common mechanism of toxic action. While there are 210 dioxin congeners, typically only the 17 most toxic congeners are reported by laboratories. The reported concentrations of the 17 dioxin congeners typically are validated to assess usability and then a toxicity equivalence (TEQ) is calculated from the reported results to evaluate the toxicity of these compounds as a whole. The purpose of this memo is to provide an approach for dioxin data validation and TEQ calculation for the former Pacific Wood Treating site. Further, analytical method recommendations and requirements for laboratory deliverables are provided to enable consistent data validation and TEQ calculation using data from a variety of laboratories.

Critical to consistent data use is consistent use of terminology. Terms used in this memorandum are defined below.

- Method Detection Limit (MDL)—The minimum concentration of a compound that can be measured and reported with 99 percent confidence that the value is greater than zero according to the Washington State Department of Ecology's (Ecology), Model Toxics Control Act (MTCA) (Ecology, 2007).
- Estimated Detection Limit (EDL)—The sample- and analyte-specific EDL is an estimate made by the laboratory of the concentration of a given analyte that would have to be present to produce a signal with a peak height of at least 2.5 times the background noise signal level (U.S. Environmental Protection Agency [USEPA], 2005).
- Practical Quantitation Limit (PQL)—The lowest concentration that can be reliably measured within specified limits of precision, accuracy, representativeness, completeness, and comparability during routine laboratory operating conditions, using Ecology-approved methods (Ecology, 2007). This value is usually the lowest concentration used to calibrate the instrument after being adjusted for sample volume, sample extract volume, cleanups performed, and injection volume. PQLs should be no greater than 10 times the MDL (Ecology, 2007) and no greater than what is established by the USEPA in 40 Code of Federal Regulations (CFR) 136, 40 CFR 141-143, or 40 CFR 260-270.

- Estimated Maximum Potential Concentration (EMPC)—An EMPC is a value calculated for a reported analyte when the signal-to-noise ratio is at least 2.5:1 for both quantitation ions, but the ion abundance ratio criteria used for analyte confirmation are not met (USEPA, 2005). An EMPC value represents the maximum possible result of an analyte that could not be positively identified. The inability to positively identify the analyte could be a result of matrix interference, a coeluting compound, or low response.
- Toxic Equivalency Factor (TEF)—The factor by which each congener is multiplied in order to calculate its toxicity relative to 2,3,7,8-TCDD (Ecology, 2007). These values are summed to calculate the TEQ. TEFs depend on the endpoint being examined (i.e., birds, fish, mammals).
- TEQs—Concentrations of each congener are adjusted and summed to reflect their potency relative to 2,3,7,8-TCDD, one of the most toxic congeners. The TEQ is the sum of congener results multiplied by their specific TEF (Ecology, 2007).

ANALYTICAL METHODS

Dioxins are analyzed generally by USEPA Method 1613B or 8290, using a high-resolution gas chromatograph paired with a high-resolution mass spectrometer. A laboratory's PQL is usually the same for both methods. While the methods are very similar, Method 1613B is preferred, as it requires more rigorous quality assurance and quality control (QA/QC) through the use of six more internal standards than Method 8290. Because analytical technology and methodology have advanced rapidly since the methods were written, many laboratories combine elements of both methods to obtain the best results possible (Hoffman, E., and D. Fox 2010). Often the preparation and analyses are run using Method 1613B (for the additional QA/QC), while the calculations will be performed by Method 8290 (in order to obtain the sample- and analyte-specific EDLs). Method 1613B with calculated EDLs is the preferred method.

LABORATORY DELIVERABLES

It is important to work closely with the laboratory performing the dioxin analyses because different laboratories report data in different ways. The following items should be requested to ensure that the analytical report and electronic data deliverable (EDD) will contain all of the requisite information to validation the data and calculate TEQs:

- EDLs[1]and PQLs should be included in the final analytical report. EDLs, MDLs, and PQLs should all be included in the EDD.
- Results should be reported to the sample- and analyte-specific EDL. Results below the PQL but above the EDL will be qualified as estimates (J).
- EMPC results should be reported at the EMPC value (EMPC values will be assigned a "U" qualifier [the analyte was not detected at or above the concentration qualified] at the time of validation).

---

[1] Note that USEPA Method 1613B does not provide for the calculation of EDLs; therefore, the laboratory must use the calculation approach provided in Method 8290 to report the required limits.

TEQ concentrations will not be requested from the laboratory. If the laboratory provides TEQ concentrations, they will not be used because the data have not been validated TEQs should be calculated only after the data are validated.

VALIDATION

Dioxin data are validated much like other organic data, but there are a few issues that do not typically arise in other organic data sets. In addition to standard validation procedures (USEPA 2005), the following scenarios should be addressed in the fashion described below, consistent with other Ecology sites (Ecology and Environment and G. L. Glass, 2011):

- EMPC reported values should be assigned a U qualifier at the reported EMPC value.
- EMPC values that appear to be significantly elevated should be investigated further with the laboratory and may be assigned an R qualifier (unusable) when applicable.
- Non-detected results should be assigned a U qualifier and reported at the EDL value.

Further dioxin validation guidelines can be found in the National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins (CDDs) and Chlorinated Dibenzofurans (CDFs) Data Review (USEPA 2005). Data must be validated before TEQs are calculated.

TEQS

To express the overall toxicity of the 17 reported dioxins, the concentration of each congener is adjusted based on its toxicity relative to the most toxic congener, 2,3,7,8-TCDD, and then all 17 are added together. The adjustment factors, the TEFs, are provided by the 2005 World Health Organization. TEQs are commonly calculated by one of the following two methods:

1. Non-detected values (U) are set as one half of the EDL. Values that are detected, even as estimates (J), should be used at face value. Multiply congener values by their corresponding TEF and then sum all of the products.
2. Non-detected values (U) are set as 0. Values that are detected, even as estimates (J), should be used at face value. Multiply congener values by their corresponding TEF and then sum all of the products.

These methods result in two different TEQ values that can be shown as TEQ (U=1/2) and TEQ (U=0). TEQs should not be calculated to more significant figures than the original data. The table below illustrates these methods:

Table

Example of Handling Non-Detects and Resulting TEQs.

Dioxin	Result (ng/kg)	TEC[1] (U=1/2) (ng/kg)	TEC[1] (U=0) (ng/kg)	TEF Mammals
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	44	44	44	0.0003
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3000 J	3000	3000	0.0003
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	41	41	41	0.01
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	510	510	510	0.01
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	2.9 U	1.45	0	0.01
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	6.9 U	3.45	0	0.1
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	7.4	7.4	7.4	0.1
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	5.2 U	2.6	0	0.1
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	27	27	27	0.1
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	0.5 U	0.25	0	0.1
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	22	22	22	0.1
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	3.4 U	1.7	0	0.03
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	3.2 U	1.6	0	1
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	2.4	2.4	2.4	0.1
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	3 U	1.5	0	0.3
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	1.4 U	0.7	0	0.1
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	0.23 U	0.115	0	1
Total Heptachlorodibenzofuran (HpCDF)	99	99	99	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	1,100	1100	1100	--
Total Hexachlorodibenzofuran (HxCDF)	97 J	97	97	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	250	250	250	--
Total Pentachlorodibenzofuran (PeCDF)	44	44	44	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	32 J	32	32	--
Total Tetrachlorodibenzofuran (TCDF)	19	19	19	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	8.2	8.2	8.2	--
TEQ (U=1/2)	**15.2**	--	--	--
TEQ (U=0)	**12.3**	--	--	--

NOTES:
-- = no value.
ng/kg = nanograms per kilogram.
[1] TEC is analyte-specific TEF adjusted concentration.

The difference between TEQ (U=1/2) and TEQ (U=0) values gives data reviewers an idea of how much the EDL substitution affects the TEQ summation (Hoffman, E., and D. Fox 2010). While MTCA does not specify using the TEQ (U=1/2) method, it is the method that has been historically used at the Port of Ridgefield and will continue to be used.

SUMMARY

- USEPA Method 1613B is recommended for dioxin analysis (with Method 8290 EDL calculations).
- The laboratory must report a PQL and EDL for each sample and each congener, and provide a PQL, EDL, and MDL for each sample and each congener in the EDD.
- Results should be reported to the sample- and analyte-specific EDL. Results below the PQL but above the EDL will be qualified as estimates (J).
- EMPC results should be reported at the EMPC value (EMPC values will be assigned a "U" qualifier at the time of validation). However, if the EMPC is significantly elevated, additional qualification may be appropriate.
- Non-detected results should be assigned a U qualifier and reported at the EDL value.
- Laboratory data must be validated before a TEQ is calculated.
- TEQs should be calculated as follows: non-detected values (U) are set as one half of the EDL. Values that are detected, even as estimates (J), should be used at face value. Multiply congener values by their corresponding TEF and then sum all of the products.

REFERENCES

Ecology. 2007. Model Toxics Control Act statute and regulation. Publication No. 94-06. Washington State Department of Ecology. November.

Ecology and Environment Inc. and Gregory L. Glass. 2011. Rayonier Mill off-property soil dioxin study. June.

Hoffman, E., and D. Fox. 2010. Polychlorinated dioxins and furans (PCDD/F): revisions to the supplemental quality assurance project plan (SQAPP). U.S. Environmental Protection Agency. November.

USEPA. 2005. USEPA contract laboratory program national functional guidelines for chlorinated dibenzo-p-dioxins (CDDs) and chlorinated dibenzofurans (CDFs) data review. EPA 540-R-05-001. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. September.

APPENDIX G

LRIS SOIL FIGURES

APPENDIX G LRIS SOIL FIGURES
CONTENTS

The figures in this appendix are from previously submitted reports that have been approved by the Washington State Department of Ecology. All soil data shown was collected between 1993 and 2009. While the notes section of some of the figures have been updated to clarify the values presented and how they were calculated, only dioxin TEQ values have been updated from the values presented in the original reports. Dioxin TEQs have been updated in Figure 1 and Figure 5-4.

The dioxin data has been updated to ensure consistent treatment of interferences and non-detects during data qualification and calculation of TEQs. Updated TEQs are calculated according to the methodology developed in coordination with Ecology and are described in Appendix F.

The TEQs in the original dioxin figures are compared to the Model Toxics Control Act (MTCA) Method B Cleanup Level, 11 ng/kg, and the MTCA Method C Cleanup Level, 1500 ng/kg. In all cases the original and updated TEQs either both exceed or both do not exceed the screening criteria. Therefore, updating the dioxin TEQ calculation method does not change the interpretation of the dioxin data as presented in the original reports.

Full citations for the original reports are as follows:

MFA. 2007. Cell 3 remedial investigation and risk assessment report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc. February 23 and November 2 Amendment.

MFA. 2010. Letter (re: supplemental soil sampling results at the former Pacific Wood Treating site) to C. Rankine, Washington State Department of Ecology, from A. Hughes and S. Taylor, Maul Foster & Alongi, Inc. May 17.

MFA. 2010. Final Cell 4 remedial investigation and feasibility study report. Prepared for the Port of Ridgefield. Maul Foster & Alongi, Inc., Vancouver, Washington. November 29.

MFA. 2011. Draft Cells 1 and 2 remedial investigation and feasibility study report. Prepared for Port of Ridgefield. Prepared by Maul Foster & Alongi, Inc. January 19.

FIGURES

CELLS 1 AND 2

CELL 3

CELL 4

APPENDIX G-1

FIGURES 6-1 TO 6-9, CELLS 1 AND 2

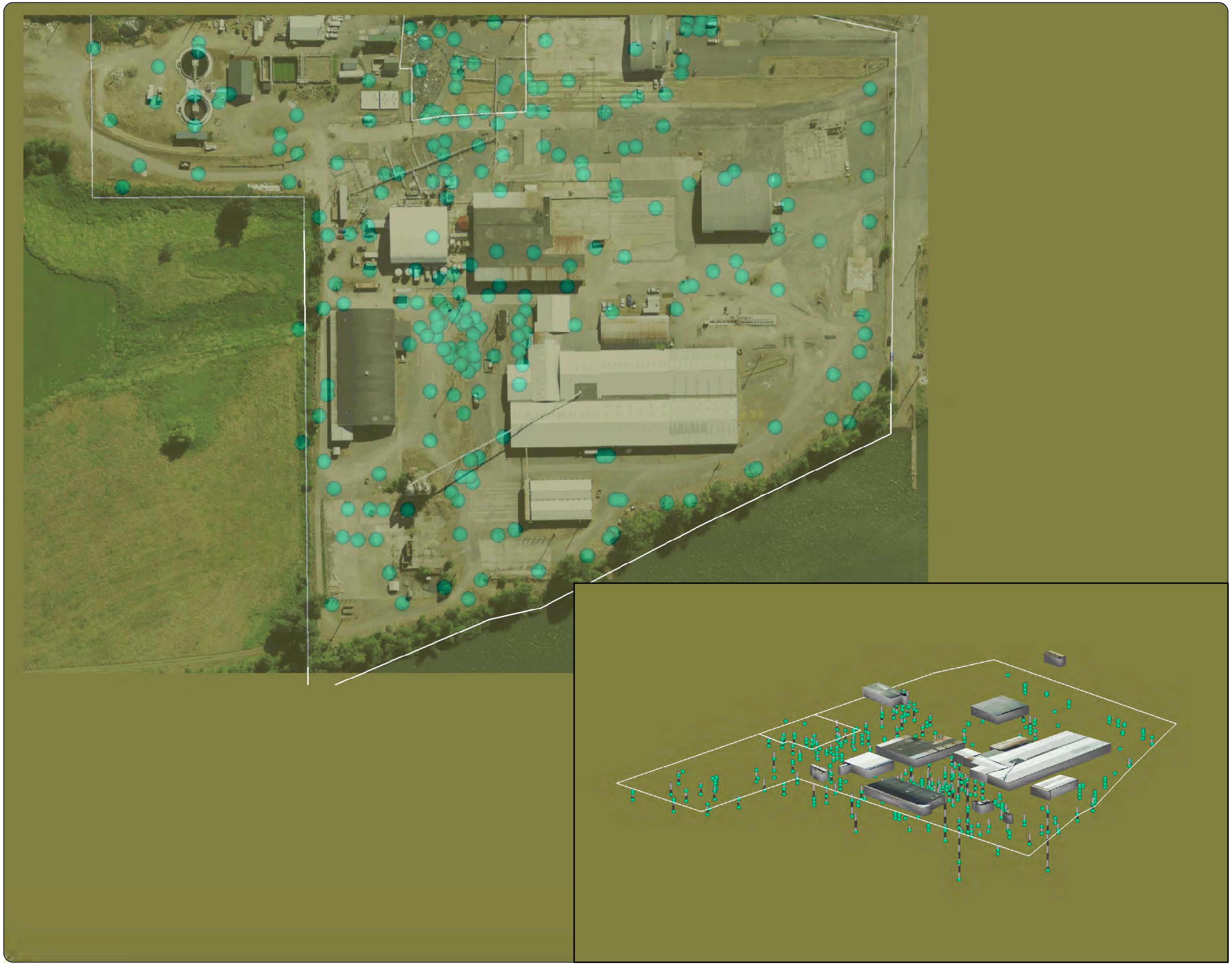


Figure 6-1
Soil Modeling Locations

Port of Ridgefield
Ridgefield, Washington

Legend

● Soil Modeling Location

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Project: 9003.01.36\05   Produced By: A. Padilla   Approved By: A. Hughes   Print Date: 01/19/2011   File: X:\9003.01 Port of Ridgefield\36\05\Projects\Draft RI Report\Fig6-1_Soil Modeling Locations.mxd

File: X:\9003.01 Port of Ridgefield\36\05\Projects\Draft RI Report\Fig6-2_Distribution of Arsenic in Soil - 0 to 6 Feet BGS.mxd

Project: 9003.01.36 /05 Produced By: J. Schane Approved By: A. Hughes Print Date: 1/19/2011

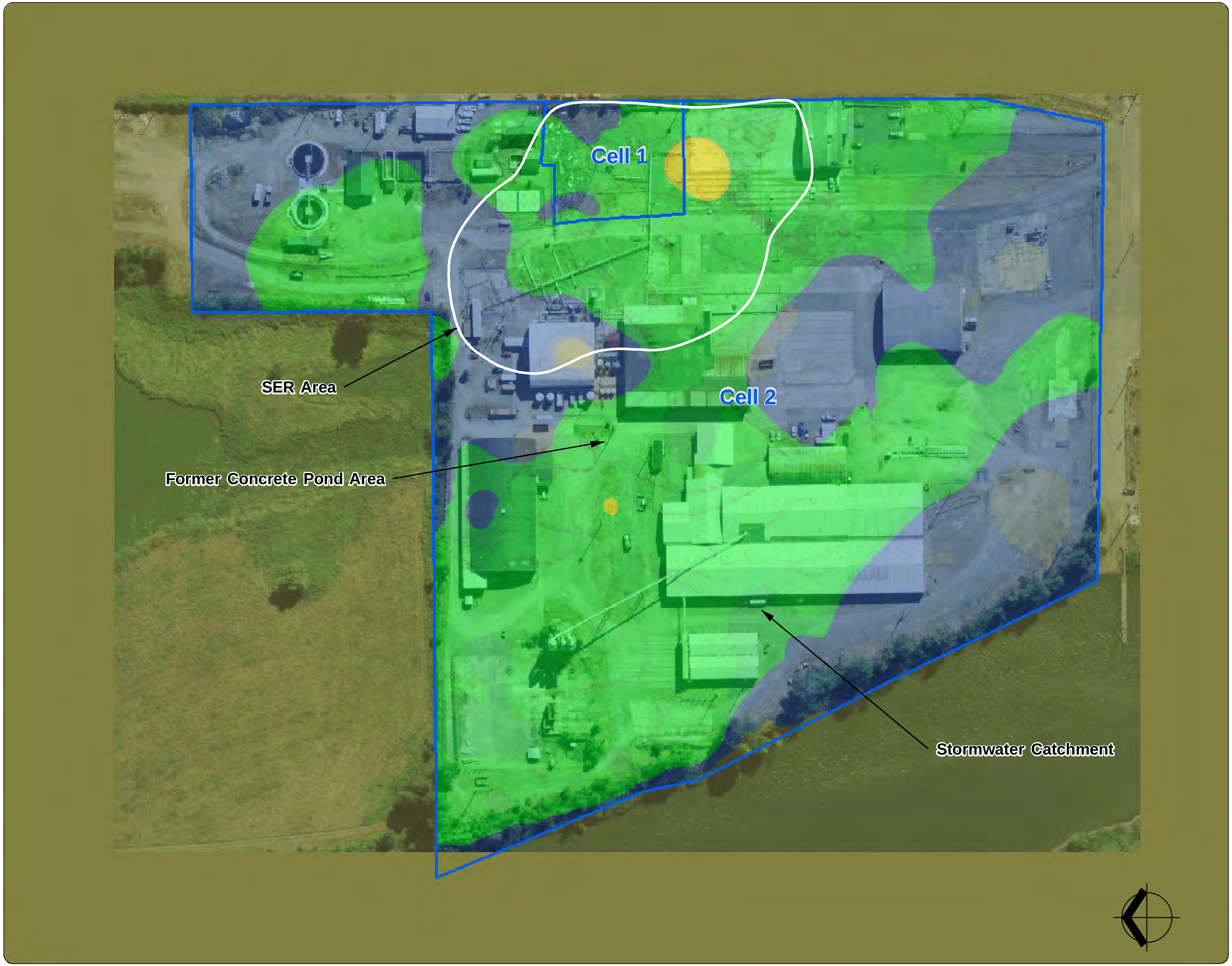


Figure 6-2
Distribution of Arsenic in Soil 0 to 6 Feet bgs

Port of Ridgefield
Ridgefield, Washington

Concentration Levels

🟦 > 0.67 mg/kg MTCA B CUL

🟩 > 5.81 mg/kg Clark County Background

🟨 > 88 mg/kg MTCA C CUL

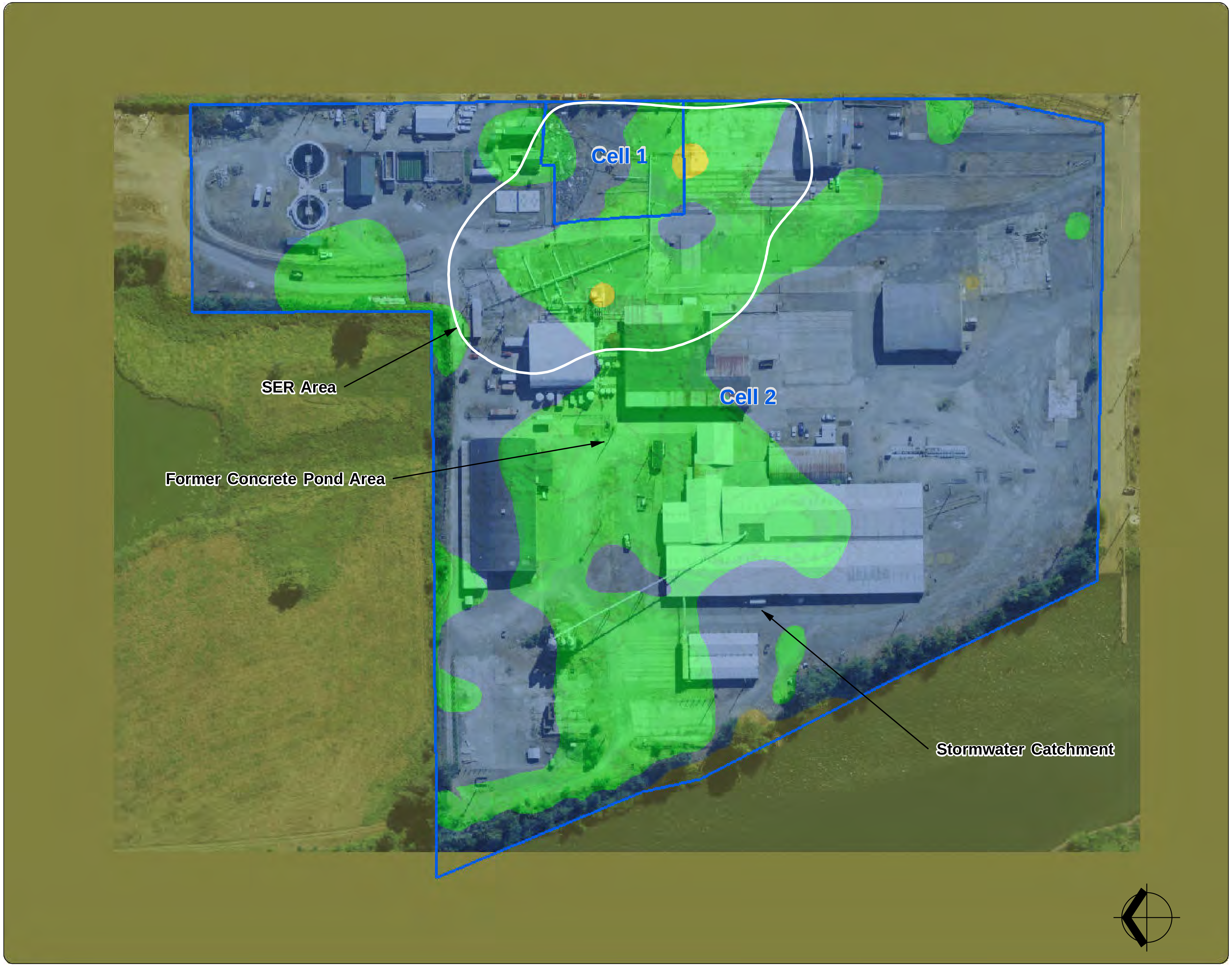
Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. mg/kg = milligrams per kilogram
4. bgs = below ground surface
5. All soil analytical data was used to create the model. The dates of the data range from 1993 to 2009.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Figure 6-3
Distribution of Arsenic in Soil 6 to 15 Feet bgs

Port of Ridgefield
Ridgefield, Washington



Concentration Levels

- 🟦 > 0.67 mg/kg MTCA B CUL
- 🟩 > 5.81 mg/kg Clark County Background
- 🟨 > 88 mg/kg MTCA C CUL

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. mg/kg = milligrams per kilogram
4. bgs = below ground surface
5. All soil analytical data was used to create the model. The dates of the data range from 1993 to 2009.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

File: X:\9003.01 Port of Ridgefield\36\05\Projects\Draft RI Report\Fig6-3_Distribution of Arsenic in Soil - 6 to15 Feet BGS.mxd

Project: 9003.01.36 /05 Produced By: J. Schane Approved By: A. Hughes Print Date: 1/19/2011

Figure 6-4
Distribution of Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil - 0 to 6 Feet bgs

Port of Ridgefield
Ridgefield, Washington

Concentration Levels

🟩 > 0.14 mg/kg MTCA B CUL

🟨 > 18 mg/kg MTCA C CUL

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. mg/kg = milligrams per kilogram
4. bgs = below ground surface
5. Distribution and concentration levels shown as toxicity equivalent.
6. All soil analytical data was used to create the model. The dates of the data range from 1993 to 2009.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

File: X:\9003.01 Port of Ridgefield\36\05\Projects\Draft RI Report\Fig6-4_Distribution of Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil - 0 to 6 Feet BGS.mxd

Project: 9003.01.36 /05 Produced By: J. Schane Approved By: A. Hughes Print Date: 1/19/2011

File: X:\9003.01 Port of Ridgefield\36\05\Projects\Draft RI Report\Fig6-5_Distribution of Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil - 6 to 15 Feet BGS.mxd

Print Date: 1/19/2011 Approved By: A. Hughes Produced By: J. Schane Project: 9003.01.36 /05

Figure 6-5
Distribution of Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil - 6 to 15 Feet bgs

Port of Ridgefield
Ridgefield, Washington

Concentration Levels

🟩 > 0.14 mg/kg MTCA B CUL

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. mg/kg = milligrams per kilogram
4. bgs = below ground surface
5. Distribution and concentration levels shown as toxicity equivalent.
6. All soil analytical data was used to create the model. The dates of the data range from 1993 to 2009.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

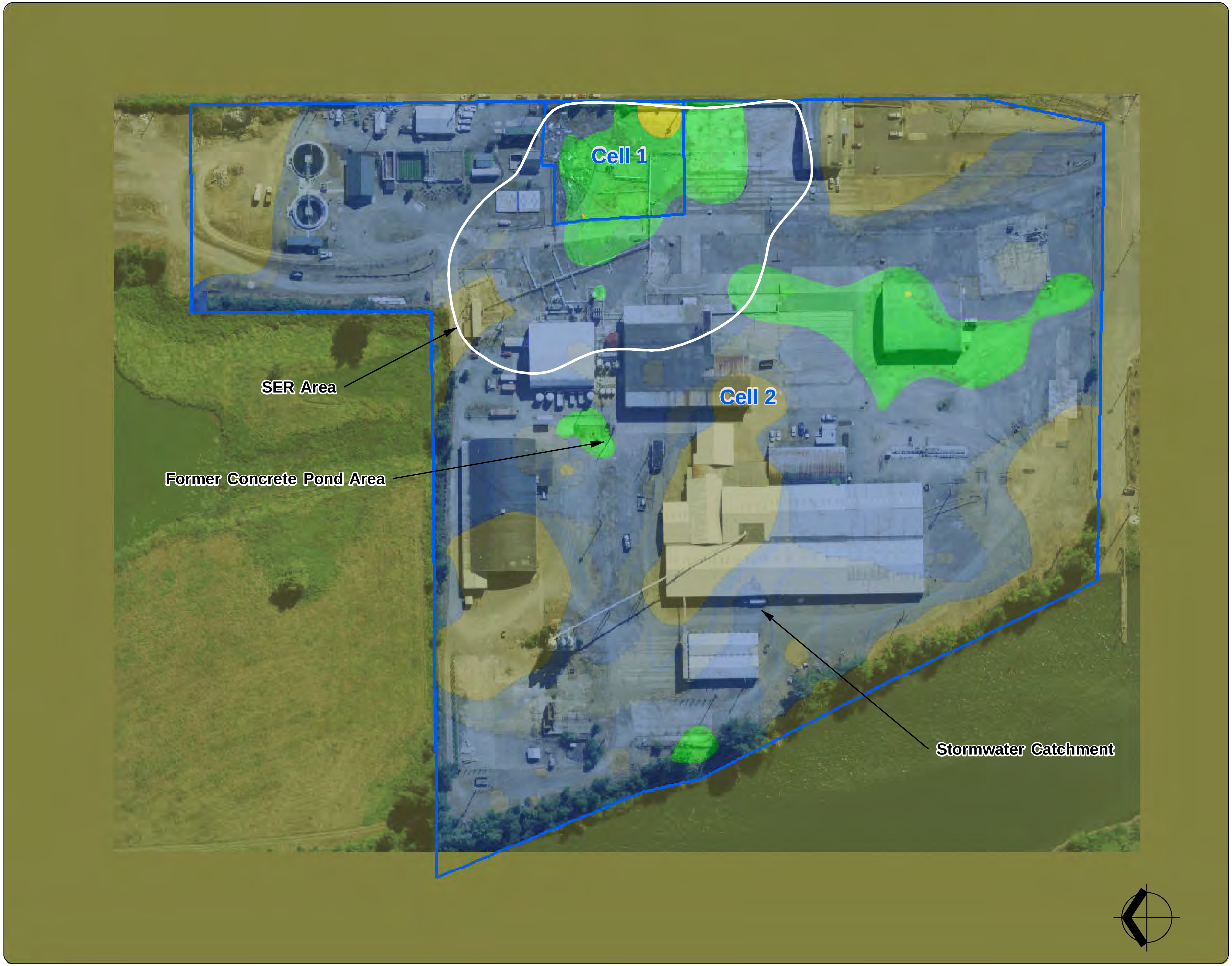


Figure 6-6 Distribution of Pentachlorophenol in Soil - 0 to 6 Feet bgs

Port of Ridgefield
Ridgefield, Washington

Concentration Levels

▨	> 0.0116 mg/kg MTCA B Soil Leaching to Groundwater CUL
🟩	> 8.3 mg/kg MTCA B CUL
🟨	> 1,100 mg/kg MTCA C CUL

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. mg/kg = milligrams per kilogram
4. bgs = below ground surface
5. All soil analytical data was used to create the model. The dates of the data range from 1993 to 2009.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

File: X:\9003.01 Port of Ridgefield\36\05\Projects\Draft RI Report\Fig6-6_Distribution of Pentachlorophenol in Soil - 0 to 6 Feet BGS.mxd

Project: 9003.01.36 /05 Produced By: J. Schane Approved By: A. Hughes Print Date: 1/19/2011

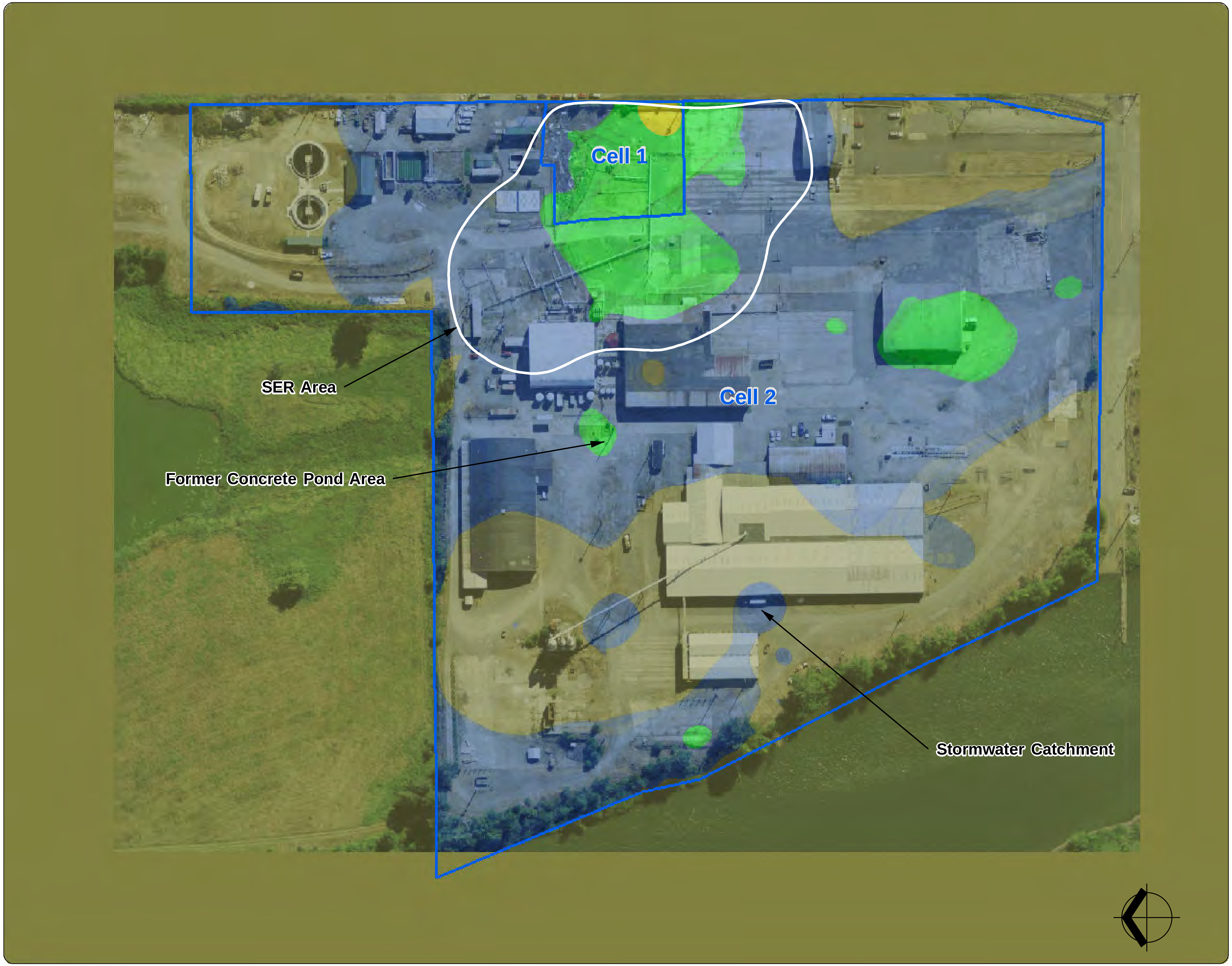


Figure 6-7
Distribution of Pentachlorophenol in Soil - 6 to 15 Feet bgs

Port of Ridgefield
Ridgefield, Washington

Concentration Levels

- 🟦 > 0.0116 mg/kg MTCA B Soil Leaching to Groundwater CUL
- 🟩 > 8.3 mg/kg MTCA B CUL
- 🟨 > 1,100 mg/kg MTCA C CUL

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. mg/kg = milligrams per kilogram
4. bgs = below ground surface
5. All soil analytical data was used to create the model. The dates of the data range from 1993 to 2009.

Source: Aerial photograph obtained from Clark County GIS Department

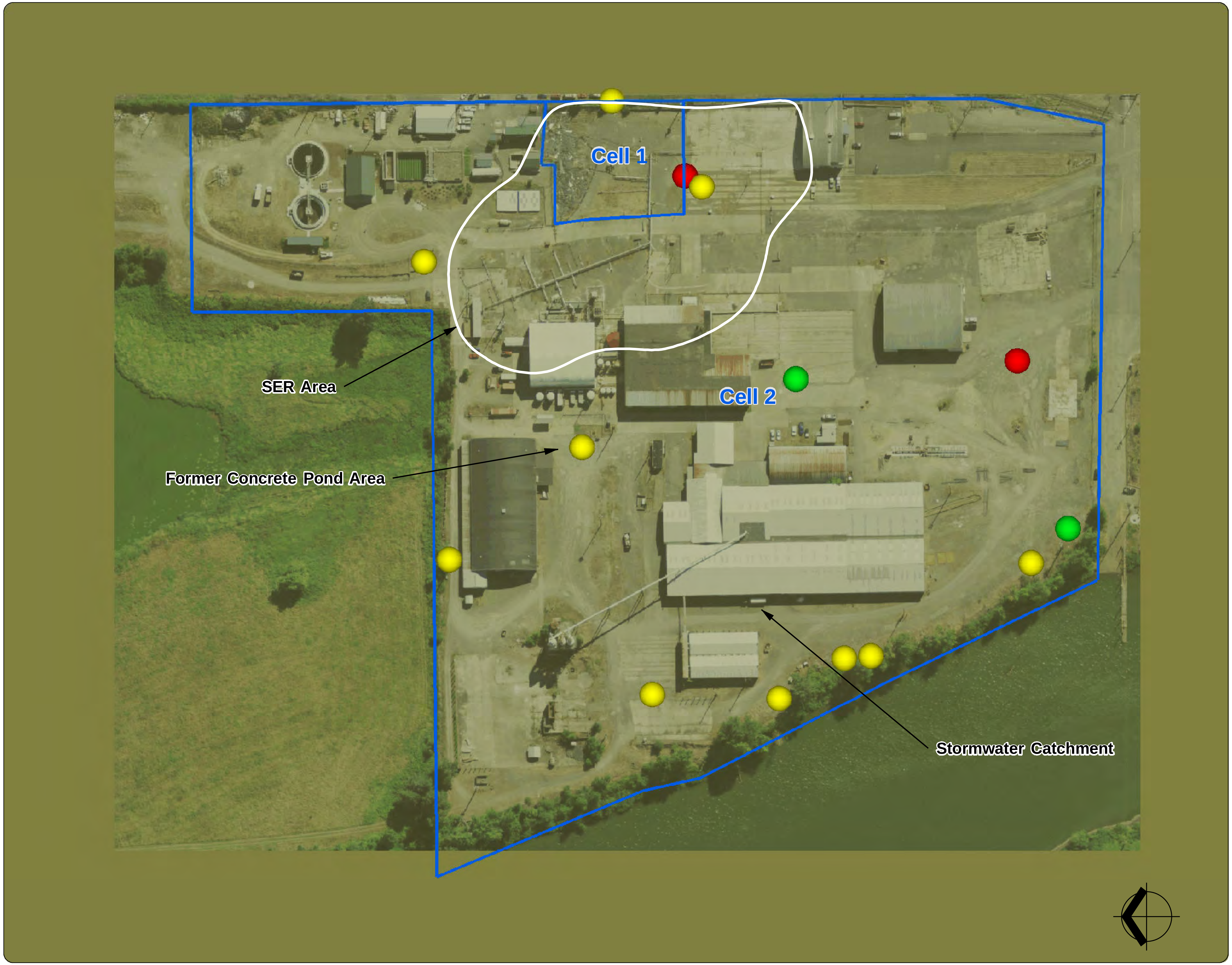
MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

File: X:\9003.01 Port of Ridgefield\36\05\Projects\Draft RI Report\Fig6-7_Distribution of Pentachlorophenol in Soil - 6 to 15 Feet BGS.mxd

Project: 9003.01.36 /05 Produced By: J. Schane Approved By: A. Hughes Print Date: 1/19/2011

Figure 6-8
Distribution of Dioxins and Furans in Soil - 0 to 6 Feet bgs

Port of Ridgefield
Ridgefield, Washington



Concentration Levels

🟩 < MTCA B CUL
🟨 > 11 ng/kg MTCA B CUL
🟥 > 1,500 ng/kg MTCA C CUL

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ng/kg = nanograms per kilogram
4. bgs = below ground surface
5. Soil analytical data from investigations in 2008 and 2009 was used to create this figure.
6. Distribution and concentration levels shown as toxicity equivalent.

Source: Aerial photograph obtained from Clark County GIS Department

MAULFOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Project: 9003.01.36 /05 Produced By: J. Schane Approved By: A. Hughes Print Date: 1/19/2011 File: X:\9003.01 Port of Ridgefield\36\05\Projects\Draft RI Report\Fig6-8_Distribution of Dioxins and Furans in Soil - 0 to 6 Feet BGS.mxd

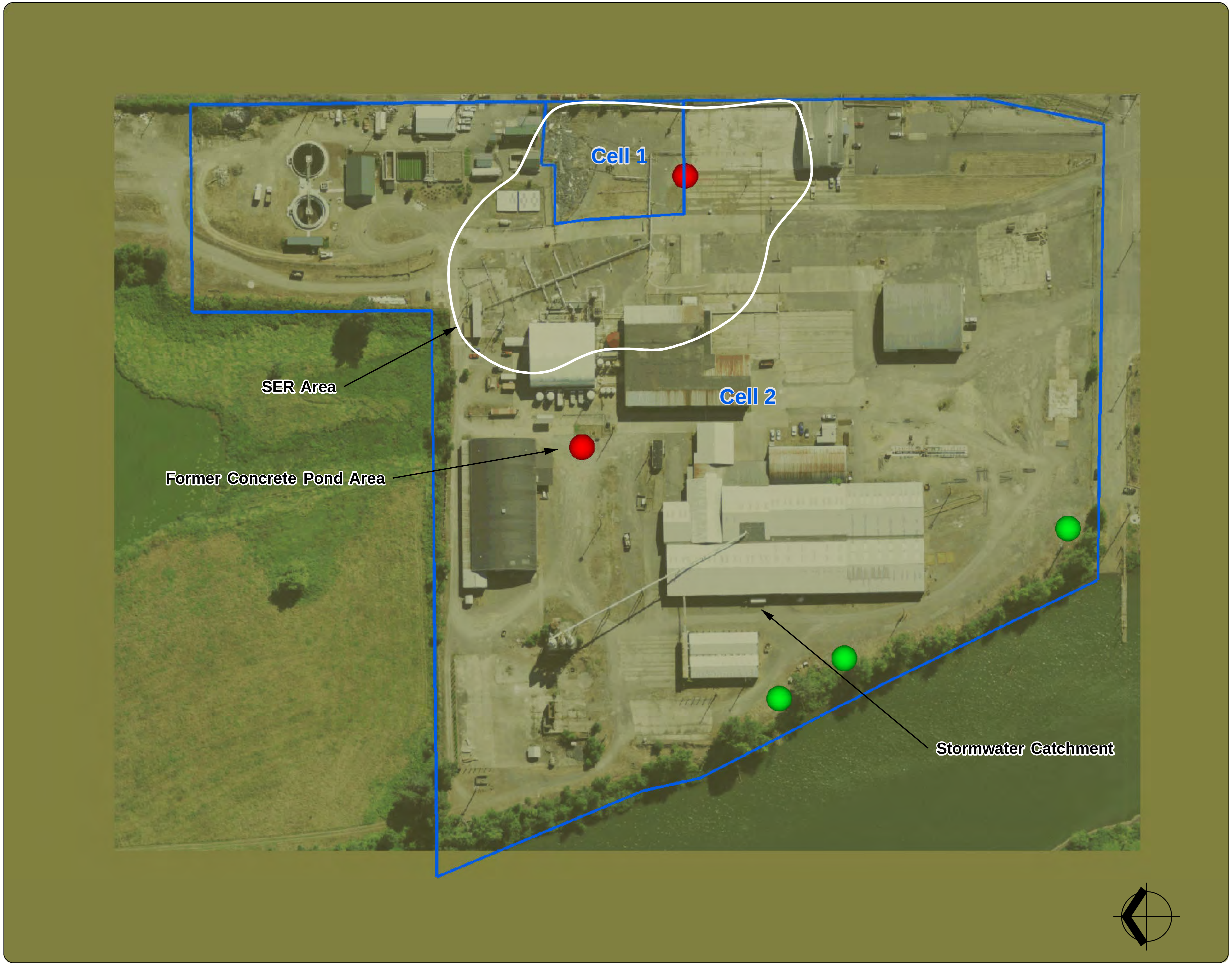


Figure 6-9
Distribution of Dioxins and Furans in Soil - 6 to 15 Feet bgs

Port of Ridgefield
Ridgefield, Washington

Concentration Levels

🟩 < MTCA B CUL

🟥 > 1,500 ng/kg MTCA C CUL

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. ng/kg = nanograms per kilogram
4. bgs = below ground surface
5. Soil analytical data from investigations in 2008 and 2009 was used to create this figure.
6. Distribution and concentration levels shown as toxicity equivalent.

Source: Aerial photograph obtained from Clark County GIS Department

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

File: X:\9003.01 Port of Ridgefield\36\05\Projects\Draft RI Report\Fig6-9_Distribution of Dioxins and Furans in Soil - 6 to 15 Feet BGS.mxd

Project: 9003.01.36 /05 Produced By: J. Schane Approved By: A. Hughes Print Date: 1/19/2011

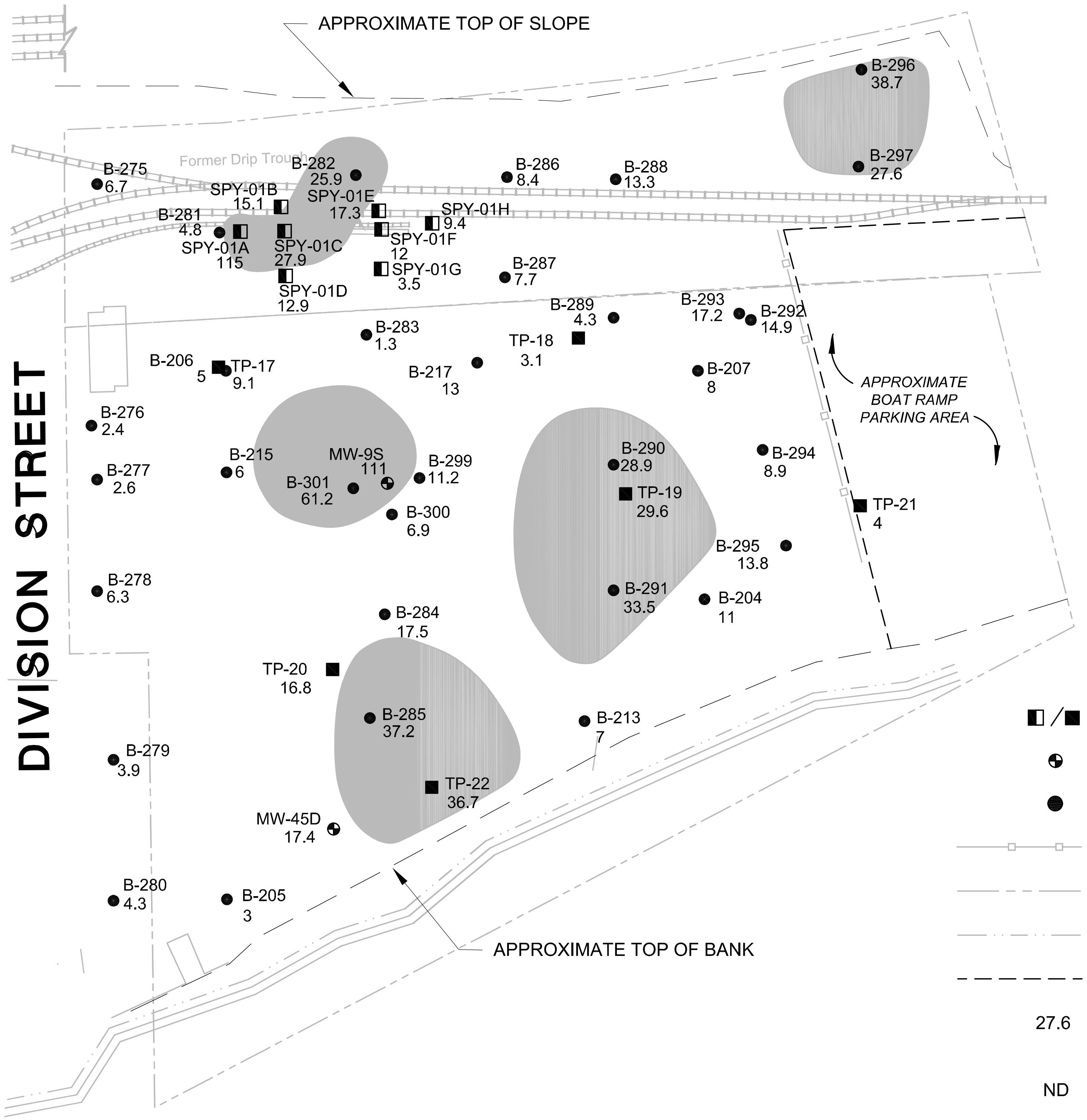
APPENDIX G-2

FIGURES 4-1 THROUGH 4-12, CELL 3; FIGURE 1 FROM SUPPLEMENTAL SITE INVESTIGATION

Figure 4-1

Estimated Distribution of Arsenic in Soil, 0-3 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington



LEGEND:

◧ / ■ TEST PIT

⊕ MONITORING WELL

● BORING

—□—□— FENCELINE

— — PROPERTY BOUNDARY

—··— SHORELINE

– – – – BOAT RAMP PARKING

27.6 ARSENIC CONCENTRATION IN MILLIGRAMS PER KILOGRAM (mg/kg)

ND NOT DETECTED AT OR ABOVE METHOD REPORTING LIMIT

▨ ESTIMATED DISTRIBUTION OF ARSENIC EXCEEDING 20 mg/kg.

GENERAL EXPLANATION:

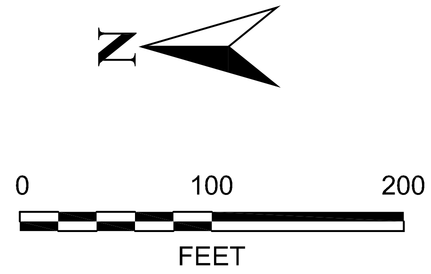
S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTES:

1) MTCA METHOD A SOIL CLEANUP LEVEL (DIRECT CONTACT PATHWAY) FOR ARSENIC IS 20 mg/kg.

2) THE HIGHEST CONCENTRATION IN A SAMPLE FROM BETWEEN 0 FEET AND 3.0 FEET BELOW GROUND SURFACE WAS USED TO ESTIMATE THE DISTRIBUTION OF ARSENIC.



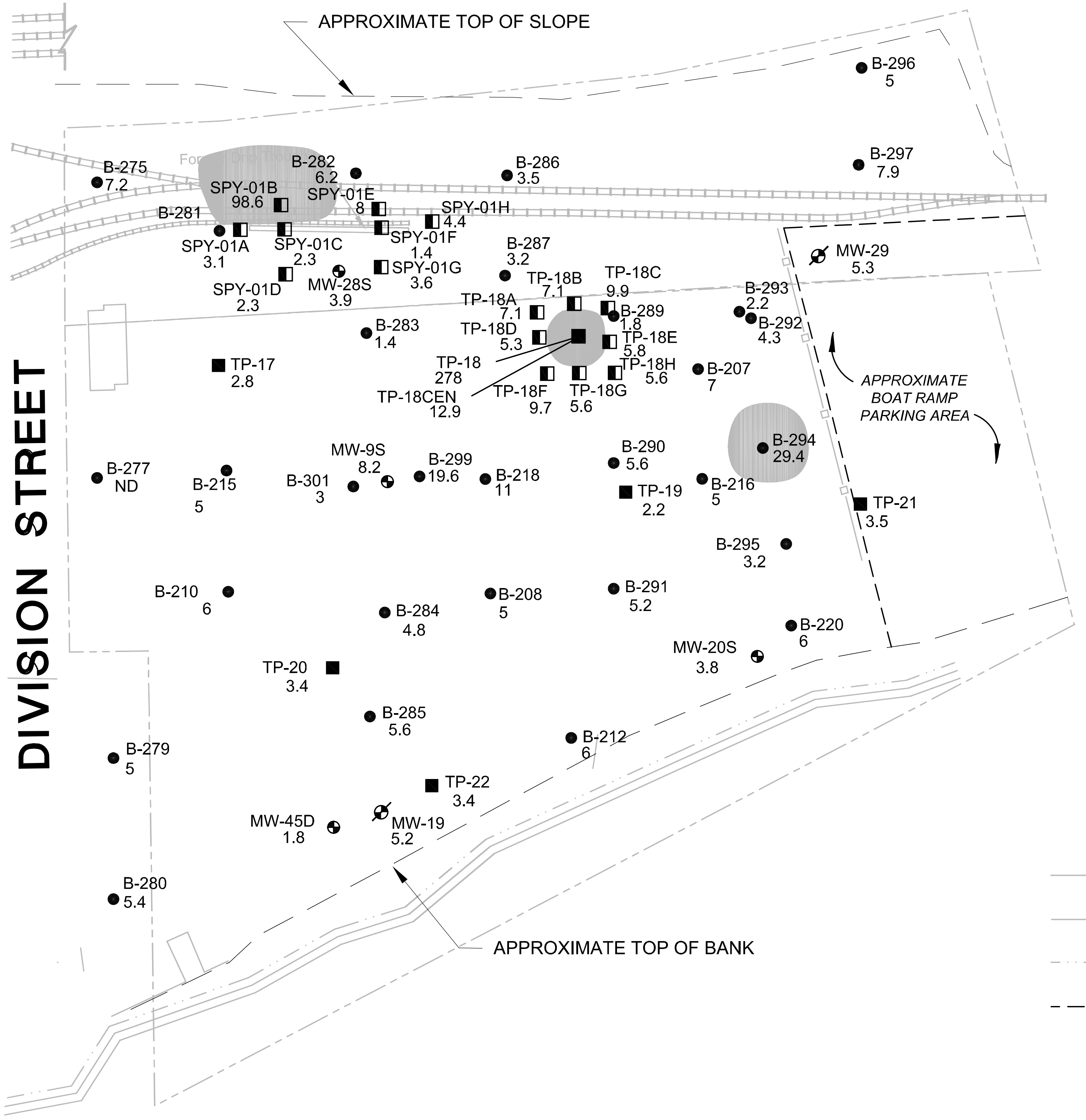
MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-01_DIS AS_0-3.DWG Last edited: FEB. 15, 2007 @ 09:55 a.m. by: jfisher Xrefs: 2004

Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-02_DIS AS_4-9.DWG Last edited: FEB. 15, 2007 @ 09:55 a.m. by: jfisher Xrefs: 2004 sit

Figure 4-2
Estimated Distribution of Arsenic in Soil, 4-9 Foot Depth Interval
Port of Ridgefield
Ridgefield, Washington



LEGEND:

◧ / ■ TEST PIT

MONITORING WELL

DECOMMISSIONED MONITORING WELL

● BORING

FENCELINE

PROPERTY BOUNDARY

SHORELINE

BOAT RAMP PARKING

7.9 ARSENIC CONCENTRATION IN MILLIGRAMS PER KILOGRAM (mg/kg)

ND NOT DETECTED AT OR ABOVE METHOD REPORTING LIMIT

▨ ESTIMATED DISTRIBUTION OF ARSENIC EXCEEDING 20 mg/kg.

GENERAL EXPLANATION:

S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTES:
1) MTCA METHOD A SOIL CLEANUP LEVEL (DIRECT CONTACT PATHWAY) FOR ARSENIC IS 20 mg/kg.
2) THE HIGHEST CONCENTRATION IN A SAMPLE FROM LOCATION BETWEEN 4.0 FEET AND 9.0 FEET BELOW GROUND SURFACE WAS USED TO ESTIMATE THE DISTRIBUTION OF ARSENIC.

N

0 100 200

FEET

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-03_DIS AS_10-15.DWG Last edited: FEB. 15, 2007 @ 09:56 a.m. by: jfisher Xrefs: 2004

Figure 4-3

Estimated Distribution of Arsenic in Soil, 10-15 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington

GENERAL EXPLANATION:

S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTES:

1) MTCA METHOD A SOIL CLEANUP LEVEL (DIRECT CONTACT PATHWAY) FOR ARSENIC IS 20 mg/kg.

2) THE HIGHEST CONCENTRATION IN A SAMPLE FROM LOCATION BETWEEN 10.0 FEET AND 15.0 FEET BELOW GROUND SURFACE WAS USED TO ESTIMATE THE DISTRIBUTION OF ARSENIC.

N

0 100 200

FEET

MAUL FOSTER ALONGI INC.

Environmental & Engineering Consultants

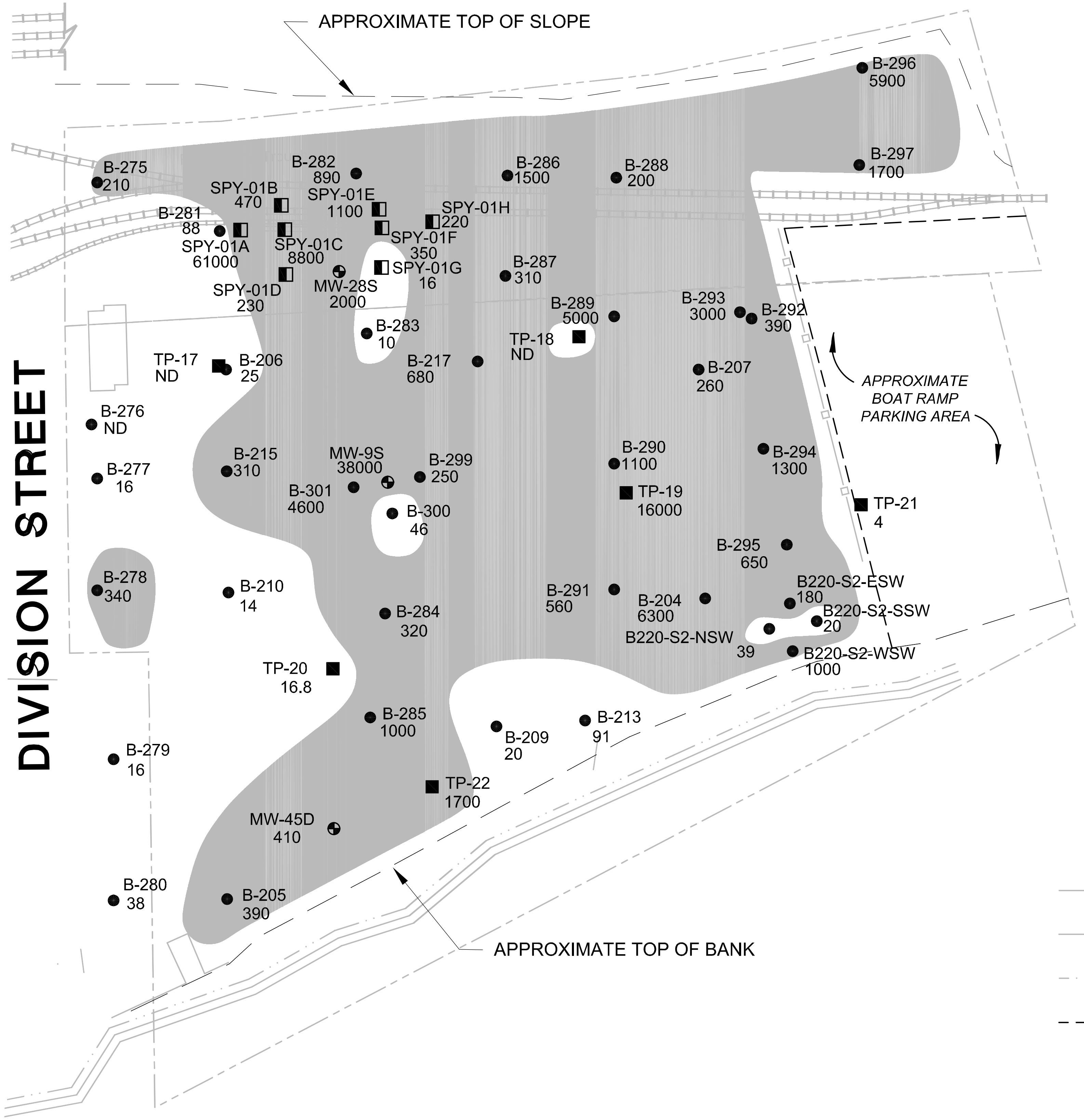
Vancouver, WA | Portland, OR | www.MFAinc.org

Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

Figure 4-4

Estimated Distribution of Chrysene in Soil, 0-3 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington



LEGEND:

◧ / ■ TEST PIT

⊕ MONITORING WELL

● BORING

FENCELINE

PROPERTY BOUNDARY

SHORELINE

BOAT RAMP PARKING

1700 CHRYSENE CONCENTRATION IN MICROGRAMS PER KILOGRAM (ug/kg)

ND NOT DETECTED AT OR ABOVE METHOD REPORTING LIMIT

▨ ESTIMATED DISTRIBUTION OF CHRYSENE EXCEEDING 137 ug/kg.

GENERAL EXPLANATION:

S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTES:

1) MTCA METHOD B SOIL CLEANUP LEVEL (DIRECT CONTACT PATHWAY) FOR CHRYSENE IS 137 ug/kg.

2) THE HIGHEST CONCENTRATION IN A SAMPLE FROM LOCATION BETWEEN 0 FEET AND 3.0 FEET BELOW GROUND SURFACE WAS USED TO ESTIMATE THE DISTRIBUTION OF CHRYSENE.

N

0 100 200
FEET

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-04_CHRY_0-3.DWG Last edited: FEB. 15, 2007 @ 09:56 a.m. by: jfisher Xrefs: 2004 site

Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

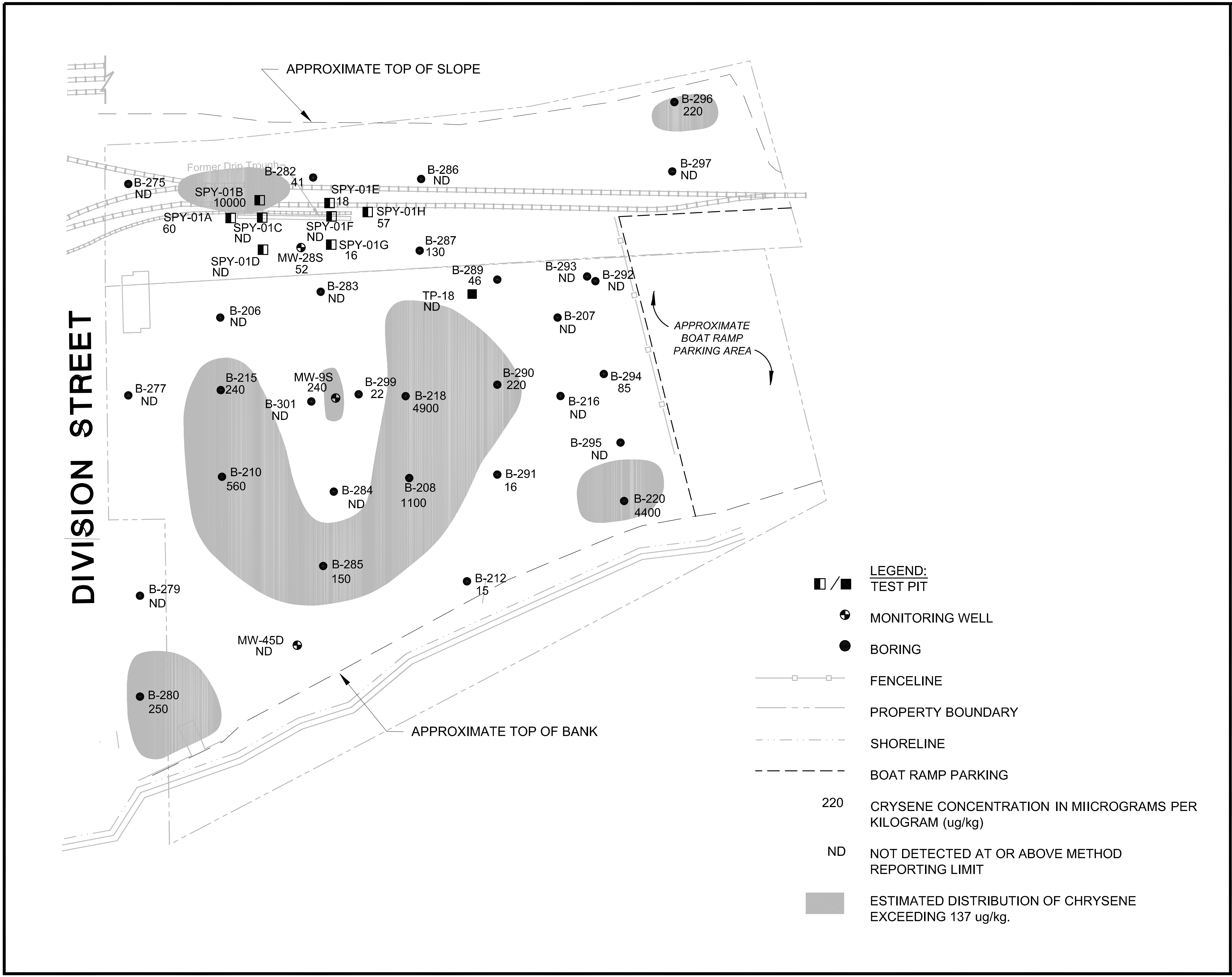


Figure 4-5

Estimated Distribution of Chrysene in Soil, 4-9 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington

GENERAL EXPLANATION:

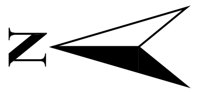
S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

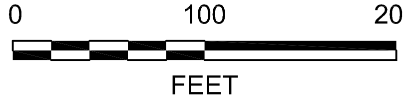
D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTES:

1) MTCA METHOD B SOIL CLEANUP LEVEL (DIRECT CONTACT PATHWAY) FOR CHRYSENE IS 137 ug/kg.

2) THE HIGHEST CONCENTRATION IN A SAMPLE FROM LOCATION BETWEEN 4.0 FEET AND 9.0 FEET BELOW GROUND SURFACE WAS USED TO ESTIMATE THE DISTRIBUTION OF CHRYSENE.





MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

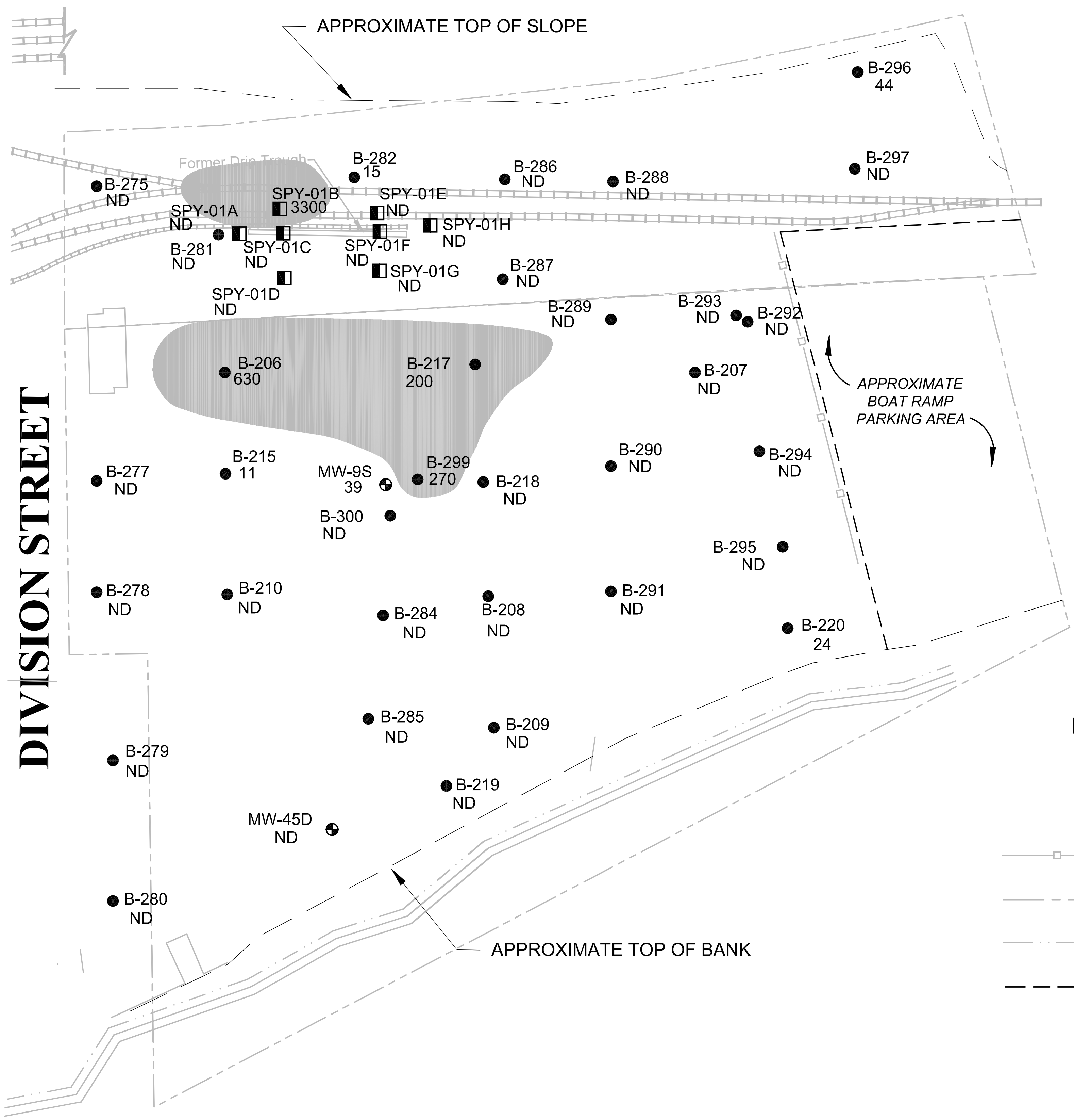
File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-05_CHRY_4-9.DWG Last edited: FEB. 15, 2007 @ 09:57 a.m. by: jfisher Xrefs: 2004 site

Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

Figure 4-6

Estimated Distribution of Chrysene in Soil, 10-15 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington



LEGEND:

◧/■ TEST PIT

⊕ MONITORING WELL

● BORING

—□—□— FENCELINE

— — — PROPERTY BOUNDARY

—··—··— SHORELINE

— — — — BOAT RAMP PARKING

44 CHRYSENE CONCENTRATION IN MICROGRAMS PER KILOGRAM (ug/kg)

ND NOT DETECTED AT OR ABOVE METHOD REPORTING LIMIT

▨ ESTIMATED DISTRIBUTION OF CHRYSENE EXCEEDING 137 ug/kg.

GENERAL EXPLANATION:

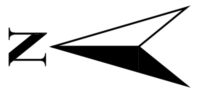
S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

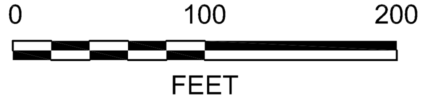
D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTES:

1) MTCA METHOD B SOIL CLEANUP LEVEL (DIRECT CONTACT PATHWAY) FOR CHRYSENE IS 137 ug/kg.

2) THE HIGHEST CONCENTRATION IN A SAMPLE FROM LOCATION BETWEEN 10.0 FEET AND 15.0 FEET BELOW GROUND SURFACE WAS USED TO ESTIMATE THE DISTRIBUTION OF CHRYSENE.





MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-06_CHRY_10-15.DWG Last edited: FEB. 15, 2007 @ 09:57 a.m. by: jfisher Xrefs: 2004

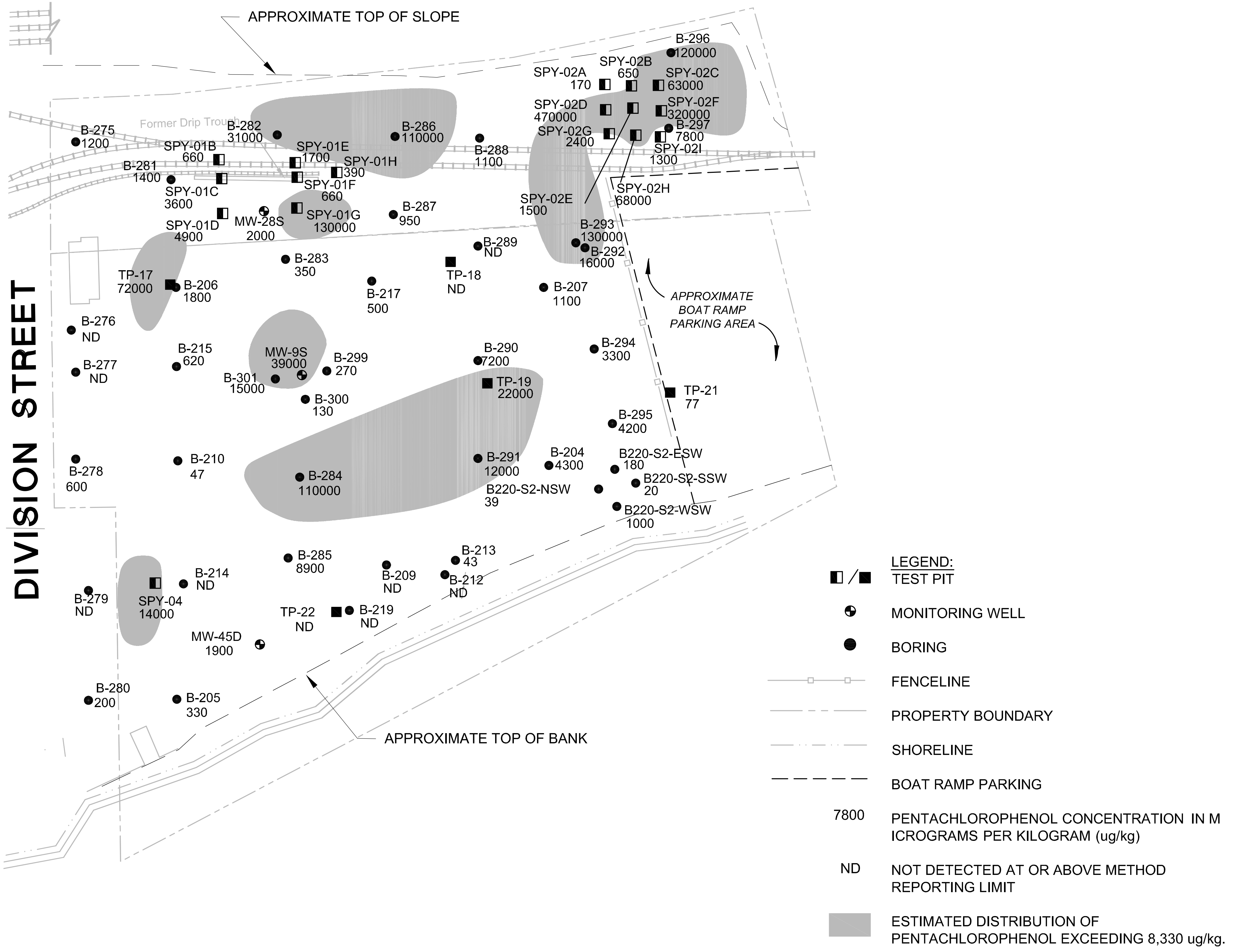
Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-07_PCP_0-3.DWG Last edited: FEB. 15, 2007 @ 09:58 a.m. by: jfisher Xrefs: 2004 site

Figure 4-7

Estimated Distribution of Pentachlorophenol in Soil, 0-3 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington



GENERAL EXPLANATION:

S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTES:

1) MTCA METHOD B SOIL CLEANUP LEVEL (DIRECT CONTACT PATHWAY) FOR PENTACHLOROPHENOL IS 8,330 ug/kg.

2) THE HIGHEST CONCENTRATION IN A SAMPLE FROM LOCATION BETWEEN 0 FEET AND 3.0 FEET BELOW GROUND SURFACE WAS USED TO ESTIMATE THE DISTRIBUTION OF PENTACHLOROPHENOL.

N

0 100 200
FEET

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

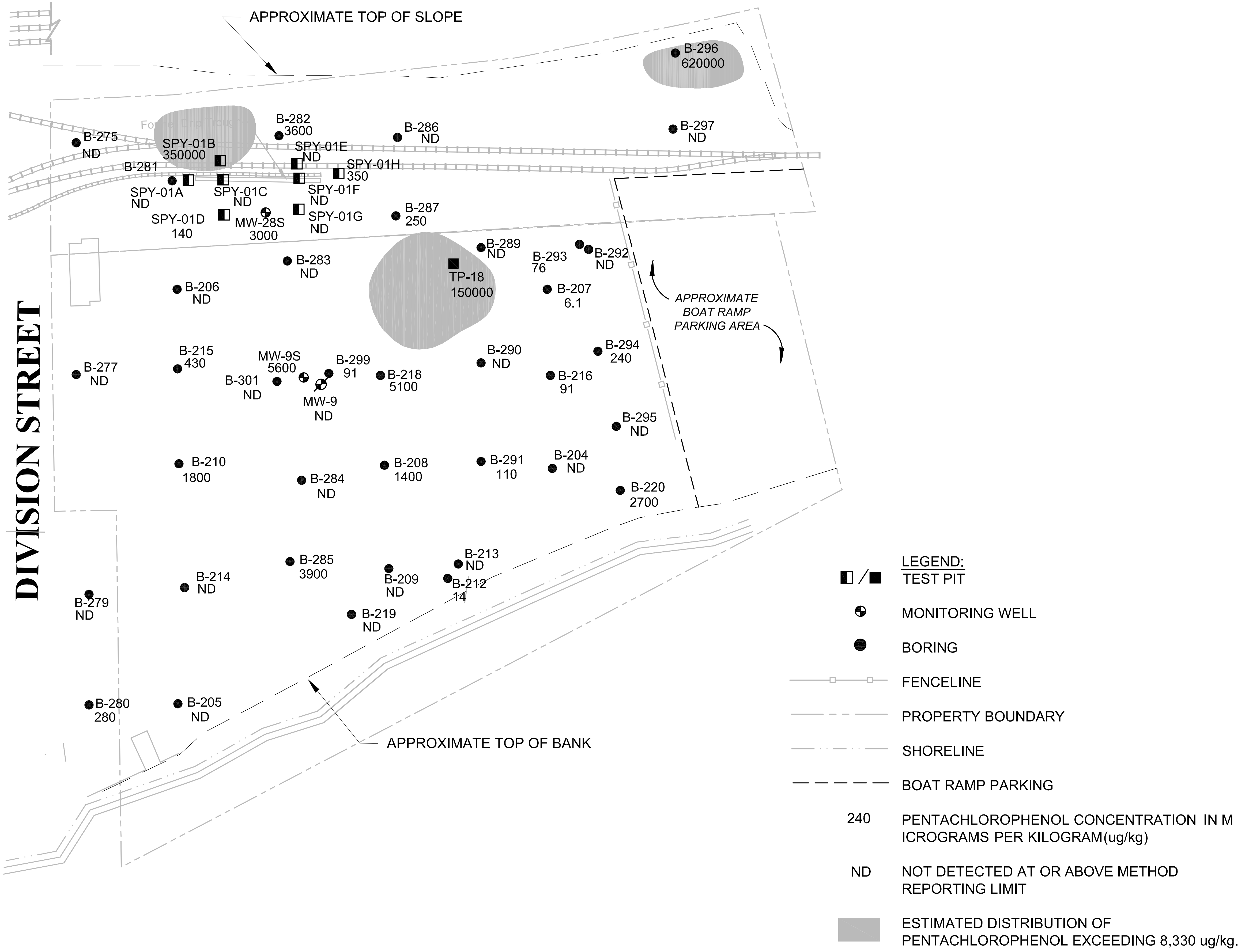
Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-08_PCP_4-9.DWG Last edited: FEB. 15, 2007 @ 09:59 a.m. by: jfisher Xrefs: 2004 site

Figure 4-8

Estimated Distribution of Pentachlorophenol in Soil, 4-9 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington



GENERAL EXPLANATION:

S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTES:

1) MTCA METHOD B SOIL CLEANUP LEVEL (DIRECT CONTACT PATHWAY) FOR PENTACHLOROPHENOL IS 8,330 ug/kg.

2) THE HIGHEST CONCENTRATION IN A SAMPLE FROM LOCATION BETWEEN 4.0 FEET AND 9.0 FEET BELOW GROUND SURFACE WAS USED TO ESTIMATE THE DISTRIBUTION OF PENTACHLOROPHENOL.

N

0 100 200

FEET

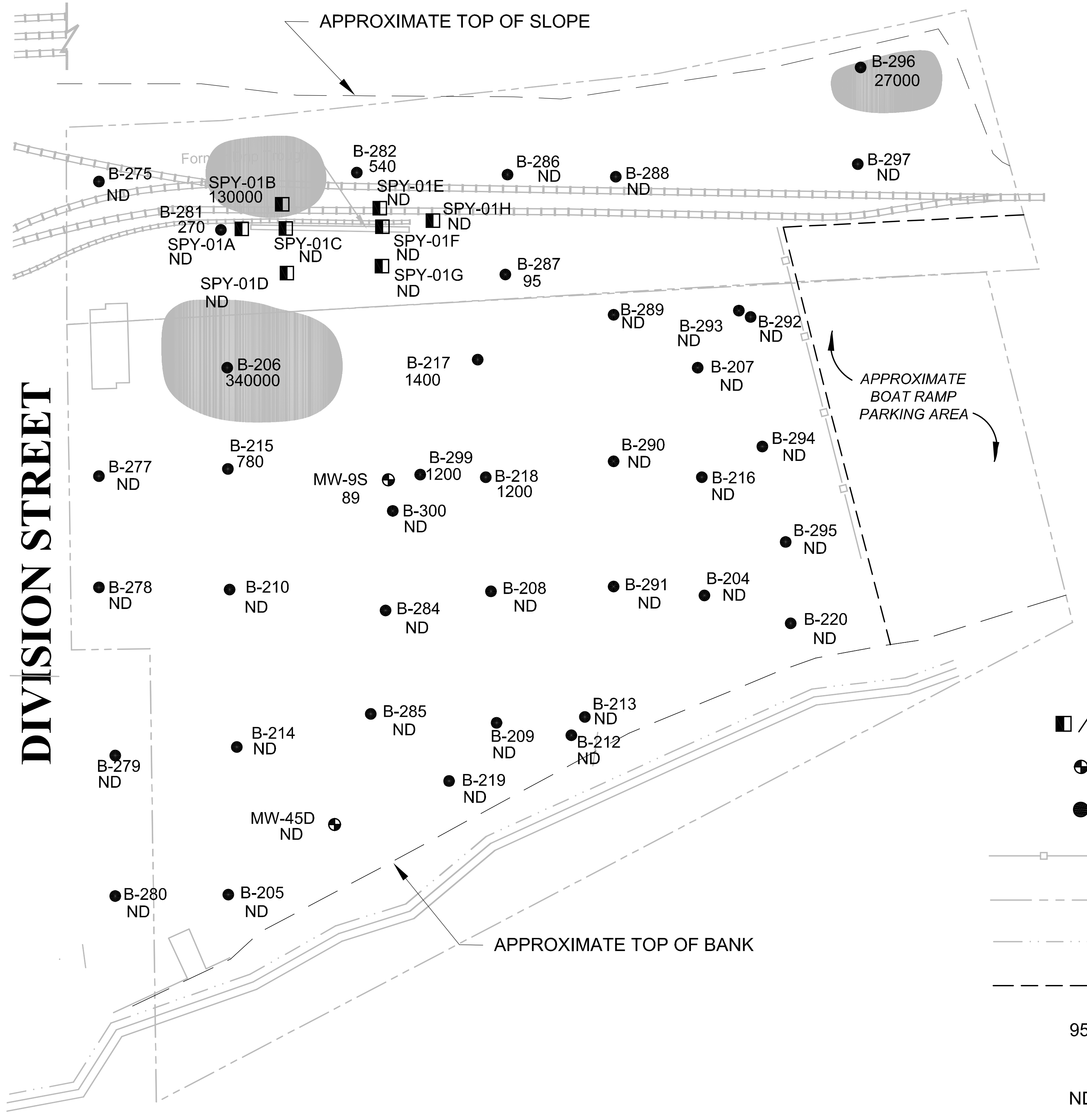
MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

Figure 4-9

Estimated Distribution of Pentachlorophenol in Soil, 10-15 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington



LEGEND:

◧/■	TEST PIT
⊕	MONITORING WELL
●	BORING
—□—□—	FENCELINE
— - —	PROPERTY BOUNDARY
—··—	SHORELINE
— — —	BOAT RAMP PARKING
95	PENTACHLOROPHENOL CONCENTRATION IN M ICROGRAMS PER KILOGRAM(ug/kg)
ND	NOT DETECTED AT OR ABOVE METHOD REPORTING LIMIT
▨	ESTIMATED DISTRIBUTION OF PENTACHLOROPHENOL EXCEEDING 8,330 ug/kg.

GENERAL EXPLANATION:

S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTES:

1) MTCA METHOD B SOIL CLEANUP LEVEL (DIRECT CONTACT PATHWAY) FOR PENTACHLOROPHENOL IS 8,330 ug/kg.

2) THE HIGHEST CONCENTRATION IN A SAMPLE FROM LOCATION BETWEEN 10.0 FEET AND 15.0 FEET BELOW GROUND SURFACE WAS USED TO ESTIMATE THE DISTRIBUTION OF PENTACHLOROPHENOL.

N

0 100 200
FEET

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

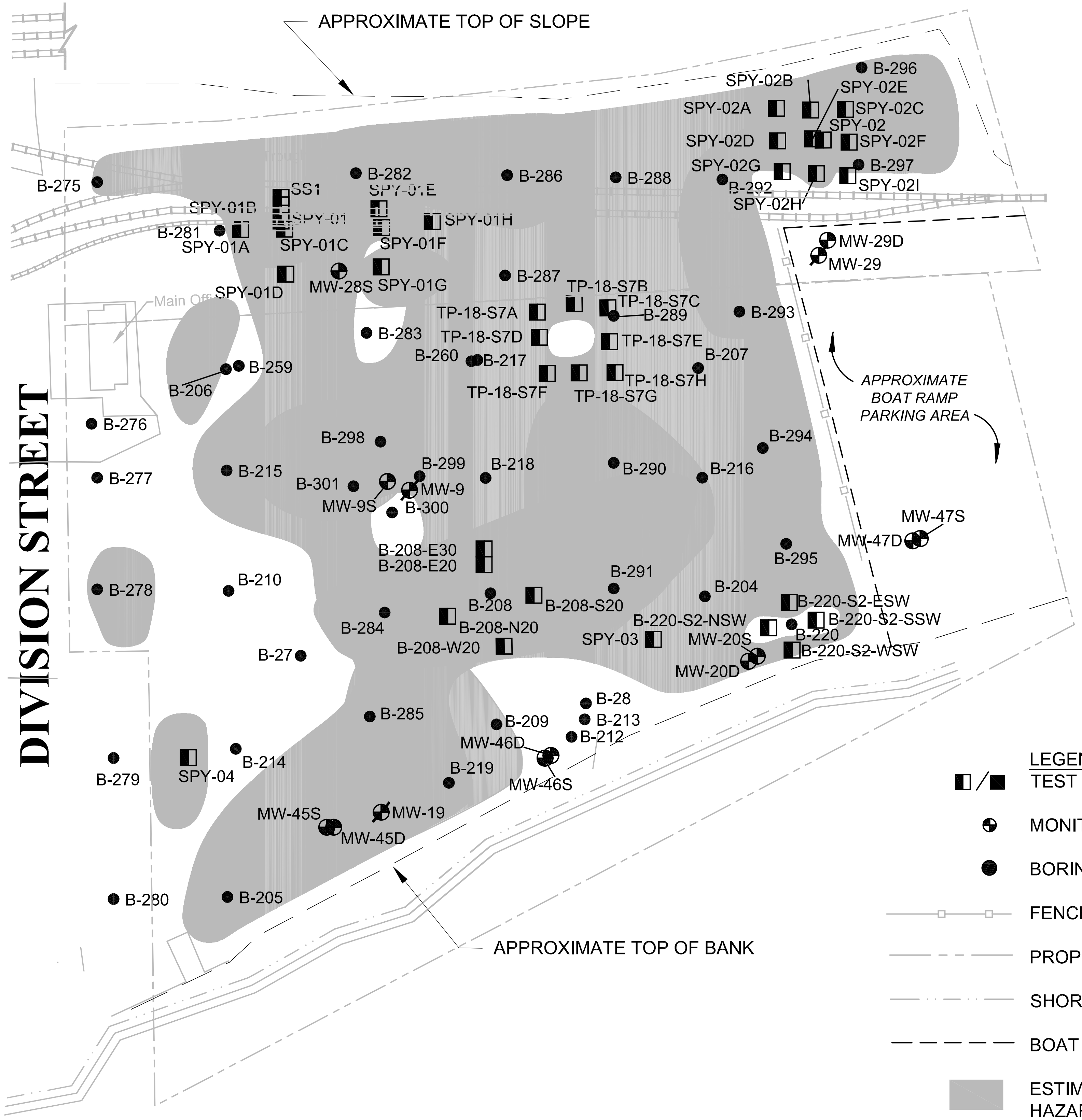
File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-09_PCP_10-15.DWG Last edited: FEB. 15, 2007 @ 09:59 a.m. by: jfisher Xrefs: 2004 sit

Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

Figure 4-10

Estimated Distribution of Indicator Hazardous Substances in Soil, 0-3 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington



LEGEND:

◧/■ TEST PIT

⊕ MONITORING WELL

● BORING

FENCELINE

PROPERTY BOUNDARY

SHORELINE

BOAT RAMP PARKING

▨ ESTIMATED DISTRIBUTION OF INDICATOR HAZARDOUS SUBSTANCES EXCEEDING RELATIVE SCREENING CRITERIA IN SOIL.

GENERAL EXPLANATION:

S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTE:

DISTRIBUTION OF INDICATOR HAZARDOUS SUBSTANCES CREATED BY OVERLAYING ESTIMATED SOIL EXCEEDANCE OF ARSENIC OF MTCA METHOD A CLEANUP LEVEL (DIRECT CONTACT PATHWAY) OF 20 MILLIGRAMS PER KILOGRAM, PENTACHLOROPHENOL OF MTCA METHOD B CLEANUP LEVEL (DIRECT CONTACT PATHWAY) OF 8,330 MICROGRAMS PER KILOGRAM (ug/kg), AND CHRYSENE OF MTCA METHOD B CLEANUP LEVEL (DIRECT CONTACT PATHWAY) OF 137 ug/kg.

N

0 100 200

FEET

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

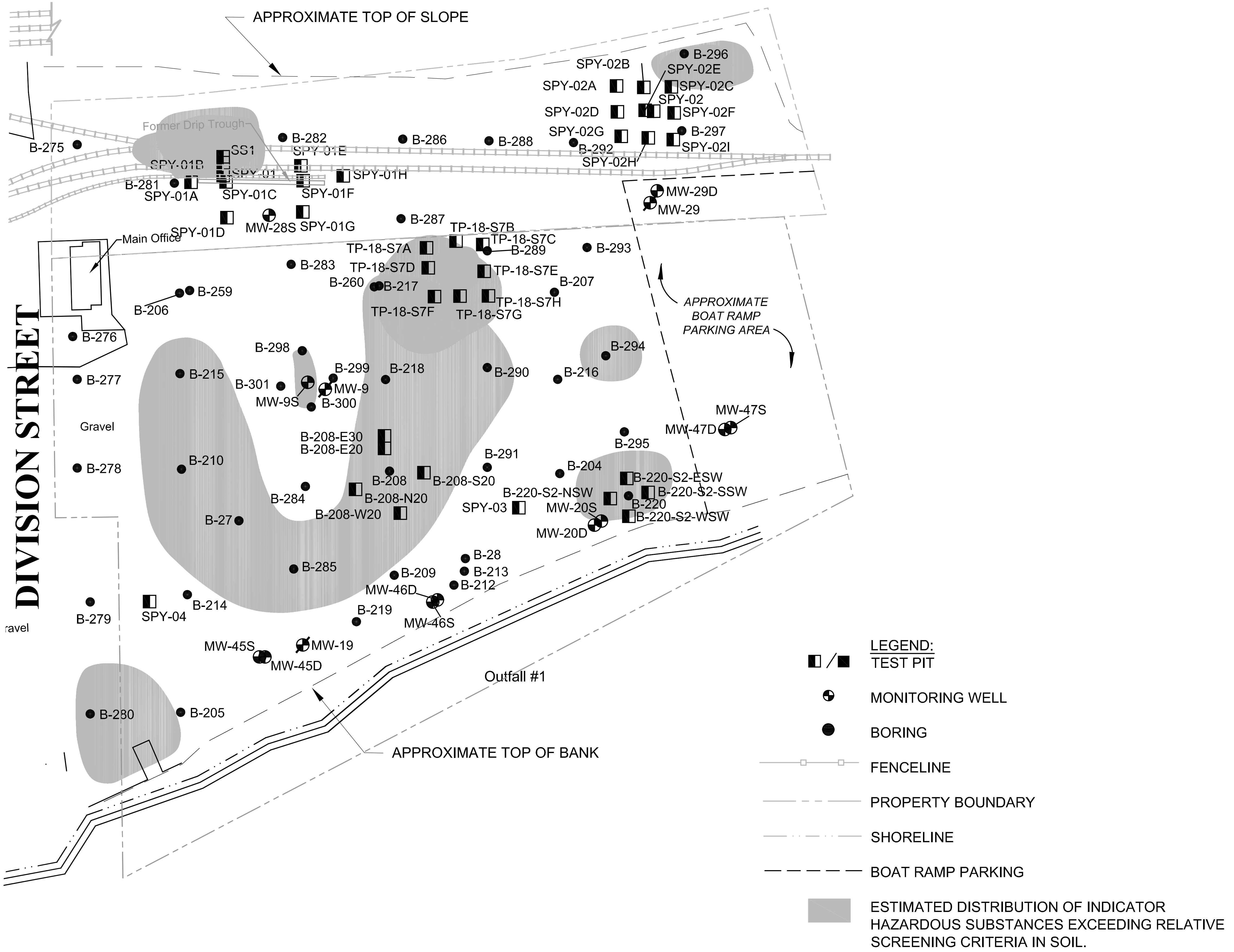
File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-10_HAZARDOUS SUBSTANCES.DWG Last edited: FEB. 15, 2007 @ 10:00 a.m. by: jfisher Xr

Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

Figure 4-11

Estimated Distribution of Indicator Hazardous Substances in Soil, 4-9 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington



GENERAL EXPLANATION:

S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTE:
DISTRIBUTION OF INDICATOR HAZARDOUS SUBSTANCES CREATED BY OVERLAYING ESTIMATED SOIL EXCEEDANCE OF ARSENIC OF MTCA METHOD A CLEANUP LEVEL (DIRECT CONTACT PATHWAY) OF 20 MILLIGRAMS PER KILOGRAM, PENTACHLOROPHENOL OF MTCA METHOD B CLEANUP LEVEL (DIRECT CONTACT PATHWAY) OF 8,330 MICROGRAMS PER KILOGRAM (ug/kg), AND CHRYSENE OF MTCA METHOD B CLEANUP LEVEL (DIRECT CONTACT PATHWAY) OF 137 ug/kg.

N

0 100 200

FEET

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-11_HAZARDOUS SUBSTANCES.DWG Last edited: FEB. 15, 2007 @ 10:05 a.m. by: jfisher Xre

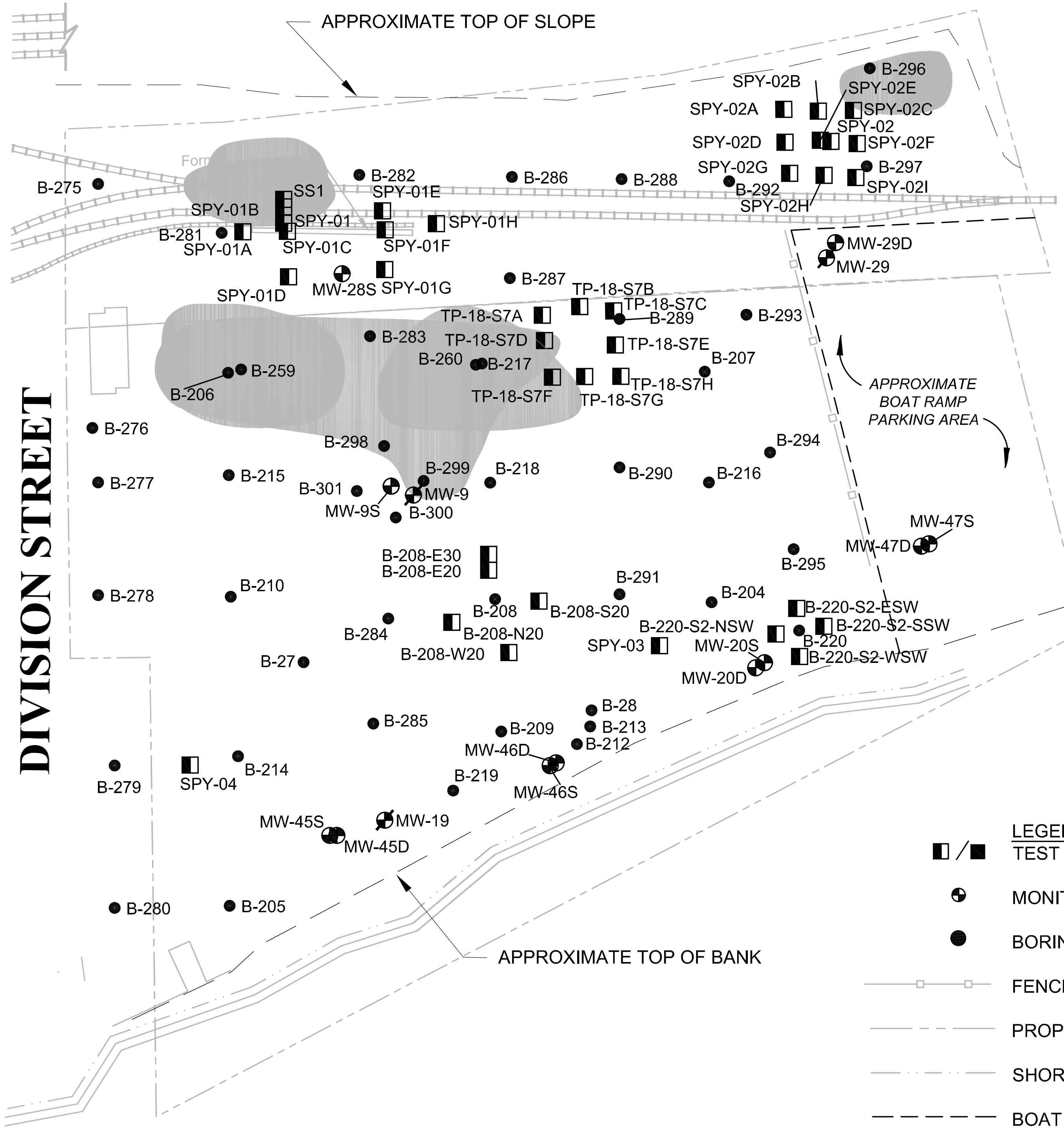
Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

File: G:\9003.01 PORT OF RIDGEFIELD\31_FINAL RI-RA REPORT-CELL 3\FIG4-12_HAZARDOUS SUBSTANCES.DWG Last edited: FEB. 15, 2007 @ 10:06 a.m. by: jfisher Xr

Figure 4-12

Estimated Distribution of Indicator Hazardous Substances in Soil, 10-15 Foot Depth Interval

Port of Ridgefield
Ridgefield, Washington



LEGEND:

◧/■ TEST PIT

◐ MONITORING WELL

● BORING

FENCELINE

PROPERTY BOUNDARY

SHORELINE

BOAT RAMP PARKING

▨ ESTIMATED DISTRIBUTION OF INDICATOR HAZARDOUS SUBSTANCES EXCEEDING RELATIVE SCREENING CRITERIA IN SOIL.

GENERAL EXPLANATION:

S = SHALLOW PORTION OF THE UPPER WATER BEARING ZONE

D = DEEP PORTION OF THE UPPER WATER BEARING ZONE

NOTE:

DISTRIBUTION OF INDICATOR HAZARDOUS SUBSTANCES CREATED BY OVERLAYING ESTIMATED SOIL EXCEEDANCE OF ARSENIC OF MTCA METHOD A CLEANUP LEVEL (DIRECT CONTACT PATHWAY) OF 20 MILLIGRAMS PER KILOGRAM, PENTACHLOROPHENOL OF MTCA METHOD B CLEANUP LEVEL (DIRECT CONTACT PATHWAY) OF 8,330 MICROGRAMS PER KILOGRAM (ug/kg), AND CHRYSENE OF MTCA METHOD B CLEANUP LEVEL (DIRECT CONTACT PATHWAY) OF 137 ug/kg.

N

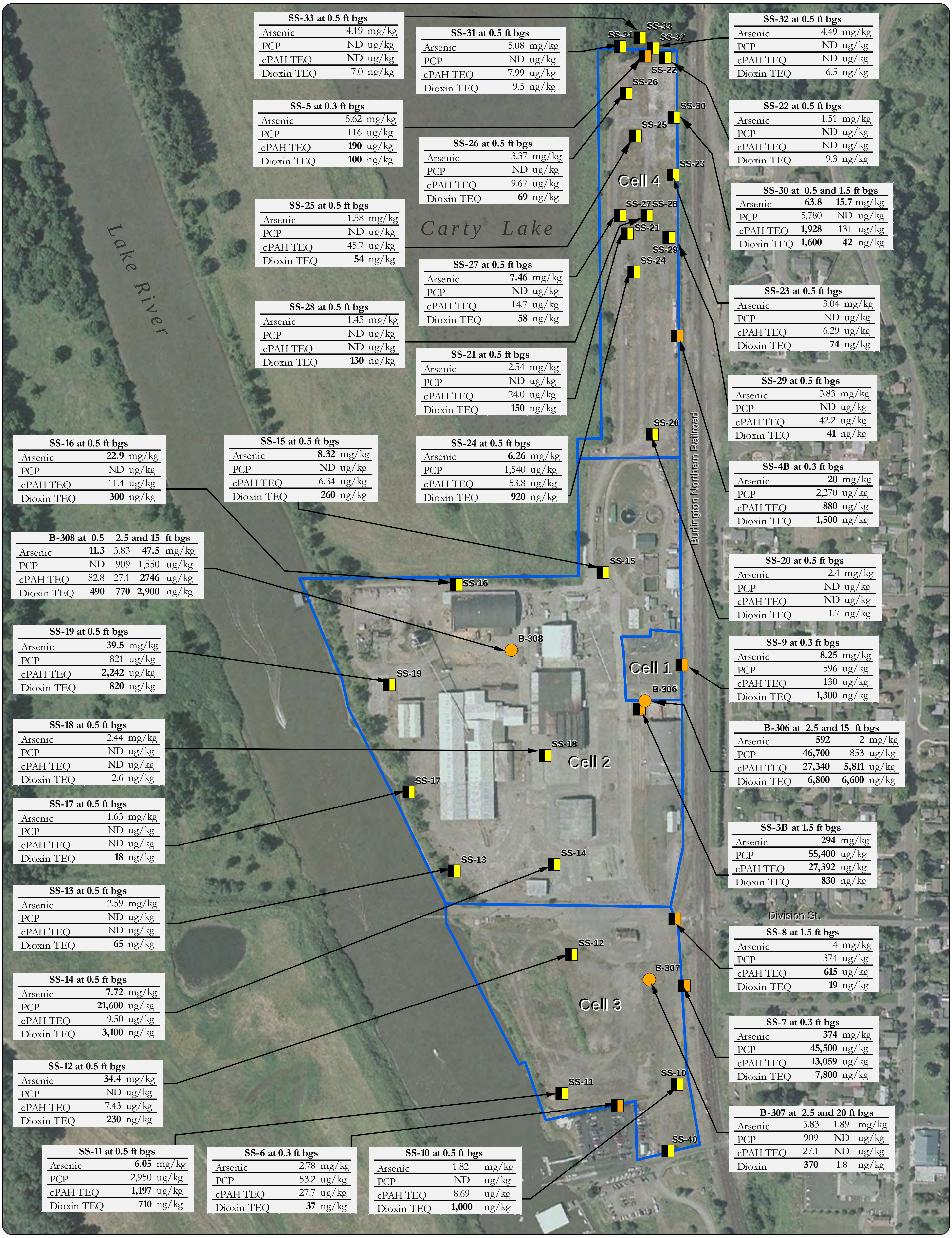
0 100 200

FEET

MAUL FOSTER ALONGI INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS
Vancouver, WA | Portland, OR | www.MFAinc.org

Layout: 1 Project: 9003.01.31 Drawn By: J. Fisher Approved By: A.Hughes

File: X:\9003.01 Port of Ridgefield\39\Projects\Fig1_Soil Samples 072008 and 072009 with Analytes



SS-33 at 0.5 ft bgs		
Arsenic	4.19	mg/kg
PCP	ND	ug/kg
cPAH TEQ	ND	ug/kg
Dioxin TEQ	7.0	ng/kg

SS-31 at 0.5 ft bgs		
Arsenic	5.08	mg/kg
PCP	ND	ug/kg
cPAH TEQ	7.99	ug/kg
Dioxin TEQ	9.5	ng/kg

SS-5 at 0.3 ft bgs		
Arsenic	5.62	mg/kg
PCP	116	ug/kg
cPAH TEQ	**190**	ug/kg
Dioxin TEQ	**100**	ng/kg

SS-26 at 0.5 ft bgs		
Arsenic	3.37	mg/kg
PCP	ND	ug/kg
cPAH TEQ	9.67	ug/kg
Dioxin TEQ	**69**	ng/kg

SS-25 at 0.5 ft bgs		
Arsenic	1.58	mg/kg
PCP	ND	ug/kg
cPAH TEQ	45.7	ug/kg
Dioxin TEQ	**54**	ng/kg

SS-27 at 0.5 ft bgs		
Arsenic	**7.46**	mg/kg
PCP	ND	ug/kg
cPAH TEQ	14.7	ug/kg
Dioxin TEQ	**58**	ng/kg

SS-28 at 0.5 ft bgs		
Arsenic	1.45	mg/kg
PCP	ND	ug/kg
cPAH TEQ	ND	ug/kg
Dioxin TEQ	**130**	ng/kg

SS-21 at 0.5 ft bgs		
Arsenic	2.54	mg/kg
PCP	ND	ug/kg
cPAH TEQ	24.0	ug/kg
Dioxin TEQ	**150**	ng/kg

SS-15 at 0.5 ft bgs		
Arsenic	**8.32**	mg/kg
PCP	ND	ug/kg
cPAH TEQ	6.34	ug/kg
Dioxin TEQ	**260**	ng/kg

SS-24 at 0.5 ft bgs		
Arsenic	**6.26**	mg/kg
PCP	1,540	ug/kg
cPAH TEQ	53.8	ug/kg
Dioxin TEQ	**920**	ng/kg

SS-32 at 0.5 ft bgs		
Arsenic	4.49	mg/kg
PCP	ND	ug/kg
cPAH TEQ	ND	ug/kg
Dioxin TEQ	6.5	ng/kg

SS-22 at 0.5 ft bgs		
Arsenic	1.51	mg/kg
PCP	ND	ug/kg
cPAH TEQ	ND	ug/kg
Dioxin TEQ	9.3	ng/kg

SS-30 at 0.5 and 1.5 ft bgs			
Arsenic	**63.8**	**15.7**	mg/kg
PCP	5,780	ND	ug/kg
cPAH TEQ	**1,928**	131	ug/kg
Dioxin TEQ	**1,600**	**42**	ng/kg

SS-23 at 0.5 ft bgs		
Arsenic	3.04	mg/kg
PCP	ND	ug/kg
cPAH TEQ	6.29	ug/kg
Dioxin TEQ	**74**	ng/kg

SS-29 at 0.5 ft bgs		
Arsenic	3.83	mg/kg
PCP	ND	ug/kg
cPAH TEQ	42.2	ug/kg
Dioxin TEQ	**41**	ng/kg

SS-4B at 0.3 ft bgs		
Arsenic	**20**	mg/kg
PCP	2,270	ug/kg
cPAH TEQ	**880**	ug/kg
Dioxin TEQ	**1,500**	ng/kg

SS-20 at 0.5 ft bgs		
Arsenic	2.4	mg/kg
PCP	ND	ug/kg
cPAH TEQ	ND	ug/kg
Dioxin TEQ	1.7	ng/kg

SS-9 at 0.3 ft bgs		
Arsenic	**8.25**	mg/kg
PCP	596	ug/kg
cPAH TEQ	130	ug/kg
Dioxin TEQ	**1,300**	ng/kg

B-306 at 2.5 and 15 ft bgs			
Arsenic	**592**	2	mg/kg
PCP	**46,700**	853	ug/kg
cPAH TEQ	**27,340**	**5,811**	ug/kg
Dioxin TEQ	**6,800**	**6,600**	ng/kg

SS-3B at 1.5 ft bgs		
Arsenic	**294**	mg/kg
PCP	**55,400**	ug/kg
cPAH TEQ	**27,392**	ug/kg
Dioxin TEQ	**830**	ng/kg

SS-8 at 1.5 ft bgs		
Arsenic	4	mg/kg
PCP	374	ug/kg
cPAH TEQ	**615**	ug/kg
Dioxin TEQ	**19**	ng/kg

SS-7 at 0.3 ft bgs		
Arsenic	**374**	mg/kg
PCP	**45,500**	ug/kg
cPAH TEQ	**13,059**	ug/kg
Dioxin TEQ	**7,800**	ng/kg

B-307 at 2.5 and 20 ft bgs			
Arsenic	3.83	1.89	mg/kg
PCP	909	ND	ug/kg
cPAH TEQ	27.1	ND	ug/kg
Dioxin	**370**	1.8	ng/kg

SS-16 at 0.5 ft bgs		
Arsenic	**22.9**	mg/kg
PCP	ND	ug/kg
cPAH TEQ	11.4	ug/kg
Dioxin TEQ	**300**	ng/kg

B-308 at	0.5	2.5 and 15		ft bgs
Arsenic	**11.3**	3.83	**47.5**	mg/kg
PCP	ND	909	1,550	ug/kg
cPAH TEQ	82.8	27.1	**2746**	ug/kg
Dioxin TEQ	**490**	**770**	**2,900**	ng/kg

SS-19 at 0.5 ft bgs		
Arsenic	**39.5**	mg/kg
PCP	821	ug/kg
cPAH TEQ	**2,242**	ug/kg
Dioxin TEQ	**820**	ng/kg

SS-18 at 0.5 ft bgs		
Arsenic	2.44	mg/kg
PCP	ND	ug/kg
cPAH TEQ	ND	ug/kg
Dioxin TEQ	2.6	ng/kg

SS-17 at 0.5 ft bgs		
Arsenic	1.63	mg/kg
PCP	ND	ug/kg
cPAH TEQ	ND	ug/kg
Dioxin TEQ	**18**	ng/kg

SS-13 at 0.5 ft bgs		
Arsenic	2.59	mg/kg
PCP	ND	ug/kg
cPAH TEQ	ND	ug/kg
Dioxin TEQ	**65**	ng/kg

SS-14 at 0.5 ft bgs		
Arsenic	**7.72**	mg/kg
PCP	**21,600**	ug/kg
cPAH TEQ	9.50	ug/kg
Dioxin TEQ	**3,100**	ng/kg

SS-12 at 0.5 ft bgs		
Arsenic	**34.4**	mg/kg
PCP	ND	ug/kg
cPAH TEQ	7.43	ug/kg
Dioxin TEQ	**230**	ng/kg

SS-11 at 0.5 ft bgs		
Arsenic	**6.05**	mg/kg
PCP	2,950	ug/kg
cPAH TEQ	**1,197**	ug/kg
Dioxin TEQ	**710**	ng/kg

SS-6 at 0.3 ft bgs		
Arsenic	2.78	mg/kg
PCP	53.2	ug/kg
cPAH TEQ	27.7	ug/kg
Dioxin TEQ	**37**	ng/kg

SS-10 at 0.5 ft bgs		
Arsenic	1.82	mg/kg
PCP	ND	ug/kg
cPAH TEQ	8.69	ug/kg
Dioxin TEQ	**1,000**	ng/kg

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online.

Notes:
1. **Bold** font shows concentrations above MTCA Level B, except for Arsenic, which is compared to natural background concentration.
2. bgs = below ground surface.
3. mg/kg = milligram per kilogram.
4. ug/kg = microgram per kilogram.
5. ng/kg = nanogram per kilogram.
6. ft = feet.
7. PCP = Pentachlorophenol.
8. cPAH = Carcinogenic Polycyclic Aromatic Hydrocarbons.
9. TEQ = Toxicity Equivalent.
10. ND = Not detected at or above method reporting limit.

Figure 1
Soil Sample Locations and Analytical Results
Port of Ridgefield
Ridgefield, Washington

Legend

◧	Surface Soil Sample July 2008
◧	Surface Soil Sample February and March 2009
▢	Cell Boundaries

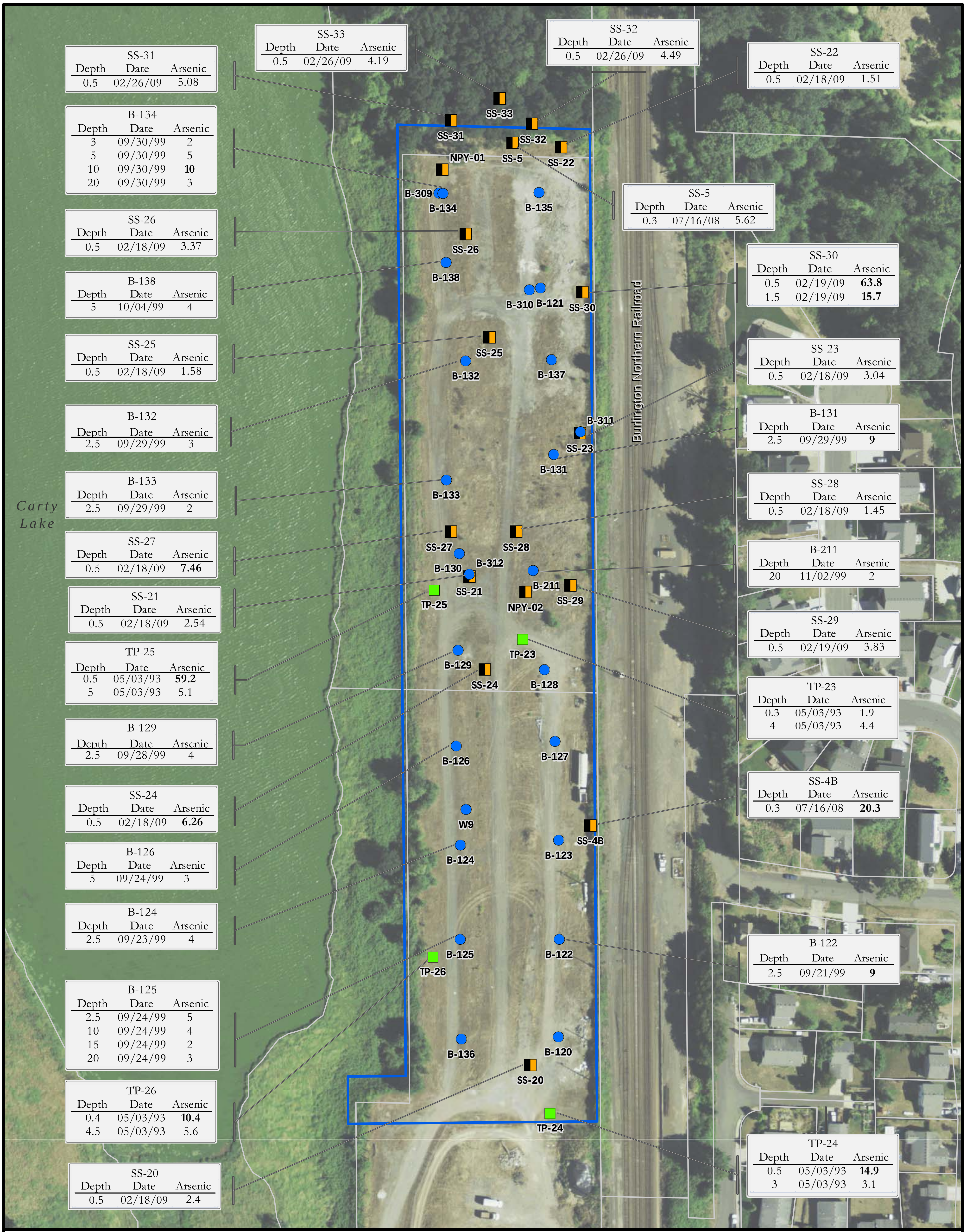
0 150 300
Feet

MAUL FOSTER ALONGI
p. 360 694 2691 | www.maulfoster.com

Print Date: 02-19-2010
Approved By: A. Hughs
Produced By: W. Coffey
Project: 9003.01.39/01

APPENDIX G-3

FIGURES 5-1 THROUGH 5-5, CELL 4



SS-31

Depth	Date	Arsenic
0.5	02/26/09	5.08

B-134

Depth	Date	Arsenic
3	09/30/99	2
5	09/30/99	5
10	09/30/99	**10**
20	09/30/99	3

SS-26

Depth	Date	Arsenic
0.5	02/18/09	3.37

B-138

Depth	Date	Arsenic
5	10/04/99	4

SS-25

Depth	Date	Arsenic
0.5	02/18/09	1.58

B-132

Depth	Date	Arsenic
2.5	09/29/99	3

B-133

Depth	Date	Arsenic
2.5	09/29/99	2

SS-27

Depth	Date	Arsenic
0.5	02/18/09	**7.46**

SS-21

Depth	Date	Arsenic
0.5	02/18/09	2.54

TP-25

Depth	Date	Arsenic
0.5	05/03/93	**59.2**
5	05/03/93	5.1

B-129

Depth	Date	Arsenic
2.5	09/28/99	4

SS-24

Depth	Date	Arsenic
0.5	02/18/09	**6.26**

B-126

Depth	Date	Arsenic
5	09/24/99	3

B-124

Depth	Date	Arsenic
2.5	09/23/99	4

B-125

Depth	Date	Arsenic
2.5	09/24/99	5
10	09/24/99	4
15	09/24/99	2
20	09/24/99	3

TP-26

Depth	Date	Arsenic
0.4	05/03/93	**10.4**
4.5	05/03/93	5.6

SS-20

Depth	Date	Arsenic
0.5	02/18/09	2.4

SS-33

Depth	Date	Arsenic
0.5	02/26/09	4.19

SS-32

Depth	Date	Arsenic
0.5	02/26/09	4.49

SS-5

Depth	Date	Arsenic
0.3	07/16/08	5.62

SS-22

Depth	Date	Arsenic
0.5	02/18/09	1.51

SS-30

Depth	Date	Arsenic
0.5	02/19/09	**63.8**
1.5	02/19/09	**15.7**

SS-23

Depth	Date	Arsenic
0.5	02/18/09	3.04

B-131

Depth	Date	Arsenic
2.5	09/29/99	**9**

SS-28

Depth	Date	Arsenic
0.5	02/18/09	1.45

B-211

Depth	Date	Arsenic
20	11/02/99	2

SS-29

Depth	Date	Arsenic
0.5	02/19/09	3.83

TP-23

Depth	Date	Arsenic
0.3	05/03/93	1.9
4	05/03/93	4.4

SS-4B

Depth	Date	Arsenic
0.3	07/16/08	**20.3**

B-122

Depth	Date	Arsenic
2.5	09/21/99	**9**

TP-24

Depth	Date	Arsenic
0.5	05/03/93	**14.9**
3	05/03/93	3.1

Legend

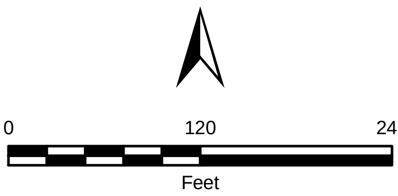
● Soil Boring
◧ Surface Soil Sample
🟩 Test Pit
□ Tax Lot Boundary
▭ Cell 4 Boundary

Figure 5-1
Distribution of Arsenic in Soil

Port of Ridgefield
Ridgefield, Washington

Notes:
1. Depth is in feet below ground surface.
2. Arsenic concentrations are in milligrams per kilogram (mg/kg). Bold font indicates exceedance of the natural background concentration of 5.81 mg/kg.

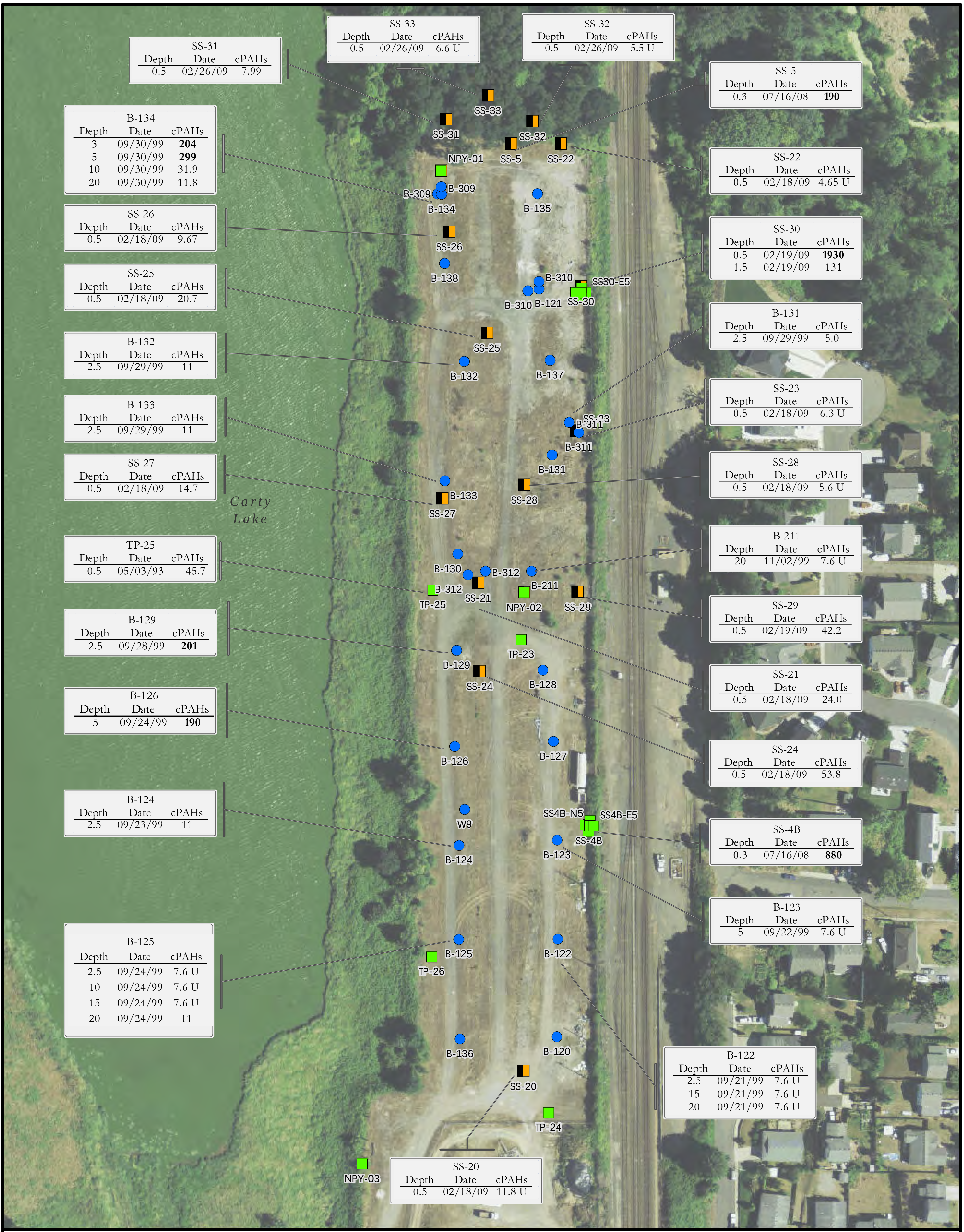
Source: Aerial photograph (2007) and tax lot data (September 2008) obtained from Clark County



MAUL FOSTER ALONGI

File: X:\9003.01 Port of Ridgefield\36\Projects\07\Cell 4\Fig5-1_Distribution of Arsenic in Soil.mxd

Project: 9003.01.36/07 Produced By: W. Coffey Approved By: A. Hughes



SS-31

Depth	Date	cPAHs
0.5	02/26/09	7.99

SS-33

Depth	Date	cPAHs
0.5	02/26/09	6.6 U

SS-32

Depth	Date	cPAHs
0.5	02/26/09	5.5 U

B-134

Depth	Date	cPAHs
3	09/30/99	**204**
5	09/30/99	**299**
10	09/30/99	31.9
20	09/30/99	11.8

SS-26

Depth	Date	cPAHs
0.5	02/18/09	9.67

SS-25

Depth	Date	cPAHs
0.5	02/18/09	20.7

B-132

Depth	Date	cPAHs
2.5	09/29/99	11

B-133

Depth	Date	cPAHs
2.5	09/29/99	11

SS-27

Depth	Date	cPAHs
0.5	02/18/09	14.7

TP-25

Depth	Date	cPAHs
0.5	05/03/93	45.7

B-129

Depth	Date	cPAHs
2.5	09/28/99	**201**

B-126

Depth	Date	cPAHs
5	09/24/99	**190**

B-124

Depth	Date	cPAHs
2.5	09/23/99	11

B-125

Depth	Date	cPAHs
2.5	09/24/99	7.6 U
10	09/24/99	7.6 U
15	09/24/99	7.6 U
20	09/24/99	11

SS-5

Depth	Date	cPAHs
0.3	07/16/08	**190**

SS-22

Depth	Date	cPAHs
0.5	02/18/09	4.65 U

SS-30

Depth	Date	cPAHs
0.5	02/19/09	**1930**
1.5	02/19/09	131

B-131

Depth	Date	cPAHs
2.5	09/29/99	5.0

SS-23

Depth	Date	cPAHs
0.5	02/18/09	6.3 U

SS-28

Depth	Date	cPAHs
0.5	02/18/09	5.6 U

B-211

Depth	Date	cPAHs
20	11/02/99	7.6 U

SS-29

Depth	Date	cPAHs
0.5	02/19/09	42.2

SS-21

Depth	Date	cPAHs
0.5	02/18/09	24.0

SS-24

Depth	Date	cPAHs
0.5	02/18/09	53.8

SS-4B

Depth	Date	cPAHs
0.3	07/16/08	**880**

B-123

Depth	Date	cPAHs
5	09/22/99	7.6 U

B-122

Depth	Date	cPAHs
2.5	09/21/99	7.6 U
15	09/21/99	7.6 U
20	09/21/99	7.6 U

SS-20

Depth	Date	cPAHs
0.5	02/18/09	11.8 U

Legend

- ● Soil Boring
- ▨ Surface Soil Sample
- 🟩 Test Pit
- ▭ Tax Lot Boundary
- ▭ Cell 4 Boundary

Notes:
1. Depth is in feet below ground surface.
2. cPAHs = carcinogenic polycyclic aromatic hydrocarbons
3. cPAH values are shown as toxicity equivalent. If no cPAHs were detected, the resulting toxicity equivalent was qualified as a non-detect ("U") value.
4. cPAH concentrations are in micrograms per kilogram (µg/kg). Bold font indicates exceedance of the MTCA Method B soil cleanup level of 140 µg/kg.

Source: Aerial photograph (2007) and
tax lot data (September 2008)
obtained from Clark County

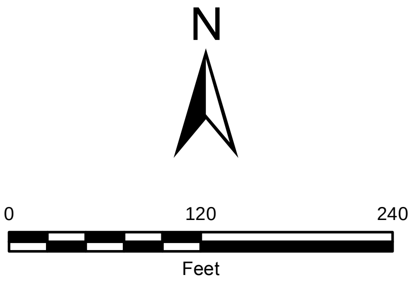


Figure 5-2
Distribution of Carcinogenic Polycyclic Aromatic Hydrocarbons in Soil

Port of Ridgefield
Ridgefield, Washington

MAUL FOSTER ALONGI

File: X:\9003.01 Port of Ridgefield\36\Projects\07\Cell 4\Fig_5-2_Distribution of cPAH in Soil.mxd

Project: 9003.01.36/07 Produced By: W. Coffey Approved By: A. Hughes

NPY-01

Depth	Date	PCP
0.5	02/06/91	2,500

B-134

Depth	Date	PCP
10	09/30/99	470
20	09/30/99	130

SS-26

Depth	Date	PCP
0.5	02/18/09	394 U

B-138

Depth	Date	PCP
2.5	10/04/99	5 U
5	10/04/99	5.4
20	10/04/99	5 U

SS-25

Depth	Date	PCP
0.5	02/18/09	395 U

B-132

Depth	Date	PCP
2.5	09/29/99	5.3
5	09/29/99	5 U
20	09/29/99	5 U

B-133

Depth	Date	PCP
2.5	09/29/99	5.1
10	09/29/99	5 U
20	09/29/99	5 U

SS-27

Depth	Date	PCP
0.5	02/18/09	356 U

B-130

Depth	Date	PCP
2.5	09/28/99	5 U
5	09/28/99	5 U
15	09/28/99	5 U

SS-21

Depth	Date	PCP
0.5	02/18/09	365 U

B-129

Depth	Date	PCP
2.5	09/28/99	34
5	09/28/99	5 U
20	09/28/99	5 U

SS-24

Depth	Date	PCP
0.5	02/18/09	1540

B-126

Depth	Date	PCP
5	09/24/99	250
10	09/24/99	5 U
15	09/24/99	5 U
20	09/24/99	5 U

W9

Depth	Date	PCP
3	02/04/91	2,500 U
8	02/04/91	2,500 U

B-124

Depth	Date	PCP
2.5	09/23/99	20
5	09/23/99	5 U
10	09/23/99	5 U

B-125

Depth	Date	PCP
2.5	09/24/99	340
5	09/24/99	5 U
10	09/24/99	22
15	09/24/99	11
20	09/24/99	9

B-136

Depth	Date	PCP
2.5	09/30/99	5 U

SS-20

Depth	Date	PCP
0.5	02/18/09	391 U

SS-31

Depth	Date	PCP
0.5	02/26/09	447 U

SS-33

Depth	Date	PCP
0.5	02/26/09	438 U

SS-32

Depth	Date	PCP
0.5	02/26/09	413 U

SS-5

Depth	Date	PCP
0.3	07/16/08	116

SS-22

Depth	Date	PCP
0.5	02/18/09	404 U

B-135

Depth	Date	PCP
2.5	09/30/99	5 U
10	09/30/99	5 U
20	09/30/99	5 U

B-121

Depth	Date	PCP
2.5	06/18/99	5 U
5	06/18/99	5 U
20	06/18/99	5 U

SS-30

Depth	Date	PCP
0.5	02/19/09	5780
1.5	02/19/09	386 U

B-137

Depth	Date	PCP
2.5	10/04/99	5 U
5	10/04/99	5 U
20	10/04/99	5 U

SS-23

Depth	Date	PCP
0.5	02/18/09	367 U

B-131

Depth	Date	PCP
2.5	09/29/99	18
5	09/29/99	5 U
20	09/29/99	5 U

SS-28

Depth	Date	PCP
0.5	02/18/09	372 U

B-211

Depth	Date	PCP
2.5	11/02/99	5 U
5	11/02/99	5 U
10	11/02/99	5 U
20	11/02/99	5.3

SS-29

Depth	Date	PCP
0.5	02/19/09	369 U

NPY-02

Depth	Date	PCP
0.5	02/06/91	8,000

TP-23

Depth	Date	PCP
0.3	05/03/93	1,100

B-128

Depth	Date	PCP
5	09/27/99	5 U
10	09/27/99	5 U
20	09/27/99	5 U

B-127

Depth	Date	PCP
2.5	09/27/99	5 U
5	09/27/99	5 U
10	09/27/99	5 U
15	09/27/99	5 U
20	09/27/99	5 U

SS-4B

Depth	Date	PCP
0.3	07/16/08	2270

B-123

Depth	Date	PCP
2.5	09/22/99	5 U
5	09/22/99	5 U
10	09/22/99	5 U
15	09/22/99	5 U
20	09/22/99	5 U

B-122

Depth	Date	PCP
2.5	09/21/99	6
15	09/21/99	5 U
20	09/21/99	5 U

TP-24

Depth	Date	PCP
0.5	05/03/93	4,400

B-120

Depth	Date	PCP
2.5	06/17/99	9
5	06/17/99	10
15	06/17/99	6

Legend

- ● Soil Boring
- ▨ Surface Soil Sample
- 🟩 Test Pit
- ▭ Tax Lot Boundary
- ▭ Cell 4 Boundary

Notes:
1. Depth is in feet below ground surface.
2. PCP = Pentachorophenol
3. PCP concentrations are in micrograms per kilogram (µg/kg). There were no exceedances of the MTCA Method B soil cleanup level of 8,300 µg/kg.

Source: Aerial photograph (2007) and tax lot data (September 2008) obtained from Clark County

N

0 120 240

Feet

Figure 5-3
Distribution of Pentachorophenol in Soil

Port of Ridgefield
Ridgefield, Washington

MAUL FOSTER ALONGI

File: X:\9003.01 Port of Ridgefield\36\Projects\07\Cell 4\Fig_5-3_Distribution of PCP in Soil.mxd

Project: 9003.01.36/07 Produced By: W. Coffey Approved By: A. Hughes

SS-33		
Depth	Date	Dioxins
0.5	02/26/09	7.0

SS-31		
Depth	Date	Dioxins
0.5	02/26/09	9.5

B-309		
Depth	Date	Dioxins
5	2/26/09	**120**

SS-26		
Depth	Date	Dioxins
0.5	02/18/09	**69**
1.5	02/18/09	**440**

SS-25		
Depth	Date	Dioxins
0.5	02/18/09	**54**
1.5	02/18/09	3.3

SS-27		
Depth	Date	Dioxins
0.5	02/18/09	**58**
1.5	02/18/09	**16**

SS-21		
Depth	Date	Dioxins
0.5	02/18/09	**150**
1.5	02/18/09	**84**

SS-24		
Depth	Date	Dioxins
0.5	02/18/09	**920**
1.5	02/18/09	**16**

SS-32		
Depth	Date	Dioxins
0.5	02/26/09	6.5

SS-22		
Depth	Date	Dioxins
0.5	02/18/09	9.3

SS-5		
Depth	Date	Dioxins
0.3	07/16/08	**100**

SS-30		
Depth	Date	Dioxins
0.5	02/19/09	**1600**
1.5	02/19/09	**42**

B-310		
Depth	Date	Dioxins
5	02/26/09	**89**

SS-23		
Depth	Date	Dioxins
0.5	02/18/09	**74**
1.5	02/18/09	4.2

SS-28		
Depth	Date	Dioxins
0.5	02/18/09	**130**
1.5	02/18/09	**400**

SS-29		
Depth	Date	Dioxins
0.5	02/19/09	**41**
1.5	02/19/09	5.5

SS-4B		
Depth	Date	Dioxins
0.3	07/16/08	**1,500**

SS-20		
Depth	Date	Dioxins
0.5	02/18/09	1.7

Legend

● Soil Boring	Tax Lot Boundary
Surface Soil Sample	▭ Cell 4 Boundary
🟩 Test Pit	

Notes:
1. Depth is in feet below ground surface.
2. Dioxin values are shown as toxicity equivalent.
3. Dioxin and furan concentrations are in nanograms per kilogram (ng/kg). **Bold** font indicates exeedance of the MTCA Method B soil cleanup level of 11 ng/kg.

Source: Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online. Tax lots from Clark County (2008).

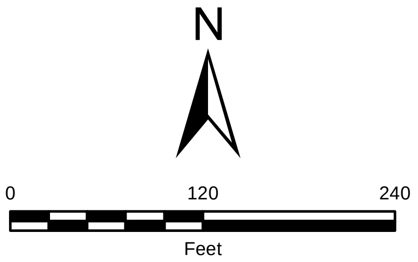


Figure 5-4
Distribution of Dioxins and Furans in soil

Port of Ridgefield
Ridgefield, Washington

MAUL FOSTER ALONGI

File: X:\9003.01 Port of Ridgefield\36\Projects\07\Cell 4\Fig_5-4_Distribution of Dioxin in Soil.mxd

Project: 9003.01.36/07 Produced By: W. Coffey Approved By: A. Hughes

Legend

○ Soil Boring

□ Surface Soil Sample

□ Test Pit

Tax Lot Boundary

□ Cell 4 Boundary

● IHS Exceedance in Surface Soil (0 to 2.5 ft bgs)

● IHS Exceedance in Surface and Subsurface Soil (0 to 10.0 ft bgs)

Notes:
1. ft bgs = feet below ground surface
2. IHS = indicator hazardous substance
3. IHS exceedances are arsenic, chromium, copper, zinc, pentachlorophenol, carcinogenic polycyclic aromatic hydrocarbons, and dioxin/furan concentrations which exceed MTCA Method B soil cleanup levels, background concentrations, and/or ecological screening levels.

Source: Aerial photograph (2007) and tax lot data (September 2008) obtained from Clark County

N

0 120 240
Feet

Figure 5-5
Indicator Hazardous Substance Exceedances in Soil in Cell 4

Port of Ridgefield
Ridgefield, Washington

MAUL FOSTER ALONGI

File: X:\9003.01 Port of Ridgefield\36\07\Projects\Cell 4\Fig5-5_Indicator Hazardous Substance Exceedances in Soil in Cell 4.mxd

Project: 9003.01.36/07 Produced By: Hines Approved By: A. Hughes

APPENDIX H

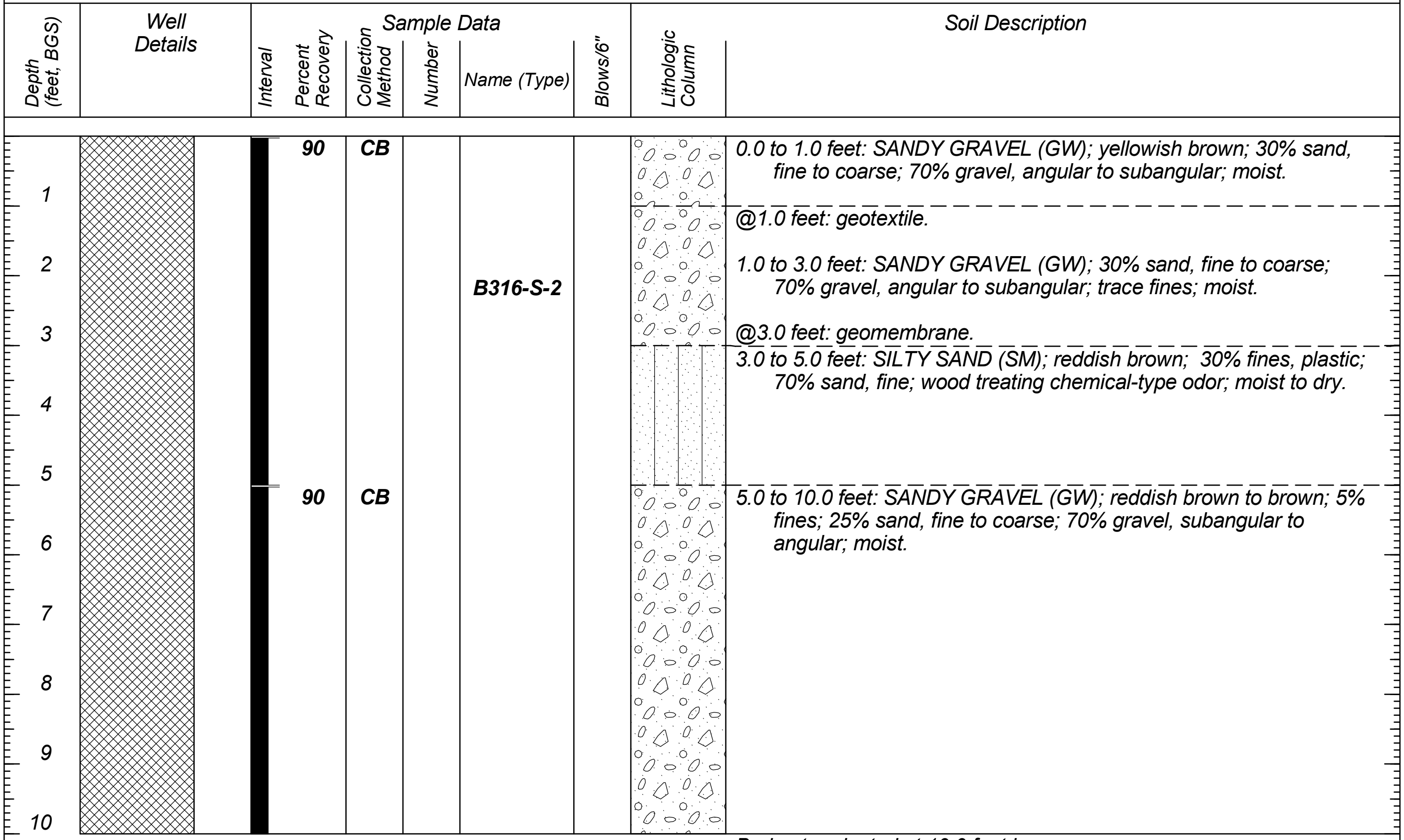
SER SOIL BORING LOGS

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
9003.01.29	**B-316**	**1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	
Project Location	**Ridgefield, WA**	Surface Elevation (feet)	
Start/End Date	**11/17/11 to 11/17/11**	Northing	
Driller/Equipment	**Major Drilling/Rotosonic**	Easting	
Geologist/Engineer	**K. Gallagher**	Hole Depth	**10.0-feet**
Sample Method		Outer Hole Diam	**6-inch**



Depth (feet, BGS)	Well Details	Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
0–1			**90**	**CB**					0.0 to 1.0 feet: SANDY GRAVEL (GW); yellowish brown; 30% sand, fine to coarse; 70% gravel, angular to subangular; moist.
1–3						**B316-S-2**			@1.0 feet: geotextile. 1.0 to 3.0 feet: SANDY GRAVEL (GW); 30% sand, fine to coarse; 70% gravel, angular to subangular; trace fines; moist. @3.0 feet: geomembrane.
3–5									3.0 to 5.0 feet: SILTY SAND (SM); reddish brown; 30% fines, plastic; 70% sand, fine; wood treating chemical-type odor; moist to dry.
5–10			**90**	**CB**					5.0 to 10.0 feet: SANDY GRAVEL (GW); reddish brown to brown; 5% fines; 25% sand, fine to coarse; 70% gravel, subangular to angular; moist.

Boring terminated at 10.0 feet bgs.

NOTES: (1) bgs - below ground surface.
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Composite sample collected from a range of 1 feet bgs to 3 feet bgs.

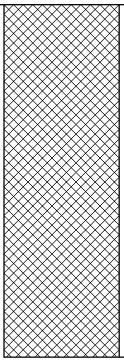
Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

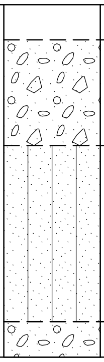
Project Number	Well Number	Sheet
9003.01.29	**B-317**	**1 of 1**

Project Name	**Port of Ridgefield**
Project Location	**Ridgefield, WA**
Start/End Date	**11/17/11 to 11/17/11**
Driller/Equipment	**Major Drilling/Rotosonic**
Geologist/Engineer	**K. Gallagher**
Sample Method	

TOC Elevation (feet)	
Surface Elevation (feet)	
Northing	
Easting	
Hole Depth	**5.0-feet**
Outer Hole Diam	**6-inch**



Depth (feet, BGS)	Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"
0–5	■	**100**	**CB**		**B317-S-1.25**	



Lithologic Column / Soil Description

0.0 to 0.5 feet: no description recorded.

0.5 to 2.0 feet: SANDY GRAVEL (GW); 30% sand; 70% gravel; wood preserving chemical-like odor.

2.0 to 4.5 feet: SILTY SAND (SM); reddish brown; 30% fines; 70% sand, fine; wood treating chemical-like odor; dry.

4.5 to 5.0 feet: SANDY GRAVEL (GW); 30% sand; 70% gravel; wood treating chemical-like odor; dry.

Boring terminated at 5.0 feet bgs.

NOTES: (1) bgs - below ground surface.
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Composite sample collected at from a range of 0.5 feet bgs to 2.0 feet bgs.

Maul Foster & Alongi, Inc.	**Geologic Borehole Log/Well Construction**		
	Project Number **9003.01.29**	Well Number **B-318**	Sheet **1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	
Project Location	**Ridgefield, WA**	Surface Elevation (feet)	
Start/End Date	**11/17/11 to 11/17/11**	Northing	
Driller/Equipment	**Major Drilling/Rotosonic**	Easting	
Geologist/Engineer	**K. Gallagher**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**6-inch**

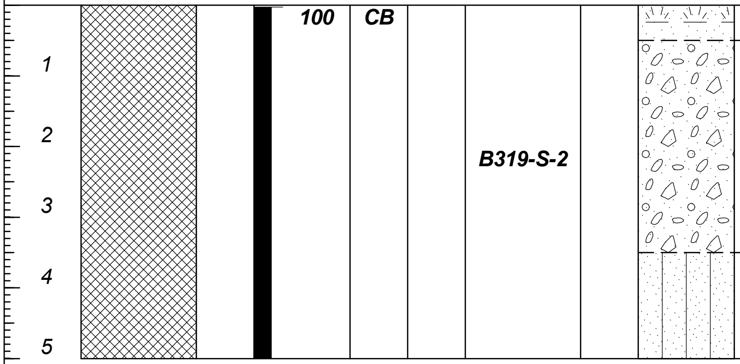
Depth (feet, BGS)	Well Details	Sample Data						Lithologic Column	Soil Description
		Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"		
0–0.5	▨	■	**85**	**CB**				○	0.0 to 0.5 feet: SANDY GRAVEL (GW); brown; 30% sand; 70% gravel.
1	▨	■						○	0.5 to 3.0 feet: SANDY GRAVEL (GW); grayish dark brown; 30% sand; 70% gravel; trace fines; moist.
2	▨	■				**B318-S-1.75**		○	
3	▨	■						░	3.0 to 5.0 feet: SILTY SAND (SM); reddish brown; 30% fines; 70% sand, fine; slight wood treating chemical-like odor; moist.
4	▨	■						░	
5	▨	■						░	

Boring terminated at 5.0 feet bgs.

NOTES: (1) bgs - below ground surface.
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Composite sample collected from a range of 0.5 feet bgs to 3.0 feet bgs.

Maul Foster & Alongi, Inc.	**Geologic Borehole Log/Well Construction**		
	Project Number **9003.01.29**	Well Number **B-319**	Sheet **1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	
Project Location	**Ridgefield, WA**	Surface Elevation (feet)	
Start/End Date	**11/17/11 to 11/17/11**	Northing	
Driller/Equipment	**Major Drilling/Rotosonic**	Easting	
Geologist/Engineer	**K. Gallagher**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**6-inch**



Depth (feet, BGS)	Well Details	Sample Data: Interval	Sample Data: Percent Recovery	Sample Data: Collection Method	Sample Data: Number	Sample Data: Name (Type)	Sample Data: Blows/6"	Lithologic Column	Soil Description
0.0–0.5			**100**	**CB**					0.0 to 0.5 feet: TOPSOIL; dark brown.
0.5–3.5						**B319-S-2**			0.5 to 3.5 feet: SANDY GRAVEL with SILT (GW); dark brown; 25% fines; 25% sand; 50% gravel; moist.
3.5–5.0									3.5 to 5.0 feet: SILTY SAND (SM); dark brown; 30% fines; 70% sand; moist.

Boring terminated at 5.0 feet bgs.

NOTES: (1) bgs - below ground surface.
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Composite sample collected from a range of 0.5 feet bgs to 3.5 feet bgs.

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
9003.01.29	**B-320**	**1 of 1**

Project Name **Port of Ridgefield**
Project Location **Ridgefield, WA**
Start/End Date **11/17/11 to 11/17/11**
Driller/Equipment **Major Drilling/Rotosonic**
Geologist/Engineer **K. Gallagher**
Sample Method

TOC Elevation (feet)
Surface Elevation (feet)
Northing
Easting
Hole Depth **4.5-feet**
Outer Hole Diam **6-inch**

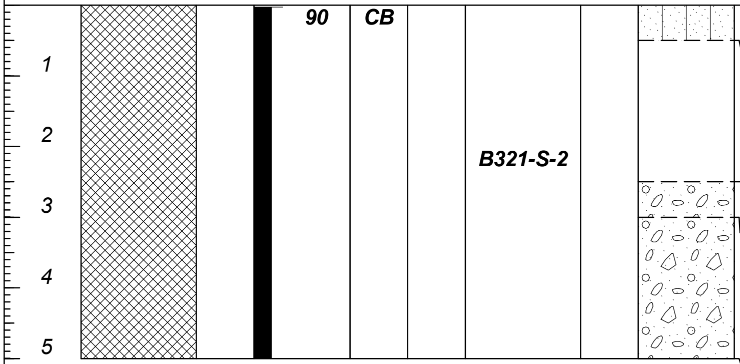
Depth (feet, BGS)	Well Details	Sample Data: Interval	Sample Data: Percent Recovery	Sample Data: Collection Method	Sample Data: Number	Sample Data: Name (Type)	Sample Data: Blows/6"	Lithologic Column	Soil Description
			100	**CB**					0.0 to 35 feet: SANDY GRAVEL (GW); brown; 30% sand; 70% gravel; moist.
1									@1.0 feet: transitions to dark brownish gray.
2									
3						**B320-S-2.25**			
									@3.5 feet: geomembrane.
4									3.5 to 4.5 feet: SILTY SAND (SM); dark gray; 30% fines; 70% sand; damp.

Boring terminated at 4.5 feet bgs.
One additional boring was attempted in adjacent location with refusal at 1.5 feet bgs.

NOTES: (1) bgs - below ground surface.
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Composite sample collected from a range of 1.0 feet bgs to 3.5 feet bgs.

Maul Foster & Alongi, Inc.	**Geologic Borehole Log/Well Construction**		
	Project Number ***9003.01.29***	*Well Number* ***B-321***	*Sheet* ***1 of 1***

Project Name	***Port of Ridgefield***	*TOC Elevation (feet)*	
Project Location	***Ridgefield, WA***	*Surface Elevation (feet)*	
Start/End Date	***11/17/11 to 11/17/11***	*Northing*	
Driller/Equipment	***Major Drilling/Rotosonic***	*Easting*	
Geologist/Engineer	***K. Gallagher***	*Hole Depth*	***5.0-feet***
Sample Method		*Outer Hole Diam*	***6-inch***



Depth (feet, BGS)	Well Details	Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
			90	**CB**					0.0 to 0.5 feet: SILTY SAND (SM); brown; 5% fines; 95% sand, fine; woody debris; wood treating chemical-like odor.
1									0.5 to 2.5 feet: no recovery
2						**B321-S-2**			
3									2.5 to 3.0 feet: SANDY SILTY GRAVEL (GW); dark brown to black; 5% fines; 25% sand, fine to coarse; 70% gravel, angular to subangular; strong wood treating chemical-like odor; sheen; saturated with product; moist.
4									3.0 to 5.0 feet: SANDY SILTY GRAVEL (GW); grayish brown; 5% fines; 25% sand, fine to coarse; 70% gravel, angular to subangular; moist. @3.5 feet: becomes reddish brown to grayish brown.
5									Boring terminated at 5.0 feet bgs.

NOTES: (1) bgs - below ground surface.
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Grab sample collected at 2.0 feet bgs.

Maul Foster & Alongi, Inc.	**Geologic Borehole Log/Well Construction**		
	Project Number	*Well Number*	*Sheet*
	9003.01.29	***B-322***	***1 of 1***

Project Name	***Port of Ridgefield***	*TOC Elevation (feet)*	
Project Location	***Ridgefield, WA***	*Surface Elevation (feet)*	
Start/End Date	***11/17/11 to 11/17/11***	*Northing*	
Driller/Equipment	***Major Drilling/Rotosonic***	*Easting*	
Geologist/Engineer	***K. Gallagher***	*Hole Depth*	***4.5-feet***
Sample Method		*Outer Hole Diam*	***6-inch***

Depth (feet, BGS)	*Well Details*	*Sample Data: Interval*	*Percent Recovery*	*Collection Method*	*Number*	*Name (Type)*	*Blows/6"*	*Lithologic Column*	*Soil Description*
	▨	■	***90***	***CB***					*0.0 to 0.5 feet: SANDY GRAVEL (GW); brown; 30% sand, fine to coarse; 70% gravel, fine; trace fines; moist.*
1	▨	■							*0.5 to 1.5 feet: SANDY GRAVEL (GW); brown; 30% sand; 70% gravel, angular to subangular; slight wood treating chemical-like odor; wet.*
2	▨	■							*@0.5 feet: geotextile*
	▨	■							*1.5 to 4.5 feet: SANDY SILTY GRAVEL (GW); brown; 25% fines; 25% sand, fine to coarse; 50% gravel, subround; moist.*
3	▨	■				***B322-S-2.5***			*@1.5 feet: geomembrane*
4	▨	■							*@4.0 feet: becomes gray*

Boring terminated at 4.5 feet bgs.

NOTES: *(1) bgs - below ground surface.*
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Grab sample collected at 2.5 feet bgs.

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
9003.01.29	**B-323**	**1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	
Project Location	**Ridgefield, WA**	Surface Elevation (feet)	
Start/End Date	**11/17/11 to 11/17/11**	Northing	
Driller/Equipment	**Major Drilling/Rotosonic**	Easting	
Geologist/Engineer	**K. Gallagher**	Hole Depth	**3.0-feet**
Sample Method		Outer Hole Diam	**6-inch**

Depth (feet, BGS)	Well Details	Sample Data						Lithologic Column	Soil Description
		Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"		
1	▨	■	**100**	**CB**		**B323-S-1**			0.0 to 1.0 feet: SANDY GRAVEL (GW); dark brown; 30% sand; 70% gravel; trace fines; moist.
2 3	▨	■							1.0 to 3.0 feet: SANDY GRAVEL with SILT (GW); dark brown; 20% fines; 30% sand; 50% gravel, subangular; wood treating chemical-like odor; moist.

Boring terminated at 3.0 feet bgs.

NOTES: (1) bgs - below ground surface.
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Grab sample collected at 1.0 feet bgs.

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
9003.01.29	**B-324**	**1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	
Project Location	**Ridgefield, WA**	Surface Elevation (feet)	
Start/End Date	**11/17/11 to 11/17/11**	Northing	
Driller/Equipment	**Major Drilling/Rotosonic**	Easting	
Geologist/Engineer	**K. Gallagher**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**6-inch**

Depth (feet, BGS)	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Soil Description
0	**100**	**CB**				0.0 to 0.5 feet: TOPSOIL.
1				**B324-S-0.5**		0.5 to 3.0 feet: SANDY GRAVEL (GW); dark brown; 40% sand; 60% gravel; trace fines; moist.
2						
3						3.0 to 5.0 feet: SILTY SAND (SM); dark brown; 30% fines; 70% sand, fine to medium.
4						
5						

Boring terminated at 5.0 feet bgs.

NOTES:
(1) bgs - below ground surface.
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Grab sample collected at 0.5 feet bgs.

Maul Foster & Alongi, Inc.	Geologic Borehole Log/Well Construction		
	Project Number	Well Number	Sheet
	9003.01.29	**B-325**	**1 of 1**

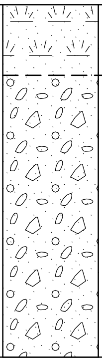
Project Name	**Port of Ridgefield**	TOC Elevation (feet)	
Project Location	**Ridgefield, WA**	Surface Elevation (feet)	
Start/End Date	**11/17/11 to 11/17/11**	Northing	
Driller/Equipment	**Major Drilling/Rotosonic**	Easting	
Geologist/Engineer	**K. Gallagher**	Hole Depth	**15.0-feet**
Sample Method		Outer Hole Diam	**6-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
0			**70**	**CB**					0.0 to 2.0 feet: SANDY GRAVEL (GW); 30% sand, fine to coarse; 70% gravel, subangular.
2									2.0 to 3.0 feet: GRAVELLY SAND (SW); 70% sand, fine to coarse; 30% gravel; some fines.
3									3.0 to 5.5 feet: No recovery, void space.
5			**70**	**CB**					
5.5									5.5 to 8.0 feet: GRAVELLY SAND (SW); 70% sand, fine to coarse; 30% gravel; some fines.
8									8.0 to 15.0 feet: SILTY SAND (SM); reddish brown to brown; 30% fines; 70% sand; moist.
8.5						**B325-S-8.5**			
10			**70**	**CB**		**B325-S-10**			
15									Boring terminated at 15.0 feet bgs.

NOTES: (1) bgs - below ground surface.
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Grab samples collected at 8.5 feet bgs and 10 feet bgs.

Maul Foster & Alongi, Inc.	**Geologic Borehole Log/Well Construction**		
	Project Number **9003.01.29**	Well Number **B-326**	Sheet **1 of 1**

Project Name	**Port of Ridgefield**	TOC Elevation (feet)	
Project Location	**Ridgefield, WA**	Surface Elevation (feet)	
Start/End Date	**11/17/11 to 11/17/11**	Northing	
Driller/Equipment	**Major Drilling/Rotosonic**	Easting	
Geologist/Engineer	**K. Gallagher**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**6-inch**



Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
			100	**CB**		**B326-S-4.5**			0.0 to 1.0 feet: TOPSOIL; dark brown; trace gravel; wood pieces; wood treating chemical-like odor.
1									1.0 to 5.0 feet: SANDY SILTY GRAVEL (GW); dark grayish brown; 20% fines; 20% sand; 60% gravel; wood pieces; wood treating chemical-like odor; moist.
2									
3									
4									
5									

Boring terminated at 5.0 feet bgs.

NOTES: (1) bgs - below ground surface.
(2) Borehole abandoned with bentonite chips hydrated with potable water.
(3) Grab sample collected at 4.5 feet bgs.

APPENDIX I

GROUNDWATER TREND PLOTS

APPENDIX I GROUNDWATER TREND PLOTS
CONTENTS

The figures in this appendix have been pulled from other reports previously submitted to and approved by the Washington State Department of Ecology. This appendix summarizes groundwater trend plots. Appendix I-1 contains trend plots for Cells 1 and 2 plume monitoring wells in the UWBZ. Appendix I-2 contains trend plots for Cell 3 plume monitoring wells.

FIGURES

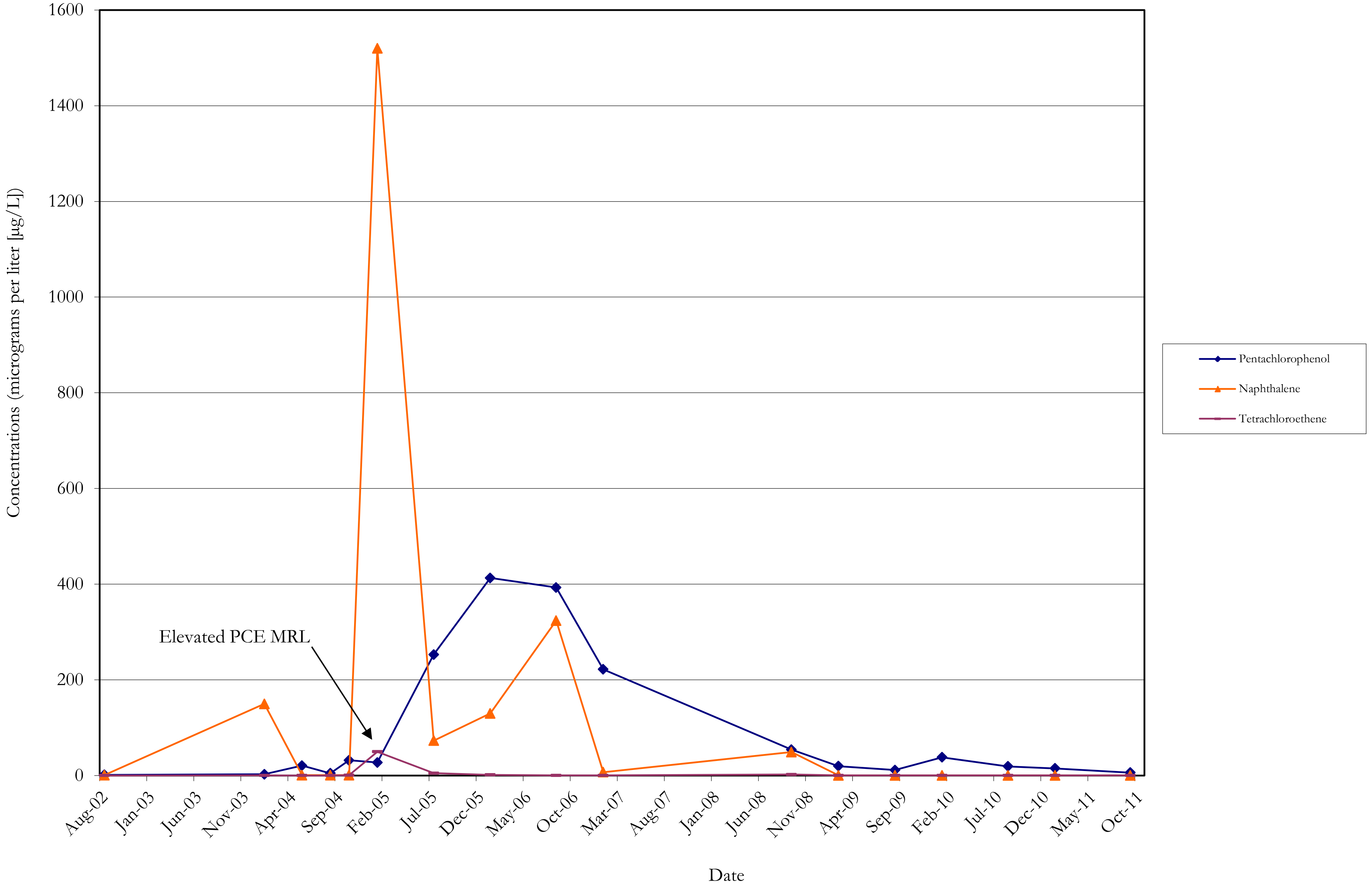
CELLS 1 AND 2

CELL 3

APPENDIX I-1

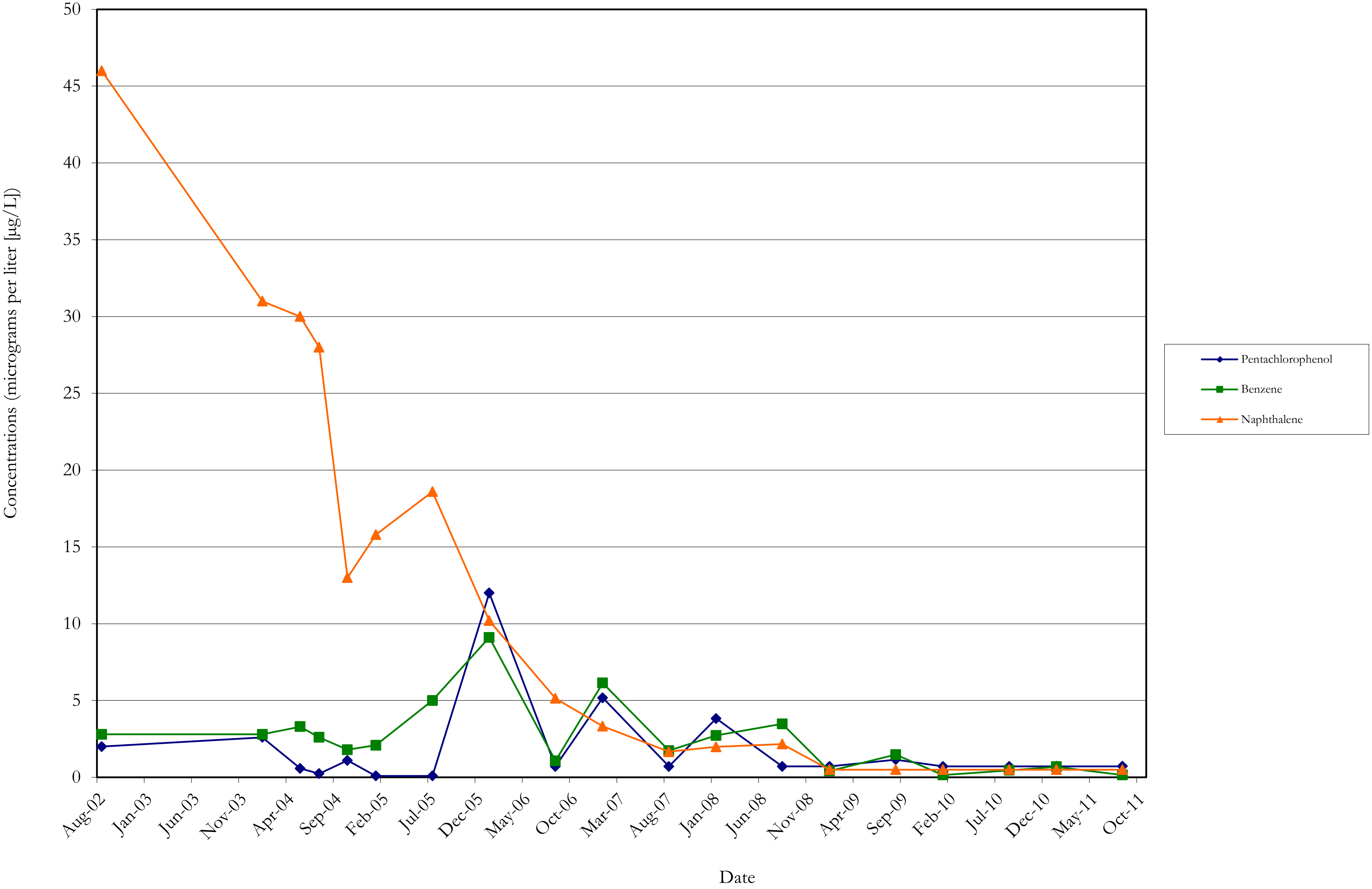
CELLS 1 AND 2 PLUME

Figure I-1-1. Indicator Hazardous Substance Trends in MW-7 in the Upper Water-Bearing Zone
Former PWT Site RI/FS



Note: Benzene was not graphed for MW-7 because it has not been detected at or above the method reporting limits.

Figure I-1-2. Indicator Hazardous Substance Trends in MW-16 in the Upper Water-Bearing Zone
Former PWT Site RI/FS



Note: Tetrachloroethene was not graphed for MW-16 because it has not been detected at or above the method reporting limits.

Figure I-1-3. Indicator Hazardous Substance Trends in MW-21 in the Upper Water-Bearing Zone
Former PWT Site RI/FS

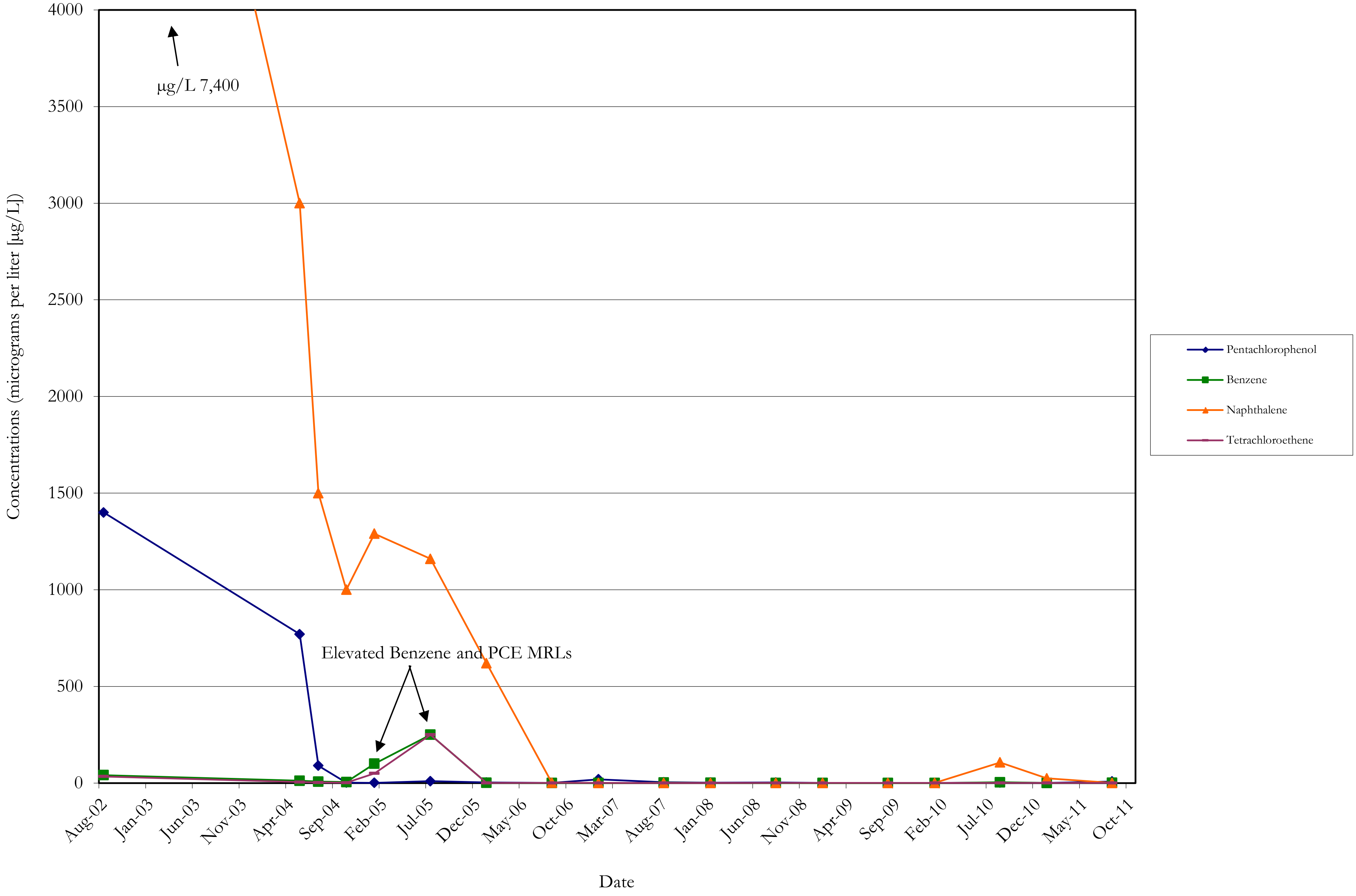


Figure I-1-4. Indicator Hazardous Substance Trends in MW-38 in the Upper Water-Bearing Zone
Former PWT Site RI/FS

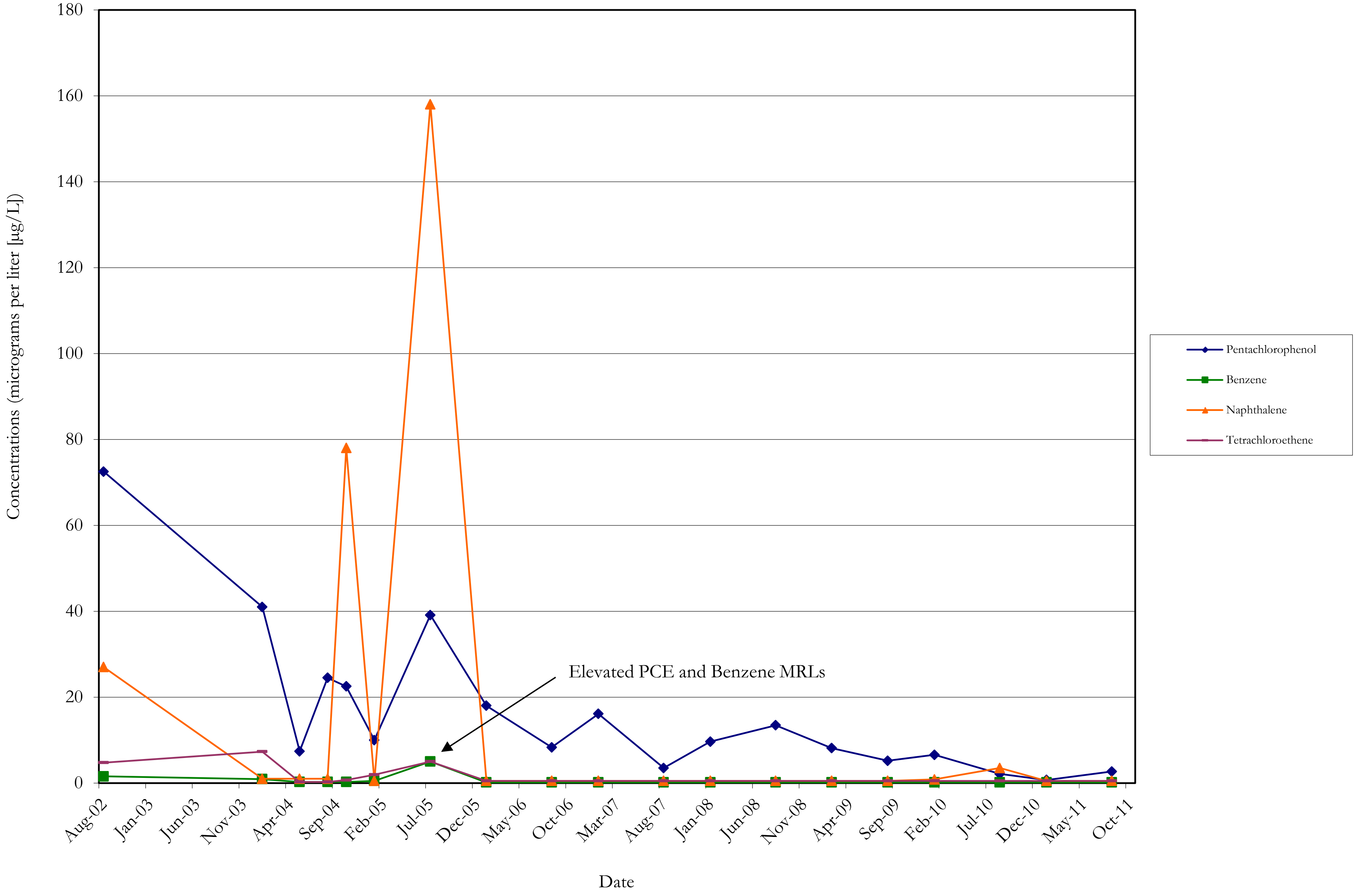
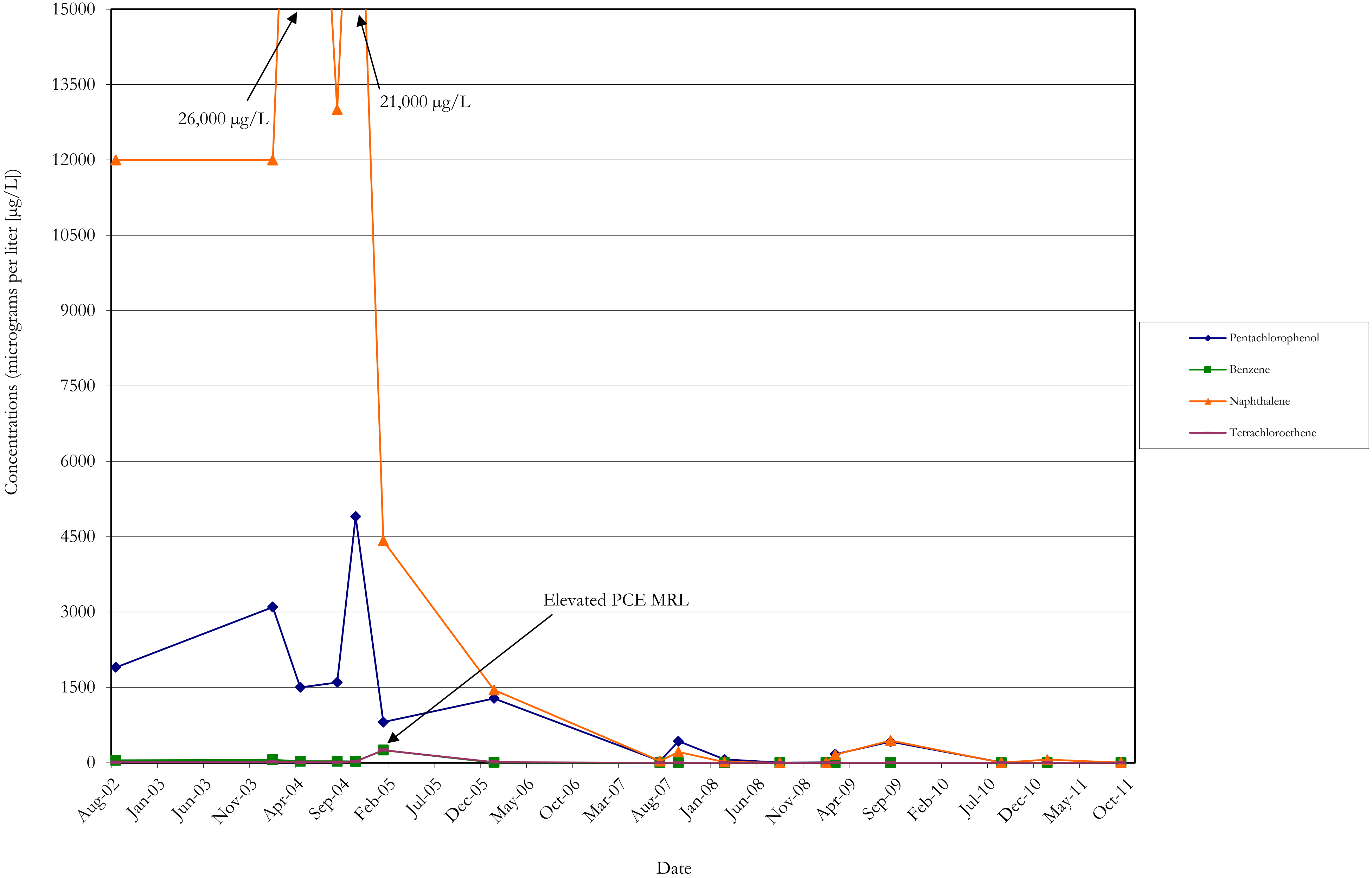
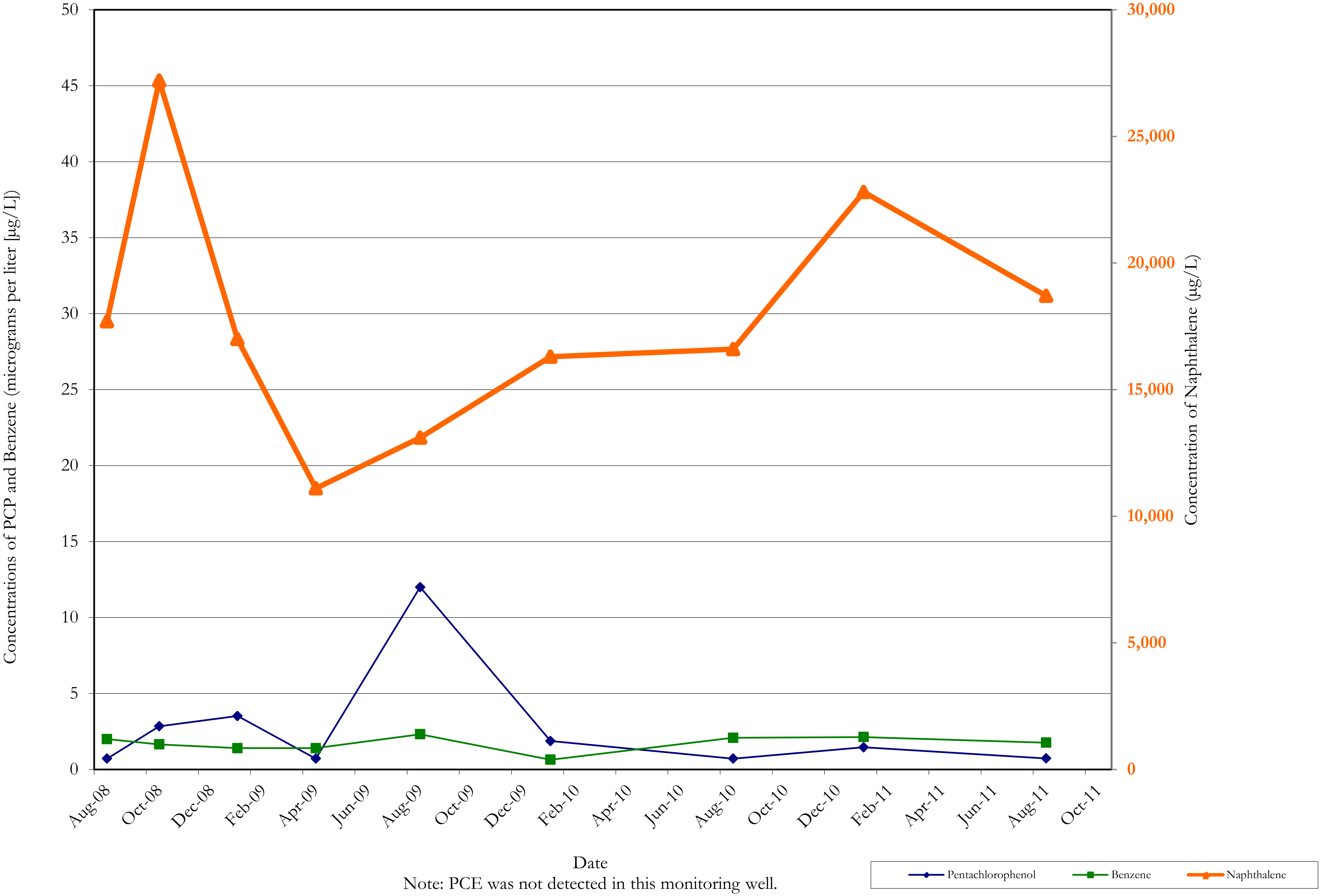


Figure I-1-5. Indicator Hazardous Substance Trends in MW-44 in the Upper Water-Bearing Zone
Former PWT Site RI/FS



Note: In January 2006, benzene was not detected, but the method reporting limit was elevated because of interference.

Figure I-1-6. Indicator Hazardous Substance Trends in MW-57S in the Upper Water-Bearing Zone
Former PWT Site RI/FS



Note: PCE was not detected in this monitoring well.

Figure I-1-7. Indicator Hazardous Substance Trends in MW-57D in the Upper Water-Bearing Zone
Former PWT Site RI/FS

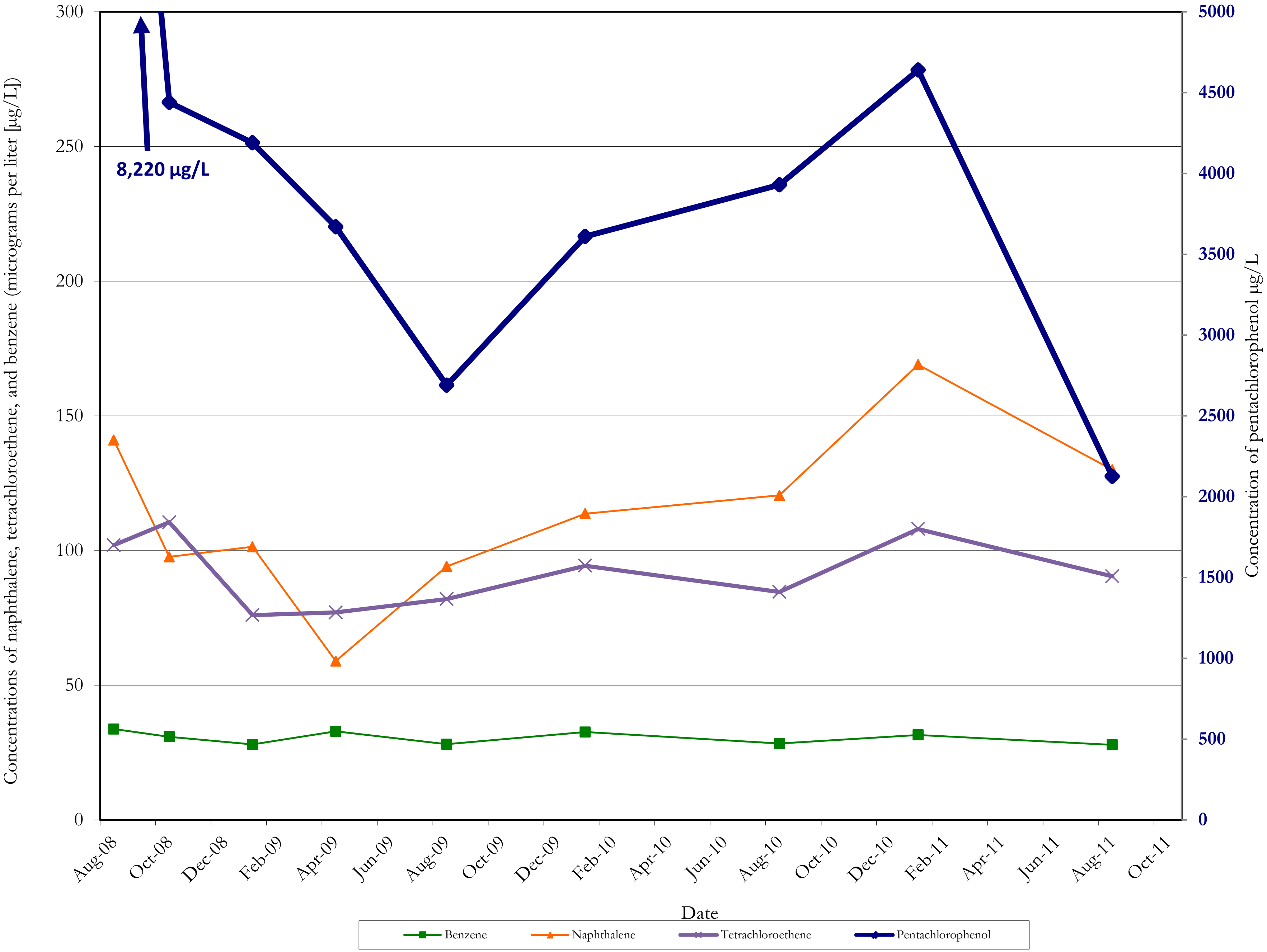


Figure I-1-8. Indicator Hazardous Substance Trends in USDFW-1 in the Upper Water-Bearing Zone
Former PWT Site RI/FS

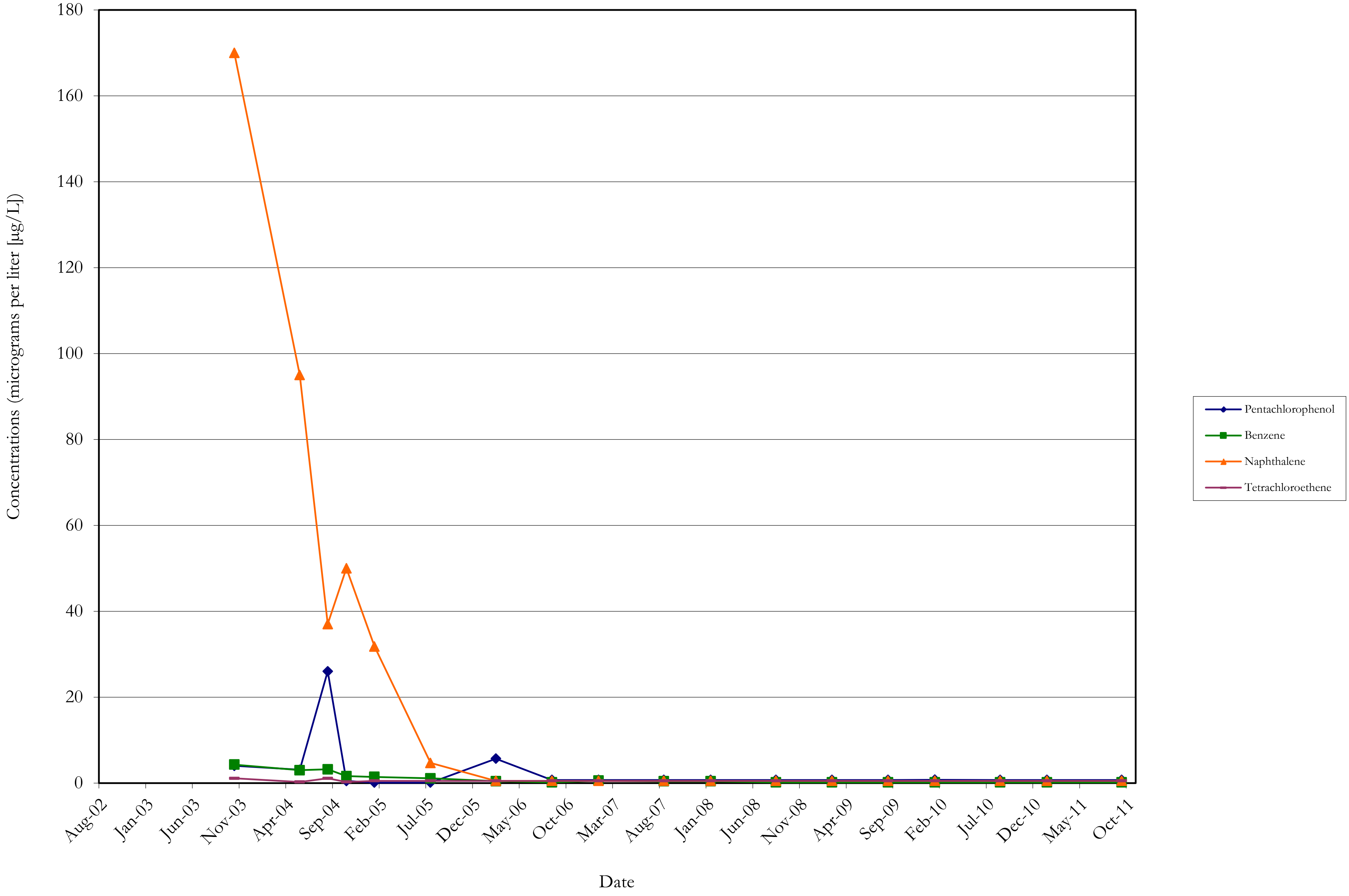
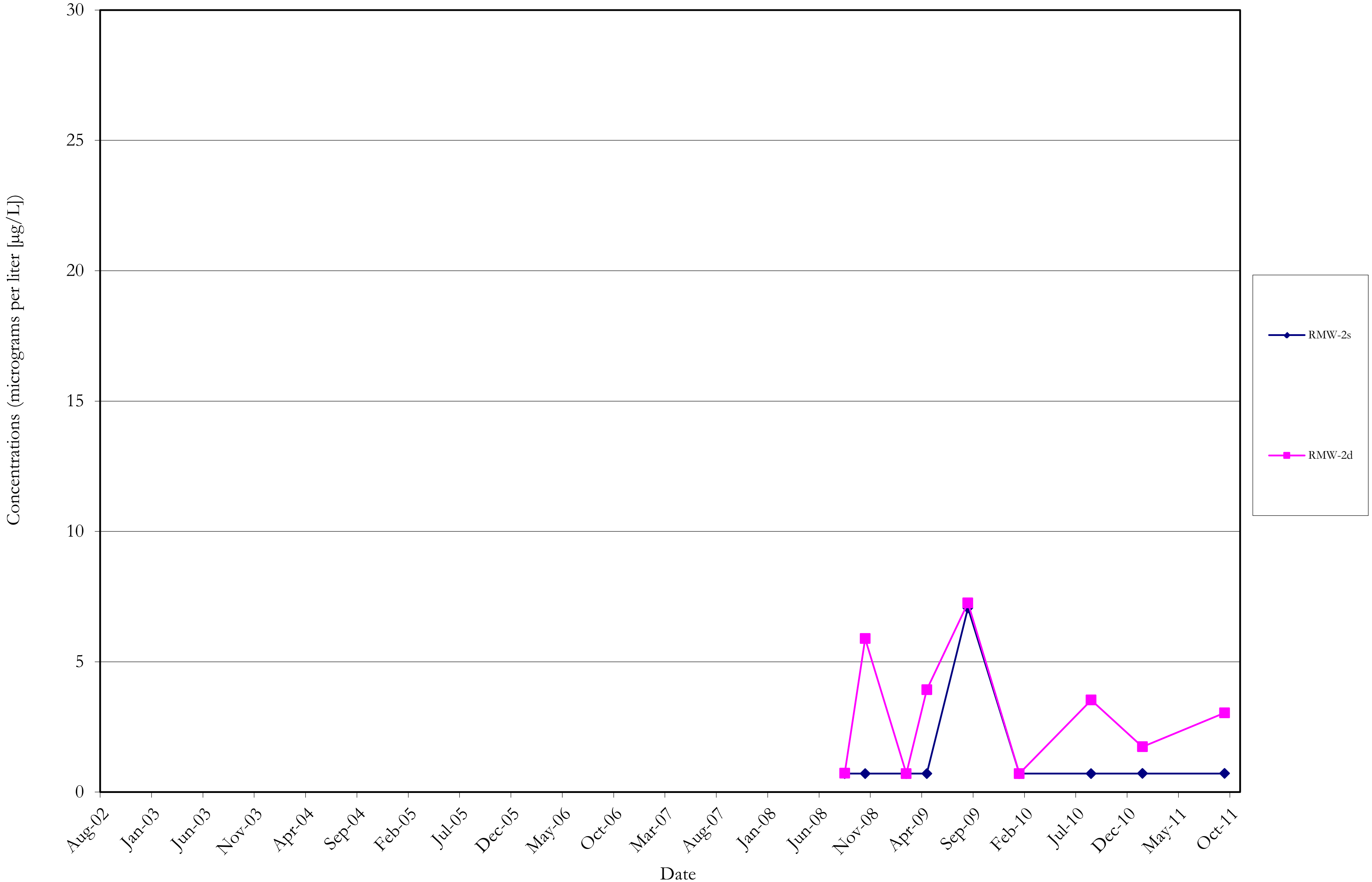
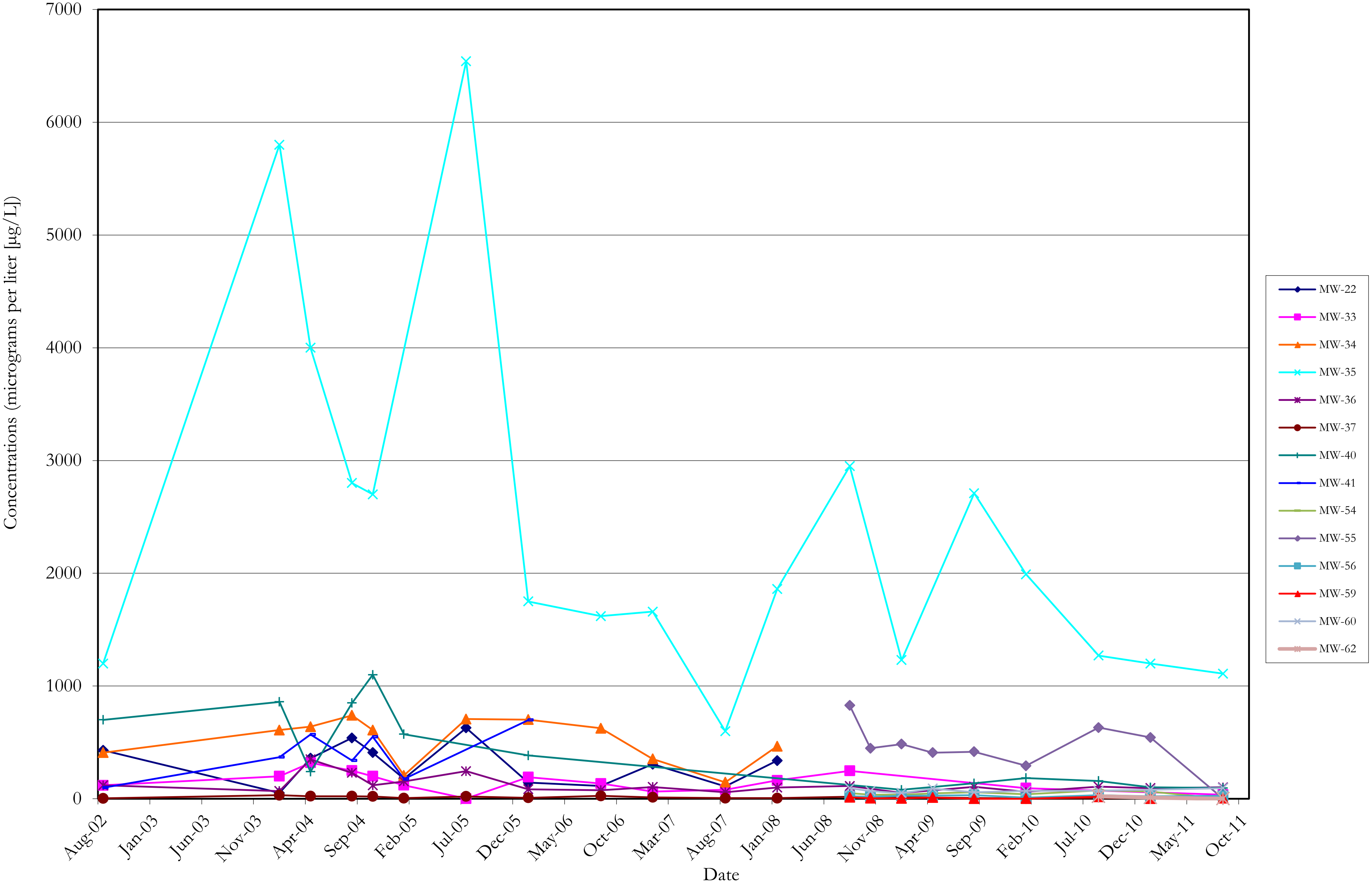


Figure I-1-9. Indicator Hazardous Substance Trends in RMW-2S and RMW2-D in the Upper Water-Bearing Zone Former PWT Site RI/FS



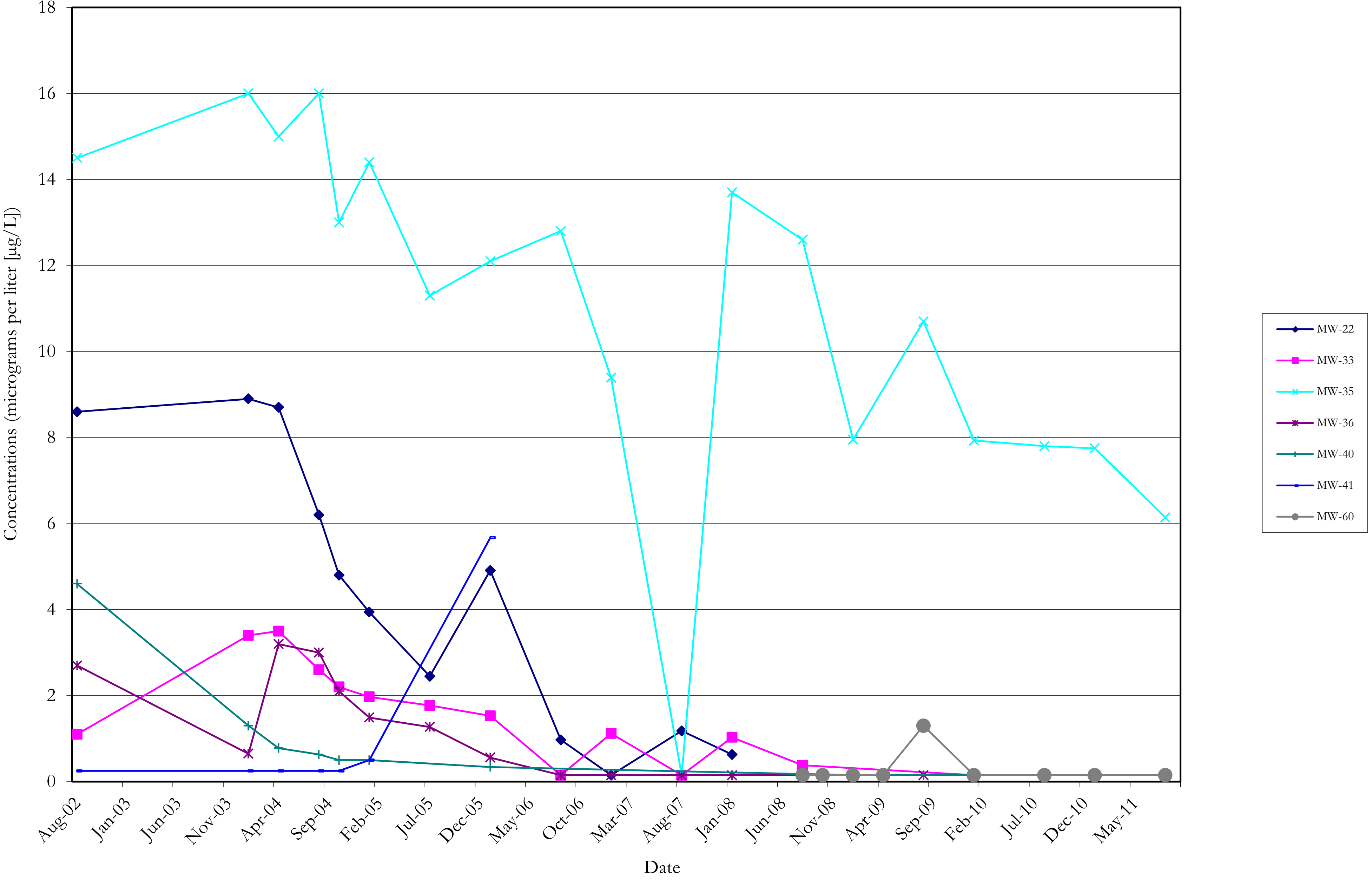
Note: Benzene, tetrachloroethene, and naphthalene were not graphed because they have not been detected at or above the method reporting limits.

Figure I-1-10. Pentachlorophenol Trends in the Lower Water-Bearing Zone
Former PWT Site RI/FS



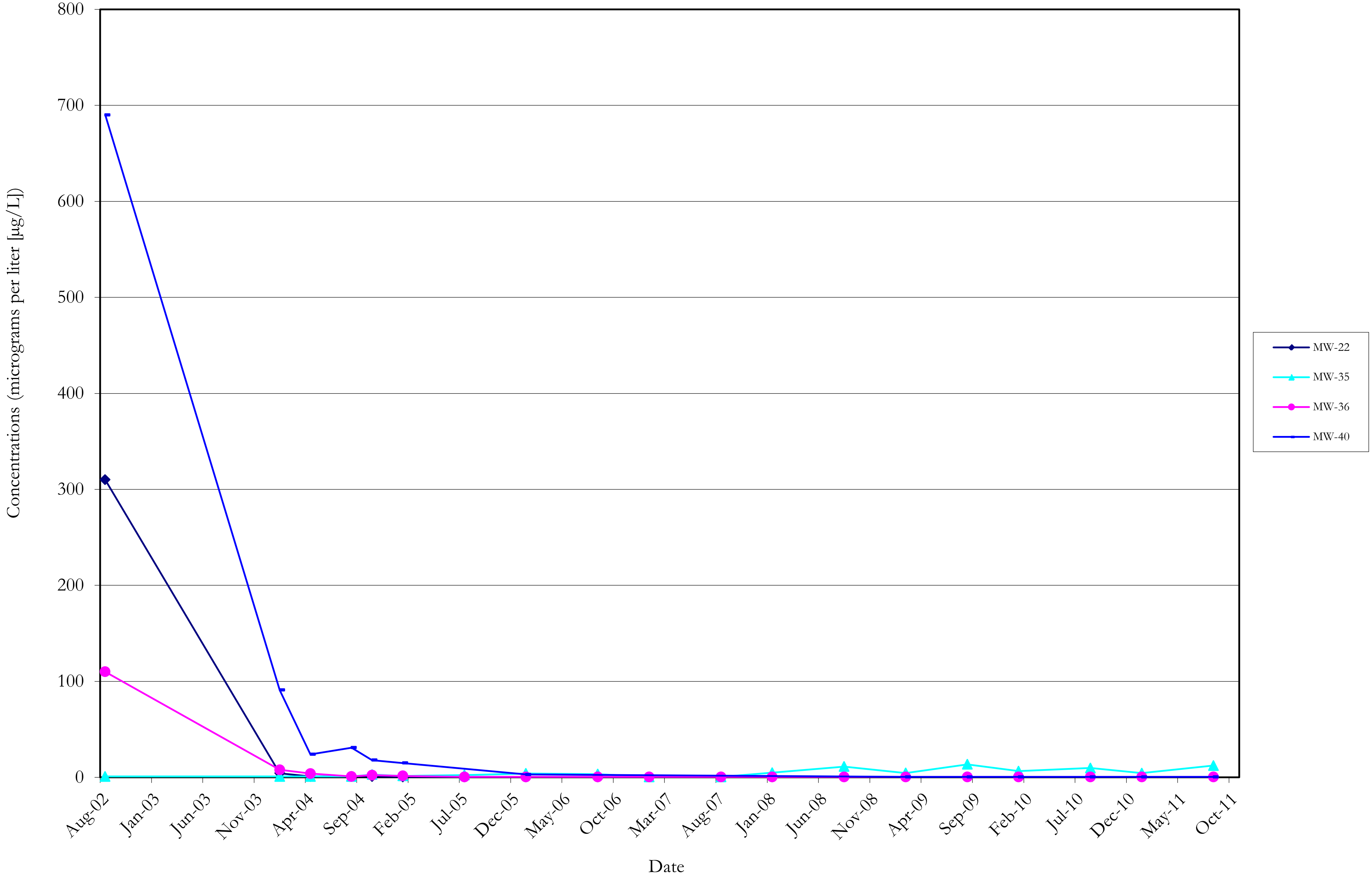
Note: Results from MW-61 were not graphed because pentachlorophenol has not been detected in this monitoring well.

Figure I-1-11. Benzene Trends in the Lower Water-Bearing Zone
Former PWT Site RI/FS



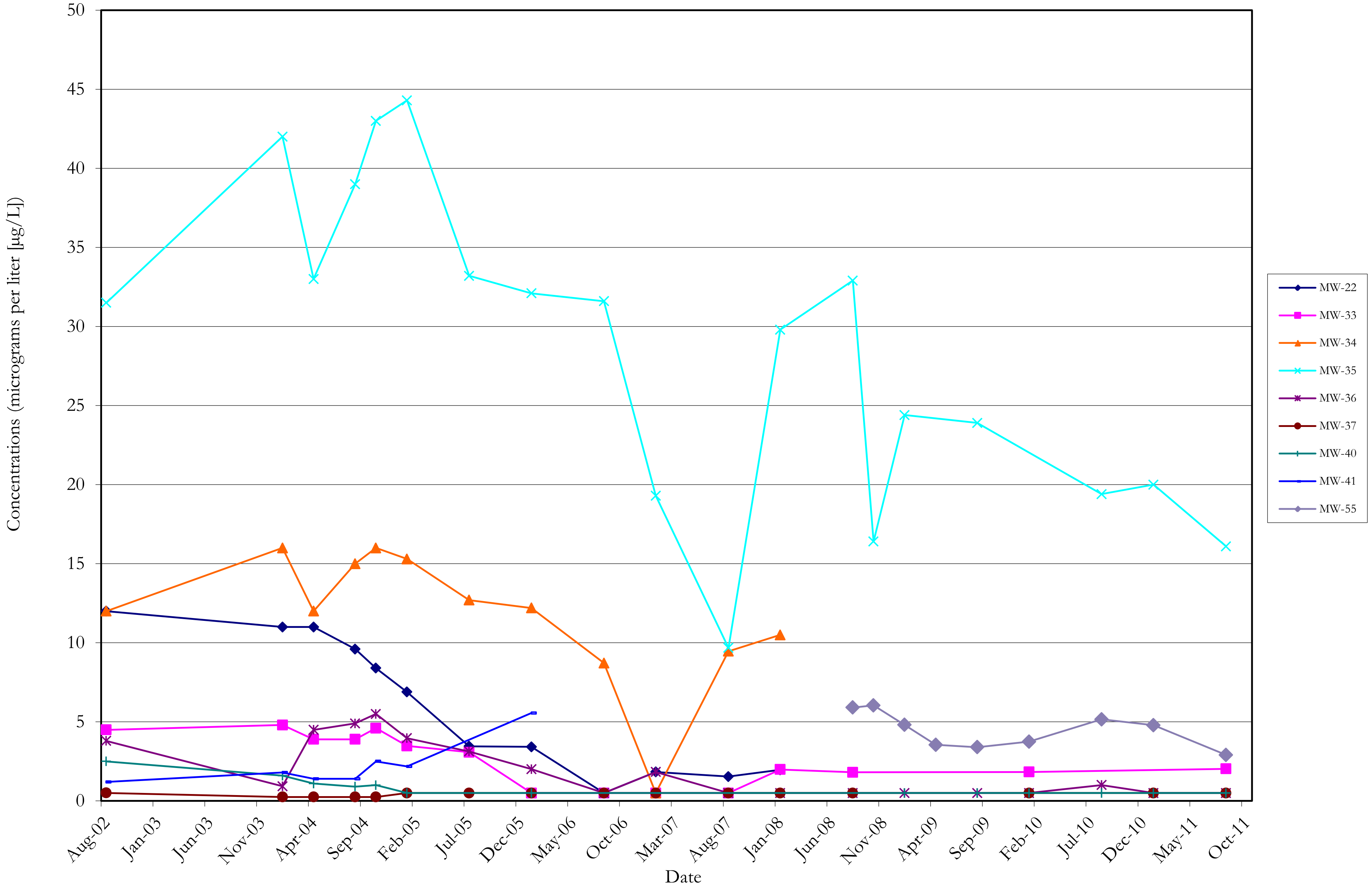
Note: Results from MW-34, MW-37, MW-54, MW-55, MW-56, MW-59, MW-61, and MW-62 were not graphed because benzene has not been detected, or has rarely been detected, in these monitoring wells.

Figure I-1-12. Naphthalene Trends in the Lower Water-Bearing Zone
Former PWT Site RI/FS



Note: Results from MW-33, MW-34, MW-37, MW-41, MW-54, MW-55, MW-56, MW-59, MW-60, MW-61, and MW-62 were not graphed because naphthalene has not been detected in these monitoring wells.

Figure I-1-13. Tetracholoroethene Trends in the Lower Water-Bearing Zone
Former PWT Site RI/FS

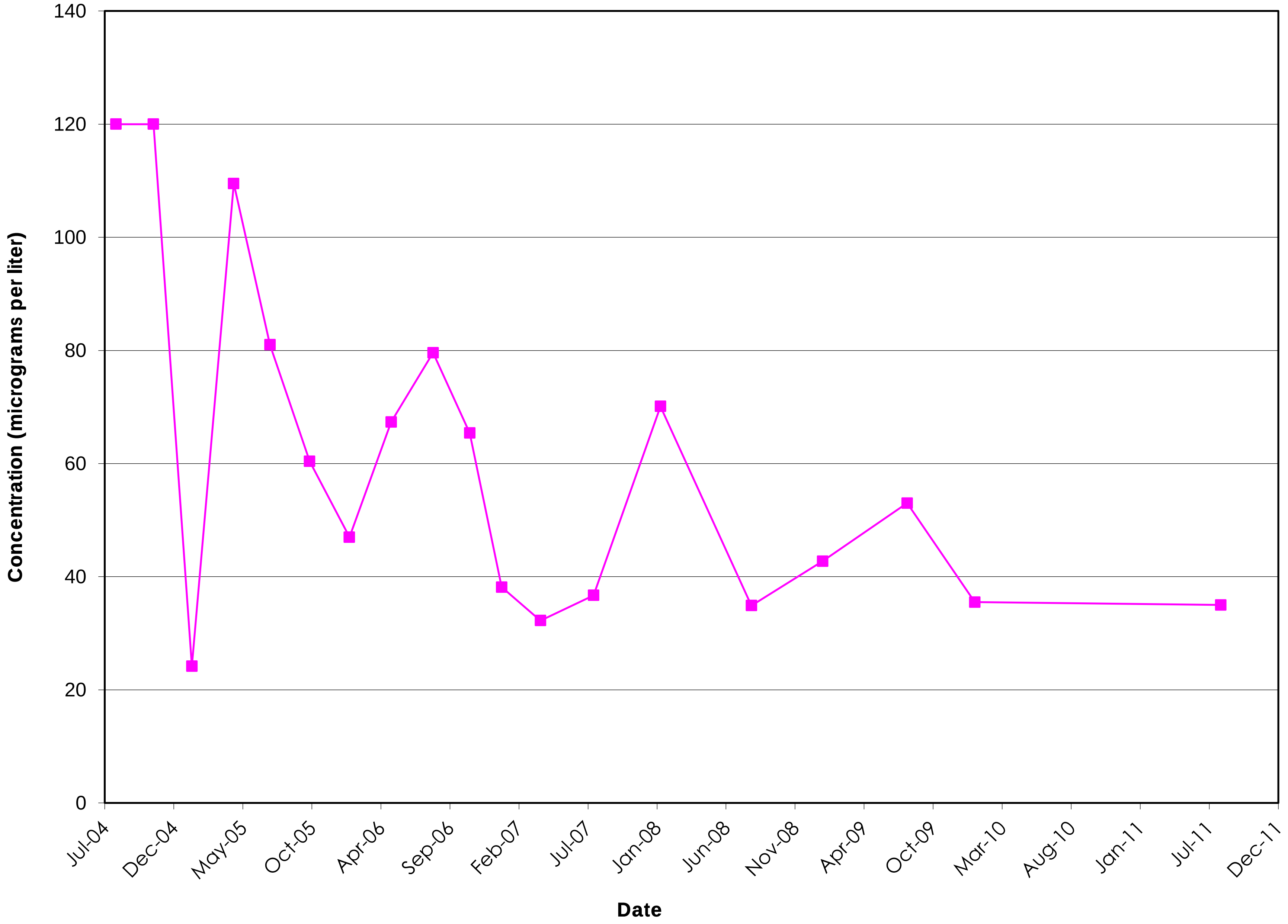


Note: Results from MW-54, MW-56, MW-59, MW-60, MW-61, and MW-62 were not graphed because PCE has not been detected in these monitoring wells.

APPENDIX I-2

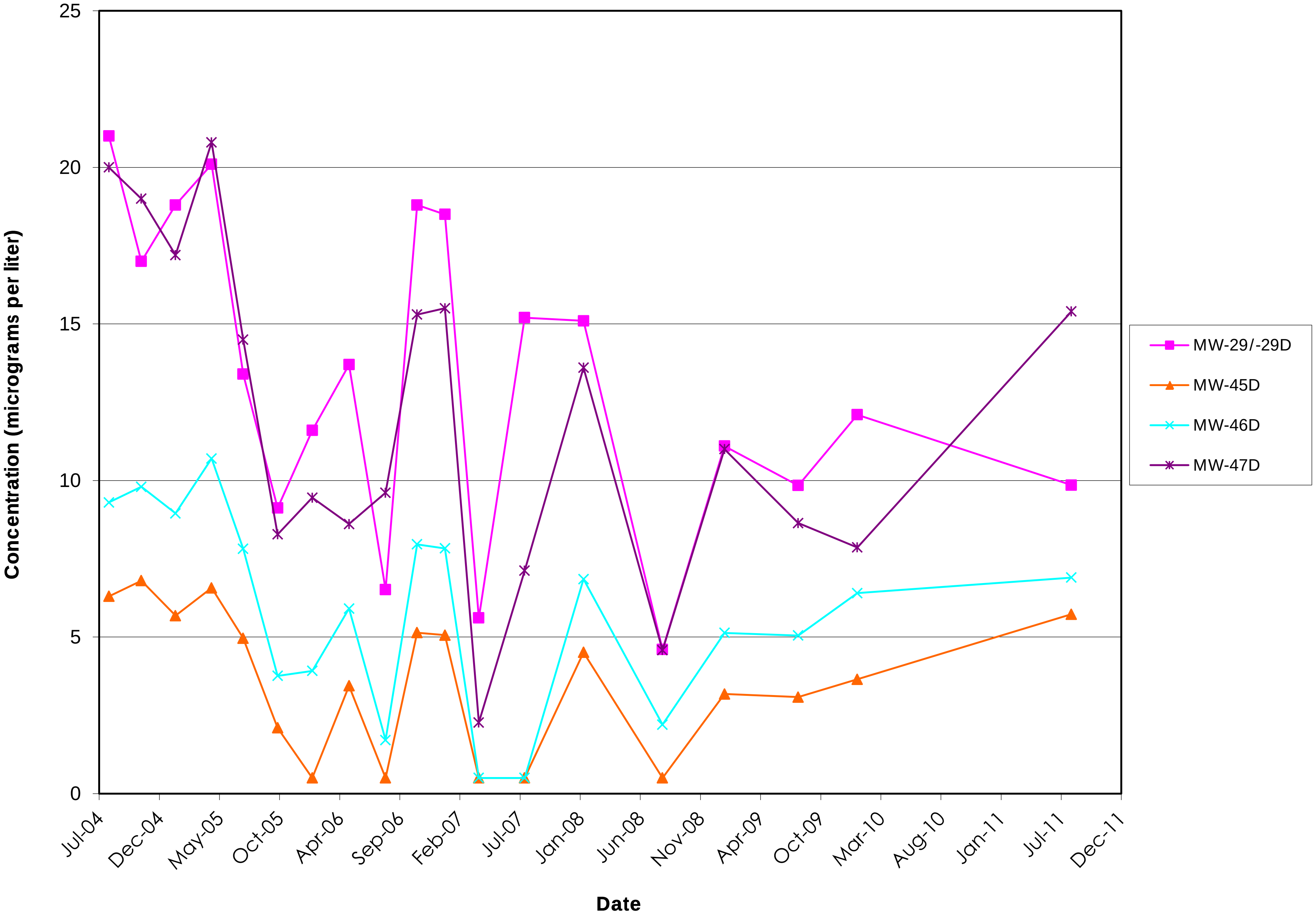
CELL 3 PLUME

Figure I-2-1. Pentachlorophenol Trend in MW-45D (Deep Portion of the Upper Water-bearing Zone)
Former PWT Site RI/FS



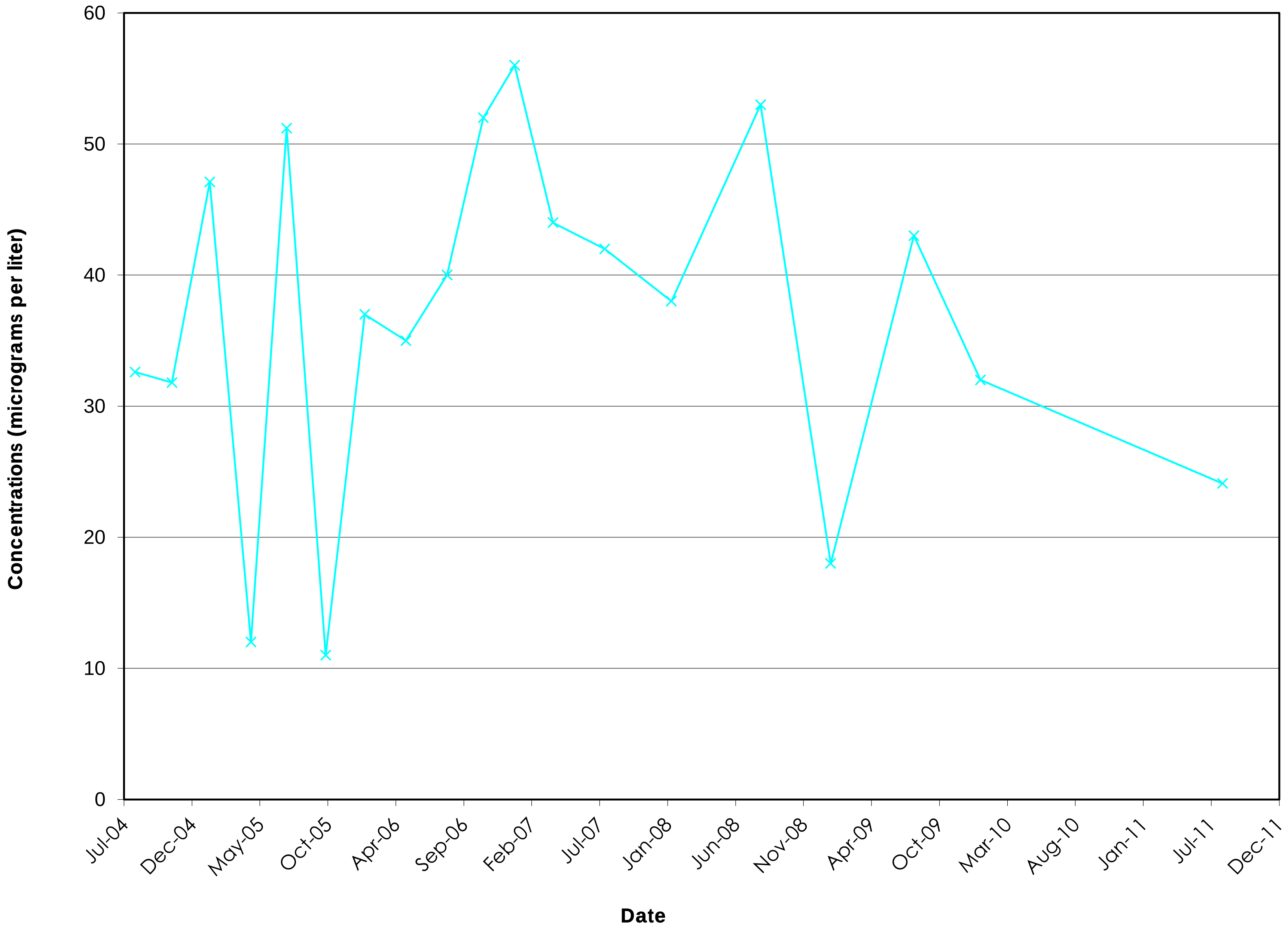
R:\9003.01 Port of Ridgefield\Report\49_2013.07.01 RIFS\Appendix I Groundwater Trend Plots\I-2 Cell 3 plume trends\
Cell 3 Trend Plots Aug 11

Figure I-2-2. Tetrachloroethene Trends in the Deep Portion of the Upper Water-bearing Zone
Former PWT Site RI/FS



R:\9003.01 Port of Ridgefield\Report\49_2013.07.01 RIFS\Appendix I Groundwater Trend Plots\I-2 Cell 3 plume trends\
Cell 3 Trend Plots Aug 11

Figure I-2-3. Arsenic Trend in MW-46S (Shallow Portion of the Upper Water-bearing Zone)
Former PWT Site RI/FS



R:\9003.01 Port of Ridgefield\Report\49_2013.07.01 RIFS\Appendix I Groundwater Trend Plots\I-2 Cell 3 plume trends\
Cell 3 Trend Plots Aug 11

APPENDIX J

EXTRACTION WELL AND RECONNAISSANCE GROUNDWATER RESULTS

APPENDIX J EXTRACTION WELL AND RECONNAISSANCE GROUNDWATER RESULTS

CONTENTS

The tables in this appendix have been pulled from other reports previously submitted to and approved by the Washington State Department of Ecology. Tables include the SER groundwater monitoring results from December 2011 (Appendix J-1) and reconnaissance groundwater results from events on the LRIS during May and June 2009 and from the RNWR from September 2006 (Appendices J-2 and J-3, respectively). Concentration contour plots representing these data are provided in the main body of the Remedial Investigation/Feasibility Study Report (see Sections 3 and 4).

The notes pages have been updated to fully explain all abbreviations and qualifiers in the tables. As such, it is important to note that what has previously been referred to as “carcinogenic polycyclic aromatic hydrocarbons toxicity equivalent concentration” (“cPAH TEC”) is the same as what is currently referred to as “carcinogenic polycyclic aromatic hydrocarbons toxicity equivalent” (“cPAH TEQ”). That is to say, the cPAH TEC is the sum of the cPAH congeners multiplied by their respective toxicity equivalent factors. In cases where all cPAHs for a sample were non-detect, the calculated cPAH TEQ is reported as “ND.”

TABLES

APPENDIX J-1

EXTRACTION WELL

Notes for Extraction Wells Tables J-1-1 through J-1-4
SER Sampling
Lake River Industrial Site

Bold numbers indicate values that exceed MTCA Method B cleanup level. Non-detect analytes ("U" or "UQ") were not compared to cleanup level.

Highlight indicates that values exceed draft MTCA Method B vapor intrusion (VI) screening level. Non-detect analytes ("U" or "UQ") were not compared to the screening level.

Two separate samples were collected from E-32 and E-36 for volatile organic compounds, using a disposable bailer (B) and the peristaltic pump (P) in May 2007. Subsequent samples were collected using a peristaltic pump or the dedicated pneumatic pump. Groundwater sampling was conducted per the scope of work desribed in the *Groundwater Sampling in the Steam Enhanced Remediation Treatment Area* letter to D. Alexanian from Maul Foster & Alongi on June 26, 2007. The scope of work was approved with slight modification in an email (re GW sampling in the SER area report) to A. Hughes, Maul Foster & Alongi, from D. Alexanian, Washington State Department of Ecology, on June 29, 2007.

-- = not applicable.

B = The blank exhibited a positive result great than the reporting limit for this compound.

cPAH = carcinogenic polycyclic aromatic hydrocarbons include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

cPAH TEQ = carcinogenic polycyclic aromatic hydrocarbon toxicity equivalent.

ft. bgs = feet below ground surface.

M = Method blank exhibited positive result greater than reporting limit for this compound.

mg/L = milligrams per liter.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

µg/L = micrograms per liter.

NA = not available.

ND = The cPAH analytes were not detected at or above their respective method reporting limits.

NV = no value.

PAH = polycyclic aromatic hydrocarbon.

pi. = pump intake, the depth of the pump intakes varied and were unknown.

U = not detected at or above the shown method reporting limit.

UQ = The analyte was analyzed for, but was not detected above the reporting limit. Reporting limit is elevated due to sample matrix interference.

[a] m-Xylene screening criteria.

[b] MTCA Method A cleanup level listed for arsenic, which is representative of background conditions.

[c] Hexavalent chromium screening criteria.

[d] Diesel-range organic screening criteria.

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane
MTCA Method B Groundwater VI Screening Level				7.4	11000	6.2	7.9	2300	130	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				1.7	16000	0.22	0.77	1600	400	NV	NV	0.0063
Area 1												
E-28	E28071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E28-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E28-20031308	03/13/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E28-41031308	03/13/2008	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2824061709	06/17/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2845061709	06/17/2009	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2837121410	12/14/2010	37	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2845121410	12/14/2010	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.14	1 U
	E2825111811	11/18/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2830111811	11/18/2011	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-32	E32-23.0 B	05/10/2007	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-23.0 P	05/10/2007	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-33.0 B	05/10/2007	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-33.0 P	05/10/2007	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45.0 B	05/10/2007	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45.0 P	05/10/2007	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-22091107	09/11/2007	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45091107	09/11/2007	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-20031308	03/14/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45031408	03/14/2008	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3227121108	12/11/2008	27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3245121108	12/11/2008	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3224061709	06/17/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3245061709	06/17/2009	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3236121410	12/14/2010	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3249121410	12/14/2010	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3228111811	11/18/2011	28	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-36	E36-21.0 B	05/09/2007	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E36-21.0 P	05/09/2007	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E36-33.0 B	05/09/2007	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E36-33.0 P	05/09/2007	33	1 U	1 U	**6.27**	**6.57**	1 U	1 U	1 U	1 U	**1.26**
	E36-44.0 B	05/09/2007	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E36-44.0 P	05/09/2007	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane
MTCA Method B Groundwater VI Screening Level				7.4	11000	6.2	7.9	2300	130	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				1.7	16000	0.22	0.77	1600	400	NV	NV	0.0063
E-36 cont.	E36-22091207	09/12/2007	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E36-43091207	09/12/2007	43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E36-20031408	03/14/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E36-37031408	03/14/2008	37	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3626121108	12/11/2008	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3637121108	12/11/2008	37	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3624061609	06/16/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3637061609	06/16/2009	37	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3626121510	12/15/2010	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3643121510	12/15/2010	43	1 U	1 U	1 U	**0.9**	1 U	1 U	1 U	1 U	1 U
	E3625112311	11/23/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3647112311	11/23/2011	47	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-37	E37-20071107	07/11/2007	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-30071107	07/11/2007	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-22091107	09/11/2007	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-30091107	09/11/2007	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-20031108	03/11/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-30031108	03/13/2008	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3726121008	12/10/2008	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3730121008	12/10/2008	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3724061609	06/16/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3730061609	06/16/2009	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3725121510	12/15/2010	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3730121510	12/15/2010	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3724111711	11/17/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3729111711	11/17/2011	29	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-39	E39-20071207	07/12/2007	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E39-36071207	07/12/2007	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E39-21091207	09/12/2007	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E39-35091207	09/12/2007	35	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E39031708	03/17/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E39011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E39P061909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-39	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3924112211	11/22/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3933112211	11/22/2011	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane
MTCA Method B Groundwater VI Screening Level				7.4	11000	6.2	7.9	2300	130	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				1.7	16000	0.22	0.77	1600	400	NV	NV	0.0063
Area 2												
E-4	E4-21071207	07/12/2007	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4-50071207	07/12/2007	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4-23091307	09/13/2007	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4-48091307	09/13/2007	48	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4031108	03/11/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4061809P	06/18/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-4	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E424112811	11/28/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E45112811	11/28/2011	51	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-5	E524011309	01/13/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E549011309	01/13/2009	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-24	E24071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E24-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E24-23031208	03/12/2008	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E24-42031208	03/12/2008	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2428121208	12/12/2008	28	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2443121208	12/12/2008	43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2426061709	06/17/2009	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2443061709	06/17/2009	43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2429121010	12/10/2010	29	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2446121010	12/10/2010	46	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2427111811	11/18/2011	27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-25	E2525011309	01/13/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2549011309	01/13/2009	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-26	E26071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E26-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E26-21031208	03/12/2008	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E26-41031208	03/12/2008	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2624061809	06/18/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2644061809	06/18/2009	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2636121310	12/13/2010	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18	1 U
	E2644121310	12/13/2010	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.22	1 U
	E2626111811	11/18/2011	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2644111811	11/18/2011	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane
MTCA Method B Groundwater VI Screening Level				7.4	11000	6.2	7.9	2300	130	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				1.7	16000	0.22	0.77	1600	400	NV	NV	0.0063
E-27	E27071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-24091307	09/13/2007	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-40091307	09/13/2007	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-21031108	03/11/2008	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-40031108	03/11/2008	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2725011409	01/14/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2740011409	01/14/2009	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2725061809	06/18/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2740061809	06/18/2009	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2726121610	12/16/2010	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2740121610	12/16/2010	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2725112911	11/29/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2742112911	11/29/2011	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-58	E58071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E58-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E58-19031808	03/18/2008	19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E58-36031808	03/18/2008	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5823011409	01/14/2009	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5836011409	01/14/2009	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5823061809	06/18/2009	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5840061809	06/18/2009	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5824121610	12/16/2010	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5840121610	12/16/2010	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5823112811	11/28/2011	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5838112811	11/28/2011	38	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Area 3												
E-42	E42-21090607	09/06/2007	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E42-40090607	09/06/2007	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E42031708	03/17/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E42011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E42P061909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-42	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4224112111	11/21/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane
MTCA Method B Groundwater VI Screening Level				7.4	11000	6.2	7.9	2300	130	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				1.7	16000	0.22	0.77	1600	400	NV	NV	0.0063
E-43	E43-20090607	09/06/2007	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E43-45090607	09/06/2007	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E43031708	03/17/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E43011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4322071509	07/15/2009	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4323121610	12/16/2010	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4324112111	11/21/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-45	E45-21090507	09/05/2007	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E45-43090607	09/06/2007	43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E45031708	03/17/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E45011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E45P061909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-45	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4522112111	11/21/2011	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4532112111	11/21/2011	32	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-49	E49-18090707	09/07/2007	18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E49-39090707	09/07/2007	39	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E49031708	03/17/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E49011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4913071509	07/15/2009	13	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E49122010	12/20/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E497113011	11/30/2011	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Area 4												
DEW-4	DEW4-20091007	09/10/2007	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	DEW4-49091007	09/10/2007	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	DEW423011509	01/15/2009	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.59**
	DEW450011509	01/15/2009	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.17**
	DEW4081309	08/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	DEW-4	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	DEW423112911	11/29/2011	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	DEW451112911	11/29/2011	51	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-2	E2-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2P051909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-2	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E223112811	11/28/2011	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2411128/11	11/28/2011	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,1,1,2-Tetra-chloroethane	1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane
MTCA Method B Groundwater VI Screening Level				7.4	11000	6.2	7.9	2300	130	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				1.7	16000	0.22	0.77	1600	400	NV	NV	0.0063
E-10	E10-20091307	09/13/2007	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E10-34091307	09/13/2007	34	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E10011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E10P061909	06/16/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-10	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1020113011	11/30/2011	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-16	E16-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E16081309	08/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1625121710	12/17/2010	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1642121710	12/17/2010	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1622112911	11/29/2011	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1633112911	11/29/2011	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-17	E1721011509	01/15/2009	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1748011509	01/15/2009	48	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-51	E51-20090707	09/07/2007	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E51-44090707	09/07/2007	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E51031708	03/17/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E51011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E51P061909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-51	12/10/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.16	1 U
	E5120113011	11/30/2011	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5139113011	11/30/2011	39	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-54	E54-19091007	09/10/2007	19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E54-40091007	09/10/2007	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5421011609	01/16/2009	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5442011609	01/16/2009	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E54081309	08/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5420122010	12/20/2010	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5412113011	11/30/2011	12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethyl-benzene
MTCA Method B Groundwater VI Screening Level				3900	24	NV	0.74	1800	4.2	28	25
MTCA Method B Groundwater Cleanup Level				80	400	0.031	0.022	720	0.48	0.64	400
Area 1											
E-28	E28071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E28-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E28-20031308	03/13/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E28-41031308	03/13/2008	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2824061709	06/17/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2845061709	06/17/2009	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2837121410	12/14/2010	37	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2845121410	12/14/2010	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2825111811	11/18/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2830111811	11/18/2011	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-32	E32-23.0 B	05/10/2007	23	1 U	5.54	1 U	1 U	1 U	1 U	1 U	1.44
	E32-23.0 P	05/10/2007	23	1 U	5.68	1 U	1 U	1 U	1 U	1 U	1.41
	E32-33.0 B	05/10/2007	33	1 U	1.85	1 U	1 U	1 U	1 U	1 U	1 U
	E32-33.0 P	05/10/2007	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45.0 B	05/10/2007	45	1 U	1.2	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45.0 P	05/10/2007	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-22091107	09/11/2007	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45091107	09/11/2007	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-20031308	03/14/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45031408	03/14/2008	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3227121108	12/11/2008	27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3245121108	12/11/2008	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3224061709	06/17/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3245061709	06/17/2009	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3236121410	12/14/2010	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3249121410	12/14/2010	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3228111811	11/18/2011	28	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-36	E36-21.0 B	05/09/2007	21	1 U	39.6	1 U	1 U	1 U	1 U	1 U	10.6
	E36-21.0 P	05/09/2007	21	1 U	59.4	1 U	1 U	1 U	1 U	1 U	15.1
	E36-33.0 B	05/09/2007	33	1 U	88.4	1 U	1 U	1 U	1 U	1 U	27.1
	E36-33.0 P	05/09/2007	33	1 U	68.5	1 U	1 U	1 U	1 U	1 U	20.9
	E36-44.0 B	05/09/2007	44	1 U	71.7	1 U	1 U	1 U	1 U	1 U	21.9
	E36-44.0 P	05/09/2007	44	1 U	45.5	1 U	1 U	1 U	1 U	1 U	14.1

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethyl-benzene
MTCA Method B Groundwater VI Screening Level				3900	24	NV	0.74	1800	4.2	28	25
MTCA Method B Groundwater Cleanup Level				80	400	0.031	0.022	720	0.48	0.64	400
E-36 cont.	E36-22091207	09/12/2007	22	1 U	44.8	1 U	1 U	1 U	1 U	1 U	10.8
	E36-43091207	09/12/2007	43	1 U	9.84	1 U	1 U	1 U	1 U	1 U	2.82
	E36-20031408	03/14/2008	20	1 U	157	1 U	1 U	1 U	1 U	1 U	34.2
	E36-37031408	03/14/2008	37	1 U	117	1 U	1 U	1 U	1 U	1 U	24.7
	E3626121108	12/11/2008	26	1 U	27.2	1 U	1 U	1 U	1 U	1 U	4.54
	E3637121108	12/11/2008	37	1 U	1.5	1 U	1 U	1 U	1 U	1 U	1 U
	E3624061609	06/16/2009	24	1 U	102	1 U	1 U	1 U	1 U	1 U	19.2
	E3637061609	06/16/2009	37	1 U	135	1 U	1 U	1 U	1 U	1 U	24.8
	E3626121510	12/15/2010	26	1 U	75.8	1 U	1 U	1 U	1 U	1 U	360
	E3643121510	12/15/2010	43	1 U	55.6	1 U	1 U	1 U	1 U	1 U	238
	E3625112311	11/23/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3647112311	11/23/2011	47	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-37	E37-20071107	07/11/2007	20	1 U	3.19	1 U	1 U	1 U	1 U	1 U	1 U
	E37-30071107	07/11/2007	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-22091107	09/11/2007	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-30091107	09/11/2007	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-20031108	03/11/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-30031108	03/13/2008	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3726121008	12/10/2008	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3730121008	12/10/2008	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3724061609	06/16/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3730061609	06/16/2009	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3725121510	12/15/2010	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3730121510	12/15/2010	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3724111711	11/17/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3729111711	11/17/2011	29	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-39	E39-20071207	07/12/2007	20	1 U	3.46	1 U	1 U	1 U	1 U	1 U	1.03
	E39-36071207	07/12/2007	36	1 U	4.36	1 U	1 U	1 U	1 U	1 U	1.43
	E39-21091207	09/12/2007	21	1 U	7.78	1 U	1 U	1 U	1 U	1 U	2.02
	E39-35091207	09/12/2007	35	1 U	6.34	1 U	1 U	1 U	1 U	1 U	2.04
	E39031708	03/17/2008	pi.	1 U	22.6	1 U	1 U	1 U	1 U	1 U	1 U
	E39011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E39P061909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-39	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3924112211	11/22/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3933112211	11/22/2011	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethyl-benzene
MTCA Method B Groundwater VI Screening Level				3900	24	NV	0.74	1800	4.2	28	25
MTCA Method B Groundwater Cleanup Level				80	400	0.031	0.022	720	0.48	0.64	400
Area 2											
E-4	E4-21071207	07/12/2007	21	1 U	2.67	1 U	1 U	1 U	1 U	1 U	1 U
	E4-50071207	07/12/2007	50	1 U	1.56	1 U	1 U	1 U	1 U	1 U	1 U
	E4-23091307	09/13/2007	23	1 U	5.06	1 U	1 U	1 U	1 U	1 U	1.24
	E4-48091307	09/13/2007	48	1 U	2.3	1 U	1 U	1 U	1 U	1 U	1 U
	E4031108	03/11/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4061809P	06/18/2009	pi.	1 U	9.82	1 U	1 U	1 U	1 U	1 U	1.84
	E-4	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E424112811	11/28/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E45112811	11/28/2011	51	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-5	E524011309	01/13/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E549011309	01/13/2009	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-24	E24071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E24-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E24-23031208	03/12/2008	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E24-42031208	03/12/2008	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2428121208	12/12/2008	28	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2443121208	12/12/2008	43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2426061709	06/17/2009	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2443061709	06/17/2009	43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2429121010	12/10/2010	29	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2446121010	12/10/2010	46	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2427111811	11/18/2011	27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-25	E2525011309	01/13/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2549011309	01/13/2009	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-26	E26071307	07/13/2007	pi.	1 U	3.78	1 U	1 U	1 U	1 U	1 U	1 U
	E26-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E26-21031208	03/12/2008	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E26-41031208	03/12/2008	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2624061809	06/18/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2644061809	06/18/2009	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2636121310	12/13/2010	36	0.15	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2644121310	12/13/2010	44	0.17	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2626111811	11/18/2011	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2644111811	11/18/2011	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethyl-benzene
MTCA Method B Groundwater VI Screening Level				3900	24	NV	0.74	1800	4.2	28	25
MTCA Method B Groundwater Cleanup Level				80	400	0.031	0.022	720	0.48	0.64	400
E-27	E27071307	07/13/2007	pi.	1 U	14.6	1 U	1 U	1 U	1 U	1 U	1.86
	E27-24091307	09/13/2007	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-40091307	09/13/2007	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-21031108	03/11/2008	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-40031108	03/11/2008	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2725011409	01/14/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2740011409	01/14/2009	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2725061809	06/18/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2740061809	06/18/2009	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2726121610	12/16/2010	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2740121610	12/16/2010	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2725112911	11/29/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2742112911	11/29/2011	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-58	E58071307	07/13/2007	pi.	1 U	30.8	1 U	1 U	1 U	1 U	1 U	4.32
	E58-P091407	09/14/2007	pi.	1 U	38	1 U	1 U	1 U	1 U	1 U	12.6
	E58-19031808	03/18/2008	19	1 U	1.64	1 U	1 U	1 U	1 U	1 U	1 U
	E58-36031808	03/18/2008	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5823011409	01/14/2009	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5836011409	01/14/2009	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5823061809	06/18/2009	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5840061809	06/18/2009	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5824121610	12/16/2010	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5840121610	12/16/2010	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5823112811	11/28/2011	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5838112811	11/28/2011	38	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Area 3											
E-42	E42-21090607	09/06/2007	21	1 U	45.7	1 U	1 U	1 U	1 U	1 U	49.4
	E42-40090607	09/06/2007	40	1 U	106	1 U	1 U	1 U	1 U	1 U	26.7
	E42031708	03/17/2008	pi.	1 U	34.5	1 U	1 U	1 U	1 U	1 U	1.42
	E42011209	01/12/2009	pi.	1 U	3.28	1 U	1 U	1 U	1 U	1 U	1 U
	E42P061909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-42	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4224112111	11/21/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethyl-benzene
MTCA Method B Groundwater VI Screening Level				3900	24	NV	0.74	1800	4.2	28	25
MTCA Method B Groundwater Cleanup Level				80	400	0.031	0.022	720	0.48	0.64	400
E-43	E43-20090607	09/06/2007	20	1 U	13	1 U	1 U	1 U	1 U	1 U	1.68
	E43-45090607	09/06/2007	45	1 U	8.61	1 U	1 U	1 U	1 U	1 U	1.55
	E43031708	03/17/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E43011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4322071509	07/15/2009	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4323121610	12/16/2010	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.14
	E4324112111	11/21/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-45	E45-21090507	09/05/2007	21	1 U	243	1 U	1 U	1 U	1 U	1 U	160
	E45-43090607	09/06/2007	43	1 U	**411**	1 U	1 U	1 U	1 U	1 U	130
	E45031708	03/17/2008	pi.	1 U	**577**	1 U	1 U	1 U	1 U	1 U	109
	E45011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E45P061909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-45	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4522112111	11/21/2011	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4532112111	11/21/2011	32	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-49	E49-18090707	09/07/2007	18	1 U	114	1 U	1 U	1 U	1 U	1 U	4.06
	E49-39090707	09/07/2007	39	1 U	99.6	1 U	1 U	1 U	1 U	1 U	2.86
	E49031708	03/17/2008	pi.	1 U	37.8	1 U	1 U	1 U	1 U	1 U	1 U
	E49011309	01/13/2009	pi.	1 U	1.19	1 U	1 U	1 U	1 U	1 U	1 U
	E4913071509	07/15/2009	13	1 U	146	1 U	1 U	1 U	1 U	1 U	28.7
	E49122010	12/20/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E497113011	11/30/2011	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Area 4											
DEW-4	DEW4-20091007	09/10/2007	20	1 U	13.9	1 U	1 U	1 U	1 U	1 U	2.84
	DEW4-49091007	09/10/2007	49	1 U	23.8	1 U	1 U	1 U	1 U	1 U	6.02
	DEW423011509	01/15/2009	23	1 U	223	1 U	1 U	1 U	1 U	1 U	52.9
	DEW450011509	01/15/2009	50	1 U	161	1 U	1 U	1 U	1 U	1 U	38.7
	DEW4081309	08/13/2009	pi.	1 U	3.04	1 U	1 U	1 U	1 U	1 U	2.45
	DEW-4	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	DEW423112911	11/29/2011	23	1 U	38.2	1 U	1 U	1 U	1 U	1 U	2.71
	DEW451112911	11/29/2011	51	1 U	2.44	1 U	1 U	1 U	1 U	1 U	1 U
E-2	E2-P091407	09/14/2007	pi.	1 U	31	1 U	1 U	1 U	1 U	1 U	9.84
	E2011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2P051909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-2	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E223112811	11/28/2011	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2411128/11	11/28/2011	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethyl-benzene
MTCA Method B Groundwater VI Screening Level				3900	24	NV	0.74	1800	4.2	28	25
MTCA Method B Groundwater Cleanup Level				80	400	0.031	0.022	720	0.48	0.64	400
E-10	E10-20091307	09/13/2007	20	1 U	151	1 U	1 U	1 U	1 U	1 U	40
	E10-34091307	09/13/2007	34	1 U	136	1 U	1 U	1 U	1 U	1 U	34.1
	E10011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E10P061909	06/16/2009	pi.	1 U	1.41	1 U	1 U	1 U	1 U	1 U	1 U
	E-10	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1020113011	11/30/2011	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-16	E16-P091407	09/14/2007	pi.	1 U	16.5	1 U	1 U	1 U	1 U	1 U	5.13
	E16081309	08/13/2009	pi.	1 U	11.4	1 U	1 U	1 U	1 U	1 U	3.1
	E1625121710	12/17/2010	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.79
	E1642121710	12/17/2010	42	1 U	0.16	1 U	1 U	1 U	1 U	1 U	0.97
	E1622112911	11/29/2011	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1633112911	11/29/2011	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-17	E1721011509	01/15/2009	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1748011509	01/15/2009	48	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-51	E51-20090707	09/07/2007	20	1 U	260	1 U	1 U	1 U	1 U	1 U	82
	E51-44090707	09/07/2007	44	1 U	262	1 U	1 U	1 U	1 U	1 U	89.4
	E51031708	03/17/2008	pi.	1 U	**446**	1 U	1 U	1 U	1 U	1 U	83.2
	E51011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E51P061909	06/19/2009	pi.	1 U	10.5	1 U	1 U	1 U	1 U	1 U	1.48
	E-51	12/10/2010	pi.	0.15	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5120113011	11/30/2011	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5139113011	11/30/2011	39	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-54	E54-19091007	09/10/2007	19	1 U	29.2	1 U	1 U	1 U	1 U	1 U	1 U
	E54-40091007	09/10/2007	40	1 U	32.2	1 U	1 U	1 U	1 U	1 U	1 U
	E5421011609	01/16/2009	21	1 U	46.3	1 U	1 U	1 U	1 U	1 U	4.28
	E5442011609	01/16/2009	42	1 U	46.2	1 U	1 U	1 U	1 U	1 U	3.77
	E54081309	08/13/2009	pi.	1 U	2.26	1 U	1 U	1 U	1 U	1 U	1 U
	E5420122010	12/20/2010	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5412113011	11/30/2011	12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone
MTCA Method B Groundwater VI Screening Level				NV	NV	7900	350000	NV	NV	NV	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				NV	NV	1.8	4800	160	NV	NV	NV	640	800
Area 1													
E-28	E28071307	07/13/2007	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E28-P091407	09/14/2007	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E28-20031308	03/13/2008	20	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	124
	E28-41031308	03/13/2008	41	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2824061709	06/17/2009	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2845061709	06/17/2009	45	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2837121410	12/14/2010	37	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	0.64
	E2845121410	12/14/2010	45	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	0.6
	E2825111811	11/18/2011	25	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2830111811	11/18/2011	30	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-32	E32-23.0 B	05/10/2007	23	1 U	1 U	1 U	12	1 U	10 U	1 U	1 U	20 U	75.5
	E32-23.0 P	05/10/2007	23	1 U	1 U	1 U	12	1 U	10 U	1 U	1 U	20 U	70.7
	E32-33.0 B	05/10/2007	33	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E32-33.0 P	05/10/2007	33	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E32-45.0 B	05/10/2007	45	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E32-45.0 P	05/10/2007	45	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E32-22091107	09/11/2007	22	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E32-45091107	09/11/2007	45	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E32-20031308	03/14/2008	20	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E32-45031408	03/14/2008	45	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3227121108	12/11/2008	27	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3245121108	12/11/2008	45	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3224061709	06/17/2009	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3245061709	06/17/2009	45	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3236121410	12/14/2010	36	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	0.94
	E3249121410	12/14/2010	49	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	0.71
	E3228111811	11/18/2011	28	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-36	E36-21.0 B	05/09/2007	21	1 U	1 U	1 U	48.1	1 U	10 U	1 U	2.02	20 U	305
	E36-21.0 P	05/09/2007	21	1 U	1 U	1 U	47.1	1 U	10 U	1 U	2.24	20 U	299
	E36-33.0 B	05/09/2007	33	1 U	1 U	1 U	16	1 U	10 U	1 U	9.49	20 U	103
	E36-33.0 P	05/09/2007	33	1 U	1 U	1 U	10 U	2.42	10 U	1 U	7.5	20 U	50 U
	E36-44.0 B	05/09/2007	44	1 U	1 U	1 U	10 U	1 U	10 U	1 U	7.12	20 U	55.7
	E36-44.0 P	05/09/2007	44	1 U	1 U	1 U	10 U	1 U	10 U	1 U	6.02	20 U	50 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone
MTCA Method B Groundwater VI Screening Level				NV	NV	7900	350000	NV	NV	NV	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				NV	NV	1.8	4800	160	NV	NV	NV	640	800
E-36 cont.	E36-22091207	09/12/2007	22	1 U	1 U	1 U	54.8	1 U	10 U	1 U	1.81	20 U	258
	E36-43091207	09/12/2007	43	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1.69	20 U	50 U
	E36-20031408	03/14/2008	20	1 U	1 U	1 U	40.1	1 U	14.7	1 U	4.3	20 U	300
	E36-37031408	03/14/2008	37	1 U	1 U	1 U	48.7	1 U	12	1 U	2.88	20 U	**980**
	E3626121108	12/11/2008	26	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	70.8
	E3637121108	12/11/2008	37	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3624061609	06/16/2009	24	1 U	1 U	1 U	172	1 U	17.6	1 U	2.66	20 U	**7400**
	E3637061609	06/16/2009	37	1 U	1 U	1 U	202	1 U	13.4	1 U	3.3	20 U	**7390**
	E3626121510	12/15/2010	26	1 U	1 U	1 U	10 U	1 U	10 U	1 U	10.2	0.48	22.5
	E3643121510	12/15/2010	43	1 U	1 U	1 U	10 U	1 U	10 U	1 U	7.7	20 U	19.7
	E3625112311	11/23/2011	25	1 U	1 U	1 U	33.4	1 U	10 U	1 U	1.02	20 U	227
	E3647112311	11/23/2011	47	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-37	E37-20071107	07/11/2007	20	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E37-30071107	07/11/2007	30	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E37-22091107	09/11/2007	22	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E37-30091107	09/11/2007	30	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E37-20031108	03/11/2008	20	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E37-30031108	03/13/2008	30	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3726121008	12/10/2008	26	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3730121008	12/10/2008	30	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3724061609	06/16/2009	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3730061609	06/16/2009	30	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3725121510	12/15/2010	25	1 U	1 U	1 U	10 U	1 U	0.79	1 U	1 U	20 U	35.5
	E3730121510	12/15/2010	30	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	5.54
	E3724111711	11/17/2011	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3729111711	11/17/2011	29	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-39	E39-20071207	07/12/2007	20	1 U	1 U	1 U	10 U	1 U	10 U	1 U	2.19	20 U	50 U
	E39-36071207	07/12/2007	36	1 U	1 U	1 U	10 U	1 U	10 U	1 U	3.08	20 U	50 U
	E39-21091207	09/12/2007	21	1 U	1 U	1 U	10 U	1 U	10 U	1 U	2.31	20 U	50 U
	E39-35091207	09/12/2007	35	1 U	1 U	1 U	10 U	1 U	10 U	1 U	2.74	20 U	50 U
	E39031708	03/17/2008	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	3.41	20 U	50 U
	E39011209	01/12/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E39P061909	06/19/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E-39	12/9/2010	pi.	1 U	1 U	1 U	6.48	1 U	10 U	1 U	1 U	20 U	47.8
	E3924112211	11/22/2011	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E3933112211	11/22/2011	33	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone
MTCA Method B Groundwater VI Screening Level				NV	NV	7900	350000	NV	NV	NV	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				NV	NV	1.8	4800	160	NV	NV	NV	640	800
Area 2													
E-4	E4-21071207	07/12/2007	21	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E4-50071207	07/12/2007	50	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E4-23091307	09/13/2007	23	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E4-48091307	09/13/2007	48	1 U	1 U	1 U	11	1 U	10 U	1 U	1 U	20 U	50 U
	E4031108	03/11/2008	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E4011309	01/13/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E4061809P	06/18/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	71.8
	E-4	12/9/2010	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	1.04
	E424112811	11/28/2011	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E45112811	11/28/2011	51	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-5	E524011309	01/13/2009	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E549011309	01/13/2009	49	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-24	E24071307	07/13/2007	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E24-P091407	09/14/2007	pi.	1 U	1 U	1 U	17.1	1 U	10 U	1 U	1 U	20 U	50 U
	E24-23031208	03/12/2008	23	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E24-42031208	03/12/2008	42	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2428121208	12/12/2008	28	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2443121208	12/12/2008	43	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2426061709	06/17/2009	26	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2443061709	06/17/2009	43	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2429121010	12/10/2010	29	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	1.75
	E2446121010	12/10/2010	46	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	1.47
	E2427111811	11/18/2011	27	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-25	E2525011309	01/13/2009	25	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2549011309	01/13/2009	49	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-26	E26071307	07/13/2007	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E26-P091407	09/14/2007	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E26-21031208	03/12/2008	21	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E26-41031208	03/12/2008	41	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2624061809	06/18/2009	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2644061809	06/18/2009	44	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2636121310	12/13/2010	36	1 U	1 U	0.15	10 U	1 U	10 U	1 U	1 U	20 U	1.47
	E2644121310	12/13/2010	44	0.1	1 U	0.17	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2626111811	11/18/2011	26	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2644111811	11/18/2011	44	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone
MTCA Method B Groundwater VI Screening Level				NV	NV	7900	350000	NV	NV	NV	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				NV	NV	1.8	4800	160	NV	NV	NV	640	800
E-27	E27071307	07/13/2007	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1.58	20 U	50 U
	E27-24091307	09/13/2007	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E27-40091307	09/13/2007	40	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E27-21031108	03/11/2008	21	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E27-40031108	03/11/2008	40	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2725011409	01/14/2009	25	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2740011409	01/14/2009	40	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2725061809	06/18/2009	25	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2740061809	06/18/2009	40	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2726121610	12/16/2010	26	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	3.59
	E2740121610	12/16/2010	40	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2725112911	11/29/2011	25	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2742112911	11/29/2011	42	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-58	E58071307	07/13/2007	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	3	20 U	50 U
	E58-P091407	09/14/2007	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	3.13	20 U	50 U
	E58-19031808	03/18/2008	19	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E58-36031808	03/18/2008	36	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E5823011409	01/14/2009	23	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E5836011409	01/14/2009	36	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E5823061809	06/18/2009	23	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E5840061809	06/18/2009	40	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E5824121610	12/16/2010	24	1 U	1 U	1 U	7.7	1 U	10 U	1 U	1 U	20 U	68.4
	E5840121610	12/16/2010	40	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	2.5
	E5823112811	11/28/2011	23	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E5838112811	11/28/2011	38	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
Area 3													
E-42	E42-21090607	09/06/2007	21	1 U	1 U	1 U	10 U	1 U	10 U	1 U	8.59	20 U	50 U
	E42-40090607	09/06/2007	40	1 U	1 U	1 U	10 U	1 U	10 U	1 U	4.61	20 U	50 U
	E42031708	03/17/2008	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E42011209	01/12/2009	pi.	1 U	1 U	1 U	41.6	1 U	10 U	1 U	1 U	20 U	666
	E42P061909	06/19/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E-42	12/9/2010	pi.	1 U	1 U	1 U	2.47	1 U	10 U	1 U	1 U	20 U	26.5
	E4224112111	11/21/2011	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone
MTCA Method B Groundwater VI Screening Level				NV	NV	7900	350000	NV	NV	NV	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				NV	NV	1.8	4800	160	NV	NV	NV	640	800
E-43	E43-20090607	09/06/2007	20	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E43-45090607	09/06/2007	45	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E43031708	03/17/2008	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E43011209	01/12/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E4322071509	07/15/2009	22	1 U	1 U	1 U	213	1 U	10 U	1 U	1 U	20 U	**1280**
	E4323121610	12/16/2010	23	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	10.2
	E4324112111	11/21/2011	24	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-45	E45-21090507	09/05/2007	21	1 U	1 U	1 U	70.3	1 U	16.8	1 U	24.8	20 U	391
	E45-43090607	09/06/2007	43	1 U	1 U	1 U	20.8	1 U	10 U	1 U	21.3	20 U	132
	E45031708	03/17/2008	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	21.6	20 U	100
	E45011209	01/12/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E45P061909	06/19/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E-45	12/9/2010	pi.	1 U	1 U	1 U	15.6	1 U	10 U	1 U	1 U	20 U	175
	E4522112111	11/21/2011	22	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	51.1
	E4532112111	11/21/2011	32	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	52.1
E-49	E49-18090707	09/07/2007	18	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1.59	20 U	50 U
	E49-39090707	09/07/2007	39	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1.78	20 U	50 U
	E49031708	03/17/2008	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E49011309	01/13/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	70.2
	E4913071509	07/15/2009	13	1 U	1 U	1 U	10 U	3.73	10 U	1 U	3.38	20 U	50 U
	E49122010	12/20/2010	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	1.51
	E497113011	11/30/2011	7	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
Area 4													
DEW-4	DEW4-20091007	09/10/2007	20	1 U	1 U	1 U	1 U	10 U	1 U	1 U	20 U	50 U	5 U
	DEW4-49091007	09/10/2007	49	1 U	1 U	1 U	1 U	10 U	1 U	1.35	20 U	50 U	5 U
	DEW423011509	01/15/2009	23	1 U	1 U	1 U	10 U	1 U	10 U	1 U	5.29	20 U	50 U
	DEW450011509	01/15/2009	50	1 U	1 U	1 U	10 U	1 U	10 U	1 U	3.27	20 U	50 U
	DEW4081309	08/13/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	DEW-4	12/9/2010	pi.	1 U	1 U	1 U	1.2	1 U	10 U	1 U	1 U	20 U	19.9
	DEW423112911	11/29/2011	23	1 U	1 U	1 U	10 U	1 U	10 U	1 U	2.56	20 U	50 U
	DEW451112911	11/29/2011	51	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-2	E2-P091407	09/14/2007	pi.	1 U	1 U	1 U	11.6	1 U	10 U	1 U	5.13	20 U	50 U
	E2011309	01/13/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2P051909	06/19/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E-2	12/9/2010	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	4.03
	E223112811	11/28/2011	23	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E2411128/11	11/28/2011	41	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone
MTCA Method B Groundwater VI Screening Level				NV	NV	7900	350000	NV	NV	NV	NV	NV	NV
MTCA Method B Groundwater Cleanup Level				NV	NV	1.8	4800	160	NV	NV	NV	640	800
E-10	E10-20091307	09/13/2007	20	1 U	1 U	1 U	78.4	1 U	10	1 U	4.9	20 U	408
	E10-34091307	09/13/2007	34	1 U	1 U	1 U	45.1	1 U	10 U	1 U	4.46	20 U	245
	E10011309	01/13/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E10P061909	06/16/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E-10	12/9/2010	pi.	1 U	1 U	1 U	47.9	1 U	1.8	1 U	1 U	0.59	202
	E1020113011	11/30/2011	20	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-16	E16-P091407	09/14/2007	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1.5	20 U	50 U
	E16081309	08/13/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	3.33	20 U	50 U
	E1625121710	12/17/2010	25	1 U	1 U	1 U	10 U	1 U	10 U	1 U	0.18	20 U	4.24
	E1642121710	12/17/2010	42	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	1.92
	E1622112911	11/29/2011	22	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E1633112911	11/29/2011	33	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-17	E1721011509	01/15/2009	21	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E1748011509	01/15/2009	48	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
E-51	E51-20090707	09/07/2007	20	1 U	1 U	1 U	10 U	1 U	10 U	1 U	9.41	20 U	50 U
	E51-44090707	09/07/2007	44	1 U	1 U	1 U	10 U	1 U	10 U	1 U	10.7	20 U	50 U
	E51031708	03/17/2008	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	9.18	20 U	50 U
	E51011309	01/13/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	56.2
	E51P061909	06/19/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	96.8
	E-51	12/10/2010	pi.	1 U	1 U	1 U	23.6	1 U	10 U	1 U	1 U	0.57	199
	E5120113011	11/30/2011	20	1 U	1 U	1 U	27.1	1 U	10 U	1 U	1 U	20 U	143
	E5139113011	11/30/2011	39	1 U	1 U	1 U	28.7	1 U	10 U	1 U	1 U	20 U	152
E-54	E54-19091007	09/10/2007	19	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E54-40091007	09/10/2007	40	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E5421011609	01/16/2009	21	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E5442011609	01/16/2009	42	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E54081309	08/13/2009	pi.	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U
	E5420122010	12/20/2010	20	1 U	1 U	1 U	22.8	1 U	10 U	1 U	1 U	0.54	89.6
	E5412113011	11/30/2011	12	1 U	1 U	1 U	10 U	1 U	10 U	1 U	1 U	20 U	50 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloro-methane
MTCA Method B Groundwater VI Screening Level				2.4	NV	NV	0.09	200	13	400	0.22	100	12	1.2	5.2
MTCA Method B Groundwater Cleanup Level				0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2	3.4
Area 1															
E-28	E28071307	07/13/2007	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E28-P091407	09/14/2007	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E28-20031308	03/13/2008	20	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E28-41031308	03/13/2008	41	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2824061709	06/17/2009	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2845061709	06/17/2009	45	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2837121410	12/14/2010	37	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2845121410	12/14/2010	45	0.3 U	1 U	1 U	1 U	1 U	1 U	0.13	1 U	1 U	1 U	1 U	1 U
	E2825111811	11/18/2011	25	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2830111811	11/18/2011	30	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-32	E32-23.0 B	05/10/2007	23	**0.93**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E32-23.0 P	05/10/2007	23	**0.91**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E32-33.0 B	05/10/2007	33	0.38	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E32-33.0 P	05/10/2007	33	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E32-45.0 B	05/10/2007	45	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E32-45.0 P	05/10/2007	45	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E32-22091107	09/11/2007	22	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E32-45091107	09/11/2007	45	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E32-20031308	03/14/2008	20	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E32-45031408	03/14/2008	45	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3227121108	12/11/2008	27	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3245121108	12/11/2008	45	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3224061709	06/17/2009	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3245061709	06/17/2009	45	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3236121410	12/14/2010	36	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3249121410	12/14/2010	49	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3228111811	11/18/2011	28	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-36	E36-21.0 B	05/09/2007	21	**2.16**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E36-21.0 P	05/09/2007	21	**1.98**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E36-33.0 B	05/09/2007	33	**1.52**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E36-33.0 P	05/09/2007	33	**1.09**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E36-44.0 B	05/09/2007	44	**1.39**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E36-44.0 P	05/09/2007	44	**1.84**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloro-methane
MTCA Method B Groundwater VI Screening Level				2.4	NV	NV	0.09	200	13	400	0.22	100	12	1.2	5.2
MTCA Method B Groundwater Cleanup Level				0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2	3.4
E-36 cont.	E36-22091207	09/12/2007	22	0.42	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E36-43091207	09/12/2007	43	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E36-20031408	03/14/2008	20	0.55	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E36-37031408	03/14/2008	37	0.41	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3626121108	12/11/2008	26	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3637121108	12/11/2008	37	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3624061609	06/16/2009	24	0.67	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3637061609	06/16/2009	37	0.57	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3626121510	12/15/2010	26	0.3	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3643121510	12/15/2010	43	0.24	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3625112311	11/23/2011	25	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3647112311	11/23/2011	47	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-37	E37-20071107	07/11/2007	20	0.32	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E37-30071107	07/11/2007	30	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E37-22091107	09/11/2007	22	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E37-30091107	09/11/2007	30	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E37-20031108	03/11/2008	20	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E37-30031108	03/13/2008	30	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3726121008	12/10/2008	26	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3730121008	12/10/2008	30	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3724061609	06/16/2009	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3730061609	06/16/2009	30	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3725121510	12/15/2010	25	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3730121510	12/15/2010	30	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3724111711	11/17/2011	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3729111711	11/17/2011	29	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-39	E39-20071207	07/12/2007	20	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E39-36071207	07/12/2007	36	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E39-21091207	09/12/2007	21	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E39-35091207	09/12/2007	35	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E39031708	03/17/2008	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E39011209	01/12/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E39P061909	06/19/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E-39	12/9/2010	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3924112211	11/22/2011	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E3933112211	11/22/2011	33	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloro-methane
MTCA Method B Groundwater VI Screening Level				2.4	NV	NV	0.09	200	13	400	0.22	100	12	1.2	5.2
MTCA Method B Groundwater Cleanup Level				0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2	3.4
Area 2															
E-4	E4-21071207	07/12/2007	21	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4-50071207	07/12/2007	50	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4-23091307	09/13/2007	23	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4-48091307	09/13/2007	48	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4031108	03/11/2008	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4011309	01/13/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4061809P	06/18/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E-4	12/9/2010	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E424112811	11/28/2011	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E45112811	11/28/2011	51	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-5	E524011309	01/13/2009	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E549011309	01/13/2009	49	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-24	E24071307	07/13/2007	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E24-P091407	09/14/2007	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E24-23031208	03/12/2008	23	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E24-42031208	03/12/2008	42	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2428121208	12/12/2008	28	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2443121208	12/12/2008	43	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2426061709	06/17/2009	26	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2443061709	06/17/2009	43	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2429121010	12/10/2010	29	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2446121010	12/10/2010	46	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2427111811	11/18/2011	27	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-25	E2525011309	01/13/2009	25	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2549011309	01/13/2009	49	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-26	E26071307	07/13/2007	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E26-P091407	09/14/2007	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E26-21031208	03/12/2008	21	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E26-41031208	03/12/2008	41	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2624061809	06/18/2009	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2644061809	06/18/2009	44	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2636121310	12/13/2010	36	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2644121310	12/13/2010	44	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2626111811	11/18/2011	26	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2644111811	11/18/2011	44	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloro-methane
MTCA Method B Groundwater VI Screening Level				2.4	NV	NV	0.09	200	13	400	0.22	100	12	1.2	5.2
MTCA Method B Groundwater Cleanup Level				0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2	3.4
E-27	E27071307	07/13/2007	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E27-24091307	09/13/2007	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E27-40091307	09/13/2007	40	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E27-21031108	03/11/2008	21	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E27-40031108	03/11/2008	40	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2725011409	01/14/2009	25	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2740011409	01/14/2009	40	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2725061809	06/18/2009	25	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2740061809	06/18/2009	40	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2726121610	12/16/2010	26	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2740121610	12/16/2010	40	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2725112911	11/29/2011	25	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2742112911	11/29/2011	42	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-58	E58071307	07/13/2007	pi.	0.45	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E58-P091407	09/14/2007	pi.	0.41	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E58-19031808	03/18/2008	19	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E58-36031808	03/18/2008	36	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5823011409	01/14/2009	23	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5836011409	01/14/2009	36	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5823061809	06/18/2009	23	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5840061809	06/18/2009	40	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5824121610	12/16/2010	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5840121610	12/16/2010	40	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5823112811	11/28/2011	23	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5838112811	11/28/2011	38	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
Area 3															
E-42	E42-21090607	09/06/2007	21	**1.34**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E42-40090607	09/06/2007	40	0.71	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E42031708	03/17/2008	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	4.53	1 U	1 U	1 U	1 U	1 U
	E42011209	01/12/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E42P061909	06/19/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E-42	12/9/2010	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4224112111	11/21/2011	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloro-methane
MTCA Method B Groundwater VI Screening Level				2.4	NV	NV	0.09	200	13	400	0.22	100	12	1.2	5.2
MTCA Method B Groundwater Cleanup Level				0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2	3.4
E-43	E43-20090607	09/06/2007	20	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E43-45090607	09/06/2007	45	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E43031708	03/17/2008	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E43011209	01/12/2009	pi.	**1.66**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4322071509	07/15/2009	22	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4323121610	12/16/2010	23	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4324112111	11/21/2011	24	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-45	E45-21090507	09/05/2007	21	**28.1**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E45-43090607	09/06/2007	43	**10.2**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E45031708	03/17/2008	pi.	**5.96**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E45011209	01/12/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E45P061909	06/19/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E-45	12/9/2010	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4522112111	11/21/2011	22	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4532112111	11/21/2011	32	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-49	E49-18090707	09/07/2007	18	**3.53**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E49-39090707	09/07/2007	39	**4.88**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E49031708	03/17/2008	pi.	**3.06**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E49011309	01/13/2009	pi.	0.3	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E4913071509	07/15/2009	13	**7.25**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E49122010	12/20/2010	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E497113011	11/30/2011	7	**1.12**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
Area 4															
DEW-4	DEW4-20091007	09/10/2007	20	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
	DEW4-49091007	09/10/2007	49	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
	DEW423011509	01/15/2009	23	0.44	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	DEW450011509	01/15/2009	50	0.42	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	DEW4081309	08/13/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	DEW-4	12/9/2010	pi.	0.3 U	1 U	1 U		1 U	1 U	0.31	1 U	1 U	1 U	1 U	1 U
	DEW423112911	11/29/2011	23	**1.38**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	DEW451112911	11/29/2011	51	0.65	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-2	E2-P091407	09/14/2007	pi.	**0.81**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2011309	01/13/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2P051909	06/19/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E-2	12/9/2010	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E223112811	11/28/2011	23	0.53	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E2411128/11	11/28/2011	41	0.44	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Benzene	Bromo-benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloro-methane
MTCA Method B Groundwater VI Screening Level				2.4	NV	NV	0.09	200	13	400	0.22	100	12	1.2	5.2
MTCA Method B Groundwater Cleanup Level				0.8	NV	NV	0.71	5.5	11	800	0.34	160	15	7.2	3.4
E-10	E10-20091307	09/13/2007	20	**2.18**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E10-34091307	09/13/2007	34	**1.9**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E10011309	01/13/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E10P061909	06/16/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E-10	12/9/2010	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E1020113011	11/30/2011	20	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-16	E16-P091407	09/14/2007	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E16081309	08/13/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E1625121710	12/17/2010	25	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E1642121710	12/17/2010	42	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E1622112911	11/29/2011	22	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E1633112911	11/29/2011	33	0.3	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-17	E1721011509	01/15/2009	21	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E1748011509	01/15/2009	48	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-51	E51-20090707	09/07/2007	20	**50.5**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E51-44090707	09/07/2007	44	**52.9**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E51031708	03/17/2008	pi.	**38.2**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E51011309	01/13/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E51P061909	06/19/2009	pi.	0.3 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E-51	12/10/2010	pi.	0.1	1 U	1 U	1 U	1 U	1 U	0.25	1 U	1 U	1 U	1 U	1 U
	E5120113011	11/30/2011	20	0.37	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5139113011	11/30/2011	39	0.34	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
E-54	E54-19091007	09/10/2007	19	**2.92**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E54-40091007	09/10/2007	40	**2.84**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5421011609	01/16/2009	21	**1.39**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5442011609	01/16/2009	42	**1.3**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E54081309	08/13/2009	pi.	**1.72**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5420122010	12/20/2010	20	**0.8**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
	E5412113011	11/30/2011	12	**0.86**	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethylbenzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methylene chloride	Naphthalene	n-Butyl-benzene
MTCA Method B Groundwater VI Screening Level				160	0.22	NV	9.9	2800	0.81	720	310[a]	94	170	NV
MTCA Method B Groundwater Cleanup Level				80	0.52	80	1600	800	0.56	800	16000[a]	5.8	160	NV
Area 1														
E-28	E28071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	3.40	1 U
	E28-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E28-20031308	03/13/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	6.24	1 U
	E28-41031308	03/13/2008	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2824061709	06/17/2009	24	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.72	1 U
	E2845061709	06/17/2009	45	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2837121410	12/14/2010	37	0.2	1 U	1 U	1 U	0.12	1 U	1 U	2 U	20 U	0.32	1 U
	E2845121410	12/14/2010	45	1 U	1 U	1 U	1 U	0.13	1 U	1 U	2 U	20 U	0.43	1 U
	E2825111811	11/18/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2830111811	11/18/2011	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-32	E32-23.0 B	05/10/2007	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	65.3	1 U
	E32-23.0 P	05/10/2007	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	87.5	1 U
	E32-33.0 B	05/10/2007	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	18.2	1 U
	E32-33.0 P	05/10/2007	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	7.28	1 U
	E32-45.0 B	05/10/2007	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	8.16	1 U
	E32-45.0 P	05/10/2007	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.88	1 U
	E32-22091107	09/11/2007	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E32-45091107	09/11/2007	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E32-20031308	03/14/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E32-45031408	03/14/2008	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3227121108	12/11/2008	27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3245121108	12/11/2008	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3224061709	06/17/2009	24	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3245061709	06/17/2009	45	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3236121410	12/14/2010	36	0.18	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	0.25	1 U
	E3249121410	12/14/2010	49	0.21	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	0.37	1 U
	E3228111811	11/18/2011	28	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-36	E36-21.0 B	05/09/2007	21	4.72	1 U	1 U	1 U	2.19	1 U	2.48	4.05	20 U	**316**	1.43
	E36-21.0 P	05/09/2007	21	4.83	1 U	1 U	1 U	4.3	1 U	4.26	7.92	20 U	**689**	1.38
	E36-33.0 B	05/09/2007	33	25.8	1 U	1 U	1 U	3.28	1 U	6.37	8.07	20 U	**253**	7.71
	E36-33.0 P	05/09/2007	33	30.7	1 U	1 U	1 U	2.42	1 U	5.09	5.73	20 U	169	5.91
	E36-44.0 B	05/09/2007	44	35.4	1 U	1 U	1 U	2.33	1 U	5.84	5.91	20 U	**226**	5.39
	E36-44.0 P	05/09/2007	44	**84.5**	1 U	1 U	1 U	1.06	1 U	4.05	2.83	20 U	148	5.11

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethylbenzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methylene chloride	Naphthalene	n-Butyl-benzene
MTCA Method B Groundwater VI Screening Level				160	0.22	NV	9.9	2800	0.81	720	310[a]	94	170	NV
MTCA Method B Groundwater Cleanup Level				80	0.52	80	1600	800	0.56	800	16000[a]	5.8	160	NV
E-36 cont.	E36-22091207	09/12/2007	22	3.82	1 U	1 U	1 U	6.2	1 U	3.36	10.2	20 U	**385**	1.36
	E36-43091207	09/12/2007	43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	82.9	1.98
	E36-20031408	03/14/2008	20	4.19	1 U	1 U	1 U	21.2	1 U	11.5	42.7	20 U	**1100**	2.15
	E36-37031408	03/14/2008	37	3.69	1 U	1 U	1 U	17.7	1 U	8.53	36.1	20 U	**836**	1.78
	E3626121108	12/11/2008	26	1 U	1 U	1 U	1 U	1.97	1 U	1 U	2 U	20 U	**818**	1.02
	E3637121108	12/11/2008	37	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	120	1 U
	E3624061609	06/16/2009	24	1 U	--	1 U	1 U	7.03	1 U	5.24	11.2	20 U	**1760**	2.26
	E3637061609	06/16/2009	37	1 U	--	1 U	1 U	9.47	1 U	6.69	16	20 U	**1320**	2.92
	E3626121510	12/15/2010	26	1 U	1 U	1 U	1 U	25.4	1 U	21.8	58.1	20 U	**7210**	4.96
	E3643121510	12/15/2010	43	1 U	1 U	1 U	1 U	20.7	1 U	15.4	45.6	20 U	**3530**	3.5
	E3625112311	11/23/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1.14	2 U	20 U	116	1 U
	E3647112311	11/23/2011	47	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	4.79	1.06
E-37	E37-20071107	07/11/2007	20	2.71	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E37-30071107	07/11/2007	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E37-22091107	09/11/2007	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E37-30091107	09/11/2007	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E37-20031108	03/11/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E37-30031108	03/13/2008	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3726121008	12/10/2008	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3730121008	12/10/2008	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3724061609	06/16/2009	24	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3730061609	06/16/2009	30	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3725121510	12/15/2010	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	0.26	1 U
	E3730121510	12/15/2010	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3724111711	11/17/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E3729111711	11/17/2011	29	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-39	E39-20071207	07/12/2007	20	1.81	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	11.5	2.05
	E39-36071207	07/12/2007	36	1.71	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	12.2	2.96
	E39-21091207	09/12/2007	21	3.76	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	18.5	2.12
	E39-35091207	09/12/2007	35	3.8	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	**184**	2.41
	E39031708	03/17/2008	pi.	1 U	1 U	1 U	1 U	3.88	1 U	1.2	2.97	20 U	**1110**	3.21
	E39011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	27.8	1 U
	E39P061909	06/19/2009	pi.	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.11	1 U
	E-39	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	4.93	1 U
	E3924112211	11/22/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	7.31	1 U
	E3933112211	11/22/2011	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	6.17	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	cis-1,2-Dichloroethene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene
MTCA Method B Groundwater VI Screening Level				160	0.22	NV	9.9	2800	0.81	720	310[a]	94	170	NV
MTCA Method B Groundwater Cleanup Level				80	0.52	80	1600	800	0.56	800	16000[a]	5.8	160	NV
Area 2														
E-4	E4-21071207	07/12/2007	21	1.19	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	34.4	1 U
	E4-50071207	07/12/2007	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	24.7	1 U
	E4-23091307	09/13/2007	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	**216**	1 U
	E4-48091307	09/13/2007	48	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	12	1 U
	E4031108	03/11/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	9	1 U
	E4011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.95	1 U
	E4061809P	06/18/2009	pi.	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	28.8	1 U
	E-4	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	0.28	1 U
	E424112811	11/28/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E45112811	11/28/2011	51	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-5	E524011309	01/13/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	6.78	1 U
	E549011309	01/13/2009	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-24	E24071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	4.68	1 U
	E24-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	12.6	1 U
	E24-23031208	03/12/2008	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E24-42031208	03/12/2008	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2428121208	12/12/2008	28	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2443121208	12/12/2008	43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2426061709	06/17/2009	26	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2443061709	06/17/2009	43	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2429121010	12/10/2010	29	0.2	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	0.59	1 U
	E2446121010	12/10/2010	46	0.2	1 U	1 U	1 U	0.1	1 U	1 U	2 U	20 U	0.43	1 U
	E2427111811	11/18/2011	27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-25	E2525011309	01/13/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	12.1	1 U
	E2549011309	01/13/2009	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-26	E26071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	21	1 U
	E26-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E26-21031208	03/12/2008	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E26-41031208	03/12/2008	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2624061809	06/18/2009	24	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.91	1 U
	E2644061809	06/18/2009	44	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2636121310	12/13/2010	36	0.25	1 U	1 U	1 U	0.13	1 U	1 U	2 U	20 U	0.59	1 U
	E2644121310	12/13/2010	44	0.25	1 U	1 U	1 U	0.13	1 U	1 U	2 U	20 U	0.65	0.1
	E2626111811	11/18/2011	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2644111811	11/18/2011	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	cis-1,2-Dichloroethene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methylene chloride	Naphthalene	n-Butylbenzene
MTCA Method B Groundwater VI Screening Level				160	0.22	NV	9.9	2800	0.81	720	310[a]	94	170	NV
MTCA Method B Groundwater Cleanup Level				80	0.52	80	1600	800	0.56	800	16000[a]	5.8	160	NV
E-27	E27071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1.59	2 U	20 U	152	1.26
	E27-24091307	09/13/2007	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	19.6	1 U
	E27-40091307	09/13/2007	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	31.8	1 U
	E27-21031108	03/11/2008	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E27-40031108	03/11/2008	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2725011409	01/14/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	7.86	1 U
	E2740011409	01/14/2009	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2725061809	06/18/2009	25	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.81	1 U
	E2740061809	06/18/2009	40	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2726121610	12/16/2010	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2740121610	12/16/2010	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2725112911	11/29/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2742112911	11/29/2011	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-58	E58071307	07/13/2007	pi.	1.48	1 U	1 U	1 U	4.62	1 U	6.39	2.98	20 U	**356**	3.47
	E58-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	9.17	1 U	6.62	12	20 U	**411**	2.14
	E58-19031808	03/18/2008	19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	34.4	1 U
	E58-36031808	03/18/2008	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E5823011409	01/14/2009	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	5.19	1 U
	E5836011409	01/14/2009	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E5823061809	06/18/2009	23	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E5840061809	06/18/2009	40	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.09	1 U
	E5824121610	12/16/2010	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	8.2	1 U
	E5840121610	12/16/2010	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	0.49	1 U
	E5823112811	11/28/2011	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E5838112811	11/28/2011	38	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
Area 3														
E-42	E42-21090607	09/06/2007	21	9.57	1 U	1 U	1 U	27.1	1 U	16.2	41.3	20 U	**588**	4.52
	E42-40090607	09/06/2007	40	5.01	1 U	1 U	1 U	13.5	1 U	7.91	21.2	20 U	**502**	2.9
	E42031708	03/17/2008	pi.	3.1	1 U	1 U	1 U	1 U	1 U	1 U	2.08	20 U	**356**	1 U
	E42011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	**341**	1 U
	E42P061909	06/19/2009	pi.	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E-42	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	0.46	1 U
	E4224112111	11/21/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethylbenzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methylene chloride	Naphthalene	n-Butyl-benzene
MTCA Method B Groundwater VI Screening Level				160	0.22	NV	9.9	2800	0.81	720	310[a]	94	170	NV
MTCA Method B Groundwater Cleanup Level				80	0.52	80	1600	800	0.56	800	16000[a]	5.8	160	NV
E-43	E43-20090607	09/06/2007	20	6.21	1 U	1 U	1 U	2.57	1 U	8.57	2 U	20 U	125	4.3
	E43-45090607	09/06/2007	45	6.13	1 U	1 U	1 U	2	1 U	4.03	2 U	20 U	41.6	1.41
	E43031708	03/17/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E43011209	01/12/2009	pi.	4.09	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.81	1 U
	E4322071509	07/15/2009	22	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	121	1 U
	E4323121610	12/16/2010	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	53.5	1 U
	E4324112111	11/21/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	63	1 U
E-45	E45-21090507	09/05/2007	21	76.5	1 U	1 U	1 U	70.1	1 U	45.5	159	20 U	**3370**	13.1
	E45-43090607	09/06/2007	43	47.4	1 U	1 U	1 U	48.8	1 U	36.3	108	20 U	**2500**	12
	E45031708	03/17/2008	pi.	19.9	1 U	1 U	1 U	34.8	1 U	25.6	95.1	20 U	**1650**	14.4
	E45011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	41.9 B	1 U
	E45P061909	06/19/2009	pi.	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E-45	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.67	1 U
	E4522112111	11/21/2011	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E4532112111	11/21/2011	32	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-49	E49-18090707	09/07/2007	18	11.4	1 U	1 U	1 U	111	1 U	24.9	42	20 U	**1350**	2.29
	E49-39090707	09/07/2007	39	18.2	1 U	1 U	1 U	80.1	1 U	24	33.9	20 U	**1620**	2.15
	E49031708	03/17/2008	pi.	7.81	1 U	1 U	1 U	10.2	1 U	13.7	4.03	20 U	119	1 U
	E49011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1.23	1 U	1 U	2 U	20 U	**303**	1 U
	E4913071509	07/15/2009	13	1 U	--	1 U	1 U	120	1 U	18.1	132	20 U	**1130**	1.96
	E49122010	12/20/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1.72	1 U
	E497113011	11/30/2011	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	2.95	1 U
Area 4														
DEW-4	DEW4-20091007	09/10/2007	20	1 U	1 U	1 U	8.46	1 U	**3.96**	5.96	10 U	20 U	**239**	1 U
	DEW4-49091007	09/10/2007	49	1 U	1 U	1 U	11.4	1 U	**6.63**	8.15	10 U	20 U	**312**	1.23
	DEW423011509	01/15/2009	23	2.03	1 U	1 U	1 U	28.4	1 U	13.5	42.7	20 U	**1610**	2.8
	DEW450011509	01/15/2009	50	1.87	1 U	1 U	1 U	27.5	1 U	12.4	36	20 U	**1200**	2.35
	DEW4081309	08/13/2009	pi.	1 U	--	1 U	1 U	1.22	1 U	2.81	2 U	20 U	20.2	1 U
	DEW-4	12/9/2010	pi.	1 U	1 U	1 U	1 U	0.17	1 U	1 U	2 U	20 U	19.1	1 U
	DEW423112911	11/29/2011	23	1.59	1 U	1 U	1 U	8.13	1 U	5.76	11	20 U	**344**	1.19
	DEW451112911	11/29/2011	51	1 U	1 U	1 U	1 U	1.28	1 U	1 U	2 U	20 U	64.8	1 U
E-2	E2-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	2.67	2 U	20 U	147	3.41
	E2011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E2P051909	06/19/2009	pi.	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E-2	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	0.59	1 U
	E223112811	11/28/2011	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	8.64	1 U
	E2411128/11	11/28/2011	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	6.53	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	cis-1,2-Dichloroethene	Dibromochloro-methane	Dibromo-methane	Dichloro-difluoromethane	Ethylbenzene	Hexachloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methylene chloride	Naphthalene	n-Butyl-benzene
MTCA Method B Groundwater VI Screening Level				160	0.22	NV	9.9	2800	0.81	720	310[a]	94	170	NV
MTCA Method B Groundwater Cleanup Level				80	0.52	80	1600	800	0.56	800	16000[a]	5.8	160	NV
E-10	E10-20091307	09/13/2007	20	1.19	1 U	1 U	1 U	78.2	1 U	20.4	103	20 U	**6980**	1.93
	E10-34091307	09/13/2007	34	1.12	1 U	1 U	1 U	65.7	1 U	17.2	85	20 U	**4840**	1.88
	E10011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	159 B	1 U
	E10P061909	06/16/2009	pi.	1 U	--	1 U	1 U	1 U	1 U	1 U	2 U	20 U	**294**	1 U
	E-10	12/9/2010	pi.	1 U	1 U	1 U	1 U	0.11	1 U	1 U	2 U	20 U	99.8	1 U
	E1020113011	11/30/2011	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-16	E16-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	2.55	1 U	2.11	3.26	20 U	54.2	1.1
	E16081309	08/13/2009	pi.	1 U	--	1 U	1 U	4.15	1 U	3.56	2 U	20 U	**465**	3.45
	E1625121710	12/17/2010	25	1 U	1 U	1 U	1 U	0.49	1 U	1 U	2 U	20 U	3.66	1 U
	E1642121710	12/17/2010	42	1 U	1 U	1 U	1 U	0.69	1 U	1 U	2 U	20 U	4.2	1 U
	E1622112911	11/29/2011	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E1633112911	11/29/2011	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
E-17	E1721011509	01/15/2009	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	1 U	1 U
	E1748011509	01/15/2009	48	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	4.35	1 U
E-51	E51-20090707	09/07/2007	20	42.8	1 U	1 U	1 U	167	1 U	28.9	199	20 U	**2890**	3.71
	E51-44090707	09/07/2007	44	48.2	1 U	1 U	1 U	167	1 U	30.2	198	20 U	**3710**	4.32
	E51031708	03/17/2008	pi.	19.3	1 U	1 U	1 U	245	1 U	27.1	319	20 U	**4520**	4.41
	E51011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	**328**	1 U
	E51P061909	06/19/2009	pi.	1 U	--	1 U	1 U	9.58	1 U	1.54	10.4	20 U	**1780**	1 U
	E-51	12/10/2010	pi.	0.3	1 U	1 U	1 U	0.23	1 U	1 U	0.16	20 U	**1260**	0.11
	E5120113011	11/30/2011	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	13.9	1 U
	E5139113011	11/30/2011	39	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	5.89	1 U
E-54	E54-19091007	09/10/2007	19	1 U	1 U	1 U	1 U	49.3	1 U	19.8	3.17	20 U	**309**	1.17
	E54-40091007	09/10/2007	40	1 U	1 U	1 U	1 U	50.5	1 U	21.5	2.77	20 U	**526**	1.42
	E5421011609	01/16/2009	21	1 U	1 U	1 U	1.46	69.8	1 U	22.6	7.63	20 U	**858**	1 U
	E5442011609	01/16/2009	42	1 U	1 U	1 U	1.25	78.8	1 U	23.9	6.67	20 U	**1300**	1 U
	E54081309	08/13/2009	pi.	1 U	--	1 U	1 U	1.77	1 U	3.19	2 U	20 U	63.1	2.21
	E5420122010	12/20/2010	20	1 U	1 U	1 U	1 U	0.18	1 U	1 U	2 U	20 U	11.9	1 U
	E5412113011	11/30/2011	12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	20 U	87	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	n-Propyl-benzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloro-propene	Trichloro-ethene (TCE)	Trichlorofluoro-methane	Vinyl chloride
MTCA Method B Groundwater VI Screening Level				NV	440	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level				NV	16000	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
Area 1															
E-28	E28071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E28-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E28-20031308	03/13/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E28-41031308	03/13/2008	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2824061709	06/17/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2845061709	06/17/2009	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2837121410	12/14/2010	37	1 U	1 U	1 U	1 U	1 U	**0.31**	1 U	1 U	1 U	**0.9**	1 U	1 U
	E2845121410	12/14/2010	45	1 U	1 U	1 U	1 U	1 U	**0.38**	1 U	1 U	1 U	**0.93**	1 U	1 U
	E2825111811	11/18/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2830111811	11/18/2011	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-32	E32-23.0 B	05/10/2007	23	1 U	1.15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-23.0 P	05/10/2007	23	1 U	1.09	1 U	1 U	1 U	**1.59**	1 U	1 U	1 U	1 U	1 U	1 U
	E32-33.0 B	05/10/2007	33	1 U	1 U	1 U	1 U	1 U	**4.98**	1 U	1 U	1 U	1 U	1 U	1 U
	E32-33.0 P	05/10/2007	33	1 U	1 U	1 U	1 U	1 U	**5.73**	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45.0 B	05/10/2007	45	1 U	1 U	1 U	1 U	1 U	**5.72**	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45.0 P	05/10/2007	45	1 U	1 U	1 U	1 U	1 U	**6.11**	1 U	1 U	1 U	1 U	1 U	1 U
	E32-22091107	09/11/2007	22	1 U	1 U	1 U	1 U	1 U	**5.49**	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45091107	09/11/2007	45	1 U	1 U	1 U	1 U	1 U	**3.67**	1 U	1 U	1 U	1 U	1 U	1 U
	E32-20031308	03/14/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E32-45031408	03/14/2008	45	1 U	1 U	1 U	1 U	1 U	**2.33**	1 U	1 U	1 U	1 U	1 U	1 U
	E3227121108	12/11/2008	27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3245121108	12/11/2008	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3224061709	06/17/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3245061709	06/17/2009	45	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3236121410	12/14/2010	36	1 U	1 U	1 U	1 U	1 U	**0.79**	1 U	1 U	1 U	**0.93**	1 U	1 U
	E3249121410	12/14/2010	49	1 U	1 U	1 U	1 U	1 U	**0.71**	1 U	1 U	1 U	**0.85**	1 U	1 U
	E3228111811	11/18/2011	28	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-36	E36-21.0 B	05/09/2007	21	2.47	4.71	2.11	1 U	1 U	**1**	1.26	1 U	1 U	1 U	1 U	1 U
	E36-21.0 P	05/09/2007	21	4.22	9.13	2.52	1.01	1 U	**5.38**	1.09	1 U	1 U	1 U	1 U	1 U
	E36-33.0 B	05/09/2007	33	7.78	8.28	8.45	1 U	1 U	**26.6**	1 U	1 U	1 U	**9.46**	1 U	1 U
	E36-33.0 P	05/09/2007	33	5.72	6.2	7.1	1 U	1 U	**23.7**	1 U	1 U	1 U	**10.6**	1 U	1 U
	E36-44.0 B	05/09/2007	44	6.14	7.11	7.07	1 U	1 U	**27.5**	1 U	1 U	1 U	**9.52**	1 U	1 U
	E36-44.0 P	05/09/2007	44	3.51	6.14	6.53	1 U	1 U	**24.2**	1 U	1.27	1 U	**13.7**	1 U	**1.66**

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	n-Propyl-benzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloro-propene	Trichloro-ethene (TCE)	Trichlorofluoro-methane	Vinyl chloride
MTCA Method B Groundwater VI Screening Level				NV	440	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level				NV	16000	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
E-36 cont.	E36-22091207	09/12/2007	22	3.71	14.6	1.72	1.17	1 U	**3.6**	1.42	1 U	1 U	1 U	1 U	1 U
	E36-43091207	09/12/2007	43	1	2.09	2.13	1 U	1 U	**1.04**	1 U	1 U	1 U	1 U	1 U	1 U
	E36-20031408	03/14/2008	20	11.3	50	3.08	**3.09**	1 U	**10.2**	3.31	1 U	1 U	**1.61**	1 U	1 U
	E36-37031408	03/14/2008	37	7.96	44.4	2.29	**2.74**	1 U	**6.26**	3.47	1 U	1 U	**1.18**	1 U	1 U
	E3626121108	12/11/2008	26	1.3	2.16	1 U	1 U	1 U	**1.86**	1 U	1 U	1 U	1 U	1 U	1 U
	E3637121108	12/11/2008	37	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3624061609	06/16/2009	24	6.12	15.8	2.41	1 U	1 U	**4.98**	1.14	1 U	1 U	1 U	1 U	1 U
	E3637061609	06/16/2009	37	7.82	23.2	2.94	1.08	1 U	**4.83**	1.79	1 U	1 U	**1.05**	1 U	1 U
	E3626121510	12/15/2010	26	25.8	60.1	7.87	**2.74**	1 U	**15.7**	2.12	1 U	1 U	**0.86**	1 U	1 U
	E3643121510	12/15/2010	43	17.5	49.3	5.72	**2.55**	1 U	**11.1**	1.65	1 U	1 U	**0.8**	1 U	1 U
	E3625112311	11/23/2011	25	1.09	1 U	1.03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3647112311	11/23/2011	47	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-37	E37-20071107	07/11/2007	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.44**	1 U	1 U
	E37-30071107	07/11/2007	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-22091107	09/11/2007	22	1 U	1 U	1 U	1 U	1 U	**1.05**	1 U	1 U	1 U	1 U	1 U	1 U
	E37-30091107	09/11/2007	30	1 U	1 U	1 U	1 U	1 U	**1.26**	1 U	1 U	1 U	1 U	1 U	1 U
	E37-20031108	03/11/2008	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E37-30031108	03/13/2008	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3726121008	12/10/2008	26	1 U	1 U	1 U	1 U	1 U	**3.45**	1 U	1 U	1 U	**2.41**	1 U	1 U
	E3730121008	12/10/2008	30	1 U	1 U	1 U	1 U	1 U	**1.29**	1 U	1 U	1 U	1 U	1 U	1 U
	E3724061609	06/16/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3730061609	06/16/2009	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3725121510	12/15/2010	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3730121510	12/15/2010	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3724111711	11/17/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3729111711	11/17/2011	29	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-39	E39-20071207	07/12/2007	20	1 U	1 U	1.71	1 U	1 U	1 U	1 U	1 U	1 U	**2.1**	1 U	1 U
	E39-36071207	07/12/2007	36	1 U	1 U	2.34	1 U	1 U	1 U	1 U	1 U	1 U	**1.68**	1 U	1 U
	E39-21091207	09/12/2007	21	1 U	1 U	1.99	1 U	1 U	1 U	1 U	6.15	1 U	**2.25**	1 U	1 U
	E39-35091207	09/12/2007	35	1 U	1 U	2.24	1 U	1 U	1 U	1 U	6.2	1 U	**1.94**	1 U	1 U
	E39031708	03/17/2008	pi.	1.4	7.01	2.27	1 U	1 U	**15.2**	1 U	1 U	1 U	**2.53**	1 U	1 U
	E39011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E39P061909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-39	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3924112211	11/22/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E3933112211	11/22/2011	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	n-Propyl-benzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloro-propene	Trichloro-ethene (TCE)	Trichlorofluoro-methane	Vinyl chloride
MTCA Method B Groundwater VI Screening Level				NV	440	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level				NV	16000	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
Area 2															
E-4	E4-21071207	07/12/2007	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4-50071207	07/12/2007	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4-23091307	09/13/2007	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4-48091307	09/13/2007	48	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4031108	03/11/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4061809P	06/18/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-4	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E424112811	11/28/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E45112811	11/28/2011	51	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-5	E524011309	01/13/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E549011309	01/13/2009	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-24	E24071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E24-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E24-23031208	03/12/2008	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E24-42031208	03/12/2008	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2428121208	12/12/2008	28	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2443121208	12/12/2008	43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2426061709	06/17/2009	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2443061709	06/17/2009	43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2429121010	12/10/2010	29	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.79**	1 U	1 U
	E2446121010	12/10/2010	46	1 U	1 U	1 U	1 U	1 U	1 U	0.1	1 U	1 U	**0.86**	1 U	1 U
	E2427111811	11/18/2011	27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-25	E2525011309	01/13/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2549011309	01/13/2009	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-26	E26071307	07/13/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E26-P091407	09/14/2007	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E26-21031208	03/12/2008	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E26-41031208	03/12/2008	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2624061809	06/18/2009	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2644061809	06/18/2009	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2636121310	12/13/2010	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.85**	1 U	1 U
	E2644121310	12/13/2010	44	0.1	1 U	1 U	1 U	1 U	**0.17**	1 U	1 U	1 U	**0.97**	1 U	1 U
	E2626111811	11/18/2011	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2644111811	11/18/2011	44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride
MTCA Method B Groundwater VI Screening Level				NV	440	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level				NV	16000	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
E-27	E27071307	07/13/2007	pi.	1.27	1.12	1.68	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-24091307	09/13/2007	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-40091307	09/13/2007	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-21031108	03/11/2008	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E27-40031108	03/11/2008	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2725011409	01/14/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2740011409	01/14/2009	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2725061809	06/18/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2740061809	06/18/2009	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2726121610	12/16/2010	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2740121610	12/16/2010	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2725112911	11/29/2011	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2742112911	11/29/2011	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-58	E58071307	07/13/2007	pi.	4.35	4.48	4.7	1 U	1 U	1 U	1 U	1 U	1 U	**1.75**	1 U	1 U
	E58-P091407	09/14/2007	pi.	4.77	7.19	3.58	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E58-19031808	03/18/2008	19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E58-36031808	03/18/2008	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5823011409	01/14/2009	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5836011409	01/14/2009	36	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5823061809	06/18/2009	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5840061809	06/18/2009	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5824121610	12/16/2010	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5840121610	12/16/2010	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5823112811	11/28/2011	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5838112811	11/28/2011	38	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Area 3															
E-42	E42-21090607	09/06/2007	21	19.5	49.1	6.76	1.18	1 U	**58.1**	5.59	1 U	1 U	**7.41**	1 U	1 U
	E42-40090607	09/06/2007	40	9.85	25.1	3.85	1.15	1 U	**27.9**	2.88	1 U	1 U	**3.88**	1 U	1 U
	E42031708	03/17/2008	pi.	1 U	4.97	1 U	1 U	1 U	**13.3**	1 U	1 U	1 U	**1.94**	1 U	1 U
	E42011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E42P061909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-42	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	0.1	1 U	1 U	1 U	1 U	1 U
	E4224112111	11/21/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	n-Propyl-benzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloro-propene	Trichloro-ethene (TCE)	Trichlorofluoro-methane	Vinyl chloride
MTCA Method B Groundwater VI Screening Level				NV	440	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level				NV	16000	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
E-43	E43-20090607	09/06/2007	20	10.9	2.3	8.12	1 U	1 U	**1.62**	1 U	1 U	1 U	**1.07**	1 U	1 U
	E43-45090607	09/06/2007	45	3.98	2.03	3.4	1 U	1 U	**1.11**	1 U	1 U	1 U	1 U	1 U	**1.18**
	E43031708	03/17/2008	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E43011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	**5.51**	1 U	1 U	1 U	**1.48**	1 U	1 U
	E4322071509	07/15/2009	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4323121610	12/16/2010	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4324112111	11/21/2011	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-45	E45-21090507	09/05/2007	21	55.7	156	19.2	**11.3**	2.42	**42.9**	21	1 U	1 U	**6.27**	1 U	1 U
	E45-43090607	09/06/2007	43	44.3	108	16.6	**8.27**	1.97	**32**	10.6	1 U	1 U	**5.68**	1 U	**1.59**
	E45031708	03/17/2008	pi.	30.8	97.4	13.3	**5.61**	1.25	**22**	8.37	1 U	1 U	**3.12**	1 U	**2.23**
	E45011209	01/12/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E45P061909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-45	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4522112111	11/21/2011	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4532112111	11/21/2011	32	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-49	E49-18090707	09/07/2007	18	12.1	97	5.49	1.24	1 U	**2.83**	6.95	1 U	1 U	**2.93**	1 U	**1.16**
	E49-39090707	09/07/2007	39	10.1	96	5.94	1.35	1 U	**5.24**	6.81	1 U	1 U	**4.41**	1 U	**1.72**
	E49031708	03/17/2008	pi.	2.66	39.3	4	1 U	1 U	**4.78**	1 U	1 U	1 U	**2.26**	1 U	1 U
	E49011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E4913071509	07/15/2009	13	14.8	90.3	5.4	**6.56**	1 U	**1.08**	6.61	1 U	1 U	1 U	1 U	1 U
	E49122010	12/20/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E497113011	11/30/2011	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Area 4															
DEW-4	DEW4-20091007	09/10/2007	20	1.2	11.7	1.42	1 U	1 U	1 U	2.77	1 U	1 U	1 U	1 U	1 U
	DEW4-49091007	09/10/2007	49	2.34	15.2	2.76	1 U	1 U	1 U	3.07	1 U	1 U	1 U	1 U	1 U
	DEW423011509	01/15/2009	23	9.84	58.8	5.62	1 U	1 U	**1.65**	5.52	1 U	1 U	**1.64**	1 U	**1.27**
	DEW450011509	01/15/2009	50	8.24	55.5	4.82	1 U	1 U	**1.27**	5.8	1 U	1 U	**1.64**	1 U	**1.55**
	DEW4081309	08/13/2009	pi.	1.85	3.13	2.41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	DEW-4	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	0.13	1 U	1 U	1 U	1 U	1 U
	DEW423112911	11/29/2011	23	3.37	16.6	3.19	1 U	1 U	1 U	3.9	1 U	1 U	1 U	1 U	1 U
	DEW451112911	11/29/2011	51	1 U	2.12	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U
E-2	E2-P091407	09/14/2007	pi.	3.35	1 U	4.07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2P051909	06/19/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-2	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E223112811	11/28/2011	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E2411128/11	11/28/2011	41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-1
Volatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	n-Propyl-benzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	1,3-Dichloro-propene	Trichloro-ethene (TCE)	Trichlorofluoro-methane	Vinyl chloride
MTCA Method B Groundwater VI Screening Level				NV	440	NV	78	NV	1	15000	130	1.6	0.42	120	0.35
MTCA Method B Groundwater Cleanup Level				NV	16000	NV	1.5	NV	0.081	640	160	0.24	0.49	2400	0.029
E-10	E10-20091307	09/13/2007	20	12.1	84	3.62	**10.1**	1 U	**1.03**	13.4	1 U	1 U	1 U	1 U	1 U
	E10-34091307	09/13/2007	34	10.8	68.8	3.48	**7.91**	1 U	1 U	10.2	1 U	1 U	1 U	1 U	1 U
	E10011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E10P061909	06/16/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E-10	12/9/2010	pi.	1 U	1 U	1 U	1 U	1 U	1 U	0.13	1 U	1 U	1 U	1 U	1 U
	E1020113011	11/30/2011	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-16	E16-P091407	09/14/2007	pi.	1.94	2.68	1.59	1 U	1 U	**1.17**	1 U	1 U	1 U	1 U	1 U	1 U
	E16081309	08/13/2009	pi.	2.85	3.82	3.61	**2.29**	2.94	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1625121710	12/17/2010	25	0.25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1642121710	12/17/2010	42	0.29	1 U	0.15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1622112911	11/29/2011	22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1633112911	11/29/2011	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-17	E1721011509	01/15/2009	21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E1748011509	01/15/2009	48	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-51	E51-20090707	09/07/2007	20	20.9	175	5.8	**54.2**	1 U	**29.4**	115	1 U	1 U	**8.46**	1 U	**1.1**
	E51-44090707	09/07/2007	44	22.8	180	6.26	**56.7**	1.01	**32.6**	112	1.21	1 U	**9.03**	1 U	**1.32**
	E51031708	03/17/2008	pi.	21.8	268	5.6	**70.8**	1 U	**9.38**	103	1 U	1 U	**4.11**	1 U	1 U
	E51011309	01/13/2009	pi.	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E51P061909	06/19/2009	pi.	1 U	7.24	1.11	1 U	1 U	1 U	2.28	1 U	1 U	1 U	1 U	1 U
	E-51	12/10/2010	pi.	1 U	1.01	1 U	1 U	1 U	1 U	0.18	1 U	1 U	**0.84**	1 U	1 U
	E5120113011	11/30/2011	20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5139113011	11/30/2011	39	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
E-54	E54-19091007	09/10/2007	19	5.11	17	2.1	1 U	1 U	1 U	3.88	1 U	1 U	1 U	1 U	1 U
	E54-40091007	09/10/2007	40	5.79	16.5	2.5	1 U	1 U	1 U	3.87	1 U	1 U	1 U	1 U	1 U
	E5421011609	01/16/2009	21	4.75	25.4	1.71	1 U	1 U	1 U	3.08	1 U	1 U	1 U	1 U	1 U
	E5442011609	01/16/2009	42	4.97	25	1.63	1 U	1 U	1 U	3.31	1 U	1 U	1 U	1 U	1 U
	E54081309	08/13/2009	pi.	1.89	2.98	2.59	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	E5420122010	12/20/2010	20	1 U	1 U	1 U	1 U	1 U	1 U	0.41	1 U	1 U	1 U	1 U	1 U
	E5412113011	11/30/2011	12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-1-2
Dissolved Metals in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level				5[b]	48[c]	590	4800
Area 1							
E-28	E28071307	07/13/2007	pi.	4.3	5 U	10 U	14.9
	E28-P091407	09/14/2007	pi.	**11**	5 U	10 U	24.1
	E28-20031308	03/13/2008	20	**16**	5 U	10 U	10 U
	E28-41031308	03/13/2008	41	3.1	5 U	10 U	10 U
	E2824061709	06/17/2009	24	**7.9**	1 U	0.5 U	10 U
	E2845061709	06/17/2009	45	**5.6**	1 U	0.61	10 U
	E2837121410	12/14/2010	37	1.8	8.9	10.3	10 U
	E2845121410	12/14/2010	45	1.3	8.6	8.1	1.2
	E2825111811	11/18/2011	25	1.38	9	10 U	10 U
	E2830111811	11/18/2011	30	2.16	8.9	10 U	10 U
E-32	E32-23.0 P	05/10/2007	23	**14**	5 U	10 U	10 U
	E32-33.0 P	05/10/2007	33	2.8	5 U	10 U	10 U
	E32-45.0 P	05/10/2007	45	2.3	5 U	10 U	10 U
	E32-22091107	09/11/2007	22	2.8	5 U	10 U	10 U
	E32-45091107	09/11/2007	45	2.2	5 U	10 U	10 U
	E32-20031308	03/14/2008	20	**6.1**	5 U	10 U	10 U
	E32-45031408	03/14/2008	45	2.5	5 U	10 U	10 U
	E3227121108	12/11/2008	27	**5.5**	5.9	10 U	10 U
	E3245121108	12/11/2008	45	4.6	5 U	10 U	10 U
	E3224061709	06/17/2009	24	**6.5**	1 U	4.6	10 U
	E3245061709	06/17/2009	45	4.8	1 U	2	10 U
	E3236121410	12/14/2010	36	1.3	6.7	10 U	10 U
	E3249121410	12/14/2010	49	1.1	8.6	6	10 U
	E3228111811	11/18/2011	28	2.26	7.3	10 U	10 U
E-36	E36-21.0 P	05/09/2007	21	**21**	5 U	10 U	10 U
	E36-33.0 P	05/09/2007	33	**8.4**	5 U	10 U	10 U
	E36-44.0 P	05/09/2007	44	3.3	5 U	10 U	10 U
	E36-22091207	09/12/2007	22	**13**	5 U	10 U	10 U
	E36-43091207	09/12/2007	43	3.5	5 U	10 U	10 U
	E36-20031408	03/14/2008	20	**5.6**	5 U	10 U	18.8
	E36-37031408	03/14/2008	37	**5.7**	5 U	10 U	39.9
	E3626121108	12/11/2008	26	**16**	5 U	10	10 U
	E3637121108	12/11/2008	37	**6.3**	5 U	10 U	10 U
	E3624061609	06/16/2009	24	**21**	1.1	0.5	12
	E3637061609	06/16/2009	37	**20**	1 U	0.5 U	10 U
	E3626121510	12/15/2010	26	**6.1**	10.9	5.7	10 U
	E3643121510	12/15/2010	43	2.4	10.1	10 U	10 U
	E3625112311	11/23/2011	25	**11.5**	8.6	10 U	10 U
	E3647112311	11/23/2011	47	1.26	7.7	10 U	10 U

Table J-1-2
Dissolved Metals in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level				5[b]	48[c]	590	4800
E-37	E37-20071107	07/11/2007	20	**15**	5 U	10 U	10 U
	E37-30071107	07/11/2007	30	**8.3**	5 U	10 U	10 U
	E37-22091107	09/11/2007	22	**7.8**	5 U	10 U	10 U
	E37-30091107	09/11/2007	30	4.1	5 U	10 U	10 U
	E37-20031108	03/11/2008	20	3.9	5 U	10 U	10 U
	E37-30031108	03/13/2008	30	4.2	5 U	10 U	10 U
	E3726121008	12/10/2008	26	3.9	5.4	10 U	10 U
	E3730121008	12/10/2008	30	3.8	5	10 U	10 U
	E3724061609	06/16/2009	24	**6.2**	1 U	5.7	13
	E3730061609	06/16/2009	30	**5.1**	1 U	4.8	10 U
	E3725121510	12/15/2010	25	**5.5**	9	10 U	10 U
	E3730121510	12/15/2010	30	**6.6**	10.2	10 U	10 U
	E3724111711	11/17/2011	24	3.71	5 U	10 U	10 U
	E3729111711	11/17/2011	29	3.94	7.9	10 U	10 U
E-39	E39-20071207	07/12/2007	20	**42**	5 U	10 U	10 U
	E39-36071207	07/12/2007	36	**40**	5 U	10 U	10 U
	E39-21091207	09/12/2007	21	**36**	5 U	10 U	10 U
	E39-35091207	09/12/2007	35	**37**	5 U	10 U	10 U
	E39031708	03/17/2008	pi.	**24**	5.6	10 U	17.1
	E39011209	01/12/2009	pi.	**37**	1 U	3.9	14
	E39P061909	06/19/2009	pi.	**17**	5.5	10 U	15.4
	E-39	12/09/2010	pi.	**31**	7	16.3	33.8
	E3924112211	11/22/2011	24	**60.2**	9.5	10 U	10 U
	E3933112211	11/22/2011	33	**49.9**	7.3	10 U	10 U
Area 2							
E-4	E4-21071207	07/12/2007	21	**8.6**	5 U	10 U	10 U
	E4-50071207	07/12/2007	50	4.6	5 U	10 U	10 U
	E4-23091307	09/13/2007	23	**57**	5 U	11.3	10 U
	E4-48091307	09/13/2007	48	**18**	5 U	10 U	10 U
	E4031108	03/11/2008	pi.	**15**	5 U	10 U	10 U
	E4011309	01/13/2009	pi.	**7.8**	1 U	4.1	23
	E4061809P	06/18/2009	pi.	**15**	5.4	14.9	10 U
	E-4	12/09/2010	pi.	**8.7**	9.5	10 U	11.5
	E424112811	11/28/2011	24	4.59	7.4	10 U	10 U
	E45112811	11/28/2011	51	2.57	8.8	10.3	10 U
E-5	E524011309	01/13/2009	24	2.9	1 U	2.7	10 U
	E549011309	01/13/2009	49	**5.3**	1 U	0.5 U	10 U

Table J-1-2
Dissolved Metals in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level				5[b]	48[c]	590	4800
E-24	E24071307	07/13/2007	pi.	**11**	5 U	10 U	22.9
	E24-P091407	09/14/2007	pi.	**15**	5 U	13.2	10 U
	E24-23031208	03/12/2008	23	**6.5**	5 U	10 U	10 U
	E24-42031208	03/12/2008	42	1.4	5 U	10 U	10 U
	E2428121208	12/12/2008	28	4.4	5 U	10 U	10 U
	E2443121208	12/12/2008	43	4.1	5 U	10 U	10 U
	E2426061709	06/17/2009	26	4.3	1 U	10	10 U
	E2443061709	06/17/2009	43	1.6	1 U	0.52	10 U
	E2429121010	12/10/2010	29	**7.8**	10.2	16.6	10 U
	E2446121010	12/10/2010	46	**5.6**	9.1	14.6	10 U
	E2427111811	11/18/2011	27	2.04	10.5	10 U	10 U
E-25	E2525011309	01/13/2009	25	4.1	1 U	1.1	10 U
	E2549011309	01/13/2009	49	2.3	1 U	0.5 U	10 U
E-26	E26071307	07/13/2007	pi.	**9.3**	5 U	10 U	13.9
	E26-P091407	09/14/2007	pi.	**16**	5 U	10 U	10 U
	E26-21031208	03/12/2008	21	**12**	5 U	10 U	10 U
	E26-41031208	03/12/2008	41	**9.3**	5 U	10 U	10 U
	E2624061809	06/18/2009	24	4.3	6.2	10 U	10 U
	E2644061809	06/18/2009	44	**5.1**	7.4	10 U	10 U
	E2636121310	12/13/2010	36	**5.7**	9	5.9	10 U
	E2644121310	12/13/2010	44	1.6	10.6	3.6	1.6
	E2626111811	11/18/2011	26	3.12	7.9	10 U	10 U
	E2644111811	11/18/2011	44	1.66	9.3	10 U	10 U
E-27	E27071307	07/13/2007	pi.	**18**	5 U	10 U	10.1
	E27-24091307	09/13/2007	24	**62**	5 U	14.1	10 U
	E27-40091307	09/13/2007	40	**18**	5 U	10 U	10 U
	E27-21031108	03/11/2008	21	**19**	5 U	10 U	10 U
	E27-40031108	03/11/2008	40	**11**	5 U	10 U	10 U
	E2725011409	01/14/2009	25	**7.9**	1 U	1.4	10 U
	E2740011409	01/14/2009	40	**5.7**	1 U	0.5 U	10 U
	E2725061809	06/18/2009	25	**12**	5 U	10 U	10 U
	E2740061809	06/18/2009	40	**6.8**	6.8	10 U	10 U
	E2726121610	12/16/2010	26	**13**	8.6	10 U	10 U
	E2740121610	12/16/2010	40	2.3	12.1	10 U	10 U
	E2725112911	11/29/2011	25	**6.22**	8.5	10.5	10 U
	E2742112911	11/29/2011	42	3.99	8.8	10	10 U

Table J-1-2
Dissolved Metals in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level				5^b	48^c	590	4800
E-58	E58071307	07/13/2007	pi.	**12**	5 U	10 U	10 U
	E58-P091407	09/14/2007	pi.	**49**	5 U	10 U	12.3
	E58-19031808	03/18/2008	19	**21**	5 U	10 U	10 U
	E58-36031808	03/18/2008	36	**12**	5 U	10 U	10 U
	E5823011409	01/14/2009	23	**12**	1 U	0.5 U	10 U
	E5836011409	01/14/2009	36	**5.6**	1 U	0.5 U	10 U
	E5823061809	06/18/2009	23	**8.2**	6.3	10 U	10 U
	E5840061809	06/18/2009	40	**46**	5	19.1	41.2
	E5824121610	12/16/2010	24	**28**	7.7	4.7	10 U
	E5840121610	12/16/2010	40	**5.4**	7.6	10 U	10 U
	E5823112811	11/28/2011	23	**8.27**	8.9	10 U	10 U
	E5838112811	11/28/2011	38	**6.54**	8	10 U	10 U
Area 3							
E-42	E42-21090607	09/06/2007	21	**5.5**	5 U	10 U	10 U
	E42-40090607	09/06/2007	40	2.5	5 U	10 U	10 U
	E42031708	03/17/2008	pi.	2.1	5 U	17.1	25.8
	E42011209	01/12/2009	pi.	**18**	1 U	13	14
	E42P061909	06/19/2009	pi.	**6.3**	6.9	10 U	10 U
	E-42	12/09/2010	pi.	**29**	7.6	9.3	21.7
	E4224112111	11/21/2011	24	**26.7**	6.9	10 U	10 U
E-43	E43-20090607	09/06/2007	20	**9.5**	5 U	10 U	10 U
	E43-45090607	09/06/2007	45	**6.1**	5 U	10 U	23.5
	E43031708	03/17/2008	pi.	1.3	5 U	10 U	10 U
	E43011209	01/12/2009	pi.	1.3	1 U	0.54	36
	E4322071509	07/15/2009	22	**160**	1 U	0.5 U	10
	E4323121610	12/16/2010	23	**84**	7.4	4.8	10 U
	E4324112111	11/21/2011	24	**75.8**	8.3	10 U	10 U
E-45	E45-21090507	09/05/2007	21	**16**	5 U	10 U	10 U
	E45-43090607	09/06/2007	43	**14**	5 U	10 U	10 U
	E45031708	03/17/2008	pi.	**5.4**	5.7	10 U	10 U
	E45011209	01/12/2009	pi.	**25**	1 U	14	29
	E45P061909	06/19/2009	pi.	**5.8**	5 U	10 U	10 U
	E-45	12/09/2010	pi.	**38**	7.3	9.4	49.7
	E4522112111	11/21/2011	22	**34.2**	5 U	10 U	10 U
	E4532112111	11/21/2011	32	**35.6**	7.9	10 U	10 U

Table J-1-2
Dissolved Metals in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level				5[b]	48[c]	590	4800
E-49	E49-18090707	09/07/2007	18	**15**	5 U	10 U	10 U
	E49-39090707	09/07/2007	39	**9.8**	5 U	10 U	10 U
	E49031708	03/17/2008	pi.	3.5	6.2	10 U	10 U
	E49011309	01/13/2009	pi.	**34**	1 U	1.6	10 U
	E4913071509	07/15/2009	13	**93**	1 U	0.5 U	10 U
	E49122010	12/20/2010	pi.	**25**	8.4	10 U	7.9
	E497113011	11/30/2011	7	**18.6**	6.3	10 U	10 U
Area 4							
DEW-4	DEW4-20091007	09/10/2007	20	**8.2**	5 U	10 U	10 U
	DEW4-49091007	09/10/2007	49	**11**	5 U	10 U	10 U
	DEW423011509	01/15/2009	23	**16**	1 U	0.5 U	10 U
	DEW450011509	01/15/2009	50	**12**	1 U	0.5 U	10 U
	DEW4081309	08/13/2009	pi.	3.7	9.1	10 U	10 U
	DEW4081309	08/13/2009	pi.	3.7	9.1	10 U	10 U
	DEW-4	12/09/2010	pi.	**31**	6.2	3	25.2
	DEW423112911	11/29/2011	23	**99.2**	11.5	10 U	13.1
	DEW451112911	11/29/2011	51	**39.8**	11.3	10 U	10 U
E-2	E2-P091407	09/14/2007	pi.	**100**	5 U	13	10 U
	E2011309	01/13/2009	pi.	**5.1**	1 U	1.2	10 U
	E2P051909	06/19/2009	pi.	2.9	6	10 U	10 U
	E223112811	11/28/2011	23	**79.4**	7.3	10 U	10 U
	E241112811	11/28/2011	41	**64.6**	7.2	10 U	10 U
E-10	E10-20091307	09/13/2007	20	**530**	5 U	10 U	10 U
	E10-34091307	09/13/2007	34	**400**	5 U	10 U	10 U
	E10011309	01/13/2009	pi.	**32**	1 U	1.2	10 U
	E10P061909	06/16/2009	pi.	**41**	5.7	10 U	11.1
	E-10	12/09/2010	pi.	**90**	8.2	6.1	61.7
	E1020113011	11/30/2011	20	**23.9**	10.1	15	10 U
E-16	E16-P091407	09/14/2007	pi.	**42**	5 U	10 U	11
	E16081309	08/13/2009	pi.	**22**	6.4	10 U	10 U
	E1625121710	12/17/2010	25	**36**	9.6	4.9	10 U
	E1642121710	12/17/2010	42	**36**	10.1	5.3	1.3
	E1622112911	11/29/2011	22	**8.17**	**77**	10.1	10 U
	E1633112911	11/29/2011	33	**8.37**	6.8	10 U	10 U
E-17	E1721011509	01/15/2009	21	3.5	4.6	0.6	10 U
	E1748011509	01/15/2009	48	2.5	1 U	0.5 U	10 U

Table J-1-2
Dissolved Metals in Groundwater from Extraction Wells (μg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Arsenic	Chromium	Copper	Zinc
MTCA Method B Groundwater Cleanup Level				5[b]	48[c]	590	4800
E-51	E51-20090707	09/07/2007	20	**15**	5.5	10 U	10 U
	E51-44090707	09/07/2007	44	**12**	5.6	10 U	10 U
	E51031708	03/17/2008	pi.	3.5	7.4	10 U	36.1
	E51011309	01/13/2009	pi.	**28**	1 U	4.1	10 U
	E51P061909	06/19/2009	pi.	**51**	5 U	11	34.1
	E-51	12/10/2010	pi.	**97**	9.2	11	20.3
	E5120113011	11/30/2011	20	**44.9**	6.8	10 U	10 U
	E5139113011	11/30/2011	39	**47.7**	6.1	10 U	10 U
E-54	E54-19091007	09/10/2007	19	**30**	5 U	10 U	10 U
	E54-40091007	09/10/2007	40	**41**	5 U	10 U	10 U
	E5421011609	01/16/2009	21	**74**	1 U	0.5 U	10 U
	E5442011609	01/16/2009	42	**74**	1 U	0.5 U	10 U
	E54081309	08/13/2009	pi.	**9.6**	8.3	10 U	19.1
	E5420122010	12/20/2010	20	**200**	12.2	5.2	2.4
	E5412113011	11/30/2011	12	**298**	8.8	10 U	10 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics					
				2,3,4,6-Tetra-chlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol
MTCA Method B Groundwater Cleanup Level				480	NV	NV	NV	NV	800
Area 1									
E-28	E28071307	07/13/2007	pi.	4.9	17.2	43.6	1.63	0.958 U	0.958 U
	E28-P091407	09/14/2007	pi.	11.1	11.9	7.53	0.957 U	0.957 U	2.44
	E28-20031308	03/13/2008	20	17.5	7.2	27.6	0.961 U	0.961 U	2.21
	E28-41031308	03/13/2008	41	2.56	10.2	14.7	1.49	1.31	4.46
	E2824061709	6/17/2009	24	2.86	0.955 U	3.32	3.81	0.955 U	0.955 U
	E2845061709	6/17/2009	45	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	E2837121410	12/14/2010	37	0.81	0.724	3.23	0.953 U	0.953 U	0.0763
	E2845121410	12/14/2010	45	0.707	0.707	2.97	0.955 U	0.955 U	0.955 U
	E2825111811	11/18/2011	25	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	E2830111811	11/18/2011	30	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
E-32	E32-23.0 P	05/10/2007	23	150	37.8	1700	0.969 U	2.89	3.56
	E32-33.0 P	05/10/2007	33	24.4	0.961 U	135	0.961 U	0.961 U	0.961 U
	E32-45.0 P	05/10/2007	45	5.59	0.959 U	26.5	0.959 U	0.959 U	0.959 U
	E32-22091107	09/11/2007	22	1.82	0.96 U	1.96	0.96 U	0.96 U	0.96 U
	E32-45091107	09/11/2007	45	1.19	1.07 U	1.89	1.07 U	1.07 U	1.07 U
	E32-20031308	03/14/2008	20	4.08	0.954 U	8.63	0.954 U	0.954 U	0.954 U
	E32-45031408	03/14/2008	45	0.952 U	0.952 U	1.02	0.952 U	0.952 U	0.952 U
	E3227121108	12/11/2008	27	8.09	64	85.6	1.04 U	2.1	7.1
	E3245121108	12/11/2008	45	9.7	68.6	46.4	0.952 U	0.952 U	6.73
	E3224061709	6/17/2009	24	0.948 U	0.948 U	1.09	0.948 U	0.948 U	0.948 U
	E3245061709	6/17/2009	45	2.13	0.95 U	4.43	0.95 U	0.95 U	0.95 U
	E3236121410	12/14/2010	36	0.228	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	E3249121410	12/14/2010	49	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	E3228111811	11/18/2011	28	3.36	1.41	2.21	0.96 U	0.96 U	0.96 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics					
				2,3,4,6-Tetra-chlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol
MTCA Method B Groundwater Cleanup Level				480	NV	NV	NV	NV	800
E-36	E36-21.0 P	05/09/2007	21	**978**	338	5420	0.964 U	20.7	21.5
	E36-33.0 P	05/09/2007	33	59.7	63.4	376	0.964 U	1.84	10.3
	E36-44.0 P	05/09/2007	44	72.1	0.959 U	186	0.959 U	0.959 U	6.2
	E36-22091207	09/12/2007	22	**867**	713	11100	1.36	12.4	18.2
	E36-43091207	09/12/2007	43	68.9	66	728	0.958 U	0.958 U	3.38
	E36-20031408	03/14/2008	20	313	272	2090	3.82 U	8.47	19.4
	E36-37031408	03/14/2008	37	318	220	3030	3.81 U	8.91	15
	E3626121108	12/11/2008	26	39.3	81.5	209	0.967 U	3.35	11.5
	E3637121108	12/11/2008	37	9.79	64.5	76.9	0.966 U	0.966 U	20.1
	E3624061609	6/16/2009	24	39.4	212	256	3.82 UQ	1.63	95
	E3637061609	6/16/2009	37	19.4	189	162	3.82 UQ	3.82 UQ	87.3
	E3626121510	12/15/2010	26	51.6	219	68.5	0.946 U	0.284	50.7
	E3643121510	12/15/2010	43	80.1	269	42.6	261	0.172	0.505
	E3625112311	11/23/2011	25	6.03	3.36	16.1	1.28	0.965 U	0.965 U
	E3647112311	11/23/2011	47	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
E-37	E37-20071107	07/11/2007	20	24.4	36.2	149	8.65	0.973 U	0.973 U
	E37-30071107	07/11/2007	30	6.94	4.71	24	2.01	0.972 U	0.972 U
	E37-22091107	09/11/2007	22	67.1	30	65.1	1 U	1 U	8.98
	E37-30091107	09/11/2007	30	31	10.7	22.1	1 U	1 U	3.87
	E37-20031108	03/11/2008	20	2.2	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	E37-30031108	03/13/2008	30	1.42	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U
	E3726121008	12/10/2008	26	3.01	29.7	23	0.952 U	0.952 U	10.4
	E3730121008	12/10/2008	30	3.71	30.1	27.5	0.953 U	0.953 U	10.6
	E3724061609	6/16/2009	24	12.9	15.2	11.1	0.95 U	0.95 U	12.6
	E3730061609	6/16/2009	30	25.4	11.5	9.3	0.95 U	0.95 U	9.45
	E3725121510	12/15/2010	25	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	E3730121510	12/15/2010	30	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	E3724111711	11/17/2011	24	3.81	1.4	6	0.958 U	0.958 U	0.958 U
	E3729111711	11/17/2011	29	4.47	1.76	8.82	0.96 U	0.96 U	0.96 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics					
				2,3,4,6-Tetra-chlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol
MTCA Method B Groundwater Cleanup Level				480	NV	NV	NV	NV	800
E-39	E39-20071207	07/12/2007	20	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U
	E39-36071207	07/12/2007	36	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	E39-21091207	09/12/2007	21	0.962 U	0.962 U	6.93	0.962 U	0.962 U	0.962 U
	E39-35091207	09/12/2007	35	1.47	1.08 U	13	1.08 U	3.6	1.08 U
	E39031708	03/17/2008	pi.	21.2	94.4	32.3	0.958 U	0.958 U	27.7
	E39011209	01/12/2009	pi.	25.5	11.3	340	0.964 U	1.38	1.47
	E39P061909	6/19/2009	pi.	4.72	3.99	16.2	0.963 U	0.963 U	1.78
	E-39	12/9/2010	pi.	41.9	11.4	76.9	0.962 U	0.443	2.61
	E3924112211	11/22/2011	24	9.23	2.12	9.47	0.984 U	0.984 U	0.984 U
	E3933112211	11/22/2011	33	7.94	2.14	9	0.963 U	0.963 U	0.963 U
Area 2									
E-4	E4-21071207	07/12/2007	21	8.41	14.4	9.73	2.88	0.968 U	0.968 U
	E4-50071207	07/12/2007	50	1.46	1.01 U	4.47	1.01 U	1.01 U	1.01 U
	E4-23091307	09/13/2007	23	41.3	9.23	41.9	0.976 U	0.976 U	2.82
	E4-48091307	09/13/2007	48	3.58	3.66	3.3	0.96 U	0.96 U	0.96 U
	E4031108	03/11/2008	pi.	13.7	10.9	6.88	0.958 U	0.958 U	2.13
	E4011309	01/13/2009	pi.	1.8	1.71	4.22	0.947 U	0.947 U	0.947 U
	E4061809P	6/18/2009	pi.	13.1	30.9	618	0.965 U	0.965 U	9.21
	E-4	12/9/2010	pi.	0.239	0.201	0.957 U	0.957 U	0.957 U	0.115
	E424112811	11/28/2011	24	10	0.957 U	2.16	0.957 U	0.957 U	0.957 U
	E45112811	11/28/2011	51	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
E-5	E524011309	01/13/2009	24	37.6	14.8	125	0.952 U	0.952 U	5.19
	E549011309	01/13/2009	49	3.02	0.951 U	4.87	0.951 U	0.951 U	0.951 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics					
				2,3,4,6-Tetra-chlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol
MTCA Method B Groundwater Cleanup Level				480	NV	NV	NV	NV	800
E-24	E24071307	07/13/2007	pi.	16.4	24.3	35.6	2.89	0.958 U	0.958 U
	E24-P091407	09/14/2007	pi.	20	9.35	31.5	0.974 U	0.974 U	1.01
	E24-23031208	03/12/2008	23	1.13 U	1.13 U	1.13 U	1.13 U	1.13 U	1.13 U
	E24-42031208	03/12/2008	42	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U
	E2428121208	12/12/2008	28	0.951 U	5.7	6.34	0.951 U	0.951 U	1.25
	E2443121208	12/12/2008	43	0.95 U	4	2.6	0.95 U	0.95 U	0.95 U
	E2426061709	6/17/2009	26	6.33	2.67	2.37	0.955 U	0.955 U	2.45
	E2443061709	6/17/2009	43	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	E2429121010	12/10/2010	29	0.583	0.449	0.899	0.727	0.813	0.679
	E2446121010	12/10/2010	46	0.372	0.344	0.64	0.955 U	0.955 U	0.439
	E2427111811	11/18/2011	27	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U
E-25	E2525011309	01/13/2009	25	38.4	27.5	180	0.953 U	0.953 U	12
	E2549011309	01/13/2009	49	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
E-26	E26071307	07/13/2007	pi.	12.4	41	40.2	5.38	0.956 U	0.956 U
	E26-P091407	09/14/2007	pi.	1.66	11.3	2.17	0.966 U	0.966 U	2.25
	E26-21031208	03/12/2008	21	4.99	22	10.6	0.964 U	0.964 U	2.8
	E26-41031208	03/12/2008	41	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U
	E2624061809	6/18/2009	24	2.02	6.81	3.61	0.961 U	0.961 U	12.8
	E2644061809	6/18/2009	44	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	E2636121310	12/13/2010	36	0.957 U	0.421	0.689	0.957 U	0.957 U	0.383
	E2644121310	12/13/2010	44	0.258	0.957 U	0.536	0.957 U	0.957 U	0.201
	E2626111811	11/18/2011	26	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U
	E2644111811	11/18/2011	44	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics					
				2,3,4,6-Tetra-chlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol
MTCA Method B Groundwater Cleanup Level				480	NV	NV	NV	NV	800
E-27	E27071307	07/13/2007	pi.	4.81	20.8	8.9	2.98	0.954 U	0.954 U
	E27-24091307	09/13/2007	24	7.26	3.89	5.24	1.1 U	1.1 U	1.34
	E27-40091307	09/13/2007	40	1.12 U	1.12 U	1.12 U	1.12 U	1.12 U	1.12 U
	E27-21031108	03/11/2008	21	1.97	3.08	2.03	0.96 U	0.96 U	0.96 U
	E27-40031108	03/11/2008	40	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
	E2725011409	01/14/2009	25	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	E2740011409	01/14/2009	40	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	E2725061809	6/18/2009	25	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.22
	E2740061809	6/18/2009	40	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	E2726121610	12/16/2010	26	2.64	0.646	6.53	0.95 U	0.95 U	0.218
	E2740121610	12/16/2010	40	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U	0.947 U
	E2725112911	11/29/2011	25	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U
	E2742112911	11/29/2011	42	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
E-58	E58071307	07/13/2007	pi.	6.27	18	8.32	3.69	0.956 U	0.956 U
	E58-P091407	09/14/2007	pi.	29.9	22	18.2	0.97 U	0.97 U	5.57
	E58-19031808	03/18/2008	19	1.11	4.19	1.45	0.962 U	0.962 U	1.15
	E58-36031808	03/18/2008	36	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
	E5823011409	01/14/2009	23	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	E5836011409	01/14/2009	36	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	E5823061809	6/18/2009	23	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U	0.956 U
	E5840061809	6/18/2009	40	25.2	31.8	178	0.962 U	1.42	6.41
	E5824121610	12/16/2010	24	10.7	2.26	41.3	0.96 U	0.202	0.528
	E5840121610	12/16/2010	40	0.953 U	0.639	1.19	0.953 U	0.953 U	0.114
	E5823112811	11/28/2011	23	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
	E5838112811	11/28/2011	38	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics					
				2,3,4,6-Tetra-chlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol
MTCA Method B Groundwater Cleanup Level				480	NV	NV	NV	NV	800
Area 3									
E-42	E42-21090607	09/06/2007	21	289	224	830	1 U	3.16	38.1
	E42-40090607	09/06/2007	40	152	120	400	1 U	2.19	22
	E42031708	03/17/2008	pi.	24.3	25.6	221	0.951 U	0.951 U	3.04
	E42011209	01/12/2009	pi.	43.4	32.7	437	0.965 U	2.37	8.32
	E42P061909	6/19/2009	pi.	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	E-42	12/9/2010	pi.	35.9	11	63.2	0.992 U	0.595	3.31
	E4224112111	11/21/2011	24	5.11	5.24	7.64	1.75	0.965 U	0.965 U
E-43	E43-20090607	09/06/2007	20	1.6	1.03	2.47	1 U	1 U	1.39
	E43-45090607	09/06/2007	45	1.75	1.32	2.21	1 U	1 U	1.1
	E43031708	03/17/2008	pi.	0.947 U	0.947 U	1.66	0.947 U	0.947 U	0.947 U
	E43011209	01/12/2009	pi.	33.5	35.2	227	0.943 U	1.08	15.4
	E4322071509	7/15/2009	22	22.9	13.7	74.3	2.63	1.72	2.69
	E4323121610	12/16/2010	23	1.66	1.16	5.09	0.963 U	0.963 U	0.395
	E4324112111	11/21/2011	24	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
E-45	E45-21090507	09/05/2007	21	**2700**	80.6	4490	1 U	11.8	15.5
	E45-43090607	09/06/2007	43	**787**	43.9	983	1 U	3.91	16.4
	E45031708	03/17/2008	pi.	420	31.7	1180	0.953 U	2.87	5.45
	E45011209	01/12/2009	pi.	69.7	33.1	937	0.977 U	2.86	5.08
	E45P061909	6/19/2009	pi.	3.91	1.1	4.84	0.954 U	0.954 U	1.07
	E-45	12/9/2010	pi.	9.17	1.7	11.4	0.954 U	0.401	0.859
	E4522112111	11/21/2011	22	6.58	4.87	14.3	1.39	0.985 U	0.985 U
	E4532112111	11/21/2011	32	4.48	4.26	12.6	1.42	0.962 U	0.962 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics					
				2,3,4,6-Tetra-chlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol
MTCA Method B Groundwater Cleanup Level				480	NV	NV	NV	NV	800
E-49	E49-18090707	09/07/2007	18	113	14.8	162	1 U	1.26	13.7
	E49-39090707	09/07/2007	39	229	22.7	363	1 U	1.91	14.2
	E49031708	03/17/2008	pi.	90.8	8.56	163	0.946 U	0.946 U	10.4
	E49011309	01/13/2009	pi.	12	12	45.5	0.958 U	0.958 U	6.65
	E4913071509	7/15/2009	13	4.65	5.25	16.6	1 U	1 U	3.32
	E49122010	12/20/2010	pi.	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	E497113011	11/30/2011	7	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
Area 4									
DEW-4	DEW4-20091007	09/10/2007	20	2.16	4.95	10.1	1 U	1 U	1 U
	DEW4-49091007	09/10/2007	49	2.3	4.37	8.83	1 U	1 U	1 U
	DEW423011509	01/15/2009	23	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.964
	DEW450011509	01/15/2009	50	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U	0.944 U
	DEW4081309	8/13/2009	pi.	1.71 U	1.71 U	1.71 U	1.71 U	1.71 U	1.71 U
	DEW-4	12/9/2010	pi.	1.74	1.49	2.62	0.97 U	0.97 U	0.563
	DEW423112911	11/29/2011	23	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
	DEW451112911	11/29/2011	51	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U
E-2	E2-P091407	09/14/2007	pi.	40.1	17	37.8	0.971 U	0.971 U	3.53
	E2011309	01/13/2009	pi.	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	E2P061909	6/19/2009	pi.	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	E-2	12/9/2010	pi.	6.02	2.18	21	0.982 U	0.275	0.58
	E223112811	11/28/2011	23	1.16	1.84	0.961 U	0.961 U	0.961 U	0.961 U
	E241112811	11/28/2011	41	0.963 U	1.13	0.963 U	0.963 U	0.963 U	0.963 U
E-10	E10-20091307	09/13/2007	20	296	250	607	28.2	0.967 U	0.967 U
	E10-34091307	09/13/2007	34	231	208	363	0.963 U	0.963 U	23.1
	E10011309	01/13/2009	pi.	0.963 U	4.25	4.76	0.963 U	0.963 U	1.19
	E10P061909	6/19/2009	pi.	6.7	2.49	45.2	0.961 U	0.961 U	0.961 U
	E-10	12/9/2010	pi.	39.1	34.2	131	0.957 U	1.67	6.36
	E1020113011	11/30/2011	20	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics					
				2,3,4,6-Tetra-chlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetra-chlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,4,5-Trichlorophenol
MTCA Method B Groundwater Cleanup Level				480	NV	NV	NV	NV	800
E-16	E16-P091407	09/14/2007	pi.	36.3	28.6	53.7	0.957 U	0.957 U	5.99
	E16081309	8/13/2009	pi.	0.951 U	1.86	0.951 U	0.951 U	0.951 U	0.951 U
	E1625121710	12/17/2010	25	0.353	3.16	2.59	0.955 U	0.955 U	1.59
	E1642121710	12/17/2010	42	0.277	2.61	1.93	0.954 U	0.954 U	1.25
	E1622112911	11/29/2011	22	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	E1633112911	11/29/2011	33	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U
E-17	E1721011509	01/15/2009	21	0.952 U	0.952 U	1.04	0.952 U	0.952 U	0.952 U
	E1748011509	01/15/2009	48	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
E-51	E51-20090707	09/07/2007	20	**1410**	41.7	3490	1 U	8.59	9.91
	E51-44090707	09/07/2007	44	**1390**	33.9	2980	1 U	6.68	8.05
	E51031708	03/17/2008	pi.	**1070**	35.2	1210	0.962 U	2.29	8.12
	E51011309	01/13/2009	pi.	23.1	8.45	159	0.975 U	1.06	2.31
	E51P061909	6/19/2009	pi.	12.1	7.36	88.4	0.958 U	0.958 U	2.13
	E-51	12/10/2010	pi.	23.4	24.7	194	0.974 U	2.44	4.19
	E5120113011	11/30/2011	20	13.9		31.7	4.8	0.995	0.966 U
	E5139113011	11/30/2011	39	14.3	12.8	33.2	4.87	0.971 U	0.971 U
E-54	E54-19091007	09/10/2007	19	2.13	1 U	3.03	1 U	1 U	1 U
	E54-40091007	09/10/2007	40	1.46	1 U	1.94	1 U	1 U	1 U
	E5421011609	01/16/2009	21	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U	0.943 U
	E5442011609	01/16/2009	42	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U	0.945 U
	E54081309	8/13/2009	pi.	6.54	0.946 U	14.6	0.946 U	0.946 U	0.946 U
	E5420122010	12/20/2010	20	3.45	1.97	32.2	0.3	0.426	0.348
	E5412113011	11/30/2011	12	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics			cPAHs			
				2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachloro-phenol (PCP)	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B Groundwater Cleanup Level				4	NV	0.73	NV	0.012	NV	NV
Area 1										
E-28	E28071307	07/13/2007	pi.	0.958 U	9.43	**57.6**	0.958 U	0.958 U	0.958 U	0.958 U
	E28-P091407	09/14/2007	pi.	0.957 U	66.3	**35.9**	0.957 U	0.957 U	0.957 U	0.957 U
	E28-20031308	03/13/2008	20	0.961 U	15.7	**207**	3.44	0.961 U	0.961 U	0.961 U
	E28-41031308	03/13/2008	41	0.993	32.1	**39.9**	1.78	**1.14**	1.16	1.08
	E2824061709	6/17/2009	24	0.955 U	85.9	**6.47**	6.19	**1.81**	3.05	1.38
	E2845061709	6/17/2009	45	0.951 U	3.62	1.43 U	2.56	0.951 U	1.56	0.951 U
	E2837121410	12/14/2010	37	0.505	2.87	**11.2**	0.191	**0.191**	0.953 U	0.953 U
	E2845121410	12/14/2010	45	0.516	2.93	**12.2**	0.296	0.955 U	0.955 U	0.955 U
	E2825111811	11/18/2011	25	0.953 U	4.35	1.43 U	0.953 U	0.953 U	0.953 U	0.953 U
	E2830111811	11/18/2011	30	0.955 U	0.955 U	1.43 U	0.955 U	0.955 U	0.955 U	0.955 U
E-32	E32-23.0 P	05/10/2007	23	0.969 U	62.5	**4780**	3.91	0.969 U	0.969 U	0.969 U
	E32-33.0 P	05/10/2007	33	0.961 U	5.38	**514**	1.71	0.961 U	0.961 U	0.961 U
	E32-45.0 P	05/10/2007	45	0.959 U	0.959 U	**96.9**	0.959 U	0.959 U	0.959 U	0.959 U
	E32-22091107	09/11/2007	22	0.96 U	0.96 U	**159**	0.96 U	0.96 U	0.96 U	0.96 U
	E32-45091107	09/11/2007	45	1.07 U	1.07 U	**174**	1.07 U	1.07 U	1.07 U	1.07 U
	E32-20031308	03/14/2008	20	0.954 U	1.37	**33.4**	0.954 U	0.954 U	0.954 U	0.954 U
	E32-45031408	03/14/2008	45	0.952 U	0.952 U	**11.9**	0.952 U	0.952 U	0.952 U	0.952 U
	E3227121108	12/11/2008	27	1.04 U	6.1	**15.1**	1.04 U	1.04 U	1.04 U	1.04 U
	E3245121108	12/11/2008	45	0.952 U	7.19	**23.3**	0.952 U	0.952 U	0.952 U	0.952 U
	E3224061709	6/17/2009	24	0.948 U	1.31	1.42 U	0.948 U	0.948 U	0.948 U	0.948 U
	E3245061709	6/17/2009	45	0.95 U	3.21	**11.4**	0.95 U	0.95 U	0.95 U	0.95 U
	E3236121410	12/14/2010	36	0.951 U	0.951 U	**0.752**	0.951 U	0.951 U	0.951 U	0.951 U
	E3249121410	12/14/2010	49	0.953 U	0.953 U	1.43 U	0.953 U	0.953 U	0.953 U	0.953 U
	E3228111811	11/18/2011	28	0.96 U	25.1	**14.5**	0.96 U	0.96 U	0.96 U	0.96 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics			cPAHs			
				2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachloro-phenol (PCP)	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B Groundwater Cleanup Level				4	NV	0.73	NV	0.012	NV	NV
E-36	E36-21.0 P	05/09/2007	21	2.5	184	**3800**	3.57	0.964 U	1.04	0.964 U
	E36-33.0 P	05/09/2007	33	0.964 U	116	**483**	198	**53.5**	88.2	27.9
	E36-44.0 P	05/09/2007	44	0.959 U	27.6	**1090**	194	**60.4**	91	34.7
	E36-22091207	09/12/2007	22	0.96 U	192	**1470**	55.6	**17.6**	17.8	19.4
	E36-43091207	09/12/2007	43	0.958 U	25.6	**208**	63.3	**19.2**	19	19.7
	E36-20031408	03/14/2008	20	**4.08**	138	**1240**	8.21	3.82 U	4.12	3.82 U
	E36-37031408	03/14/2008	37	**4.34**	105	**1060**	20.6	**6.29**	9.71	4.08
	E3626121108	12/11/2008	26	2.33	89.6	**163**	17.1	**6.68**	12.1	4.75
	E3637121108	12/11/2008	37	0.966 U	181	**50.3**	11.1	**5.47**	9.63	3.91
	E3624061609	6/16/2009	24	3.82 U	1080	**215**	5.55	**7.46**	5.33	3.82 U
	E3637061609	6/16/2009	37	3.82 U	1070	**297**	57.2	**29.2**	0.955 U	59.5
	E3626121510	12/15/2010	26	0.265	280	**340**	6.76	**3.07**	4.45	1.61
	E3643121510	12/15/2010	43	0.286	307	**381**	14.7	**5.94**	8.69	4.27
	E3625112311	11/23/2011	25	0.965 U	20.3	**62.2**	10.6	**3.34**	11.4	3.2
	E3647112311	11/23/2011	47	0.963 U	0.963 U	**2.34**	8.99	**2.2**	4.8	1.97
E-37	E37-20071107	07/11/2007	20	0.973 U	74.9	**297**	0.973 U	0.973 U	0.973 U	0.973 U
	E37-30071107	07/11/2007	30	0.972 U	16.3	**92**	3.07	0.972 U	1.31	0.972 U
	E37-22091107	09/11/2007	22	1 U	104	**203**	1.07	1 U	1 U	1 U
	E37-30091107	09/11/2007	30	1 U	46.2	**53.2 M**	1.07	1 U	1 U	1 U
	E37-20031108	03/11/2008	20	0.953 U	0.953 U	**89.6**	0.953 U	0.953 U	0.953 U	0.953 U
	E37-30031108	03/13/2008	30	1.11 U	1.11 U	**72.2**	1.11 U	1.11 U	1.11 U	1.11 U
	E3726121008	12/10/2008	26	0.952 U	140	**31.5**	0.952 U	0.952 U	0.952 U	0.952 U
	E3730121008	12/10/2008	30	0.953 U	110	**41.3**	0.953 U	0.953 U	0.953 U	0.953 U
	E3724061609	6/16/2009	24	0.95 U	151	**172**	0.95 U	0.95 U	0.95 U	0.95 U
	E3730061609	6/16/2009	30	0.95 U	110	**105**	0.95 U	0.95 U	0.95 U	0.95 U
	E3725121510	12/15/2010	25	0.952 U	0.952 U	**2.06**	0.162	**0.429**	0.371	0.362
	E3730121510	12/15/2010	30	0.951 U	0.951 U	**2.01**	0.951 U	**0.276**	0.951 U	0.314
	E3724111711	11/17/2011	24	0.958 U	7	**13.5**	0.958 U	0.958 U	0.958 U	0.958 U
	E3729111711	11/17/2011	29	0.96 U	9.4	**24.1**	0.96 U	0.96 U	0.96 U	0.96 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics			cPAHs			
				2,4,6-Trichlorophenol	3,4,5-Trichlorophenol	Pentachlorophenol (PCP)	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B Groundwater Cleanup Level				4	NV	0.73	NV	0.012	NV	NV
E-39	E39-20071207	07/12/2007	20	1.03 U	31.8	**3.01**	10.3	**2.62**	4.27	1.24
	E39-36071207	07/12/2007	36	1.01 U	50.7	**10.7**	18.2	**4.8**	8.54	2.29
	E39-21091207	09/12/2007	21	0.962 U	0.962 U	**9.63**	9.98	**2.96**	4.27	2.04
	E39-35091207	09/12/2007	35	1.08 U	1.08 U	**16.3**	23.4	**6.34**	9.74	3.87
	E39031708	03/17/2008	pi.	**9.4**	602	**68**	16.3	**3.16**	4.17	2.23
	E39011209	01/12/2009	pi.	0.964 U	20.1	**314**	5.22	0.964 U	1.2	0.964 U
	E39P061909	6/19/2009	pi.	0.963 U	32.3	**15.6**	2.85	0.963 U	0.963 U	0.963 U
	E-39	12/9/2010	pi.	0.433	84.8	**72.5**	2.73	**1.53**	0.462	0.423
	E3924112211	11/22/2011	24	0.984 U	15.8	**98.2**	0.984 U	0.984 U	0.984 U	0.984 U
	E3933112211	11/22/2011	33	0.963 U	14.7	**65.2**	0.963 U	0.963 U	0.963 U	0.963 U
Area 2										
E-4	E4-21071207	07/12/2007	21	0.968 U	74.2	**34.1**	5.03	0.968 U	2.34	0.968 U
	E4-50071207	07/12/2007	50	1.01 U	14.1	**11.8**	4.82	**1.76**	3.48	1.4
	E4-23091307	09/13/2007	23	0.976 U	64.4	**429**	14	**2.01**	4.02	3.9
	E4-48091307	09/13/2007	48	0.96 U	15.5	**15.5**	44.6	**6.28**	13.4	12
	E4031108	03/11/2008	pi.	0.958 U	15.2	**25.1**	2.6	0.958 U	0.958 U	0.958 U
	E4011309	01/13/2009	pi.	0.947 U	10.9	**8.17**	0.947 U	0.947 U	0.947 U	0.947 U
	E4061809P	6/18/2009	pi.	0.965 U	115	**508**	0.965 U	0.965 U	0.965 U	0.965 U
	E-4	12/9/2010	pi.	0.957 U	0.651	1.44 U	0.794	**0.22**	0.957 U	0.957 U
	E424112811	11/28/2011	24	0.957 U	3.61	**52.1**	2.61	**0.967**	3.38	1.08
	E45112811	11/28/2011	51	0.957 U	1.67	**8.59**	1.91	0.957 U	1.8	0.957 U
E-5	E524011309	01/13/2009	24	0.952 U	35.9	**377**	82.2	**17**	50.9	16.2
	E549011309	01/13/2009	49	0.951 U	0.951 U	**14.9**	28	**6.44**	16.7	6.12

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics			cPAHs			
				2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachloro-phenol (PCP)	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B Groundwater Cleanup Level				4	NV	0.73	NV	0.012	NV	NV
E-24	E24071307	07/13/2007	pi.	0.958 U	36.7	**55.8**	0.958 U	0.958 U	0.958 U	0.958 U
	E24-P091407	09/14/2007	pi.	0.974 U	42.4	**148**	1.59	0.974 U	0.974 U	0.974 U
	E24-23031208	03/12/2008	23	1.13 U	1.57	1.69 U	1.13 U	1.13 U	1.13 U	1.13 U
	E24-42031208	03/12/2008	42	1.11 U	1.11 U	1.67 U	1.11 U	1.11 U	1.11 U	1.11 U
	E2428121208	12/12/2008	28	0.951 U	20.2	**7.32**	0.951 U	0.951 U	0.951 U	0.951 U
	E2443121208	12/12/2008	43	0.95 U	13.2	**3.36**	0.95 U	0.95 U	0.95 U	0.95 U
	E2426061709	6/17/2009	26	0.955 U	53.9	14.5	0.955 U	0.955 U	0.955 U	0.955 U
	E2443061709	6/17/2009	43	0.951 U	0.951 U	1.43 U	0.951 U	0.951 U	0.951 U	0.951 U
	E2429121010	12/10/2010	29	0.956 U	4.73	**3.62**	0.21	**0.191**	0.956 U	0.956 U
	E2446121010	12/10/2010	46	0.363	3.71	**3.07**	0.955 U	**0.181**	0.955 U	0.955 U
	E2427111811	11/18/2011	27	0.967 U	0.967 U	1.45 U	0.967 U	0.967 U	0.967 U	0.967 U
E-25	E2525011309	01/13/2009	25	0.953 U	48.8	**256**	0.953 U	0.953 U	0.953 U	0.953 U
	E2549011309	01/13/2009	49	0.951 U	0.951 U	1.43 U	0.951 U	0.951 U	0.951 U	0.951 U
E-26	E26071307	07/13/2007	pi.	0.956 U	68.2	**44**	0.956 U	0.956 U	0.956 U	0.956 U
	E26-P091407	09/14/2007	pi.	0.966 U	58.2	**4.43**	3.94	0.966 U	0.966 U	0.966 U
	E26-21031208	03/12/2008	21	0.964 U	16.8	**33.7**	2.68	0.964 U	1.07	0.964 U
	E26-41031208	03/12/2008	41	1.11 U	1.11 U	1.66 U	1.96	1.22	2.33	1.11 U
	E2624061809	6/18/2009	24	0.961 U	326	**7.35**	1.09	0.961 U	0.961 U	0.961 U
	E2644061809	6/18/2009	44	0.952 U	0.952 U	1.43 U	0.952 U	0.952 U	0.952 U	0.952 U
	E2636121310	12/13/2010	36	0.316	2.84	**1.1**	0.957 U	**0.163**	0.957 U	0.957 U
	E2644121310	12/13/2010	44	0.957 U	0.498	**1.23**	0.249	**0.163**	0.957 U	0.957 U
	E2626111811	11/18/2011	26	0.959 U	0.959 U	1.44 U	0.959 U	0.959 U	0.959 U	0.959 U
	E2644111811	11/18/2011	44	0.957 U	0.957 U	1.44 U	0.957 U	0.957 U	0.957 U	0.957 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics			cPAHs			
				2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachloro-phenol (PCP)	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B Groundwater Cleanup Level				4	NV	0.73	NV	0.012	NV	NV
E-27	E27071307	07/13/2007	pi.	0.954 U	63.2	**9.53**	0.954 U	0.954 U	0.954 U	0.954 U
	E27-24091307	09/13/2007	24	1.1 U	24.8	**43.2**	1.72	1.1 U	1.17	1.1 U
	E27-40091307	09/13/2007	40	1.12 U	1.91	**3.76**	1.28	1.12 U	1.12 U	1.12 U
	E27-21031108	03/11/2008	21	0.96 U	7.41	**6.27**	1.46	0.96 U	0.96 U	0.96 U
	E27-40031108	03/11/2008	40	0.96 U	1.55	1.44 U	0.96 U	0.96 U	0.96 U	0.96 U
	E2725011409	01/14/2009	25	0.957 U	140	1.44 U	0.957 U	0.957 U	0.957 U	0.957 U
	E2740011409	01/14/2009	40	0.946 U	0.946 U	1.42 U	0.946 U	0.946 U	0.946 U	0.946 U
	E2725061809	6/18/2009	25	0.95 U	38.8	1.42 U	0.95 U	0.95 U	0.95 U	0.95 U
	E2740061809	6/18/2009	40	0.951 U	1.32	1.43 U	0.951 U	0.951 U	0.951 U	0.951 U
	E2726121610	12/16/2010	26	0.95 U	1.99	**20.3**	0.95 U	**0.247**	0.37	0.247
	E2740121610	12/16/2010	40	0.947 U	0.947 U	1.42 U	0.483	**0.578**	0.701	0.549
	E2725112911	11/29/2011	25	0.959 U	0.959 U	1.44 U	0.959 U	0.959 U	0.959 U	0.959 U
	E2742112911	11/29/2011	42	0.96 U	0.96 U	1.44 U	0.96 U	0.96 U	0.96 U	0.96 U
E-58	E58071307	07/13/2007	pi.	0.956 U	89.1	**14.8**	0.956 U	0.956 U	0.956 U	0.956 U
	E58-P091407	09/14/2007	pi.	0.97 U	82.4	**61.7**	6.14	**1.36**	2.04	1.64
	E58-19031808	03/18/2008	19	0.962 U	3.17	**8.15**	1.13	0.962 U	0.962 U	0.962 U
	E58-36031808	03/18/2008	36	0.962 U	0.962 U	1.44 U	0.962 U	0.962 U	0.962 U	0.962 U
	E5823011409	01/14/2009	23	0.954 U	3.64	**4.84**	1.15	0.954 U	0.954 U	0.954 U
	E5836011409	01/14/2009	36	0.955 U	0.955 U	**1.92**	0.955 U	0.955 U	0.955 U	0.955 U
	E5823061809	6/18/2009	23	0.956 U	0.956 U	1.43 U	0.956 U	0.956 U	0.956 U	0.956 U
	E5840061809	6/18/2009	40	0.962 U	90.5	**272**	0.962 U	0.962 U	0.962 U	0.962 U
	E5824121610	12/16/2010	24	0.96 U	3.21	**144**	1.99	**0.643**	1.32	0.595
	E5840121610	12/16/2010	40	0.953 U	0.963	**0.963**	0.724	**0.353**	0.477	0.296
	E5823112811	11/28/2011	23	0.962 U	0.962 U	1.44 U	0.962 U	0.962 U	0.962 U	0.962 U
	E5838112811	11/28/2011	38	0.962 U	0.962 U	1.44 U	0.962 U	0.962 U	0.962 U	0.962 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics			cPAHs			
				2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachloro-phenol (PCP)	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B Groundwater Cleanup Level				4	NV	0.73	NV	0.012	NV	NV
Area 3										
E-42	E42-21090607	09/06/2007	21	1 U	332	**362**	1.99	1 U	1 U	1 U
	E42-40090607	09/06/2007	40	1 U	171	**527**	6.53	1 U	1 U	1 U
	E42031708	03/17/2008	pi.	0.951 U	35.6	**181**	1.06	0.951 U	0.951 U	0.951 U
	E42011209	01/12/2009	pi.	0.965 U	119	**740**	1.05	0.965 U	0.965 U	0.965 U
	E42P061909	6/19/2009	pi.	0.955 U	0.955 U	1.43 U	0.955 U	0.955 U	0.955 U	0.955 U
	E-42	12/9/2010	pi.	0.317	79.4	**113**	1.86	**1.37**	0.992 U	0.992 U
	E4224112111	11/21/2011	24	0.965 U	22.1	**36.8**	0.965 U	0.965 U	0.965 U	0.965 U
E-43	E43-20090607	09/06/2007	20	1 U	17.6	1.5 U	1 U	1 U	1 U	1 U
	E43-45090607	09/06/2007	45	1 U	11.3	1.5 U	1 U	1 U	1 U	1 U
	E43031708	03/17/2008	pi.	0.947 U	1.76	1.42 U	0.947 U	0.947 U	0.947 U	0.947 U
	E43011209	01/12/2009	pi.	0.943 U	393	**668**	2.52	0.953	1.23	0.943 U
	E4322071509	7/15/2009	22	1.67	22.4	**286**	1 U	1 U	1 U	1 U
	E4323121610	12/16/2010	23	1.11	1.43	**11.3**	0.617	**0.289**	0.963 U	0.25
	E4324112111	11/21/2011	24	0.963 U	0.963 U	1.45 U	0.963 U	0.963 U	0.963 U	0.963 U
E-45	E45-21090507	09/05/2007	21	**6.48**	214	**29300**	15.1	3.72	4.6	4.62
	E45-43090607	09/06/2007	43	2.17	210	**32200**	5.93	1.43	1.37	1.64
	E45031708	03/17/2008	pi.	2.79	58.2	**3560**	19.2	5.19	7.35	2.97
	E45011209	01/12/2009	pi.	0.977 U	81.1	**810**	0.977 U	0.977 U	0.977 U	0.977 U
	E45P061909	6/19/2009	pi.	1.98	5.73	**17**	0.954 U	0.954 U	0.954 U	0.954 U
	E-45	12/9/2010	pi.	0.258	6.1	**3.67**	1.55	**0.592**	1.05	0.42
	E4522112111	11/21/2011	22	0.985 U	15.3	**49**	0.985 U	0.985 U	0.985 U	0.985 U
	E4532112111	11/21/2011	32	0.962 U	13.7	**41.8**	0.962 U	0.962 U	0.962 U	0.962 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics			cPAHs			
				2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachloro-phenol (PCP)	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B Groundwater Cleanup Level				4	NV	0.73	NV	0.012	NV	NV
E-49	E49-18090707	09/07/2007	18	1.43	41.8	**392**	1 U	1 U	1 U	1 U
	E49-39090707	09/07/2007	39	1.88	50.3	**1400**	1 U	1 U	1 U	1 U
	E49031708	03/17/2008	pi.	1.98	40.9	**790**	0.946 U	0.946 U	0.946 U	0.946 U
	E49011309	01/13/2009	pi.	0.958 U	65.2	**249**	0.958 U	0.958 U	0.958 U	0.958 U
	E4913071509	7/15/2009	13	1 U	28.6	**114**	1 U	1 U	1 U	1 U
	E49122010	12/20/2010	pi.	0.946 U	0.946 U	1.42 U	0.199	0.946 U	0.946 U	0.946 U
	E497113011	11/30/2011	7	0.952 U	0.952 U	1.43 U	0.952 U	0.952 U	0.952 U	0.952 U
Area 4										
DEW-4	DEW4-20091007	09/10/2007	20	1 U	1 U	2.68 U	1 U	1 U	1 U	1 U
	DEW4-49091007	09/10/2007	49	1 U	1 U	2.66 U	1.38	1 U	1 U	1 U
	DEW423011509	01/15/2009	23	1.06	0.945 U	1.42 U	3.6	2.13	2.64	1.69
	DEW450011509	01/15/2009	50	0.944 U	0.944 U	1.42 U	0.944 U	0.944 U	0.944 U	0.944 U
	DEW4081309	8/13/2009	pi.	1.71 U	1.71 U	2.57 U	1.71 U	1.71 U	1.71 U	1.71 U
	DEW-4	12/9/2010	pi.	0.97 U	5.32	**6.94**	2.74	**0.281**	0.398	0.262
	DEW423112911	11/29/2011	23	0.962 U	0.962 U	**3.45**	23.4	**12.9**	13.8	10.7
	DEW451112911	11/29/2011	51	0.958 U	4.28	1.44 U	2.72	0.958 U	2.08	0.958 U
E-2	E2-P091407	09/14/2007	pi.	0.971 U	105	**118**	46.1	20.9	26.9	19
	E2011309	01/13/2009	pi.	0.961 U	0.961 U	1.44 U	7.44	4.6	8.03	2.57
	E2P061909	6/19/2009	pi.	0.961 U	0.961 U	1.44 U	1.03	0.961 U	1.12	0.961 U
	E-2	12/9/2010	pi.	0.982 U	2.66	**17.1**	4.22	**0.884**	2.34	0.894
	E223112811	11/28/2011	23	0.961 U	13.5	**3.65**	0.961 U	0.961 U	0.961 U	0.961 U
	E241112811	11/28/2011	41	0.963 U	10.1	**2.82**	0.963 U	0.963 U	0.963 U	0.963 U
E-10	E10-20091307	09/13/2007	20	0.967 U	829	**25.6**	8.04	3.04	3.45	4.35
	E10-34091307	09/13/2007	34	0.963 U	860	**705**	9.71	3.55	4.37	3.97
	E10011309	01/13/2009	pi.	0.963 U	20.5	1.45 U	1.5	0.963 U	0.963 U	0.963 U
	E10P061909	6/19/2009	pi.	0.961 U	9.73	**142**	1.71	0.961 U	0.961 U	0.961 U
	E-10	12/9/2010	pi.	0.66	68.5	**174**	2.33	**1.15**	0.957 U	0.287
	E1020113011	11/30/2011	20	0.955 U	0.955 U	1.43U	0.955 U	0.955 U	0.955 U	0.955 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chlorinated Phenolics			cPAHs			
				2,4,6-Trichloro-phenol	3,4,5-Trichloro-phenol	Pentachloro-phenol (PCP)	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
MTCA Method B Groundwater Cleanup Level				4	NV	0.73	NV	0.012	NV	NV
E-16	E16-P091407	09/14/2007	pi.	0.957 U	156	**132**	13	1.96	2.45	2.44
	E16081309	8/13/2009	pi.	0.951 U	10.6	1.43 U	0.951 U	0.951 U	0.951 U	0.951 U
	E1625121710	12/17/2010	25	0.955 U	14.6	**3.23**	0.745	**0.449**	0.649	0.296
	E1642121710	12/17/2010	42	0.954 U	12	**2.02**	1	**0.277**	0.515	0.954 U
	E1622112911	11/29/2011	22	0.957 U	0.957 U	1.44 U	0.957 U	0.957 U	0.957 U	0.957 U
	E1633112911	11/29/2011	33	0.959 U	0.959 U	1.44 U	0.959 U	0.959 U	0.959 U	0.959 U
E-17	E1721011509	01/15/2009	21	0.952 U	2.9	**5.5**	0.952 U	0.952 U	0.952 U	0.952 U
	E1748011509	01/15/2009	48	0.951 U	4.26	**6.98**	0.951 U	0.951 U	0.951 U	0.951 U
E-51	E51-20090707	09/07/2007	20	**4.85**	39.4	**11100**	5.44	1.78	1.86	2.06
	E51-44090707	09/07/2007	44	**4.44**	32.6	**11400**	17	5.92	6.55	6.34
	E51031708	03/17/2008	pi.	3.6	52.5	**17200**	1.4	0.962 U	0.962 U	0.962 U
	E51011309	01/13/2009	pi.	0.975 U	28.9	**193**	2.17	0.975 U	0.975 U	0.975 U
	E51P061909	6/19/2009	pi.	0.958 U	21.3	**73.8**	1.73	0.958 U	0.958 U	0.958 U
	E-51	12/10/2010	pi.	0.643	28.7	**210**	1.24	**0.185**	0.974 U	0.974 U
	E5120113011	11/30/2011	20	0.966 U	40.3	**64.5**	0.966 U	0.966 U	0.966 U	0.966 U
	E5139113011	11/30/2011	39	0.971 U	43.4	**61.5**	0.971 U	0.971 U	0.971 U	0.971 U
E-54	E54-19091007	09/10/2007	19	1 U	1 U	**10.3 M**	1 U	1 U	1 U	1 U
	E54-40091007	09/10/2007	40	1 U	1 U	**4.28 M**	1 U	1 U	1 U	1 U
	E5421011609	01/16/2009	21	0.943 U	0.943 U	1.42 U	0.943 U	0.943 U	0.943 U	0.943 U
	E5442011609	01/16/2009	42	0.945 U	0.945 U	1.42 U	0.945 U	0.945 U	0.945 U	0.945 U
	E54081309	8/13/2009	pi.	0.946 U	0.946 U	**175**	0.946 U	0.946 U	0.946 U	0.946 U
	E5420122010	12/20/2010	20	0.967 U	7.02	**75.6**	0.967 U	0.967 U	0.967 U	0.967 U
	E5412113011	11/30/2011	12	0.963 U	9.67	1.45 U	0.963 U	0.963 U	0.963 U	0.963 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	cPAHs			cPAH TEQ	Noncarcinogenic PAHs				
				Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene
MTCA Method B Groundwater Cleanup Level				NV	NV	NV	0.012	32	NV	32	960	NV
Area 1												
E-28	E28071307	07/13/2007	pi.	0.958 U	0.958 U	0.958 U	ND	0.958 U	0.958 U	0.958 U	4.35	0.958 U
	E28-P091407	09/14/2007	pi.	1.24	0.957 U	0.957 U	**0.73**	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	E28-20031308	03/13/2008	20	3.85	0.961 U	0.961 U	**1.06**	5.32	7.86	9.4	1.64	1.05
	E28-41031308	03/13/2008	41	1.63	1.09	1.12	**1.78**	1.09	1.24	1.15	1.14	1.43
	E2824061709	6/17/2009	24	6.33	0.955 U	0.955 U	**3.03**	4.66	1.66	1.81	5.19	0.955 U
	E2845061709	6/17/2009	45	2.36	0.951 U	0.951 U	**1.05**	2.31	0.951 U	0.951 U	3.12	0.951 U
	E2837121410	12/14/2010	37	0.953 U	0.953 U	0.953 U	**0.405**	0.953 U	0.953 U	0.953 U	--	0.953 U
	E2845121410	12/14/2010	45	0.955 U	0.955 U	0.955 U	**0.703**	0.955 U	0.955 U	0.955 U	--	0.955 U
	E2825111811	11/18/2011	25	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	E2830111811	11/18/2011	30	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
E-32	E32-23.0 P	05/10/2007	23	3.84	0.969 U	0.969 U	**1.11**	**56.6**	11.8	17.7	52.2	6.92
	E32-33.0 P	05/10/2007	33	1.3	0.961 U	0.961 U	**0.857**	3.84	0.961 U	0.97	3.32	0.961 U
	E32-45.0 P	05/10/2007	45	0.959 U	0.959 U	0.959 U	ND	1.08	0.959 U	0.959 U	0.959 U	0.959 U
	E32-22091107	09/11/2007	22	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
	E32-45091107	09/11/2007	45	1.07 U	1.07 U	1.07 U	ND	1.29	1.07 U	1.07 U	1.07 U	1.07 U
	E32-20031308	03/14/2008	20	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	E32-45031408	03/14/2008	45	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	E3227121108	12/11/2008	27	1.04 U	1.04 U	1.04 U	ND	1.04 U	1.04 U	1.04 U	3.63	1.04 U
	E3245121108	12/11/2008	45	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U	6.22	1.02
	E3224061709	6/17/2009	24	0.948 U	0.948 U	0.948 U	ND	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	E3245061709	6/17/2009	45	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	E3236121410	12/14/2010	36	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U	--	0.951 U
	E3249121410	12/14/2010	49	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U	--	0.953 U
	E3228111811	11/18/2011	28	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	cPAHs			cPAH TEQ	Noncarcinogenic PAHs				
				Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene
MTCA Method B Groundwater Cleanup Level				NV	NV	NV	0.012	32	NV	32	960	NV
E-36	E36-21.0 P	05/09/2007	21	3.27	0.964 U	0.964 U	**1.12**	**52**	34	**53.8**	63.4	3.99
	E36-33.0 P	05/09/2007	33	163	2.75	10.4	**87.9**	**156**	56.2	**133**	206	9.58
	E36-44.0 P	05/09/2007	44	163	2.84	11.2	**95.4**	**92.4**	44.2	**82.4**	152	8.02
	E36-22091207	09/12/2007	22	53.9	0.96 U	5.59	**28**	**47.7**	48.6	**73.5**	64.3	2.77
	E36-43091207	09/12/2007	43	61.7	0.958 U	6.62	**30.7**	29.2	10.5	19.2	36.5	1.7
	E36-20031408	03/14/2008	20	7.75	3.82 U	3.82 U	**3.79**	**63.1**	89.6	**148**	81.2	284
	E36-37031408	03/14/2008	37	21.1	3.81 U	3.81 U	**10.3**	**61.4**	78.6	**131**	79.5	111
	E3626121108	12/11/2008	26	16.1	1.39	2.51	**10.6**	22.1	29.8	**54.2**	27.4	2.31
	E3637121108	12/11/2008	37	9.98	1.17	2.4	**8.39**	2.09	3.57	6.9	3.03	1.04
	E3624061609	6/16/2009	24	5.06	0.955 U	0.955 U	**8.89**	**43.9**	44	**68.9**	54.1	9.84
	E3637061609	6/16/2009	37	60.4	4.62	7.27	**42.7**	**72.7**	76.4	**128**	101	4.81
	E3626121510	12/15/2010	26	7.43	0.53	1.02	**4.58**	**44.4**	85	**140**	--	3.26
	E3643121510	12/15/2010	43	15.7	0.782	1.83	**9.12**	**49**	95.1	**160**	--	4.35
	E3625112311	11/23/2011	25	13.5	0.965 U	1.43	**6.19**	15.3	11.7	19.4	27.8	0.965 U
	E3647112311	11/23/2011	47	9.79	0.963 U	0.963 U	**3.97**	8.1	1.9	3.4	20.7	0.963 U
E-37	E37-20071107	07/11/2007	20	0.973 U	0.973 U	0.973 U	ND	1.78	0.973 U	0.973 U	15.8	1.23
	E37-30071107	07/11/2007	30	2.59	0.972 U	0.972 U	**1.1**	0.972 U	0.972 U	0.972 U	3.05	0.972 U
	E37-22091107	09/11/2007	22	1.19	1 U	1 U	**0.819**	1.82	1 U	1 U	17.5	2.16
	E37-30091107	09/11/2007	30	1.07	1 U	1 U	**0.818**	1 U	1 U	1 U	6.62	1.17
	E37-20031108	03/11/2008	20	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U	0.963	0.953 U
	E37-30031108	03/13/2008	30	1.11 U	1.11 U	1.11 U	ND	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U
	E3726121008	12/10/2008	26	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U	6.28	1.51
	E3730121008	12/10/2008	30	0.953 U	0.953 U	0.953 U	ND	0.953 U	0.953 U	0.953 U	5.89	1.28
	E3724061609	6/16/2009	24	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	E3730061609	6/16/2009	30	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	E3725121510	12/15/2010	25	0.952 U	0.505	0.514	**0.625**	0.952 U	0.952 U	0.219	--	0.952 U
	E3730121510	12/15/2010	30	0.951 U	0.951 U	0.951 U	**0.502**	0.951 U	0.951 U	0.951 U	--	0.951 U
	E3724111711	11/17/2011	24	0.958 U	0.958 U	0.958 U	ND	0.958 U	0.958 U	0.958 U	0.958 U	1.14
	E3729111711	11/17/2011	29	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U	0.96 U	0.96 U	1.51

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	cPAHs			cPAH TEQ	Noncarcinogenic PAHs				
				Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene
MTCA Method B Groundwater Cleanup Level				NV	NV	NV	0.012	32	NV	32	960	NV
E-39	E39-20071207	07/12/2007	20	8.46	1.03 U	1.03 U	**4.39**	12.5	6.54	9.69	22.2	1.03 U
	E39-36071207	07/12/2007	36	15.3	1.01 U	1.01 U	**7.96**	20	8.46	14.6	34.5	1.01 U
	E39-21091207	09/12/2007	21	12.6	0.962 U	0.962 U	**4.81**	29.4	17.3	21.4	47.7	1.71
	E39-35091207	09/12/2007	35	29.2	1.08 U	1.49	**10.5**	**33.6**	18.1	22.5	49.7	1.08 U
	E39031708	03/17/2008	pi.	16.4	0.958 U	0.958 U	**5.69**	**58**	86.3	**140**	170	6.09
	E39011209	01/12/2009	pi.	5.22	0.964 U	0.964 U	**1.32**	21.4	5.49	8.09	22.5	1.26
	E39P061909	6/19/2009	pi.	3.36	0.963 U	0.963 U	**0.993**	5.71	1.49	2.23	5.97	0.963 U
	E-39	12/9/2010	pi.	3.1	0.962 U	0.962 U	**2.02**	6.34	1.46	1.93	--	0.703
	E3924112211	11/22/2011	24	0.984 U	0.984 U	0.984 U	ND	0.984 U	0.984 U	1.4	1.97	0.984 U
	E3933112211	11/22/2011	33	0.963 U	0.963 U	0.963 U	ND	1.78	0.963 U	1.22	1.77	0.963 U
Area 2												
E-4	E4-21071207	07/12/2007	21	4.83	0.968 U	0.968 U	**1.41**	22.8	9.19	5.06	38.2	1.12
	E4-50071207	07/12/2007	50	4.05	1.01 U	1.01 U	**2.87**	16.1	6.12	2.09	17.7	1.01 U
	E4-23091307	09/13/2007	23	15.5	0.976 U	0.976 U	**4.45**	**41.4**	27.8	**33.2**	50.2	2.72
	E4-48091307	09/13/2007	48	48	0.96 U	2.05	**14**	18	8.09	7.27	27.5	1.52
	E4031108	03/11/2008	pi.	2.58	0.958 U	0.958 U	**0.956**	12.4	12	11.7	29.3	0.958 U
	E4011309	01/13/2009	pi.	0.947 U	0.947 U	0.947 U	ND	2.17	1.04	0.947 U	5.51	0.947 U
	E4061809P	6/18/2009	pi.	0.965 U	0.965 U	0.965 U	ND	6.25	3.41	4.48	5.7	1.97
	E-4	12/9/2010	pi.	0.785	0.957 U	0.957 U	**0.499**	0.163	0.957 U	0.957 U	--	0.957 U
	E424112811	11/28/2011	24	3.78	0.957 U	0.957 U	**1.81**	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	E45112811	11/28/2011	51	2.31	0.957 U	0.957 U	**1.02**	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
E-5	E524011309	01/13/2009	24	89.8	4	7.41	**34**	31.8	5.88	7.36	22.4	4.34
	E549011309	01/13/2009	49	26.8	1.4	2.64	**12.2**	3.49	0.951 U	0.951 U	3.06	0.951 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	cPAHs			cPAH TEQ	Noncarcinogenic PAHs				
				Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene
MTCA Method B Groundwater Cleanup Level				NV	NV	NV	0.012	32	NV	32	960	NV
E-24	E24071307	07/13/2007	pi.	0.958 U	0.958 U	0.958 U	ND	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U
	E24-P091407	09/14/2007	pi.	2.04	0.974 U	0.974 U	**0.861**	6.47	4.11	3.85	3	0.974 U
	E24-23031208	03/12/2008	23	1.13 U	1.13 U	1.13 U	ND	1.13 U	1.13 U	1.13 U	1.13 U	1.13 U
	E24-42031208	03/12/2008	42	1.11 U	1.11 U	1.11 U	ND	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U
	E2428121208	12/12/2008	28	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	E2443121208	12/12/2008	43	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
	E2426061709	6/17/2009	26	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	E2443061709	6/17/2009	43	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	E2429121010	12/10/2010	29	0.229	0.956 U	0.956 U	**0.405**	0.956 U	0.956 U	0.956 U	--	0.956 U
	E2446121010	12/10/2010	46	0.955 U	0.955 U	0.955 U	**0.425**	0.955 U	0.955 U	0.955 U	--	0.955 U
	E2427111811	11/18/2011	27	0.967 U	0.967 U	0.967 U	ND	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U
E-25	E2525011309	01/13/2009	25	0.953 U	0.953 U	0.953 U	ND	12.1	4.34	6.97	3.07	4.06
	E2549011309	01/13/2009	49	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
E-26	E26071307	07/13/2007	pi.	0.956 U	0.956 U	0.956 U	ND	15.1	3.75	4.67	23.5	0.956 U
	E26-P091407	09/14/2007	pi.	4.78	0.966 U	0.966 U	**1.12**	12.3	3.29	4.71	25.8	1.42
	E26-21031208	03/12/2008	21	2.88	0.964 U	0.964 U	**1.03**	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U
	E26-41031208	03/12/2008	41	1.83	1.11 U	1.11 U	**1.83**	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U
	E2624061809	6/18/2009	24	0.961 U	0.961 U	0.961 U	**0.787**	9.83	2.23	2.42	9.72	0.961 U
	E2644061809	6/18/2009	44	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	E2636121310	12/13/2010	36	0.957 U	0.957 U	0.957 U	**0.407**	0.957 U	0.957 U	0.957 U	--	0.957 U
	E2644121310	12/13/2010	44	0.957 U	0.957 U	0.957 U	**0.384**	0.957 U	0.957 U	0.957 U	--	0.957 U
	E2626111811	11/18/2011	26	0.959 U	0.959 U	0.959 U	ND	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U
	E2644111811	11/18/2011	44	0.957 U	0.957 U	0.957 U	ND	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	cPAHs			cPAH TEQ	Noncarcinogenic PAHs				
				Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene
MTCA Method B Groundwater Cleanup Level				NV	NV	NV	0.012	32	NV	32	960	NV
E-27	E27071307	07/13/2007	pi.	0.954 U	0.954 U	0.954 U	ND	25.2	13.5	15.4	31.1	0.992
	E27-24091307	09/13/2007	24	1.93	1.1 U	1.1 U	**1.02**	6.56	3.01	2.75	7.26	1.1 U
	E27-40091307	09/13/2007	40	1.41	1.12 U	1.12 U	**0.926**	2.57	1.49	1.27	3.41	1.12 U
	E27-21031108	03/11/2008	21	1.37	0.96 U	0.96 U	**0.832**	0.96 U	0.96 U	0.96 U	2.18	0.96 U
	E27-40031108	03/11/2008	40	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U	0.96 U	1.75	0.96 U
	E2725011409	01/14/2009	25	0.957 U	0.957 U	0.957 U	ND	10.1	3.64	3.82	8.99	0.957 U
	E2740011409	01/14/2009	40	0.946 U	0.946 U	0.946 U	ND	0.946 U	0.946 U	0.946 U	0.946 U	0.946 U
	E2725061809	6/18/2009	25	0.95 U	0.95 U	0.95 U	ND	0.95 U	0.95 U	0.95 U	8.27	0.95 U
	E2740061809	6/18/2009	40	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	E2726121610	12/16/2010	26	0.95 U	0.95 U	0.95 U	**0.456**	0.95 U	0.95 U	0.95 U	--	0.95 U
	E2740121610	12/16/2010	40	0.455	0.511	0.54	**0.861**	0.947 U	0.947 U	0.947 U	--	0.947 U
	E2725112911	11/29/2011	25	0.959 U	0.959 U	0.959 U	ND	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U
	E2742112911	11/29/2011	42	0.96 U	0.96 U	0.96 U	ND	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
E-58	E58071307	07/13/2007	pi.	0.956 U	0.956 U	0.956 U	ND	**60.1**	45.8	**38.2**	86.4	2.42
	E58-P091407	09/14/2007	pi.	7.4	0.97 U	0.97 U	**2.51**	**114**	100	**171**	152	4.98
	E58-19031808	03/18/2008	19	1.14	0.962 U	0.962 U	**0.798**	6.48	8.36	11.3	13.9	0.962 U
	E58-36031808	03/18/2008	36	0.962 U	0.962 U	0.962 U	ND	0.962 U	0.962 U	0.962 U	4.77	0.962 U
	E5823011409	01/14/2009	23	1.05	0.954 U	0.954 U	**0.793**	0.954 U	1.49	1.39	2.56	0.954 U
	E5836011409	01/14/2009	36	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	E5823061809	6/18/2009	23	0.956 U	0.956 U	0.956 U	ND	0.956 U	0.956 U	0.956 U	2.08	0.956 U
	E5840061809	6/18/2009	40	0.962 U	0.962 U	0.962 U	ND	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
	E5824121610	12/16/2010	24	2.87	0.96 U	0.489	**1.16**	0.509	0.873	0.624	--	0.25
	E5840121610	12/16/2010	40	0.887	0.953 U	0.953 U	**0.607**	0.953 U	0.953 U	0.953 U	--	0.953 U
	E5823112811	11/28/2011	23	0.962 U	0.962 U	0.962 U	ND	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
	E5838112811	11/28/2011	38	0.962 U	0.962 U	0.962 U	ND	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	cPAHs			cPAH TEQ	Noncarcinogenic PAHs				
				Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzofuran	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene
MTCA Method B Groundwater Cleanup Level				NV	NV	NV	0.012	32	NV	32	960	NV
Area 3												
E-42	E42-21090607	09/06/2007	21	1.89	1 U	1 U	**0.918**	**37.4**	67.9	**87.4**	69.3	2.74
	E42-40090607	09/06/2007	40	6.2	1 U	1 U	**1.42**	21.8	33.3	**40.1**	42.2	1.56
	E42031708	03/17/2008	pi.	0.951 U	0.951 U	0.951 U	**0.776**	7.37	11.9	13.3	12.5	1.02
	E42011209	01/12/2009	pi.	0.965 U	0.965 U	0.965 U	**0.785**	**34.6**	20.7	27.9	24	3.47
	E42P061909	6/19/2009	pi.	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
	E-42	12/9/2010	pi.	2.26	0.992 U	0.992 U	**1.78**	0.992 U	0.992 U	0.992 U	--	0.655
	E4224112111	11/21/2011	24	0.965 U	0.965 U	0.965 U	ND	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U
E-43	E43-20090607	09/06/2007	20	1 U	1 U	1 U	ND	15.5	5.55	1 U	42.2	1.03
	E43-45090607	09/06/2007	45	1 U	1 U	1 U	ND	10.2	4.35	1 U	31.9	1 U
	E43031708	03/17/2008	pi.	0.947 U	0.947 U	0.947 U	ND	11.5	0.947 U	0.947 U	4.42	0.947 U
	E43011209	01/12/2009	pi.	1.97	0.943 U	0.943 U	**1.49**	14.9	0.943 U	0.943 U	16.8	0.991
	E4322071509	7/15/2009	22	1 U	1 U	1 U	ND	15.8	36	**41.2**	35.1	1.62
	E4323121610	12/16/2010	23	0.617	0.963 U	0.963 U	**0.526**	3.8	5.95	5.71	--	0.318
	E4324112111	11/21/2011	24	0.963 U	0.963 U	0.963 U	ND	2.34	3.39	3.44	15.7	0.963 U
E-45	E45-21090507	09/05/2007	21	14.7	1 U	1 U	**6.4**	**90.8**	291	**427**	280	25
	E45-43090607	09/06/2007	43	5.8	1 U	1 U	**2.48**	**84.3**	179	**260**	171	6.84
	E45031708	03/17/2008	pi.	16.3	0.953 U	1.41	**8.49**	**187**	296	**501**	269	8.53
	E45011209	01/12/2009	pi.	0.977 U	0.977 U	0.977 U	ND	31.6	5.7	8.25	30	2.9
	E45P061909	6/19/2009	pi.	0.954 U	0.954 U	0.954 U	ND	0.954 U	0.954 U	0.954 U	5.31	0.954 U
	E-45	12/9/2010	pi.	1.5	0.954 U	0.954 U	**1**	0.954 U	0.954 U	0.954 U	--	0.954 U
	E4522112111	11/21/2011	22	0.985 U	0.985 U	0.985 U	ND	0.985 U	0.985 U	0.985 U	0.985 U	0.985 U
	E4532112111	11/21/2011	32	0.962 U	0.962 U	0.962 U	ND	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	cPAHs			cPAH TEQ	Noncarcinogenic PAHs				
				Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene
MTCA Method B Groundwater Cleanup Level				NV	NV	NV	0.012	32	NV	32	960	NV
E-49	E49-18090707	09/07/2007	18	1 U	1 U	1 U	ND	16.9	48.7	20.7	31.3	1 U
	E49-39090707	09/07/2007	39	1 U	1 U	1 U	ND	24.5	50.5	29.6	31.6	1.02
	E49031708	03/17/2008	pi.	0.946 U	0.946 U	0.946 U	ND	19.3	21.4	3.42	14.4	0.946 U
	E49011309	01/13/2009	pi.	0.958 U	0.958 U	0.958 U	ND	4.52	5.34	1.96	8.6	0.958 U
	E4913071509	7/15/2009	13	1 U	1 U	1 U	ND	10.6	32.9	**37.8**	30.1	1 U
	E49122010	12/20/2010	pi.	0.946 U	0.946 U	0.946 U	**0.687**	0.17	NA	0.35	--	NA
	E497113011	11/30/2011	7	0.952 U	0.952 U	0.952 U	ND	1.38	1.91	1.56	12.8	0.952 U
Area 4												
DEW-4	DEW4-20091007	09/10/2007	20	1 U	1 U	1 U	ND	12.4	25.8	16	25.5	1 U
	DEW4-49091007	09/10/2007	49	1.05	1 U	1 U	**0.849**	23	43	28.5	44.6	1.06
	DEW423011509	01/15/2009	23	2.93	1.06	1.3	**3.19**	26	64.8	**58**	71.1	2.39
	DEW450011509	01/15/2009	50	0.944 U	0.944 U	0.944 U	ND	15.6	49.4	**33.5**	45.6	1.14
	DEW4081309	8/13/2009	pi.	1.71 U	1.71 U	1.71 U	ND	1.71 U	1.71 U	1.71 U	3.61	1.71 U
	DEW-4	12/9/2010	pi.	2.85	0.97 U	0.97 U	**0.747**	1.46	0.941	1.15	--	0.97 U
	DEW423112911	11/29/2011	23	25.6	0.962 U	3.81	**18.4**	10.4	28.1	**36.8**	84.3	2.46
	DEW451112911	11/29/2011	51	2.67	0.958 U	0.958 U	**1.13**	0.958 U	3.61	4	8.19	0.958 U
E-2	E2-P091407	09/14/2007	pi.	54.8	0.971 U	3.5	**31**	**283**	153	**267**	336	9.81
	E2011309	01/13/2009	pi.	7.02	0.961 U	1.46	**6.67**	0.961 U	0.961 U	0.961 U	1.26	0.961 U
	E2P061909	6/19/2009	pi.	0.961 U	0.961 U	0.961 U	**0.844**	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	E-2	12/9/2010	pi.	5.25	0.982 U	0.982 U	**1.78**	0.354	0.982 U	0.982 U	--	0.187
	E223112811	11/28/2011	23	0.961 U	0.961 U	0.961 U	ND	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	E241112811	11/28/2011	41	0.963 U	0.963 U	0.963 U	ND	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
E-10	E10-20091307	09/13/2007	20	10.2	0.967 U	0.967 U	**4.82**	**428**	643	**848**	552	18.4
	E10-34091307	09/13/2007	34	11.9	0.963 U	0.963 U	**5.57**	**324**	480	**678**	434	11.8
	E10011309	01/13/2009	pi.	1.45	0.963 U	0.963 U	**0.839**	4.51	9.88	10.5	16.3	1.03
	E10P061909	6/19/2009	pi.	1.61	0.961 U	0.961 U	**0.86**	19.7	7.23	3.33	22.5	1.87
	E-10	12/9/2010	pi.	2.78	0.957 U	0.957 U	**1.58**	8.15	1.89	0.239	--	1.94
	E1020113011	11/30/2011	20	0.955 U	0.955 U	0.955 U	ND	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	cPAHs			cPAH TEQ	Noncarcinogenic PAHs				
				Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene		Dibenzo-furan	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaph-thene	Acenaph-thylene
MTCA Method B Groundwater Cleanup Level				NV	NV	NV	0.012	32	NV	32	960	NV
E-16	E16-P091407	09/14/2007	pi.	15.3	0.957 U	0.957 U	**4**	**103**	21.8	1.16	133	6.25
	E16081309	8/13/2009	pi.	0.951 U	0.951 U	0.951 U	ND	**38**	32.4	29.9	62.4	2.05
	E1625121710	12/17/2010	25	0.659	0.955 U	0.955 U	**0.72**	4.62	2.26	1.16	--	0.525
	E1642121710	12/17/2010	42	1.02	0.954 U	0.954 U	**0.582**	4.94	2.45	1.59	--	0.954 U
	E1622112911	11/29/2011	22	0.957 U	0.957 U	0.957 U	ND	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	E1633112911	11/29/2011	33	0.959 U	0.959 U	0.959 U	ND	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U
E-17	E1721011509	01/15/2009	21	0.952 U	0.952 U	0.952 U	ND	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	E1748011509	01/15/2009	48	0.951 U	0.951 U	0.951 U	ND	0.951 U	0.951 U	0.951 U	1.51	0.951 U
E-51	E51-20090707	09/07/2007	20	5.25	1 U	1 U	**2.87**	**77.5**	244	**321**	246	19.4
	E51-44090707	09/07/2007	44	16	1 U	1.3	**9.25**	**84.3**	276	**367**	314	20.1
	E51031708	03/17/2008	pi.	1.13	0.962 U	0.962 U	**0.825**	**60.5**	316	**422**	180	9.75
	E51011309	01/13/2009	pi.	1.99	0.975 U	0.975 U	**0.919**	8.79	9.1	12.3	15.7	2.24
	E51P061909	6/19/2009	pi.	2.03	0.958 U	0.958 U	**0.864**	29.6	32.7	**49.5**	57.7	3.39
	E-51	12/10/2010	pi.	0.993	0.974 U	0.974 U	**0.514**	11.3	6.5	8.62	--	2.13
	E5120113011	11/30/2011	20	0.966 U	0.966 U	0.966 U	ND				0.966 U	0.966 U
	E5139113011	11/30/2011	39	0.971 U	0.971 U	0.971 U	ND	0.971 U	0.971 U	0.971 U	0.971 U	0.971 U
E-54	E54-19091007	09/10/2007	19	1 U	1 U	1 U	ND	3.73	18	1 U	11.7	1 U
	E54-40091007	09/10/2007	40	1 U	1 U	1 U	ND	3.37	20.2	1 U	11.7	1 U
	E5421011609	01/16/2009	21	0.943 U	0.943 U	0.943 U	ND	4.66	24.9	3.6	14.5	0.943 U
	E5442011609	01/16/2009	42	0.945 U	0.945 U	0.945 U	ND	4.24	23.3	4.08	13	0.945 U
	E54081309	8/13/2009	pi.	0.946 U	0.946 U	0.946 U	ND	2.72	5.08	3.95	8.33	0.946 U
	E5420122010	12/20/2010	20	0.967 U	0.967 U	0.967 U	ND	0.967 U	0.338	0.184	--	0.967 U
	E5412113011	11/30/2011	12	0.963 U	0.963 U	0.963 U	ND	0.963 U	1.32	0.963 U	5.5	0.963 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Noncarcinogenic PAHs								
				Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluor- anthene	Fluorene	Naphthalene	Phen- anthrene	Pyrene
MTCA Method B Groundwater Cleanup Level				4800	NV	6.3	4.4	640	640	160	NV	480
Area 1												
E-28	E28071307	07/13/2007	pi.	0.958 U	0.958 U	0.958 U	2.55	17.8	0.958 U	0.958 U	0.958 U	13.1
	E28-P091407	09/14/2007	pi.	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	9.96
	E28-20031308	03/13/2008	20	7.37	0.961 U	0.961 U	**6.22**	47.9	8.22	13.9	29.4	36.1
	E28-41031308	03/13/2008	41	3.71	1.12	1.3	2.9	8.3	1.35	2.09	1.3	6.51
	E2824061709	6/17/2009	24	12.1	0.955 U	0.955 U	4.36	54.6	14.3	2.09	66.2	41.9
	E2845061709	6/17/2009	45	3.52	0.951 U	0.951 U	0.951 U	18.2	3.29	0.951 U	20.9	14.8
	E2837121410	12/14/2010	37	1.57	0.953 U	0.953 U	0.991	0.4	0.953 U	0.362	0.181	0.324
	E2845121410	12/14/2010	45	1.61	0.955 U	0.955 U	0.898	0.497	0.955 U	0.248	0.201	0.411
	E2825111811	11/18/2011	25	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	E2830111811	11/18/2011	30	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U
E-32	E32-23.0 P	05/10/2007	23	15	0.969 U	0.969 U	**207**	36.7	41.5	51.3	86.2	26.6
	E32-33.0 P	05/10/2007	33	1.42	0.961 U	0.961 U	**28.3**	5.39	2.8	3.5	11.4	4.02
	E32-45.0 P	05/10/2007	45	0.959 U	0.959 U	0.959 U	**6.21**	2.1	0.959 U	0.959 U	3.03	1.64
	E32-22091107	09/11/2007	22	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
	E32-45091107	09/11/2007	45	1.07 U	1.07 U	1.07 U	1.07 U	3.18	1.07 U	1.07 U	2.3	2.36
	E32-20031308	03/14/2008	20	1.15	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	E32-45031408	03/14/2008	45	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	E3227121108	12/11/2008	27	2.36	1.04 U	--	3.01	6.4	1.04 U	1.04 U	1.04 U	3.24
	E3245121108	12/11/2008	45	2.84	0.952 U	0.952 U	1.81	7.83	0.952 U	0.952 U	0.952 U	3.87
	E3224061709	6/17/2009	24	0.986	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
	E3245061709	6/17/2009	45	1.2	0.95 U	0.95 U	0.95 U	1.61	0.95 U	0.95 U	0.95 U	1.08
	E3236121410	12/14/2010	36	0.19	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	E3249121410	12/14/2010	49	0.191	0.953 U	0.953 U	0.953 U	0.229	0.953 U	0.953 U	0.953 U	0.953 U
	E3228111811	11/18/2011	28	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Noncarcinogenic PAHs								
				Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluor-anthene	Fluorene	Naphthalene	Phen-anthrene	Pyrene
MTCA Method B Groundwater Cleanup Level				4800	NV	6.3	4.4	640	640	160	NV	480
E-36	E36-21.0 P	05/09/2007	21	66.3	0.964 U	0.964 U	**1230**	67.4	56.3	**395**	289	48.4
	E36-33.0 P	05/09/2007	33	252	9.01	0.964 U	**80.6**	**1160**	233	87.9	1580	**736**
	E36-44.0 P	05/09/2007	44	213	9.23	0.959 U	**42.5**	**1160**	175	79	1430	**770**
	E36-22091207	09/12/2007	22	61.7	5.13	0.96 U	**333**	266	53.8	**1310**	319	247
	E36-43091207	09/12/2007	43	51.6	6.32	0.958 U	**58.8**	273	48.4	156	290	272
	E36-20031408	03/14/2008	20	43.5	3.82 U	3.82 U	**142**	31.9	63.3	**1330**	199	37.8
	E36-37031408	03/14/2008	37	54.2	3.81 U	3.81 U	**163**	226	66.6	**1590**	342	132
	E3626121108	12/11/2008	26	11.8	2.49	0.967 U	**94**	62	18.3	**486**	40.2	44.3
	E3637121108	12/11/2008	37	8.39	2.15	2.37	**27.2**	24.1	2.33	81.9	7.76	17.1
	E3624061609	6/16/2009	24	46.7	0.955 U	0.955 U	**173**	73.9	47.2	**886**	126	24
	E3637061609	6/16/2009	37	0.955 U	6.89	0.955 U	**201**	551	95.5	**1080**	331	307
	E3626121510	12/15/2010	26	24	1	0.946 U	**128**	47.1	41	**1480**	55.7	32.6
	E3643121510	12/15/2010	43	32.1	1.75	0.953 U	**168**	65.6	47.5	**1710**	74.9	53.1
	E3625112311	11/23/2011	25	12.9	1.41	0.965 U	**7.12**	59.2	13	67.1	40.9	53.2
	E3647112311	11/23/2011	47	10.2	0.963 U	0.963 U	0.963 U	51.2	2.92	3.61	38	45.8
E-37	E37-20071107	07/11/2007	20	3.82	0.973 U	0.973 U	**40.4**	6.67	6.25	0.973 U	0.973 U	4.29
	E37-30071107	07/11/2007	30	1.46	0.972 U	0.972 U	**10.4**	10.5	3.35	0.972 U	1.7	7.86
	E37-22091107	09/11/2007	22	2.66	1 U	1 U	**37.3**	10.9	11	2.11	5.62	7.63
	E37-30091107	09/11/2007	30	1.68	1 U	1 U	**15.4**	7.11	4.9	1 U	3.65	5.33
	E37-20031108	03/11/2008	20	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
	E37-30031108	03/13/2008	30	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U
	E3726121008	12/10/2008	26	1.14	0.952 U	0.952 U	**7.44**	3.66	0.952 U	0.952 U	0.952 U	2.14
	E3730121008	12/10/2008	30	1.18	0.953 U	0.953 U	**7.03**	4.29	0.953 U	0.953 U	0.953 U	2.56
	E3724061609	6/16/2009	24	1.78	0.95 U	0.95 U	1.57	2.46	0.95 U	0.95 U	0.95 U	0.95 U
	E3730061609	6/16/2009	30	1.19	0.95 U	0.95 U	1.5	2.26	0.95 U	0.95 U	0.95 U	0.95 U
	E3725121510	12/15/2010	25	0.524	0.952 U	0.438	0.952 U	0.952 U	0.952 U	0.219	0.952 U	0.952 U
	E3730121510	12/15/2010	30	0.352	0.951 U	0.343	0.951 U	0.951 U	0.951 U	0.276	0.951 U	0.951 U
	E3724111711	11/17/2011	24	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U	0.958 U
	E3729111711	11/17/2011	29	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Noncarcinogenic PAHs								
				Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluor-anthene	Fluorene	Naphthalene	Phen-anthrene	Pyrene
MTCA Method B Groundwater Cleanup Level				4800	NV	6.3	4.4	640	640	160	NV	480
E-39	E39-20071207	07/12/2007	20	23.3	1.03 U	1.03 U	**8.12**	142	19	17.1	68	83.3
	E39-36071207	07/12/2007	36	38	1.01 U	1.01 U	**6.99**	215	31.2	17.4	153	194
	E39-21091207	09/12/2007	21	26.1	0.962 U	0.962 U	**15.4**	157	35.6	**322**	184	146
	E39-35091207	09/12/2007	35	40.6	1.51	1.08 U	**14.1**	311	41	**340**	280	334
	E39031708	03/17/2008	pi.	74.6	0.958 U	0.958 U	**72.3**	296	76.2	**707**	329	249
	E39011209	01/12/2009	pi.	23.4	0.964 U	1.72 B	**53.3**	122	25.2	24.7	228	81.7
	E39P061909	6/19/2009	pi.	8.15	0.963 U	0.963 U	**6.37**	65	8.23	2.22	63.8	50
	E-39	12/9/2010	pi.	24.1	0.962 U	0.962 U	**26.8**	50.8	9.36	3	41.7	32.5
	E3924112211	11/22/2011	24	11.2	0.984 U	0.984 U	**14.8**	12.1	4.23	5.22	4.97	14.8
	E3933112211	11/22/2011	33	11.9	0.963 U	0.963 U	**15.6**	13.5	4.1	4.49	6.14	14.9
Area 2												
E-4	E4-21071207	07/12/2007	21	16.1	0.968 U	0.968 U	**11.8**	76.1	36.6	12.3	59.6	55.3
	E4-50071207	07/12/2007	50	7.14	1.01 U	1.01 U	**7.01**	37.7	18.5	9.77	35.6	27.8
	E4-23091307	09/13/2007	23	28.7	0.976 U	0.976 U	**50.3**	172	46.2	132	265	64.6
	E4-48091307	09/13/2007	48	31.1	1.83	0.96 U	**15.2**	319	40.6	46.4	234	291
	E4031108	03/11/2008	pi.	17.5	0.958 U	0.958 U	**6.91**	44.7	31.2	20.8	65.1	34.8
	E4011309	01/13/2009	pi.	2.8	0.947 U	0.947 U	**5.17**	16.7	7.07	8.58	6.93	11.2
	E4061809P	6/18/2009	pi.	8.85	0.965 U	4.09	**37.3**	21.6	5.77	22.8	30.7	12.9
	E-4	12/9/2010	pi.	1.49	0.957 U	1.42	0.957 U	9.98	1.03	0.957 U	2.4	6.58
	E424112811	11/28/2011	24	0.957 U	0.957 U	0.957 U	0.957 U	12.2	0.957 U	0.957 U	0.957 U	8.78
	E45112811	11/28/2011	51	0.957 U	0.957 U	0.957 U	0.957 U	12.4	0.957 U	0.957 U	1	9.6
E-5	E524011309	01/13/2009	24	41.4	6.54	3.57 B	**17.1**	**653**	105	36.1	481	406
	E549011309	01/13/2009	49	11.1	2.3	0.951 U	0.951 U	162	11.8	0.951 U	78.7	118

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Noncarcinogenic PAHs								
				Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluor-anthene	Fluorene	Naphthalene	Phen-anthrene	Pyrene
MTCA Method B Groundwater Cleanup Level				4800	NV	6.3	4.4	640	640	160	NV	480
E-24	E24071307	07/13/2007	pi.	0.958 U	0.958 U	0.958 U	0.958 U	1.22	0.958 U	0.958 U	0.958 U	0.958 U
	E24-P091407	09/14/2007	pi.	3.29	0.974 U	0.974 U	**12.3**	15.2	4.52	42.3	19.6	11.5
	E24-23031208	03/12/2008	23	1.13 U	1.13 U	1.13 U	1.13 U	1.13 U	1.13 U	1.13 U	1.13 U	1.13 U
	E24-42031208	03/12/2008	42	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U	1.11 U
	E2428121208	12/12/2008	28	1.22	0.951 U	--	1.42	2.62	0.951 U	0.951 U	0.951 U	1.19
	E2443121208	12/12/2008	43	0.95 U	0.95 U	--	0.95 U	2.24	0.95 U	0.95 U	0.95 U	1.09
	E2426061709	6/17/2009	26	4.18	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	6.57	0.955 U	0.955 U
	E2443061709	6/17/2009	43	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	E2429121010	12/10/2010	29	3.15	0.956 U	0.956 U	0.956 U	0.459	0.956 U	0.956 U	0.956 U	0.956 U
	E2446121010	12/10/2010	46	1.42	0.955 U	0.955 U	0.955 U	0.229	0.955 U	0.888	0.955 U	0.955 U
	E2427111811	11/18/2011	27	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U	0.967 U
E-25	E2525011309	01/13/2009	25	6.93	0.953 U	0.953 U	**5.82**	10.1	33.4	19.4	27.4	6.6
	E2549011309	01/13/2009	49	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
E-26	E26071307	07/13/2007	pi.	11.3	0.956 U	0.956 U	**12**	42.3	52.7	14.4	49.2	27.2
	E26-P091407	09/14/2007	pi.	13.6	0.966 U	0.966 U	**14.7**	51.3	41.3	0.966 U	36.5	46.8
	E26-21031208	03/12/2008	21	2.85	0.964 U	0.964 U	3.82	19.3	4.6	0.964 U	7.63	14.9
	E26-41031208	03/12/2008	41	1.37	1.11 U	1.11 U	1.11 U	9.79	1.11 U	1.11 U	1.11 U	7.06
	E2624061809	6/18/2009	24	10.8	0.961 U	0.961 U	**11.4**	13.2	43.4	2.48	47.6	7.87
	E2644061809	6/18/2009	44	0.952 U	0.952 U	0.952 U	0.952 U	4.15	0.952 U	0.952 U	0.952 U	1.92
	E2636121310	12/13/2010	36	0.737	0.957 U	0.957 U	0.421	1.81	0.957 U	0.957 U	0.287	1.16
	E2644121310	12/13/2010	44	0.344	0.957 U	0.297	0.957 U	1.01	0.957 U	0.957 U	0.957 U	0.823
	E2626111811	11/18/2011	26	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U
	E2644111811	11/18/2011	44	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Noncarcinogenic PAHs								
				Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluor- anthene	Fluorene	Naphthalene	Phen- anthrene	Pyrene
MTCA Method B Groundwater Cleanup Level				4800	NV	6.3	4.4	640	640	160	NV	480
E-27	E27071307	07/13/2007	pi.	15.6	0.954 U	0.954 U	**6.93**	39.6	60.1	68	76.2	24.3
	E27-24091307	09/13/2007	24	4.73	1.1 U	1.1 U	**25.4**	13.4	7.95	9.97	17.8	9.17
	E27-40091307	09/13/2007	40	3.62	1.12 U	1.12 U	**12.9**	3.96	2.97	5.9	3.6	3.28
	E27-21031108	03/11/2008	21	2.17	0.96 U	0.96 U	2.93	10.9	3.78	1.09	6.83	8.74
	E27-40031108	03/11/2008	40	2.37	0.96 U	0.96 U	1.45	9.74	1.29	0.96 U	1.95	7.39
	E2725011409	01/14/2009	25	11.7	0.957 U	0.957 U	**33.2**	18.1	42.1	114	47.6	13
	E2740011409	01/14/2009	40	0.946 U	0.946 U	0.946 U	0.946 U	4.24	0.946 U	0.946 U	0.946 U	2.49
	E2725061809	6/18/2009	25	5.44	0.95 U	0.95 U	**13**	14.1	0.95 U	37.7	0.95 U	9.96
	E2740061809	6/18/2009	40	0.951 U	0.951 U	0.951 U	0.951 U	4.22	0.951 U	0.951 U	0.951 U	1.3
	E2726121610	12/16/2010	26	1.19	0.95 U	0.95 U	0.95 U	0.266	0.95 U	0.95 U	0.95 U	0.56
	E2740121610	12/16/2010	40	0.152	0.947 U	0.947 U	0.947 U	1.87	0.947 U	0.947 U	0.947 U	1.68
	E2725112911	11/29/2011	25	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U
	E2742112911	11/29/2011	42	0.96 U	0.96 U	0.96 U	0.96 U	3.05	0.96 U	0.96 U	0.96 U	2.82
E-58	E58071307	07/13/2007	pi.	19.9	0.956 U	0.956 U	**24.9**	25.2	139	**192**	72.3	14.2
	E58-P091407	09/14/2007	pi.	38.7	0.97 U	0.97 U	**47.6**	54.8	140	**613**	228	42.8
	E58-19031808	03/18/2008	19	7.31	0.962 U	0.962 U	**13.6**	9.57	20	43.9	25.7	6.54
	E58-36031808	03/18/2008	36	4.29	0.962 U	0.962 U	3.25	8.89	3.63	1.15	6.89	5.79
	E5823011409	01/14/2009	23	1.93	0.954 U	1.10 B	3.54	8.5	1.84	7.64	2.91	6.47
	E5836011409	01/14/2009	36	0.955 U	0.955 U	0.955 U	0.955 U	2.96	0.955 U	0.955 U	0.955 U	1.96
	E5823061809	6/18/2009	23	0.994	0.956 U	0.956 U	0.956 U	6.73	1.53	0.956 U	1.74	4.75
	E5840061809	6/18/2009	40	5.49	0.962 U	0.962 U	**35.5**	22.7	1.12	1.37	10.3	13.9
	E5824121610	12/16/2010	24	4.17	0.96 U	0.288	**9.64**	4.64	0.633	4.89	2.91	4.13
	E5840121610	12/16/2010	40	0.658	0.953 U	0.953 U	0.467	2.96	0.553	0.448	0.448	2.36
	E5823112811	11/28/2011	23	0.962 U	0.962 U	0.962 U	0.962 U	1.2	0.962 U	0.962 U	0.962 U	0.981
	E5838112811	11/28/2011	38	0.962 U	0.962 U	0.962 U	0.962 U	1.51	0.962 U	0.962 U	0.962 U	1.44

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Noncarcinogenic PAHs								
				Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluor-anthene	Fluorene	Naphthalene	Phen-anthrene	Pyrene
MTCA Method B Groundwater Cleanup Level				4800	NV	6.3	4.4	640	640	160	NV	480
Area 3												
E-42	E42-21090607	09/06/2007	21	8.62	1 U	1 U	**210**	38.3	43.6	**878**	45.7	23
	E42-40090607	09/06/2007	40	7.99	1 U	1 U	**85**	63	28.6	**456**	39.7	46.5
	E42031708	03/17/2008	pi.	2.98	0.951 U	0.951 U	**19.5**	20.1	4.52	**195**	7.14	17.9
	E42011209	01/12/2009	pi.	7.17	0.965 U	**9.03 B**	**66.1**	22.2	12.6	113	61.7	16.5
	E42P061909	6/19/2009	pi.	0.955 U	0.955 U	0.955 U	0.955 U	3.6	0.955 U	0.955 U	0.955 U	2.57
	E-42	12/9/2010	pi.	16.2	0.992 U	0.367	2.23	16.1	0.992 U	0.992 U	0.992 U	12.5
	E4224112111	11/21/2011	24	0.965 U	0.965 U	0.965 U	1.8	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U
E-43	E43-20090607	09/06/2007	20	1.9	1 U	1 U	**4.55**	6.68	12.4	11.6	1 U	3.42
	E43-45090607	09/06/2007	45	1.34	1 U	1 U	**4.92**	4.68	8.23	12.5	1 U	2.73
	E43031708	03/17/2008	pi.	0.947 U	0.947 U	0.947 U	0.947 U	10.6	0.947 U	1.92	0.947 U	7.56
	E43011209	01/12/2009	pi.	4.02	0.943 U	0.943 U	**21.2**	17	20.2	0.943 U	2.65	13.1
	E4322071509	7/15/2009	22	4.46	1 U	1 U	**72**	2.46	13.8	**857**	18.3	1 U
	E4323121610	12/16/2010	23	4.89	0.963 U	0.963 U	**8.49**	13	12.6	30	20.8	9.78
	E4324112111	11/21/2011	24	2.23	0.963 U	0.963 U	2.33	6.59	4.22	18.4	9.51	5.75
E-45	E45-21090507	09/05/2007	21	48.8	1 U	1 U	**319**	94.8	91.5	**4490**	343	64.7
	E45-43090607	09/06/2007	43	27.3	1 U	1 U	**163**	52.7	90.7	**2940**	191	33.8
	E45031708	03/17/2008	pi.	56.6	1.33	0.953 U	**148**	166	173	**3630**	362	89.5
	E45011209	01/12/2009	pi.	22.6	0.977 U	3.44 B	**112**	60.5	32.5	22.2	249	39.6
	E45P061909	6/19/2009	pi.	1.74	0.954 U	1.29	1.9	17	3.75	0.954 U	0.954 U	11.5
	E-45	12/9/2010	pi.	1.5	0.954 U	0.954 U	0.954 U	9.33	0.2	0.954 U	2.08	15.6
	E4522112111	11/21/2011	22	0.985 U	0.985 U	0.985 U	**5.3**	1.33	0.985 U	0.985 U	2.54	1.09
	E4532112111	11/21/2011	32	0.962 U	0.962 U	0.962 U	**4.49**	1.13	0.962 U	0.962 U	1.99	1.05

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Noncarcinogenic PAHs								
				Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluor-anthene	Fluorene	Naphthalene	Phen-anthrene	Pyrene
MTCA Method B Groundwater Cleanup Level				4800	NV	6.3	4.4	640	640	160	NV	480
E-49	E49-18090707	09/07/2007	18	1.73	1 U	1 U	**34.5**	2.51	13	**552**	10.5	1.6
	E49-39090707	09/07/2007	39	2.03	1 U	1 U	**52.6**	2.74	16.5	**705**	12.3	1.7
	E49031708	03/17/2008	pi.	1.63	0.946 U	0.946 U	**41.2**	2.51	10.2	79.9	8.11	1.87
	E49011309	01/13/2009	pi.	1.07	0.958 U	0.958 U	**14**	1.53	5.14	2.06	6.22	1.02
	E4913071509	7/15/2009	13	1 U	1 U	1 U	**16.3**	1 U	10.3	**882**	6.42	1 U
	E49122010	12/20/2010	pi.	0.416	0.946 U	0.946 U	0.237	0.861	0.946 U	0.227	0.946 U	0.397
	E497113011	11/30/2011	7	1.85	0.952 U	0.952 U	0.952 U	12.6	4.13	2.37	7.33	11.7
Area 4												
DEW-4	DEW4-20091007	09/10/2007	20	2.68	1 U	1 U	**8.63**	3.89	13.2	**207**	9.57	2.52
	DEW4-49091007	09/10/2007	49	7.57	1 U	1 U	**9.58**	11.7	25.6	**252**	21.4	7.85
	DEW423011509	01/15/2009	23	15.7	1.21	2.73 B	**12.7**	25	33	**882**	25.5	20.1
	DEW450011509	01/15/2009	50	5.38	0.944 U	1.73 B	**9.36**	7.47	17.5	**809**	10.6	5.47
	DEW4081309	8/13/2009	pi.	1.71 U	1.71 U	1.71 U	1.71 U	2	2.21	1.71 U	1.71 U	1.71 U
	DEW-4	12/9/2010	pi.	1.81	0.97 U	0.66	**5.43**	23.4	2.49	5.96	4.59	17.6
	DEW423112911	11/29/2011	23	16.1	3.94	0.962 U	**19.5**	80.4	22.1	**254**	38.9	84.7
	DEW451112911	11/29/2011	51	2.14	0.958 U	0.958 U	**7.37**	9.01	1.72	48.7	3.62	8.88
E-2	E2-P091407	09/14/2007	pi.	184	3.17	1.36	**64.6**	391	384	**267**	685	332
	E2011309	01/13/2009	pi.	22.1	1.59	0.961 U	0.961 U	24.6	1.25	0.961 U	3.45	21
	E2P061909	6/19/2009	pi.	0.961 U	0.961 U	0.961 U	0.961 U	5.3	0.961 U	0.961 U	0.961 U	4.1
	E-2	12/9/2010	pi.	3.84	0.982 U	1.39	**11.7**	14.7	1.3	0.982 U	6.83	12.4
	E223112811	11/28/2011	23	13.5	0.961 U	0.961 U	**4.44**	1.16	0.98	9.8	0.961 U	1.06
	E241112811	11/28/2011	41	10.1	0.963 U	0.963 U	3.23	1.53	0.963 U	5.83	0.963 U	1.53
E-10	E10-20091307	09/13/2007	20	50.7	0.967 U	0.967 U	**402**	66	364	**9720**	412	47.7
	E10-34091307	09/13/2007	34	47	0.963 U	0.963 U	**351**	64.5	298	**7660**	338	54.7
	E10011309	01/13/2009	pi.	6.03	0.963 U	1.51 B	**8.43**	28.4	10.4	49.3	13.3	22.6
	E10P061909	6/19/2009	pi.	13.8	0.961 U	1.3	**22.1**	45.2	24.2	1.06	70.4	32.3
	E-10	12/9/2010	pi.	20.7	0.957 U	0.957 U	**59.9**	48.1	13.9	0.957 U	51.4	31.9
	E1020113011	11/30/2011	20	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U	0.955 U

Table J-1-3
Semivolatile Organic Compounds in Groundwater from Extraction Wells (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Noncarcinogenic PAHs								
				Anthracene	Benzo(ghi) perylene	Bis(2-ethylhexyl) phthalate (BEHP)	Carbazole	Fluor-anthene	Fluorene	Naphthalene	Phen-anthrene	Pyrene
MTCA Method B Groundwater Cleanup Level				4800	NV	6.3	4.4	640	640	160	NV	480
E-16	E16-P091407	09/14/2007	pi.	41.4	0.957 U	0.957 U	**52.9**	126	151	14.7	181	111
	E16081309	8/13/2009	pi.	17.8	0.951 U	0.951 U	**6.79**	24.7	54.6	77.9	66.7	15.7
	E1625121710	12/17/2010	25	3.01	0.955 U	0.955 U	3.51	15.2	5.28	1	4.43	11.4
	E1642121710	12/17/2010	42	3.62	0.954 U	0.954 U	3.18	17.3	5.73	1.41	7.43	13
	E1622112911	11/29/2011	22	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	E1633112911	11/29/2011	33	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U	0.959 U
E-17	E1721011509	01/15/2009	21	0.952 U	0.952 U	2.47 B	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
	E1748011509	01/15/2009	48	0.951 U	0.951 U	0.951 U	0.951 U	2.39	0.951 U	6.18	0.951 U	2
E-51	E51-20090707	09/07/2007	20	19.7	1 U	1 U	**182**	44	68.9	**4120**	69.6	27.3
	E51-44090707	09/07/2007	44	32.1	1.19	1 U	**187**	90	80.3	**4250**	92.3	65.5
	E51031708	03/17/2008	pi.	14.3	0.962 U	0.962 U	**233**	14.9	46.9	**6610**	67.3	10.3
	E51011309	01/13/2009	pi.	10.1	0.975 U	2.53 B	**23.6**	37.4	14.3	136	42.5	28.3
	E51P061909	6/19/2009	pi.	17.9	0.958 U	2.27	**71.4**	56.3	27.8	**425**	85.8	36.3
	E-51	12/10/2010	pi.	12.4	0.974 U	2.02	**86.6**	36.9	12.8	**194**	58.7	26.8
	E5120113011	11/30/2011	20	3.79	0.966 U	0.966 U	**21**	1.58	0.966 U	11.1	2.71	0.966 U
	E5139113011	11/30/2011	39	4.09	0.971 U	0.971 U	**21.2**	2	0.971 U	9.66	2.61	0.971 U
E-54	E54-19091007	09/10/2007	19	1 U	1 U	1 U	1.72	3.51	2.87	**234**	6.6	2.42
	E54-40091007	09/10/2007	40	1 U	1 U	1 U	1.36	1.11	1.79	**217**	3.35	1 U
	E5421011609	01/16/2009	21	0.943 U	0.943 U	0.943 U	1.74	0.943 U	1.39	**183**	1.83	0.943 U
	E5442011609	01/16/2009	42	0.945 U	0.945 U	1.01 B	1.63	0.945 U	1.29	**626**	1.67	0.945 U
	E54081309	8/13/2009	pi.	0.946 U	0.946 U	0.946 U	**5.18**	0.946 U	0.956	35	0.946 U	0.946 U
	E5420122010	12/20/2010	20	1.38	0.967 U	0.967 U	**6.02**	0.967 U	0.967 U	16.4	0.967 U	0.967 U
	E5412113011	11/30/2011	12	0.963 U	0.963 U	0.963 U	**5.76**	0.963 U	3.42	52.4	0.963 U	0.963 U

Table J-1-4
Petroleum Hydrocarbons in Groundwater from Extraction Wells (mg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Diesel-Range Organics (DROs)	Kerosene-Range Organics	Residual-Range Organics (RROs)
MTCA Method A Groundwater Cleanup Level				0.5	0.5^d	0.5
Area 1						
E-28	E28071307	07/13/2007	pi.	**0.624**	NA	0.478 U
	E28-P091407	09/14/2007	pi.	**1.46**	NA	**0.814**
	E28-20031308	03/13/2008	20	**4.68**	NA	**1.88**
	E28-41031308	03/13/2008	41	**1.15**	NA	**0.892**
	E2824061709	06/17/2009	24	**4.88**	NA	**3.35**
	E2845061709	06/17/2009	45	**1.19**	NA	**1.62**
	E2837121410	12/14/2010	37	**1.52**	NA	**1.59**
	E2845121410	12/14/2010	45	**1.6**	NA	**1.61**
	E2825111811	11/18/2011	25	0.219	NA	0.472
	E2830111811	11/18/2011	30	0.178	NA	0.468
E-32	E32-23.0 P	05/10/2007	23	**14.8**	NA	**1.86**
	E32-33.0 P	05/10/2007	33	**1.88**	NA	0.48 U
	E32-45.0 P	05/10/2007	45	**1.03**	NA	0.48 U
	E32-22091107	09/11/2007	22	**0.794**	NA	**1.24**
	E32-45091107	09/11/2007	45	**1.02**	NA	0.478 U
	E32-20031308	03/14/2008	20	**0.722**	NA	0.476 U
	E32-45031408	03/14/2008	45	0.284	NA	0.476 U
	E3227121108	12/11/2008	27	**3.89**	NA	**1.88**
	E3245121108	12/11/2008	45	**3.60**	NA	**1.88**
	E3224061709	06/17/2009	24	**1.23**	NA	**0.791**
	E3245061709	06/17/2009	45	**1.02**	NA	**0.970**
	E3236121410	12/14/2010	36	0.367	NA	**1.26**
	E3249121410	12/14/2010	49	0.337	NA	0.246
	E3228111811	11/18/2011	28	**0.819**	NA	**2.01**
E-36	E36-21.0 P	05/09/2007	21	**27.0**	NA	**6.02**
	E36-33.0 P	05/09/2007	33	**68.5**	NA	**8.50**
	E36-44.0 P	05/09/2007	44	**94.7**	NA	**12.8**
	E36-22091207	09/12/2007	22	**27.6**	NA	**3.79**
	E36-43091207	09/12/2007	43	**39.4**	NA	**7.47**
	E36-20031408	03/14/2008	20	**23**	NA	**14.8**
	E36-37031408	03/14/2008	37	**32.1**	NA	**16.7**
	E3626121108	12/11/2008	26	**10.4**	NA	**4.33**
	E3637121108	12/11/2008	37	**7.16**	NA	**3.59**
	E3624061609	06/16/2009	24	**30.9**	NA	**13.9**
	E3637061609	06/16/2009	37	**64.7**	NA	**20.8**
	E3626121510	12/15/2010	26	**23.1**	NA	**9.41**
	E3643121510	12/15/2010	43	**25.7**	NA	**18.8**
	E3625112311	11/23/2011	25	**10.7**	NA	**3.68**
	E3647112311	11/23/2011	47	**9.58**	NA	**1.03**

Table J-1-4
Petroleum Hydrocarbons in Groundwater from Extraction Wells (mg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Diesel-Range Organics (DROs)	Kerosene-Range Organics	Residual-Range Organics (RROs)
MTCA Method A Groundwater Cleanup Level				0.5	0.5[d]	0.5
E-37	E37-20071107	07/11/2007	20	**1.03**	NA	**2.71**
	E37-30071107	07/11/2007	30	**1.57**	NA	**2.06**
	E37-22091107	09/11/2007	22	**1.67**	NA	**0.952 B**
	E37-30091107	09/11/2007	30	**0.876**	NA	**0.715 B**
	E37-20031108	03/11/2008	20	**1.2**	NA	**0.792**
	E37-30031108	03/13/2008	30	**1.09**	NA	**0.635**
	E3726121008	12/10/2008	26	**1.9**	NA	**0.864**
	E3730121008	12/10/2008	30	**1.93**	NA	**0.748**
	E3724061609	06/16/2009	24	**2.89**	NA	**1.73**
	E3730061609	06/16/2009	30	**2.47**	NA	**1.48**
	E3725121510	12/15/2010	25	0.331	NA	**0.734**
	E3730121510	12/15/2010	30	0.459	NA	**0.72**
	E3724111711	11/17/2011	24	**0.512**	NA	**0.678**
	E3729111711	11/17/2011	29	**0.605**	NA	**0.665**
E-39	E39-20071207	07/12/2007	20	**26.8**	**20.4**	**11.5**
	E39-36071207	07/12/2007	36	**51.2**	**42.1**	0.496 U
	E39-21091207	09/12/2007	21	**35.9**	NA	**4.55**
	E39-35091207	09/12/2007	35	**112**	NA	**10.4**
	E39031708	03/17/2008	pi.	**38.8**	NA	**6.81**
	E39011209	01/12/2009	pi.	**6.86**	NA	**1.62**
	E39P061909	06/19/2009	pi.	**2.44**	NA	**1.69**
	E-39	12/09/2010	pi.	**8.69**	NA	**5.27**
	E3924112211	11/22/2011	24	**8.69**	NA	**4.17**
	E3933112211	11/22/2011	33	**6.77**	NA	**3.38**
Area 2						
E-4	E4-21071207	07/12/2007	21	**3.63**	NA	0.486 U
	E4-50071207	07/12/2007	50	**3.2**	NA	0.488 U
	E4-23091307	09/13/2007	23	**14.1**	NA	**19.2**
	E4-48091307	09/13/2007	48	**8.32**	NA	**16.9**
	E4031108	03/11/2008	pi.	**2.49**	NA	**0.805**
	E4011309	01/13/2009	pi.	**2.5**	NA	**1.48**
	E4061809P	06/18/2009	pi.	**3.64**	NA	**2.18**
	E-4	12/09/2010	pi.	0.486	NA	0.369
	E424112811	11/28/2011	24	**2.17**	NA	**1.35**
	E45112811	11/28/2011	51	**0.734**	NA	**0.549**
E-5	E524011309	01/13/2009	24	**21.3**	NA	**4.13**
	E549011309	01/13/2009	49	**3.01**	NA	**1.38**

Table J-1-4
Petroleum Hydrocarbons in Groundwater from Extraction Wells (mg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Diesel-Range Organics (DROs)	Kerosene-Range Organics	Residual-Range Organics (RROs)
MTCA Method A Groundwater Cleanup Level				0.5	0.5[d]	0.5
E-24	E24071307	07/13/2007	pi.	**0.901**	NA	0.5 U
	E24-P091407	09/14/2007	pi.	**1.69**	NA	**1.19**
	E24-23031208	03/12/2008	23	**0.595**	NA	0.483 U
	E24-42031208	03/12/2008	42	0.24 U	NA	0.48 U
	E2428121208	12/12/2008	28	**2.04**	NA	**1.16**
	E2443121208	12/12/2008	43	**1.62**	NA	**1.08**
	E2426061709	06/17/2009	26	**2.81**	NA	**2.37**
	E2443061709	06/17/2009	43	0.238 U	NA	0.476 U
	E2429121010	12/10/2010	29	**2.02**	NA	**2.17**
	E2446121010	12/10/2010	46	**1.18**	NA	**1.4**
	E2427111811	11/18/2011	27	0.221	NA	**0.589**
E-25	E2525011309	01/13/2009	25	**7.44**	NA	**1.91**
	E2549011309	01/13/2009	49	0.371	NA	**0.857**
E-26	E26071307	07/13/2007	pi.	**1.11**	NA	0.478 U
	E26-P091407	09/14/2007	pi.	**2.21**	NA	**1.2**
	E26-21031208	03/12/2008	21	**2.87**	NA	**1.35**
	E26-41031208	03/12/2008	41	**2.8**	NA	**0.777**
	E2624061809	06/18/2009	24	**4.27**	NA	**2.47**
	E2644061809	06/18/2009	44	**1.14**	NA	**0.883**
	E2636121310	12/13/2010	36	**0.83**	NA	**0.752**
	E2644121310	12/13/2010	44	**0.806**	NA	0.413
	E2626111811	11/18/2011	26	0.377	NA	0.448
	E2644111811	11/18/2011	44	0.383	NA	0.437
E-27	E27071307	07/13/2007	pi.	**1.86**	NA	0.477 U
	E27-24091307	09/13/2007	24	**6.14**	NA	**31.7**
	E27-40091307	09/13/2007	40	**5.95**	NA	**36.3**
	E27-21031108	03/11/2008	21	**1.54**	NA	**0.588**
	E27-40031108	03/11/2008	40	**0.731**	NA	0.48 U
	E2725011409	01/14/2009	25	**8.15**	NA	**2.88**
	E2740011409	01/14/2009	40	**1.87**	NA	**2.34**
	E2725061809	06/18/2009	25	**3.41**	NA	**2.45**
	E2740061809	06/18/2009	40	0.46	NA	**0.699**
	E2726121610	12/16/2010	26	**2.49**	NA	**4.92**
	E2740121610	12/16/2010	40	**0.705**	NA	**0.741**
	E2725112911	11/29/2011	25	0.45	NA	**1.47**
	E2742112911	11/29/2011	42	**0.558**	NA	**0.628**

Table J-1-4
Petroleum Hydrocarbons in Groundwater from Extraction Wells (mg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Diesel-Range Organics (DROs)	Kerosene-Range Organics	Residual-Range Organics (RROs)
MTCA Method A Groundwater Cleanup Level				0.5	0.5[d]	0.5
E-58	E58071307	07/13/2007	pi.	**2.53**	NA	0.5 U
	E58-P091407	09/14/2007	pi.	**5.23**	NA	**1.86**
	E58-19031808	03/18/2008	19	**3.06**	NA	**2.04**
	E58-36031808	03/18/2008	36	**0.752**	NA	0.48 U
	E5823011409	01/14/2009	23	**1.96**	NA	**0.93**
	E5836011409	01/14/2009	36	**0.518**	NA	**0.585**
	E5823061809	06/18/2009	23	**0.54**	NA	**0.94**
	E5840061809	06/18/2009	40	**2.86**	NA	**1.65**
	E5824121610	12/16/2010	24	**3.58**	NA	**3.45**
	E5840121610	12/16/2010	40	0.33	NA	0.495
	E5823112811	11/28/2011	23	0.456	NA	**0.663**
	E5838112811	11/28/2011	38	**0.504**	NA	**0.653**
Area 3						
E-42	E42-21090607	09/06/2007	21	**8.82**	NA	**5.28**
	E42-40090607	09/06/2007	40	**6.55**	NA	**2**
	E42031708	03/17/2008	pi.	**3.18**	NA	**1.54**
	E42011209	01/12/2009	pi.	**8.87**	NA	**2.53**
	E42P061909	06/19/2009	pi.	0.351	NA	**0.828**
	E-42	12/09/2010	pi.	**7.35**	NA	**5.56**
	E4224112111	11/21/2011	24	**1.31**	NA	**4.09**
E-43	E43-20090607	09/06/2007	20	**1.4**	NA	**0.886**
	E43-45090607	09/06/2007	45	**1.42**	NA	**1.25**
	E43031708	03/17/2008	pi.	**1.2**	NA	0.475 U
	E43011209	01/12/2009	pi.	**4.26**	NA	**1.29**
	E4322071509	07/15/2009	22	**9.27**	NA	**4.12**
	E4323121610	12/16/2010	23	**1.57**	NA	**0.854**
	E4324112111	11/21/2011	24	**0.759**	NA	**0.823**
E-45	E45-21090507	09/05/2007	21	**70.6**	NA	**12.3**
	E45-43090607	09/06/2007	43	**25.6**	NA	**5.18**
	E45031708	03/17/2008	pi.	**30.7**	NA	**7.13**
	E45011209	01/12/2009	pi.	**8.09**	NA	**1.72**
	E45P061909	06/19/2009	pi.	**1.98**	NA	**1.72**
	E-45	12/09/2010	pi.	**1.84**	NA	**1.17**
	E4522112111	11/21/2011	22	**1.5**	NA	**1.48**
	E4532112111	11/21/2011	32	**1.57**	NA	**1.44**
E-49	E49-18090707	09/07/2007	18	**3.82**	NA	**0.950 M**
	E49-39090707	09/07/2007	39	**2.77**	NA	**0.585 M**
	E49031708	03/17/2008	pi.	**2.41**	NA	0.477 U
	E49011309	01/13/2009	pi.	**2.9**	NA	**1.26**
	E4913071509	07/15/2009	13	**3.14**	NA	**1.22**
	E49122010	12/20/2010	pi.	0.229	NA	0.461
	E497113011	11/30/2011	7	**1.66**	NA	**0.851**

Table J-1-4
Petroleum Hydrocarbons in Groundwater from Extraction Wells (mg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Diesel-Range Organics (DROs)	Kerosene-Range Organics	Residual-Range Organics (RROs)
MTCA Method A Groundwater Cleanup Level				0.5	0.5[d]	0.5
Area 4						
DEW-4	DEW4-20091007	09/10/2007	20	**3.69**	NA	2.02 U
	DEW4-49091007	09/10/2007	49	**3.91**	NA	2.42 U
	DEW423011509	01/15/2009	23	**7.3**	NA	**5.44**
	DEW450011509	01/15/2009	50	**4.93**	NA	**2.01**
	DEW4081309	08/13/2009	0	**0.84**	NA	**0.927**
	DEW-4	12/09/2010	pi.	**0.777**	NA	**0.532**
	DEW423112911	11/29/2011	23	**19.1**	NA	**55.3**
	DEW451112911	11/29/2011	51	**4.59**	NA	**9.5**
E-2	E2-P091407	09/14/2007	pi.	**26**	NA	**7.33**
	E2011309	01/13/2009	pi.	**0.987**	NA	**1.05**
	E2P051909	06/19/2009	pi.	0.424	NA	**0.67**
	E-2	12/09/2010	pi.	**2.53**	NA	**1.12**
	E223112811	11/28/2011	23	**1.34**	NA	**1.16**
	E241112811	11/28/2011	41	**1.17**	NA	**1.04**
E-10	E10-20091307	09/13/2007	20	**46.6**	NA	**36.2**
	E10-34091307	09/13/2007	34	**36.6**	NA	**9.28**
	E10011309	01/13/2009	pi.	**2.6**	NA	**1.5**
	E10P061909	06/16/2009	pi.	**4.88**	NA	**1.36**
	E-10	12/09/2010	pi.	**6.89**	NA	**3.67**
	E1020113011	11/30/2011	20	0.184	NA	**0.515**
E-16	E16-P091407	09/14/2007	pi.	**5.71**	NA	**1.67**
	E16081309	08/13/2009	pi.	**2.78**	NA	**1.32**
	E1625121710	12/17/2010	25	**1.23**	NA	**1.12**
	E1642121710	12/17/2010	42	**1.23**	NA	**0.952**
	E1622112911	11/29/2011	22	0.254	NA	**0.781**
	E1633112911	11/29/2011	33	0.269	NA	**0.615**
E-17	E1721011509	01/15/2009	21	**0.829**	NA	**0.819**
	E1748011509	01/15/2009	48	**0.678**	NA	**0.911**
E-51	E51-20090707	09/07/2007	20	**53.7**	NA	**7.14 M**
	E51-44090707	09/07/2007	44	**43.4**	NA	**5.68 M**
	E51031708	03/17/2008	pi.	**21.4**	NA	**4.6**
	E51011309	01/13/2009	pi.	**4.36**	NA	**1.63**
	E51P061909	06/19/2009	pi.	**3.37**	NA	**1.28**
	E-51	12/10/2010	pi.	**4.51**	NA	**1.76**
	E5120113011	11/30/2011	20	**5.8**	NA	**30.1**
	E5139113011	11/30/2011	39	**8.19**	NA	**52.1**
E-54	E54-19091007	09/10/2007	19	**1.23**	NA	0.556 U
	E54-40091007	09/10/2007	40	**0.98**	NA	0.552 U
	E5421011609	01/16/2009	21	**1.95**	NA	**0.674**
	E5442011609	01/16/2009	42	**1.62**	NA	**0.684**
	E54081309	08/13/2009	pi.	**1.02**	NA	0.475 U
	E5420122010	12/20/2010	20	**2.35**	NA	**1.74**
	E5412113011	11/30/2011	12	**2.12**	NA	**1.92**

APPENDIX J-2

MAY AND JUNE 2009 RECONNAISSANCE

Notes for Reconnaissance Groundwater Tables J-2-1 through J-2-3
Former PWT Site RI/FS

Bold = detected concentration that exceeds MTCA Method B (Method A for Arsenic only) groundwater cleanup level. Non-detect values were not compared with cleanup level.

Highlight indicates detected concentration that exceeds MTCA Method B Groundwater VI Level. Non-detect values were not compared with cleanup levels.

cPAH = carcinogenic polycyclic aromatic hydrocarbon, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

cPAH TEQ = carcinogenic polycyclic aromatic hydrocarbon toxicity equivalent.

CUL = cleanup level.

Dup = duplicate sample.

ft. bgs = feet below ground surface.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

µg/L = micrograms per liter (parts per billion).

ND = The cPAH analytes were not detected at or above their respective method reporting limits.

NTU = nephelometric turbidity unit.

NV = no value.

PAH = polycyclic aromatic hydrocarbon.

U = not detected at or above method reporting limit; half the value used in calculations.

[a] m-Xylene.

[b] MTCA Method A CUL listed for arsenic, which is representative of background conditions.

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene
MTCA Method B Groundwater VI Level				7.4	11,000	6.2	7.9	2300	130
MTCA Method B Groundwater CULs				1.7	16,000	0.22	0.77	1600	400
B-313	B313-W-104.0	05/26/2009	104	1 U	1 U	1 U	1 U	1 U	1 U
B-314	B314-W-100.0	05/29/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
B-315	B315-W-90.0	06/01/2009	90	1 U	1 U	1 U	1 U	1 U	1 U
GP6	GP6-W-20.0	05/29/2009	20	1 U	1 U	1 U	1 U	1 U	1 U
	GP6-W-70.0	05/29/2009	70	1 U	1 U	1 U	1 U	1 U	1 U
GP7	GP7-W-25.0	05/27/2009	25	1 U	1 U	1 U	1 U	1 U	1 U
	GP7-W-70.0	05/28/2009	70	1 U	1 U	1 U	1 U	1 U	1 U
GP8	GP8-W-26.0	05/22/2009	26	1 U	1 U	1 U	1 U	1 U	1 U
	GP8-W-75.0	05/26/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP9	GP9-W-26.0	05/26/2009	26	1 U	1 U	1 U	1 U	1 U	1 U
	GP9-W-60.0	05/27/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
GP10	GW10-W-25.0	05/20/2009	25	1 U	1 U	1 U	1 U	1 U	1 U
	GW10-W-75.0	05/20/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP11	GP11-W-25.0	05/21/2009	25	1 U	1 U	1 U	1 U	1 U	1 U
	GP11-W-75.0	05/21/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP12	GP12-W-15.0	06/01/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-60.0	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-60.0-Dup	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-100.0	06/04/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-130.0	06/04/2009	130	1 U	1 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	1,1,1,2-Tetra-chloroethane	1,1,1-Trichloro-ethane	1,1,2,2-Tetra-chloroethane	1,1,2-Trichloro-ethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene
MTCA Method B Groundwater VI Level				7.4	11,000	6.2	7.9	2300	130
MTCA Method B Groundwater CULs				1.7	16,000	0.22	0.77	1600	400
GP13	GP13-W-15.0	06/02/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-100.0	06/08/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-130.0	06/08/2009	130	1 U	1 U	1 U	1 U	1 U	1 U
GP14	GP14-W-15.0	06/03/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-100.0	06/11/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-125.0	06/11/2009	125	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-180.0	06/12/2009	180	1 U	1 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane
MTCA Method B Groundwater VI Level				NV	NV	NV	3900	24	NV
MTCA Method B Groundwater CULs				NV	NV	0.0063	80	400	0.031
B-313	B313-W-104.0	05/26/2009	104	1 U	1 U	1 U	1 U	1 U	1 U
B-314	B314-W-100.0	05/29/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
B-315	B315-W-90.0	06/01/2009	90	1 U	1 U	1 U	1 U	1 U	1 U
GP6	GP6-W-20.0	05/29/2009	20	1 U	1 U	1 U	1 U	1 U	1 U
	GP6-W-70.0	05/29/2009	70	1 U	1 U	1 U	1 U	7.02	1 U
GP7	GP7-W-25.0	05/27/2009	25	1 U	1 U	1 U	1 U	1 U	1 U
	GP7-W-70.0	05/28/2009	70	1 U	1 U	1 U	1 U	1 U	1 U
GP8	GP8-W-26.0	05/22/2009	26	1 U	1 U	1 U	1 U	1 U	1 U
	GP8-W-75.0	05/26/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP9	GP9-W-26.0	05/26/2009	26	1 U	1 U	1 U	1 U	1 U	1 U
	GP9-W-60.0	05/27/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
GP10	GW10-W-25.0	05/20/2009	25	1 U	1 U	1 U	1 U	1 U	1 U
	GW10-W-75.0	05/20/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP11	GP11-W-25.0	05/21/2009	25	1 U	1 U	1 U	1 U	1 U	1 U
	GP11-W-75.0	05/21/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP12	GP12-W-15.0	06/01/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-60.0	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-60.0-Dup	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-100.0	06/04/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-130.0	06/04/2009	130	1 U	1 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-Dibromo-3-chloropropane
MTCA Method B Groundwater VI Level				NV	NV	NV	3900	24	NV
MTCA Method B Groundwater CULs				NV	NV	0.0063	80	400	0.031
GP13	GP13-W-15.0	06/02/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-100.0	06/08/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-130.0	06/08/2009	130	1 U	1 U	1 U	1 U	1 U	1 U
GP14	GP14-W-15.0	06/03/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-100.0	06/11/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-125.0	06/11/2009	125	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-180.0	06/12/2009	180	1 U	1 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	1,2-Dibromo-ethane	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene
MTCA Method B Groundwater VI Level				0.74	1800	4.2	28	25	NV
MTCA Method B Groundwater CULs				0.022	720	0.48	0.64	400	NV
B-313	B313-W-104.0	05/26/2009	104	1 U	1 U	1 U	1 U	1 U	1 U
B-314	B314-W-100.0	05/29/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
B-315	B315-W-90.0	06/01/2009	90	1 U	1 U	1 U	1 U	1 U	1 U
GP6	GP6-W-20.0	05/29/2009	20	1 U	1 U	1 U	1 U	1 U	1 U
	GP6-W-70.0	05/29/2009	70	1 U	1 U	1 U	1 U	1 U	1 U
GP7	GP7-W-25.0	05/27/2009	25	1 U	1 U	1 U	1 U	1 U	1 U
	GP7-W-70.0	05/28/2009	70	1 U	1 U	1 U	1 U	1 U	1 U
GP8	GP8-W-26.0	05/22/2009	26	1 U	1 U	1 U	1 U	1 U	1 U
	GP8-W-75.0	05/26/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP9	GP9-W-26.0	05/26/2009	26	1 U	1 U	1 U	1 U	1 U	1 U
	GP9-W-60.0	05/27/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
GP10	GW10-W-25.0	05/20/2009	25	1 U	1 U	1 U	1 U	1 U	1 U
	GW10-W-75.0	05/20/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP11	GP11-W-25.0	05/21/2009	25	1 U	1 U	1 U	1 U	1 U	1 U
	GP11-W-75.0	05/21/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP12	GP12-W-15.0	06/01/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-60.0	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-60.0-Dup	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-100.0	06/04/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-130.0	06/04/2009	130	1 U	1 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	1,2-Dibromo-ethane	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	1,3-Dichloro-benzene
MTCA Method B Groundwater VI Level				0.74	1800	4.2	28	25	NV
MTCA Method B Groundwater CULs				0.022	720	0.48	0.64	400	NV
GP13	GP13-W-15.0	06/02/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-100.0	06/08/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-130.0	06/08/2009	130	1 U	1 U	1 U	1 U	1 U	1 U
GP14	GP14-W-15.0	06/03/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-100.0	06/11/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-125.0	06/11/2009	125	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-180.0	06/12/2009	180	1 U	1 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	Methyl ethylketone (2-Butanone)	2-Chloro-toluene	2-Hexanone	4-Chloro-toluene
MTCA Method B Groundwater VI Level				NV	7900	NV	350000	NV	NV	NV
MTCA Method B Groundwater CULs				NV	1.8	NV	4800	160	NV	NV
B-313	B313-W-104.0	05/26/2009	104	1 U	1 U	1 U	10 U	1 U	10 U	1 U
B-314	B314-W-100.0	05/29/2009	100	1 U	1 U	1 U	10 U	1 U	10 U	1 U
B-315	B315-W-90.0	06/01/2009	90	1 U	1 U	1 U	10 U	1 U	10 U	1 U
GP6	GP6-W-20.0	05/29/2009	20	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP6-W-70.0	05/29/2009	70	1 U	1 U	1 U	10 U	1 U	10 U	1 U
GP7	GP7-W-25.0	05/27/2009	25	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP7-W-70.0	05/28/2009	70	1 U	1 U	1 U	10 U	1 U	10 U	1 U
GP8	GP8-W-26.0	05/22/2009	26	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP8-W-75.0	05/26/2009	75	1 U	1 U	1 U	10 U	1 U	10 U	1 U
GP9	GP9-W-26.0	05/26/2009	26	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP9-W-60.0	05/27/2009	60	1 U	1 U	1 U	10 U	1 U	10 U	1 U
GP10	GW10-W-25.0	05/20/2009	25	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GW10-W-75.0	05/20/2009	75	1 U	1 U	1 U	10 U	1 U	10 U	1 U
GP11	GP11-W-25.0	05/21/2009	25	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP11-W-75.0	05/21/2009	75	1 U	1 U	1 U	10 U	1 U	10 U	1 U
GP12	GP12-W-15.0	06/01/2009	15	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP12-W-60.0	06/02/2009	60	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP12-W-60.0-Dup	06/02/2009	60	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP12-W-100.0	06/04/2009	100	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP12-W-130.0	06/04/2009	130	1 U	1 U	1 U	10 U	1 U	10 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	Methyl ethylketone (2-Butanone)	2-Chloro-toluene	2-Hexanone	4-Chloro-toluene
MTCA Method B Groundwater VI Level				NV	7900	NV	350000	NV	NV	NV
MTCA Method B Groundwater CULs				NV	1.8	NV	4800	160	NV	NV
GP13	GP13-W-15.0	06/02/2009	15	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP13-W-60.0	06/03/2009	60	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP13-W-100.0	06/08/2009	100	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP13-W-130.0	06/08/2009	130	1 U	1 U	1 U	10 U	1 U	10 U	1 U
GP14	GP14-W-15.0	06/03/2009	15	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP14-W-60.0	06/03/2009	60	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP14-W-100.0	06/11/2009	100	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP14-W-125.0	06/11/2009	125	1 U	1 U	1 U	10 U	1 U	10 U	1 U
	GP14-W-180.0	06/12/2009	180	1 U	1 U	1 U	10 U	1 U	10 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Acrylonitrile	Benzene	Bromo-benzene	Bromodichloro-methane
MTCA Method B Groundwater VI Level				NV	NV	NV	16	2.4	NV	0.09
MTCA Method B Groundwater CULs				NV	640	800	0.081	0.8	NV	0.71
B-313	B313-W-104.0	05/26/2009	104	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
B-314	B314-W-100.0	05/29/2009	100	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
B-315	B315-W-90.0	06/01/2009	90	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
GP6	GP6-W-20.0	05/29/2009	20	1 U	20 U	50 U	5 U	**1.38**	1 U	1 U
	GP6-W-70.0	05/29/2009	70	1 U	20 U	50 U	5 U	**20.5**	1 U	1 U
GP7	GP7-W-25.0	05/27/2009	25	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP7-W-70.0	05/28/2009	70	1 U	20 U	50 U	5 U	**12.3**	1 U	1 U
GP8	GP8-W-26.0	05/22/2009	26	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP8-W-75.0	05/26/2009	75	1 U	20 U	50 U	5 U	**7.20**	1 U	1 U
GP9	GP9-W-26.0	05/26/2009	26	1 U	20 U	50 U	5 U	**5.10**	1 U	1 U
	GP9-W-60.0	05/27/2009	60	1 U	20 U	50 U	5 U	**5.29**	1 U	1 U
GP10	GW10-W-25.0	05/20/2009	25	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GW10-W-75.0	05/20/2009	75	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
GP11	GP11-W-25.0	05/21/2009	25	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP11-W-75.0	05/21/2009	75	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
GP12	GP12-W-15.0	06/01/2009	15	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP12-W-60.0	06/02/2009	60	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP12-W-60.0-Dup	06/02/2009	60	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP12-W-100.0	06/04/2009	100	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP12-W-130.0	06/04/2009	130	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	4-Isopropyl-toluene	4-Methyl-2-pentanone	Acetone	Acrylonitrile	Benzene	Bromo-benzene	Bromodichloro-methane
MTCA Method B Groundwater VI Level				NV	NV	NV	16	2.4	NV	0.09
MTCA Method B Groundwater CULs				NV	640	800	0.081	0.8	NV	0.71
GP13	GP13-W-15.0	06/02/2009	15	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP13-W-60.0	06/03/2009	60	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP13-W-100.0	06/08/2009	100	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP13-W-130.0	06/08/2009	130	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
GP14	GP14-W-15.0	06/03/2009	15	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP14-W-60.0	06/03/2009	60	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP14-W-100.0	06/11/2009	100	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP14-W-125.0	06/11/2009	125	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U
	GP14-W-180.0	06/12/2009	180	1 U	20 U	50 U	5 U	0.3 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Bromoform	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	Chloro-methane	Chloro-benzene
MTCA Method B Groundwater VI Level				200	13	400	0.22	1.2	5.2	100
MTCA Method B Groundwater CULs				5.5	11	800	0.34	7.2	3.4	160
B-313	B313-W-104.0	05/26/2009	104	1 U	1 U	2 U	1 U	1 U	1 U	1 U
B-314	B314-W-100.0	05/29/2009	100	1 U	1 U	2 U	1 U	1 U	1 U	1 U
B-315	B315-W-90.0	06/01/2009	90	1 U	1 U	2 U	1 U	1 U	1 U	1 U
GP6	GP6-W-20.0	05/29/2009	20	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP6-W-70.0	05/29/2009	70	1 U	1 U	2 U	1 U	1 U	1 U	1 U
GP7	GP7-W-25.0	05/27/2009	25	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP7-W-70.0	05/28/2009	70	1 U	1 U	2 U	1 U	1 U	1 U	1 U
GP8	GP8-W-26.0	05/22/2009	26	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP8-W-75.0	05/26/2009	75	1 U	1 U	2 U	1 U	1 U	1 U	1 U
GP9	GP9-W-26.0	05/26/2009	26	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP9-W-60.0	05/27/2009	60	1 U	1 U	2 U	1 U	1 U	1 U	1 U
GP10	GW10-W-25.0	05/20/2009	25	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GW10-W-75.0	05/20/2009	75	1 U	1 U	2 U	1 U	1 U	1 U	1 U
GP11	GP11-W-25.0	05/21/2009	25	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP11-W-75.0	05/21/2009	75	1 U	1 U	2 U	1 U	1 U	1 U	1 U
GP12	GP12-W-15.0	06/01/2009	15	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP12-W-60.0	06/02/2009	60	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP12-W-60.0-Dup	06/02/2009	60	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP12-W-100.0	06/04/2009	100	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP12-W-130.0	06/04/2009	130	1 U	1 U	2 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Bromoform	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	Chloro-methane	Chloro-benzene
MTCA Method B Groundwater VI Level				200	13	400	0.22	1.2	5.2	100
MTCA Method B Groundwater CULs				5.5	11	800	0.34	7.2	3.4	160
GP13	GP13-W-15.0	06/02/2009	15	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP13-W-60.0	06/03/2009	60	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP13-W-100.0	06/08/2009	100	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP13-W-130.0	06/08/2009	130	1 U	1 U	2 U	1 U	1 U	1 U	1 U
GP14	GP14-W-15.0	06/03/2009	15	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP14-W-60.0	06/03/2009	60	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP14-W-100.0	06/11/2009	100	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP14-W-125.0	06/11/2009	125	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	GP14-W-180.0	06/12/2009	180	1 U	1 U	2 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chloro-bromo-methane	Chloro-ethane	Ethyl-benzene	cis-1,2-Dichloro-ethene	Isopropyl-benzene	Dibromo-chloro-methane	Dibromo-methane	Styrene
MTCA Method B Groundwater VI Level				NV	12	2800	160	720	0.22	NV	78
MTCA Method B Groundwater CULs				NV	15	800	80	800	0.52	80	1.5
B-313	B313-W-104.0	05/26/2009	104	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
B-314	B314-W-100.0	05/29/2009	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
B-315	B315-W-90.0	06/01/2009	90	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
GP6	GP6-W-20.0	05/29/2009	20	1 U	1 U	2.86	1 U	2.86	1 U	1 U	1 U
	GP6-W-70.0	05/29/2009	70	1 U	1 U	1 U	12.2	15.7	1 U	1 U	1 U
GP7	GP7-W-25.0	05/27/2009	25	1 U	1 U	1.11	1 U	4.68	1 U	1 U	1 U
	GP7-W-70.0	05/28/2009	70	1 U	1 U	1 U	3.70	3.22	1 U	1 U	1 U
GP8	GP8-W-26.0	05/22/2009	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP8-W-75.0	05/26/2009	75	1 U	1 U	1 U	2.82	1 U	1 U	1 U	1 U
GP9	GP9-W-26.0	05/26/2009	26	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP9-W-60.0	05/27/2009	60	1 U	1 U	1 U	2.80	1 U	1 U	1 U	1 U
GP10	GW10-W-25.0	05/20/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GW10-W-75.0	05/20/2009	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
GP11	GP11-W-25.0	05/21/2009	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP11-W-75.0	05/21/2009	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
GP12	GP12-W-15.0	06/01/2009	15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-60.0	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-60.0-Dup	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-100.0	06/04/2009	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-130.0	06/04/2009	130	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Chloro-bromo-methane	Chloro-ethane	Ethyl-benzene	cis-1,2-Dichloro-ethene	Isopropyl-benzene	Dibromo-chloro-methane	Dibromo-methane	Styrene
MTCA Method B Groundwater VI Level				NV	12	2800	160	720	0.22	NV	78
MTCA Method B Groundwater CULs				NV	15	800	80	800	0.52	80	1.5
GP13	GP13-W-15.0	06/02/2009	15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-100.0	06/08/2009	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-130.0	06/08/2009	130	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
GP14	GP14-W-15.0	06/03/2009	15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-100.0	06/11/2009	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-125.0	06/11/2009	125	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-180.0	06/12/2009	180	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Dichloro-difluoro-methane	Hexachloro-butadiene	Toluene	Trichloro-ethene	Methyl tert-butyl ether	Methylene chloride
MTCA Method B Groundwater VI Level				9.9	0.81	15000	0.42	610	94
MTCA Method B Groundwater CULs				1600	0.56	640	0.49	24	5.8
B-313	B313-W-104.0	05/26/2009	104	1 U	1 U	1 U	1 U	1 U	20 U
B-314	B314-W-100.0	05/29/2009	100	1 U	1 U	1 U	1 U	1 U	20 U
B-315	B315-W-90.0	06/01/2009	90	1 U	1 U	1 U	1 U	1 U	20 U
GP6	GP6-W-20.0	05/29/2009	20	1 U	1 U	1.38	1 U	1 U	20 U
	GP6-W-70.0	05/29/2009	70	1 U	1 U	1 U	**9.02**	1 U	20 U
GP7	GP7-W-25.0	05/27/2009	25	1 U	1 U	1 U	1 U	1 U	20 U
	GP7-W-70.0	05/28/2009	70	1 U	1 U	1 U	**4.35**	1 U	20 U
GP8	GP8-W-26.0	05/22/2009	26	1 U	1 U	1 U	1 U	1 U	20 U
	GP8-W-75.0	05/26/2009	75	1 U	1 U	1 U	**10.4**	1 U	20 U
GP9	GP9-W-26.0	05/26/2009	26	1 U	1 U	1 U	1 U	1 U	20 U
	GP9-W-60.0	05/27/2009	60	1 U	1 U	1 U	**3.29**	1 U	20 U
GP10	GW10-W-25.0	05/20/2009	25	1 U	1 U	1 U	1 U	1 U	20 U
	GW10-W-75.0	05/20/2009	75	1 U	1 U	1 U	1 U	1 U	20 U
GP11	GP11-W-25.0	05/21/2009	25	1 U	1 U	1 U	1 U	1 U	20 U
	GP11-W-75.0	05/21/2009	75	1 U	1 U	1 U	1 U	1 U	20 U
GP12	GP12-W-15.0	06/01/2009	15	1 U	1 U	1 U	1 U	1 U	20 U
	GP12-W-60.0	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	20 U
	GP12-W-60.0-Dup	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	20 U
	GP12-W-100.0	06/04/2009	100	1 U	1 U	1 U	1 U	1 U	20 U
	GP12-W-130.0	06/04/2009	130	1 U	1 U	1 U	1 U	1 U	20 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Dichloro-difluoro-methane	Hexachloro-butadiene	Toluene	Trichloro-ethene	Methyl tert-butyl ether	Methylene chloride
MTCA Method B Groundwater VI Level				9.9	0.81	15000	0.42	610	94
MTCA Method B Groundwater CULs				1600	0.56	640	0.49	24	5.8
GP13	GP13-W-15.0	06/02/2009	15	1 U	1 U	1 U	1 U	1 U	20 U
	GP13-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	20 U
	GP13-W-100.0	06/08/2009	100	1 U	1 U	1 U	1 U	1 U	20 U
	GP13-W-130.0	06/08/2009	130	1 U	1 U	1 U	1 U	1 U	20 U
GP14	GP14-W-15.0	06/03/2009	15	1 U	1 U	1 U	1 U	1 U	20 U
	GP14-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	20 U
	GP14-W-100.0	06/11/2009	100	1 U	1 U	1 U	1 U	1 U	20 U
	GP14-W-125.0	06/11/2009	125	1 U	1 U	1 U	1 U	1 U	20 U
	GP14-W-180.0	06/12/2009	180	1 U	1 U	1 U	1 U	1 U	20 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Naphthalene	n-Butyl-benzene	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	tert-Butyl-benzene
MTCA Method B Groundwater VI Level				170	NV	NV	440	NV	NV
MTCA Method B Groundwater CULs				160	NV	NV	16000	NV	NV
B-313	B313-W-104.0	05/26/2009	104	1 U	1 U	1 U	1 U	1 U	1 U
B-314	B314-W-100.0	05/29/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
B-315	B315-W-90.0	06/01/2009	90	1 U	1 U	1 U	1 U	1 U	1 U
GP6	GP6-W-20.0	05/29/2009	20	3.82	1 U	2.05	1 U	1 U	1 U
	GP6-W-70.0	05/29/2009	70	**375**	1 U	1 U	13.5	2.94	1 U
GP7	GP7-W-25.0	05/27/2009	25	6.86	1 U	4.67	1 U	1.37	1 U
	GP7-W-70.0	05/28/2009	70	**213**	1 U	1 U	5.59	2.21	1 U
GP8	GP8-W-26.0	05/22/2009	26	40.4	1 U	1 U	1 U	1 U	1 U
	GP8-W-75.0	05/26/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP9	GP9-W-26.0	05/26/2009	26	6.38	1 U	1 U	1 U	1 U	1 U
	GP9-W-60.0	05/27/2009	60	42.9	1 U	1 U	3.64	1.04	1 U
GP10	GW10-W-25.0	05/20/2009	25	1 U	1 U	1 U	1 U	1 U	1 U
	GW10-W-75.0	05/20/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP11	GP11-W-25.0	05/21/2009	25	1 U	1 U	1 U	1 U	1 U	1.49
	GP11-W-75.0	05/21/2009	75	1 U	1 U	1 U	1 U	1 U	1 U
GP12	GP12-W-15.0	06/01/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-60.0	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-60.0-Dup	06/02/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-100.0	06/04/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP12-W-130.0	06/04/2009	130	1 U	1 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Naphthalene	n-Butyl-benzene	n-Propyl-benzene	o-Xylene	sec-Butyl-benzene	tert-Butyl-benzene
MTCA Method B Groundwater VI Level				170	NV	NV	440	NV	NV
MTCA Method B Groundwater CULs				160	NV	NV	16000	NV	NV
GP13	GP13-W-15.0	06/02/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-100.0	06/08/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP13-W-130.0	06/08/2009	130	1 U	1 U	1 U	1 U	1 U	1 U
GP14	GP14-W-15.0	06/03/2009	15	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-60.0	06/03/2009	60	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-100.0	06/11/2009	100	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-125.0	06/11/2009	125	1 U	1 U	1 U	1 U	1 U	1 U
	GP14-W-180.0	06/12/2009	180	1 U	1 U	1 U	1 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Tetrachloro-ethene	trans-1,2-Dichloroethene	1,3-Dichloropropene	m,p-Xylene	Trichloro-fluoro-methane	Vinyl chloride
MTCA Method B Groundwater VI Level				1	130	1.6	310[a]	120	0.35
MTCA Method B Groundwater CULs				0.081	160	0.24	16000[a]	2400	0.029
B-313	B313-W-104.0	05/26/2009	104	1 U	1 U	1 U	2 U	1 U	1 U
B-314	B314-W-100.0	05/29/2009	100	1 U	1 U	1 U	2 U	1 U	1 U
B-315	B315-W-90.0	06/01/2009	90	1 U	1 U	1 U	2 U	1 U	1 U
GP6	GP6-W-20.0	05/29/2009	20	1 U	1 U	1 U	2 U	1 U	1 U
	GP6-W-70.0	05/29/2009	70	**54.6**	1 U	1 U	2 U	1 U	**6.37**
GP7	GP7-W-25.0	05/27/2009	25	1 U	1 U	1 U	2 U	1 U	1 U
	GP7-W-70.0	05/28/2009	70	**2.94**	1 U	1 U	2 U	1 U	**1.11**
GP8	GP8-W-26.0	05/22/2009	26	1 U	1 U	1 U	2 U	1 U	1 U
	GP8-W-75.0	05/26/2009	75	**27.8**	1 U	1 U	2 U	1 U	**1.50**
GP9	GP9-W-26.0	05/26/2009	26	1 U	1 U	1 U	2 U	1 U	1 U
	GP9-W-60.0	05/27/2009	60	1 U	1 U	1 U	2 U	1 U	1 U
GP10	GW10-W-25.0	05/20/2009	25	1 U	1 U	1 U	2 U	1 U	1 U
	GW10-W-75.0	05/20/2009	75	1 U	1 U	1 U	2 U	1 U	1 U
GP11	GP11-W-25.0	05/21/2009	25	1 U	1 U	1 U	2 U	1 U	1 U
	GP11-W-75.0	05/21/2009	75	1 U	1 U	1 U	2 U	1 U	1 U
GP12	GP12-W-15.0	06/01/2009	15	1 U	1 U	1 U	2 U	1 U	1 U
	GP12-W-60.0	06/02/2009	60	1 U	1 U	1 U	2 U	1 U	1 U
	GP12-W-60.0-Dup	06/02/2009	60	1 U	1 U	1 U	2 U	1 U	1 U
	GP12-W-100.0	06/04/2009	100	1 U	1 U	1 U	2 U	1 U	1 U
	GP12-W-130.0	06/04/2009	130	1 U	1 U	1 U	2 U	1 U	1 U

Table J-2-1
Volatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft. bgs)	Tetrachloro-ethene	trans-1,2-Dichloroethene	1,3-Dichloropropene	m,p-Xylene	Trichloro-fluoro-methane	Vinyl chloride
MTCA Method B Groundwater VI Level				1	130	1.6	310[a]	120	0.35
MTCA Method B Groundwater CULs				0.081	160	0.24	16000[a]	2400	0.029
GP13	GP13-W-15.0	06/02/2009	15	1 U	1 U	1 U	2 U	1 U	1 U
	GP13-W-60.0	06/03/2009	60	1 U	1 U	1 U	2 U	1 U	1 U
	GP13-W-100.0	06/08/2009	100	1 U	1 U	1 U	2 U	1 U	1 U
	GP13-W-130.0	06/08/2009	130	1 U	1 U	1 U	2 U	1 U	1 U
GP14	GP14-W-15.0	06/03/2009	15	1 U	1 U	1 U	2 U	1 U	1 U
	GP14-W-60.0	06/03/2009	60	1 U	1 U	1 U	2 U	1 U	1 U
	GP14-W-100.0	06/11/2009	100	1 U	1 U	1 U	2 U	1 U	1 U
	GP14-W-125.0	06/11/2009	125	1 U	1 U	1 U	2 U	1 U	1 U
	GP14-W-180.0	06/12/2009	180	1 U	1 U	1 U	2 U	1 U	1 U

Table J-2-2
Total Arsenic in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Arsenic
MTCA Method A Groundwater CUL[b]				5
B-313	B313-W-104.0	05/26/2009	104	1 U
B-314	B314-W-100.0	05/29/2009	100	**33**
B-315	B315-W-90.0	06/01/2009	90	**12**
GP6	GP6-W-70.0	05/29/2009	70	**21**
	GP6-W-20.0	05/29/2009	20	**16**
GP7	GP7-W-25.0	05/27/2009	25	**37**
	GP7-W-70.0	05/28/2009	70	**18**
GP8	GP8-W-26.0	05/22/2009	26	**3.0**
	GP8-W-75.0	05/26/2009	75	**5.1**
GP9	GP9-W-26.0	05/26/2009	26	**2.9**
	GP9-W-60.0	05/27/2009	60	**13**
GP10	GW10-W-25.0	05/20/2009	25	**2.2**
	GW10-W-75.0	05/20/2009	75	**12**
GP11	GP11-W-25.0	05/21/2009	25	**3.3**
	GP11-W-75.0	05/21/2009	75	**15**
GP12	GP12-W-15.0	06/01/2009	15	**9.5**
	GP12-W-60.0	06/02/2009	60	**26**
	GP12-W-60.0-Dup	06/02/2009	60	**26**
	GP12-W-100.0	06/04/2009	100	**13**
	GP12-W-130.0	06/04/2009	130	**22**
GP13	GP13-W-15.0	06/02/2009	15	1 U
	GP13-W-60.0	06/03/2009	60	**24**
	GP13-W-100.0	06/08/2009	100	**35**
	GP13-W-130.0	06/08/2009	130	**35**
GP14	GP14-W-15.0	06/03/2009	15	1 U
	GP14-W-60.0	06/03/2009	60	**29**
	GP14-W-100.0	06/11/2009	100	**26**
	GP14-W-125.0	06/11/2009	125	**12**
	GP14-W-180.0	06/12/2009	180	**2.1**

Table J-2-3
Semivolatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Chlorinated Phenolics						
				2,3,4,6-Tetrachloro-phenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetrachloro-phenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol
MTCA Method B Groundwater CULs				640	NV	NV	NV	NV	800	4
B-313	B313-W-104.0	05/26/2009	104	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
B-314	B314-W-100.0	05/29/2009	100	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
B-315	B315-W-90.0	06/01/2009	90	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
GP6	GP6-W-20.0	05/29/2009	20	0.978 U	0.978 U	0.978 U	0.978 U	0.978 U	0.978 U	0.978 U
	GP6-W-70.0	05/29/2009	70	0.954 U	6.58	56.0	0.954 U	0.954 U	6.90	1.46
GP7	GP7-W-25.0	05/27/2009	25	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U
	GP7-W-70.0	05/28/2009	70	0.949 U	6.44	17.5	0.949 U	0.949 U	3.89	0.949 U
GP8	GP8-W-26.0	05/22/2009	26	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U
	GP8-W-75.0	05/26/2009	75	51.2	0.983 U	160	0.983 U	0.983 U	3.25	0.983 U
GP9	GP9-W-26.0	05/26/2009	26	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	GP9-W-60.0	05/27/2009	60	5.69	69.7	38.6	0.981 U	0.981 U	10.9	2.22
GP10	GW10-W-25.0	05/20/2009	25	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U
	GW10-W-75.0	05/20/2009	75	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
GP11	GP11-W-25.0	05/21/2009	25	0.971 U	0.971 U	0.971 U	0.971 U	0.971 U	0.971 U	0.971 U
	GP11-W-75.0	05/21/2009	75	0.986 U	0.986 U	0.986 U	0.986 U	0.986 U	0.986 U	0.986 U
GP12	GP12-W-15.0	06/01/2009	15	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U
	GP12-W-60.0	06/02/2009	60	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U
	GP12-W-60.0-Dup	06/02/2009	60	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	GP12-W-100.0	06/04/2009	100	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	GP12-W-130.0	06/04/2009	130	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U

Table J-2-3
Semivolatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Chlorinated Phenolics						
				2,3,4,6-Tetrachloro-phenol	2,3,4-Trichloro-phenol	2,3,5,6-Tetrachloro-phenol	2,3,5-Trichloro-phenol	2,3,6-Trichloro-phenol	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol
MTCA Method B Groundwater CULs				640	NV	NV	NV	NV	800	4
GP13	GP13-W-15.0	06/02/2009	15	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U
	GP13-W-60.0	06/03/2009	60	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
	GP13-W-100.0	06/08/2009	100	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	GP13-W-130.0	06/08/2009	130	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
GP14	GP14-W-15.0	06/03/2009	15	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	GP14-W-60.0	06/03/2009	60	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	GP14-W-100.0	06/11/2009	100	0.969 U	0.969 U	0.969 U	0.969 U	0.969 U	0.969 U	0.969 U
	GP14-W-125.0	06/11/2009	125	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
	GP14-W-180.0	06/12/2009	180	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U

Table J-2-3
Semivolatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

				Chlorinated Phenolics		Carcinogenic PAHs				
Location	Sample Name	Date Collected	Depth (ft. bgs)	3,4,5-Trichlorophenol	Pentachlorophenol	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene
MTCA Method B Groundwater CULs				NV	0.73	NV	0.012	NV	NV	NV
B-313	B313-W-104.0	05/26/2009	104	0.952 U	**1.94**	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
B-314	B314-W-100.0	05/29/2009	100	0.962 U	1.44 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
B-315	B315-W-90.0	06/01/2009	90	0.953 U	**1.71**	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
GP6	GP6-W-20.0	05/29/2009	20	0.978 U	1.47 U	0.978 U	0.978 U	0.978 U	0.978 U	0.978 U
	GP6-W-70.0	05/29/2009	70	5.68	**6350**	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
GP7	GP7-W-25.0	05/27/2009	25	1.07 U	1.61 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U
	GP7-W-70.0	05/28/2009	70	40.0	**706**	0.949 U	0.949 U	0.949 U	0.949 U	0.949 U
GP8	GP8-W-26.0	05/22/2009	26	0.979 U	1.47 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U
	GP8-W-75.0	05/26/2009	75	19.9	**2280**	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
GP9	GP9-W-26.0	05/26/2009	26	0.951 U	**1.44**	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	GP9-W-60.0	05/27/2009	60	17.0	**23.3**	0.981 U	0.981 U	0.981 U	0.981 U	0.981 U
GP10	GW10-W-25.0	05/20/2009	25	0.97 U	1.45 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U
	GW10-W-75.0	05/20/2009	75	0.962 U	1.44 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
GP11	GP11-W-25.0	05/21/2009	25	0.971 U	1.46 U	0.971 U	0.971 U	0.971 U	0.971 U	0.971 U
	GP11-W-75.0	05/21/2009	75	0.986 U	1.48 U	0.986 U	0.986 U	0.986 U	0.986 U	0.986 U
GP12	GP12-W-15.0	06/01/2009	15	0.966 U	1.45 U	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U
	GP12-W-60.0	06/02/2009	60	0.976 U	1.46 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U
	GP12-W-60.0-Dup	06/02/2009	60	0.957 U	1.44 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	GP12-W-100.0	06/04/2009	100	0.961 U	1.44 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	GP12-W-130.0	06/04/2009	130	0.965 U	1.45 U	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U

Table J-2-3
Semivolatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Chlorinated Phenolics		Carcinogenic PAHs				
				3,4,5-Trichlorophenol	Pentachlorophenol	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
MTCA Method B Groundwater CULs				NV	0.73	NV	0.012	NV	NV	NV
GP13	GP13-W-15.0	06/02/2009	15	0.979 U	1.47 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U
	GP13-W-60.0	06/03/2009	60	0.963 U	1.45 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
	GP13-W-100.0	06/08/2009	100	0.961 U	1.44 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	GP13-W-130.0	06/08/2009	130	0.948 U	1.42 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
GP14	GP14-W-15.0	06/03/2009	15	1.01 U	1.51 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	GP14-W-60.0	06/03/2009	60	0.954 U	1.43 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	GP14-W-100.0	06/11/2009	100	0.969 U	1.45 U	0.969 U	0.969 U	0.969 U	0.969 U	0.969 U
	GP14-W-125.0	06/11/2009	125	0.963 U	1.45 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
	GP14-W-180.0	06/12/2009	180	0.964 U	1.45 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U

Table J-2-3
Semivolatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Carcinogenic PAHs		cPAH TEQ	Non-Carcinogenic PAHs				
				Dibenz(a,h) anthracene	Indeno (1,2,3-cd) pyrene		Dibenzofuran	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene
MTCA Method B Groundwater CULs				NV	NV	0.012	32	NV	32	960	NV
B-313	B313-W-104.0	05/26/2009	104	0.952 U	ND	1.438 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
B-314	B314-W-100.0	05/29/2009	100	0.962 U	ND	1.453 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
B-315	B315-W-90.0	06/01/2009	90	0.953 U	ND	1.439 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
GP6	GP6-W-20.0	05/29/2009	20	0.978 U	ND	1.477 U	0.978 U	45.2	1.44	14.2	0.978 U
	GP6-W-70.0	05/29/2009	70	0.954 U	ND	1.441 U	2.70	10.5	5.91	2.04	0.954 U
GP7	GP7-W-25.0	05/27/2009	25	1.07 U	ND	1.62 U	1.07 U	28.5	1.07 U	19.2	1.07 U
	GP7-W-70.0	05/28/2009	70	0.949 U	ND	1.433 U	1.25	5.32	3.11	0.949 U	0.949 U
GP8	GP8-W-26.0	05/22/2009	26	0.979 U	ND	1.478 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U
	GP8-W-75.0	05/26/2009	75	0.983 U	ND	1.484 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
GP9	GP9-W-26.0	05/26/2009	26	0.951 U	ND	1.436 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U
	GP9-W-60.0	05/27/2009	60	0.981 U	ND	1.481 U	0.981 U	1.02	0.981 U	0.981 U	0.981 U
GP10	GW10-W-25.0	05/20/2009	25	0.97 U	ND	1.465 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U
	GW10-W-75.0	05/20/2009	75	0.962 U	ND	1.453 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
GP11	GP11-W-25.0	05/21/2009	25	0.971 U	ND	1.466 U	0.971 U	1.07	0.971 U	0.971 U	0.971 U
	GP11-W-75.0	05/21/2009	75	0.986 U	ND	1.489 U	0.986 U	0.986 U	0.986 U	0.986 U	0.986 U
GP12	GP12-W-15.0	06/01/2009	15	0.966 U	ND	1.459 U	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U
	GP12-W-60.0	06/02/2009	60	0.976 U	ND	1.474 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U
	GP12-W-60.0-Dup	06/02/2009	60	0.957 U	ND	1.445 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	GP12-W-100.0	06/04/2009	100	0.961 U	ND	1.451 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	GP12-W-130.0	06/04/2009	130	0.965 U	ND	1.457 U	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U

Table J-2-3
Semivolatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Carcinogenic PAHs		cPAH TEQ	Non-Carcinogenic PAHs				
				Dibenz(a,h) anthracene	Indeno (1,2,3-cd) pyrene		Dibenzofuran	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene
MTCA Method B Groundwater CULs				NV	NV	0.012	32	NV	32	960	NV
GP13	GP13-W-15.0	06/02/2009	15	0.979 U	ND	1.478 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U
	GP13-W-60.0	06/03/2009	60	0.963 U	ND	1.454 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
	GP13-W-100.0	06/08/2009	100	0.961 U	ND	1.451 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	GP13-W-130.0	06/08/2009	130	0.948 U	ND	1.431 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
GP14	GP14-W-15.0	06/03/2009	15	1.01 U	ND	1.53 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	GP14-W-60.0	06/03/2009	60	0.954 U	ND	1.441 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	GP14-W-100.0	06/11/2009	100	0.969 U	ND	1.463 U	0.969 U	0.969 U	0.969 U	0.969 U	0.969 U
	GP14-W-125.0	06/11/2009	125	0.963 U	ND	1.454 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
	GP14-W-180.0	06/12/2009	180	0.964 U	ND	1.456 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U

Table J-2-3
Semivolatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Noncarcinogenic PAHs								
				Anthracene	Benzo (ghi) perylene	Bis(2-ethylhexyl) phthalate	Carbazole	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
MTCA Method B Groundwater CULs				4800	NV	6.3	4.4	640	640	160	NV	480
B-313	B313-W-104.0	05/26/2009	104	0.952 U	0.952 U	**12.4**	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U	0.952 U
B-314	B314-W-100.0	05/29/2009	100	0.962 U	0.962 U	1.17	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
B-315	B315-W-90.0	06/01/2009	90	0.953 U	0.953 U	**18.3**	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U	0.953 U
GP6	GP6-W-20.0	05/29/2009	20	0.978 U	0.978 U	1.18	0.978 U	0.978 U	0.978 U	1.96	0.978 U	0.978 U
	GP6-W-70.0	05/29/2009	70	0.954 U	0.954 U	2.22	**59.4**	0.954 U	1.11	142	0.954 U	0.954 U
GP7	GP7-W-25.0	05/27/2009	25	1.07 U	1.07 U	1.07 U	3.46	1.07 U	1.96	2.96	1.07 U	1.07 U
	GP7-W-70.0	05/28/2009	70	0.949 U	0.949 U	4.09	**7.64**	0.949 U	0.949 U	70.3	0.949 U	0.949 U
GP8	GP8-W-26.0	05/22/2009	26	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	4.67	0.979 U	0.979 U
	GP8-W-75.0	05/26/2009	75	0.983 U	0.983 U	1.74	2.74	0.983 U	0.983 U	1.13	0.983 U	0.983 U
GP9	GP9-W-26.0	05/26/2009	26	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	0.951 U	1.46	0.951 U	0.951 U
	GP9-W-60.0	05/27/2009	60	0.981 U	0.981 U	0.981 U	2.39	0.981 U	0.981 U	17.2	0.981 U	0.981 U
GP10	GW10-W-25.0	05/20/2009	25	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U
	GW10-W-75.0	05/20/2009	75	0.962 U	0.962 U	**18.1**	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U	0.962 U
GP11	GP11-W-25.0	05/21/2009	25	0.971 U	0.971 U	1.32	0.971 U	0.971 U	0.971 U	0.971 U	0.971 U	0.971 U
	GP11-W-75.0	05/21/2009	75	0.986 U	0.986 U	**10.5**	0.986 U	0.986 U	0.986 U	0.986 U	0.986 U	0.986 U
GP12	GP12-W-15.0	06/01/2009	15	0.966 U	0.966 U	1.40	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U	0.966 U
	GP12-W-60.0	06/02/2009	60	0.976 U	0.976 U	2.62	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U	0.976 U
	GP12-W-60.0-Dup	06/02/2009	60	0.957 U	0.957 U	3.57	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U	0.957 U
	GP12-W-100.0	06/04/2009	100	0.961 U	0.961 U	3.14	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	GP12-W-130.0	06/04/2009	130	0.965 U	0.965 U	4.11	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U	0.965 U

Table J-2-3
Semivolatile Organic Compounds in Reconnaissance Groundwater in and near Cells 1 and 2 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date Collected	Depth (ft. bgs)	Noncarcinogenic PAHs								
				Anthra-cene	Benzo (ghi) perylene	Bis(2-ethylhexyl) phthalate	Carba-zole	Fluoran-thene	Fluorene	Naph-thalene	Phen-anthrene	Pyrene
MTCA Method B Groundwater CULs				4800	NV	6.3	4.4	640	640	160	NV	480
GP13	GP13-W-15.0	06/02/2009	15	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U	0.979 U
	GP13-W-60.0	06/03/2009	60	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
	GP13-W-100.0	06/08/2009	100	0.961 U	0.961 U	2.24	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U	0.961 U
	GP13-W-130.0	06/08/2009	130	0.948 U	0.948 U	2.04	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U	0.948 U
GP14	GP14-W-15.0	06/03/2009	15	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U
	GP14-W-60.0	06/03/2009	60	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U	0.954 U
	GP14-W-100.0	06/11/2009	100	0.969 U	0.969 U	**11.3**	0.969 U	0.969 U	0.969 U	0.969 U	0.969 U	0.969 U
	GP14-W-125.0	06/11/2009	125	0.963 U	0.963 U	**6.31**	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U	0.963 U
	GP14-W-180.0	06/12/2009	180	0.964 U	0.964 U	**8.79**	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U	0.964 U

APPENDIX J-3

SEPTEMBER 2006

Table J-3-1
Indicator Hazardous Substances in Groundwater from Reconnaissance Groundwater Near Cell 3 (µg/L)
Former PWT Site RI/FS

Location	Sample Name	Date	Depth (ft bgs)	Total Arsenic	Pentachlorophenol (PCP)	Tetrachloroethene (PCE)
MTCA Method B Groundwater CULs				5[a]	0.73	0.081
GP1	GP1-W-14.0	09/13/2006	14	1 U	0.5 U	1 U
	GP1-W-37.0	09/13/2006	37	**13.2**	0.5 U	1 U
	GP1-W-63.0	09/13/2006	63	**19.1**	0.5 U	1 U
GP2	GP2-W-14.5	09/14/2006	14.5	1 U	0.5 U	1 U
	GP2-W-38.0	09/14/2006	38	**12.2**	0.5 U	1 U
GP3	GP3-W-16.0	09/14/2006	16	1.59	0.5 U	1 U
	GP3-W-39.0	09/14/2006	39	**10.4**	0.5 U	1 U
GP4	GP4-W-20.5	09/15/2006	20.5	2.14	0.5 U	1 U
	GP4-W-38.0	09/15/2006	38	**8.22**	0.5 U	1 U
GP5	GP5-W-16.0	09/15/2006	16	3.13	0.5 U	1 U
	GP5-W-41.0	09/15/2006	41	1.67	0.5 U	1 U
dup	GP5-W-41.0-Dup	09/15/2006	41	1.63	0.5 U	1 U
	GP5-W-63.0	09/15/2006	63	4.93	0.5 U	1 U

NOTES:

Bold number indicates a detected concentration that exceeds CULs.

CULs = cleanup levels.

dup = duplicate sample.

ft bgs = feet below ground surface.

MTCA = Washington State Department of Ecology's Model Toxics Control Act.

µg/L = micrograms per liter.

U = not detected at or above the method reporting limit.

[a] Method A groundwater CUL.

APPENDIX K

BACKGROUND CONCENTRATIONS OF DIOXINS IN SEDIMENTS

APPENDIX K BACKGROUND CONCENTRATIONS OF DIOXINS IN SEDIMENTS

CONTENTS

This appendix consists of the Background Dioxin Concentrations in Sediment Discussion which was submitted to the Washington State Department of Ecology (Ecology) on February 10, 2012. Ecology commented that "Table 3 is confusing – there is a separate column showing 'upper tolerance limit', which is actually showing the rounded-up value of the number shown in the column entitled 90th UCL on the 90th Percentile – which is the UTL. This makes it look like 2 different things. Possibly last column should say 'Lake River Background.'" MFA agrees with the comment, however, no changes were made and the original Ecology-approved memo is presented in its entirety.

MAUL
FOSTER
ALONGI

MEMORANDUM

To: Craig Rankine and Joyce Mercuri
Washington State Department of Ecology
Date: November 18, 2011

From: Madi Novak and Phil Wiescher, PhD
Project: 9003.01.40

Madi Novak

RE: Dioxin Natural Background Sediment Evaluation
Port of Ridgefield Lake River Industrial Site
Agreed order No. 01TCPSR-3119

On behalf of the Port of Ridgefield (Port), Maul Foster & Alongi, Inc. (MFA) has prepared this memorandum to provide the results of a literature search conducted to identify chlorinated dibenzo-p-dioxins and dibenzofurans (collectively referred to as dioxins) data in sediment in the region in order to develop a natural background upper tolerance limit (UTL) for dioxins. This evaluation updates the previous dioxin background memorandum prepared and communicated to Ecology on August 24, 2011. In an electronic mail (Mercuri, 2011a), Ecology requested an evaluation of dioxin background concentrations as part of the dioxin cleanup-level development process for Carty Lake and Lake River, adjacent to the Port's LRIS property. In subsequent electronic email (Mercuri, 2011b), Ecology requested revisions to the background calculation method. This memorandum addresses the requested revision. This evaluation is being conducted as part of ongoing remedial investigation and feasibility study activities being performed at the Lake River Industrial Site (LRIS) in Ridgefield, Washington, under an Agreed Order between the Port and the Washington State Department of Ecology (Ecology).

Background

The current Ecology definition of natural background under MTCA regulations (WAC 173-340-200) is as follows: "The concentration of hazardous substance consistently present in the environment that has not been influenced by localized human activities. For example, low concentrations of some particularly persistent organic compounds such as polychlorinated biphenyls (PCBs) can be found in surficial soils and sediment throughout an area due to global distribution of these hazardous substances. These low concentrations would be considered natural background."

Review of Natural Sediment Data

MFA consulted multiple sources in seeking sediment dioxin data that may be suitable for generating a natural dioxin background level, including Ecology, the Oregon Department of Environmental Quality, the U.S. Army Corps of Engineers (COE), the U.S. Environmental Protection Agency (USEPA), the U.S. Fish and Wildlife Service (USFWS), and the Lower Columbia River Estuary Partnership. Table 1 summarizes the studies MFA reviewed and provides comments as to the suitability of the data for evaluating natural background concentrations of dioxins in sediment. For this assessment data from samples collected along the Lower Columbia River and tributaries were assembled; samples collected in the Willamette River and the Columbia River estuary were not incorporated into the natural background data analysis for Lake River and Carty Lake.

Only sediment samples collected from the surface of the river bottom were included in the analysis. Surface samples are generally considered to include sediment collected from zero to 30 centimeters below the mudline. However, in an effort to assemble as many data points as possible, five samples were included that were collected from zero to approximately 40 or 50 centimeters below the mudline.

The attached figure shows the approximate locations of the samples included in the natural background data analysis and Table 2 summarizes the dioxin data used. Grain size and total organic carbon (TOC) results are also listed in Table 2 when available. Table 3 summarizes the statistics calculated using the background data set. Dioxin data were all reported on a dry weight basis.

Not all data listed in Table 2 are considered ideal for natural background concentration development for comparison with dioxin concentrations in Carty Lake and Lake River. It is generally preferable to include in the background data set samples that are collected in a similar manner, from a similar fluvial environment, with similar TOC and grain size, and analyzed using the same method. However, sample results appear to be generally similar (average and median concentrations are within the same order of magnitude), indicating that the sampling and analytical methodology and physical characteristics of the sample sediment may not cause undue influence on this analysis. Therefore, all data shown in Table 2 are used in the dioxin background evaluation.

TEQs were calculated as described below using the following data rules to handle non-detect and estimated results.

- For congeners not detected and assigned a "U" qualifier, half of the detection limit was used in the TEQ calculation.

- Sample results that were estimated and flagged with "J' were used in TEQ calculations at the reported, estimated value.

- Historical data with "E" or "EMPC" flagged results (i.e., result is the estimated maximum possible concentration because of unresolved interfering compounds) were treated as estimated results (i.e., "J"-flagged results) consistent with validation procedures applied to site data (Anchor QEA and MFA, 2011).

- Historical data with "PR" (chromatograph peak was poorly resolved and concentration was likely overestimated) and "E" (result is estimated; result concentration exceeds the calibration range) qualifiers were treated as estimated results and used in TEQ calculations at face value.

- Historical data with "B" (analyte is detected in the laboratory method blank; concentration could be overestimated) qualifiers were treated as follows: 1) where the sample concentration was less than five times the blank concentration, the results were treated as a non-detect and ½ the value was used in the TEQ calculation, and 2) where the sample concentration was greater than five times the blank concentration the results were treated as detections and the face value was used in the TEQ calculation.

Derivation of Natural Background Sediment Concentrations

Statistics were calculated for the total 2,3,7,8-tetrachlorodibenzo-p-dioxin equivalence (2,3,7,8-TCDD TEQ). The 2,3,7,8-TCDD TEQ concentrations were calculated consistent with WAC 173-340-900 using toxic equivalence factors adopted by the World Health Organization in 2006 for evaluating risk to mammals and humans. Consistent with recent interagency guidance (COE et al., 2009), the dioxin background UTL was calculated based on the 90th upper confidence limit on the 90th percentile using the Kaplan-Meier nonparametric method. This is appropriate when there are greater than ten detections. The USEPA ProUCL software version 4.1.01 was used to calculate the UTL, which is shown in Table 3 to one significant figure. The ProUCL output is provided as an attachment.

Lake River total organic carbon (TOC) concentrations tend to be approximately 1 percent (the Lake River surface sediment TOC range is 0.34 to 3.2 percent, with an average and median of 1.3 percent and 1.2 percent, respectively) while the background data set TOC is generally about half that of Lake River (the background data set TOC range is 0.045 to 1.4 percent, with an average and median of 0.53 percent and 0.49 percent, respectively). TOC content effects the bioavailability of dioxins; as TOC increases, bioavailability decreases. Thus the bioavailability of dioxins in the Lower Columbia River where background samples were collected is higher than in Lake River. If the background UTL is corrected for bioavailability, the UTL is effectively raised by a factor of two for comparison with Lake River dioxin concentrations.

Attachments: Tables 1 through 3
Figure
Attachment

REFERENCES

Anchor QEA and MFA. 2011. Memorandum (re: Sediment remedial investigation, lake river industrial site). Prepared by Anchor QEA, LLC and Maul Foster & Alongi for Port of Ridgefield and Union Pacific Railroad Company. February.

COE, USEPA, Ecology, DNR, DEQ, IDEQ, NMFS, and USFWS. 2009. Sediment evaluation framework for the Pacific Northwest. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Washington State Department of Ecology, Washington State Department of Natural Resources, Oregon Department of Environmental Quality, Idaho Department of Environmental Quality, National Marine Fisheries Service, and U.S. Fish and Wildlife Service. May.

Mercuri, J. 2011a. Electronic mail (re Lake River industrial site—Ecology comments on sediment remedial investigation) to A. Hughes, Maul Foster & Alongi, Inc., from J. Mercuri, Washington State Department of Ecology. May 26.

Mercuri, J. 2011b. Electronic mail (re Pacific Wood Treating site-Background dioxin calculations)to M. Novak, Maul Foster & Alongi, from J. Mercuri, Washington State Department of Ecology. November 11.

TABLES

Table 1
Background Dioxins in Sediment Literature Review Summary
Lower Columbia River
Oregon and Washington

Study	Prepared By	Prepared For	Study Year	Purpose	Project Area	Results Used in Regional Background Evaluation	Notes
Longview Fibre Co.—Class 2 Inspection	NA; data reviewed via EIM	NA; data reviewed via EIM	1990	This survey originally entered in 1997. Catalogue Number SY-24.	Longview	No	Results all non-detect. Data not usable because of elevated detection limits.
Oregon Dioxin Sediment Study	COE	USEPA	1990	Study performed to correlate organochlorines and dioxins in sediments.	Columbia, Chetco, and Willamette rivers and Yaquina Bay	Yes	Method reporting limits acceptable. Sediment data collected 21 years ago and may not be representative of current background conditions. Information on potential sources of dioxins at sample locations in 1990 is not available. Surface sediment data (up to 46 cm) included in regional background evaluation.
Dioxin/Furans Study	Bi-State Water Quality Program	Bi-State Water Quality Program	1991	Dioxin/furan evaluation.	Wallace Island	No	Dioxins analyzed in fish tissue only, not in sediment.
Lower Columbia Backwater Reconnaissance Survey	NA; data reviewed via EIM	NA; data reviewed via EIM	1993	Bioaccumulation study.	Three locations near Columbia River from Washougal to Longview, including Bachelor Slough and Burke Slough	No	Results all non-detect. Data not usable because of elevated detection limits.
Hammond Boat Basin Sediment Evaluation	COE	COE	1994	Characterization for dredging action.	Hammond Boat Basin, located 8.7 miles from mouth of Columbia River on Oregon side	No	Method reporting limits acceptable. QA/QC sample results were not provided by COE with data, although discussion of QA results deemed QA/QC acceptable. Sediment data collected 17 years ago at a boat basin. Given age of data (17 years), potential sources of dioxin to boat basin, and location in Columbia River Estuary, sediment data are not considered suitable for use in regional background determination.
Westport Slough Sediment Evaluation	COE	COE	1998	Characterization for dredging action.	Westport Slough entrance at Columbia River RM 43.5.	Yes	Dioxin analysis conducted by screening method P-450 RGA. Method reporting limits acceptable. COE did not provide QA/QC sample results with data, although discussion of QA results deemed QA/QC acceptable. Sediments were found to be suitable for open, in-water, unconfined placement. Sediment sample was a composite from two different locations (one 21-inch core and one 44-inch core). Sediment data included in regional background evaluation.
Polychlorinated Dibenzo-p-dioxin and Polychlorinated Dibenzofuran Congener Profiles in Fish, Crayfish, and Sediment Collected Near a Wood Treating Facility and a Bleached Kraft Pulp Mill	Foster et al.	Bulletin of Environmental Contamination and Toxicology	1999	Dioxin/furan evaluation.	Lake River	No	Sediment data presented as averages that include locations both upstream and downstream of effluent discharges. Sediment data are not considered suitable for use in regional background determination.

Table 1
Background Dioxins in Sediment Literature Review Summary
Lower Columbia River
Oregon and Washington

Study	Prepared By	Prepared For	Study Year	Purpose	Project Area	Results Used in Regional Background Evaluation	Notes
Investigation of the Distribution of Organochlorine and Polycyclic Aromatic Hydrocarbon Compounds in the Lower Columbia River Using Semipermeable Membrane Devices	U.S. Dept. of the Interior, USGS; Kathleen McCarthy, Robert Gale	USFWS	1999	Evaluation of potential impacts to fish and wildlife throughout Columbia River Basin.	Lower Columbia River Region	No	Some congeners detected and quantified and others detected but not quantified. Data set not complete and not usable.
Columbia River Mile 29-24, Brookfield Mound and Skamakawa Turn Sediment Evaluation	COE	COE	2000	Characterization for dredging action.	Columbia River RM 29-24, Brookfield Mound and Skamakawa Turn	Yes	Dioxin analysis conducted by screening method P-450 RGA. Method reporting limits acceptable. Sediments were found to be suitable for open, in-water, unconfined placement. Sediment data included in regional background evaluation.
Oregon Slough Entrance Channel Sediment Evaluation	COE	COE	2001	Study performed for dredging action.	Oregon Slough entrance near Columbia River RM 108	No	Most results non-detect. Method reporting limits acceptable. COE did not provide QA/QC sample results with data, although discussion of QA results deemed QA/QC acceptable. Vibracore sediment samples collected; depths of samples not provided in report, but sedqual results indicate that sample depth was between 0 and 177 to 304 centimeters, depending on the sample. Sediments were found to be suitable for open, in-water, unconfined placement. Given that sediment samples likely do not represent surface sediment conditions, sediment not used for regional background determinations.
Portland Harbor Public Health Assessment	ATSDR	City of Portland	2002	Evaluation of public health significance as mandated by Congress.	Portland Harbor	No	Provides ranges of dioxin concentrations for 20 samples collected in and around Portland Harbor. Not considered representative of background.
Bachelor Slough Study , Dredged Material Evaluation	COE	COE and USFWS	2003	Study performed for dredging action proposed by USFWS~~,~~ and Ridgefield NWR~~,~~ to dredge Bachelor Slough to enhance in-stream salmonid habitat. Study to determine suitability of the material in Bachelor Slough for upland disposal sites on Bachelor Island.	Bachelor Slough	Yes	Method reporting limits acceptable. COE did not provide QA/QC sample results with data. Surface sediment samples collected; maximum depth of sediment samples was 22.86 cm. No known sources of dioxins to Bachelor Slough. Sediment evaluation determined sediment suitable for unconfined, in-water or upland placement without further characterization. Sediment data included in regional background evaluation.
Environmental Contaminants in Aquatic Resources from the Columbia River	Jeremy Buck, Environmental Specialist, USFWS	State and federal agencies	2004	Determine if persistent, bioaccumulative compounds are present at concentrations hazardous to fish and wildlife inhabiting NWRs and other locations in the Columbia River.	Lower Columbia River (between mouth and Camas Slough; in middle river region near McNary Dam; Willamette River near Portland)	Yes	A single composite consisting of three sediment grab samples collected from each sample area. Collected from shallow, depositional areas. Qualifiers indicate that results may be overestimated. Samples collected from Julia Butler Hansen NWR, Longview, Ridgefield, and Camas Slough selected as potentially most representative of regional dioxin concentrations. Lewis and Clark NWR samples were anomalously elevated and Baker and Cathlamet Bay samples were collected in the Columbia River Estuary. Sediment data included in regional background evaluation.

Table 1
Background Dioxins in Sediment Literature Review Summary
Lower Columbia River
Oregon and Washington

Study	Prepared By	Prepared For	Study Year	Purpose	Project Area	Results Used in Regional Background Evaluation	Notes
City of Ridgefield Sediment Sampling	MFA	City of Ridgefield	2007	Evaluate sediment in areas of proposed WWTP outfall and piping.	Lake River	Yes	Single composite consisting of three sediment grab samples collected; one grab sample collected just downstream of LRIS in area of contamination. Because of proximity of one sample location to known source of dioxins, data not suitable for regional background evaluation.
Vancouver Lake PCBs, Chlorinated Pesticides, and Dioxins in Fish Tissue and Sediment	Ecology	Ecology	2007	Evaluate fish tissue and sediment in Vancouver Lake and Lake River.	Lake River	No	Dioxins analyzed in fish tissue only, not in sediment.
Boise St. Helens Pulp and Paper Mill Remedial Investigation	URS Corporation	OfficeMax, Inc.	2010	Background assessment for remedial investigation.	Multnomah Channel	Yes	Three incremental sample composites. Method reporting limits acceptable; QA/QC sample results appear acceptable. Data included in regional background evaluation.
Davy Crockett Ship Dismantling Area Investigation, Camas, Washington	Laboratory Reports from Apex Laboratories	Ecology	2011	Characterization of ship dismantling area.	Lower Columbia River	No	Laboratory results initially provided by Ecology for use in regional background evaluation. Not included in analysis due to elevated dioxin reporting limits relative to other studies included in evaluation.
Lake River Industrial Site Remedial Investigation	Anchor QEA and MFA	Port of Ridgefield	2011	Background assessment for remedial investigation.	Lake River and Bachelor Slough	Yes	Method reporting limits acceptable. QA/QC sample results acceptable. Sediment data included in regional background evaluation.

NOTES:
ATSDR = Agency for Toxic Substances and Disease Registry.
cm = centimeter(s).
COE = U.S. Army Corps of Engineers.
Ecology = Washington State Department of Ecology.
EIM = Environmental Information Management system.
LRIS = Lake River Industrial Site.
MFA = Maul Foster & Alongi, Inc.
NA = not available.
NWR = national wildlife refuge.
PCB = polychlorinated biphenyl.
QA = quality assurance.
QC = quality control.
RM = river mile.
USEPA = U.S. Environmental Protection Agency.
USFWS = U.S. Fish and Wildlife Service.
USGS = U.S. Geological Survey.
WWTP = wastewater treatment plant.

Table 2
Dioxins in Sediment in the Lower Columbia River
Oregon and Washington

Study	Lake River Industrial Site Remedial Investigation			USFWS Columbia River Study			
Location	LRIS-BKG-01	LRIS-BKG-02	LRIS-BKG-03	Julia Butler Hansen (RM 64-72)	Longview (RM 64-72) (collected along shoreline in Longview)	Ridgefield (RM 87-102) (Lake River at Ridgefield NWR)	Camas Slough (RM 87 - 102) (in Camas Slough)
Sample ID	LRIS-BKG-01-SS	LRIS-BKG-02-SS	LRIS-BKG-03-SS	CRJSD120	CRLSD171	CRRSD117	CRCSD151
Date Collected	04/20/2010	04/20/2010	04/20/2010	8/1991 - 11/1991	8/1991 - 11/1991	8/1991 - 11/1991	8/1991 - 11/1991
Sample Type	Discrete	Discrete	Discrete	Composite	Composite	Composite	Composite
Sample Depth (below mudline)	0-10 cm	0-10 cm	0-10 cm	0 to 30 cm	0 to 30 cm	0 to 30 cm	0 to 30 cm
Analyte							
Total Organic Carbon (percent)	1.20000	0.21000	1.40000	NA	NA	NA	NA
Grain Size (percent)							
Gravel	0	0	0	No grain size analysis, although visual inspection indicated primarily fine-grained.	No grain size analysis, although visual inspection indicated primarily fine-grained.	No grain size analysis, although visual inspection indicated primarily fine-grained.	No grain size analysis, although visual inspection indicated primarily fine grained.
Coarse Sand	0	0.2	0				
Medium Sand	1.1	20	0.6 J				
Fine Sand	80.9	76.2	46 J				
Silt	14	2.6	47				
Clay	3.2	1.3	6.5 J				
Dioxins/Furans (pg/g)							
2,3,7,8-TCDD	0.054 U	0.053 U	0.065 U	0.3 U	0.2 U	0.1 U	0.1 U
1,2,3,7,8-PeCDD	0.18 U	0.038 U	0.12 U	0.3	0.4 U	0.2 U	0.2 U
1,2,3,4,7,8-HxCDD	0.26 U	0.05 U	0.24 U	0.4 U	0.3 U	0.2 U	0.2 U
1,2,3,6,7,8-HxCDD	0.93 J	0.12 U	1.3 J	0.5	0.5	0.5 U	0.8
1,2,3,7,8,9-HxCDD	0.59 J	0.15 U	0.69 J		0.2	0.4 U	0.2 U
1,2,3,4,6,7,8-HpCDD	23	2.9	27	9.1 B	13 B	8.3 B	7.8 B
OCDD	190	22	230	78 B	122 B	105 B	70 B
2,3,7,8-TCDF	0.52 J	0.2 J	0.63 J	0.9 E	0.9 U	0.6 E	0.2 U
1,2,3,7,8-PeCDF	0.62 U	0.31 U	0.27 U	0.3 U	0.3 U	0.2 U	0.1 U
2,3,4,7,8-PeCDF	0.25 J	0.066 U	0.21 U	0.2 U	0.2 U	0.1 U	0.2
1,2,3,4,7,8-HxCDF	1 U	0.58 U	0.81 U	0.3 U	0.3	0.2	0.1 U
1,2,3,6,7,8-HxCDF	0.3 U	0.14 U	0.31 U	0.2 U	0.2 U	0.1 U	0.1 U
1,2,3,7,8,9-HxCDF	0.18 U	0.11 U	0.085 U	0.3 U	0.3 U	0.1 U	0.1 U
2,3,4,6,7,8-HxCDF	0.19 U	0.048 U	0.18 U	0.4	0.4 B	0.3 U	0.4
1,2,3,4,6,7,8-HpCDF	3.6	0.68 U	4.6	0.7	1 U	2 U	0.8
1,2,3,4,7,8,9-HpCDF	0.67 U	0.62 U	0.76 U	0.4 U	0.4 U	0.2 U	0.2 U
OCDF	9.6	1.4 U	14	2 U	5.7	2.4	2.3

Table 2
Dioxins in Sediment in the Lower Columbia River
Oregon and Washington

Study	Lake River Industrial Site Remedial Investigation			USFWS Columbia River Study			
Location	LRIS-BKG-01	LRIS-BKG-02	LRIS-BKG-03	Julia Butler Hansen (RM 64-72)	Longview (RM 64-72) (collected along shoreline in Longview)	Ridgefield (RM 87-102) (Lake River at Ridgefield NWR)	Camas Slough (RM 87 - 102) (in Camas Slough)
Sample ID	LRIS-BKG-01-SS	LRIS-BKG-02-SS	LRIS-BKG-03-SS	CRJSD120	CRLSD171	CRRSD117	CRCSD151
Date Collected	04/20/2010	04/20/2010	04/20/2010	8/1991 - 11/1991	8/1991 - 11/1991	8/1991 - 11/1991	8/1991 - 11/1991
Sample Type	Discrete	Discrete	Discrete	Composite	Composite	Composite	Composite
Sample Depth (below mudline)	0-10 cm	0-10 cm	0-10 cm	0 to 30 cm	0 to 30 cm	0 to 30 cm	0 to 30 cm
Analyte							
Total HpCDD	74	6.1 U	53	NA	NA	NA	NA
Total HpCDF	12	2.6 U	16	NA	NA	NA	NA
Total HxCDD	7.4	1.4 U	8.3	NA	NA	NA	NA
Total HxCDF	8.1 U	2.6 U	9.5	NA	NA	NA	NA
Total PeCDD	0.76	0.046	0.91	NA	NA	NA	NA
Total PeCDF	2.5	0.85	3.1	NA	NA	NA	NA
Total TCDD	0.47	0.16	0.77	NA	NA	NA	NA
Total TCDF	1.9	0.57	2.5	NA	NA	NA	NA

Table 2
Dioxins in Sediment in the Lower Columbia River
Oregon and Washington

Study	Boise St. Helens Pulp and Paper Mill Remedial Investigation			Bachelor Slough Study, Dredge Material Evaluation				
Location	Columbia Slough	Columbia Slough	Columbia Slough	BACH-02	BACH-04	BACH-07	BACH-08	BACH-09
Sample ID	B-1-A	B-1-B	B-1-C	BACH-BC-02	BACH-BC-04	BACH-BC-07	BACH-BC-08	BACH-BC-09
Date Collected	9/2009 - 10/2009	9/2009 - 10/2009	9/2009 - 10/2009	06/03/2003	06/03/2003	06/03/2003	06/03/2003	06/03/2003
Sample Type	IS Composite	IS Composite	IS Composite	Discrete	Discrete	Discrete	Discrete	Discrete
Sample Depth (below mudline)	10 to 30 cm	10 to 30 cm	10 to 30 cm	0 to 15 cm	0 to 10 cm	0 to 20 cm	0 to 10 cm	0 to 20 cm
Analyte								
Total Organic Carbon (percent)	0.80000	0.68000	0.71800	0.38900	0.16900	0.58200	0.31300	0.75200
Grain Size (percent)								
Gravel	0	0	0	0.01	0.01	0.01	0.01	0.01
Coarse Sand	0.9	0.6	3.6	88.4	92.4	77.7	88.9	80.7
Medium Sand	7.1	4.6	8.6					
Fine Sand	53.6	50.4	48.4					
Silt	22.5	25.0	22.4	11.6	7.6	22.3	11.1	19.3
Clay	15.9	19.4	17.0					
Dioxins/Furans (pg/g)								
2,3,7,8-TCDD	0.11 EMPC	0.107	0.105 EMPC	0.34 U	0.25 U	0.25 U	0.15 U	0.25 U
1,2,3,7,8-PeCDD	0.17	0.15	0.194	0.18 U	0.18 U	0.19 U	0.13 U	0.32 U
1,2,3,4,7,8-HxCDD	0.298	0.27	0.311	0.29 U	0.25 U	0.22 U	0.22 U	0.23 U
1,2,3,6,7,8-HxCDD	1.05	1.01	1.36	0.43 U	0.39 U	0.55 U	0.73 U	0.78 U
1,2,3,7,8,9-HxCDD	0.787	0.76	0.852	0.44 U	0.39 U	0.49 U	0.45 U	0.86 U
1,2,3,4,6,7,8-HpCDD	17.4	18.5	22.7	5 J	6.1 J	8.1 J	16	13
OCDD	160	158	199	44 B	48 B	79 B	120 B	110 B
2,3,7,8-TCDF	0.407	0.404	0.465	0.4 U	0.24 U	0.55 U	0.42 U	0.6 U
1,2,3,7,8-PeCDF	0.28	0.301	0.546	0.32 U	0.22 U	0.24 U	0.18 U	0.38 U
2,3,4,7,8-PeCDF	0.22	0.2	0.261	0.29 U	0.22 U	0.19 U	0.25 U	0.34 U
1,2,3,4,7,8-HxCDF	0.627	0.66	14.8	0.15 U	0.3 U	0.39 U	0.53 U	0.51 U
1,2,3,6,7,8-HxCDF	0.259	0.259 EMPC	0.912	0.2 U	0.19 U	0.22 U	0.24 U	0.31 U
1,2,3,7,8,9-HxCDF	0.0469 U	0.0485 U	0.075 EMPC	0.12 U	0.12 U	0.15 U	0.11 U	0.25 U
2,3,4,6,7,8-HxCDF	0.162	0.163	0.182	0.23 U	0.1 U	0.13 U	0.22 U	0.14 U
1,2,3,4,6,7,8-HpCDF	3.5	4.24	12.3	1.3 U	1.9 U	1.9 U	2 U	2.4 U
1,2,3,4,7,8,9-HpCDF	0.26	0.355	3.42	0.32 U	0.18 U	0.28 U	0.18 U	0.28 U
OCDF	10.1	11.5	53.6	2.3 U	3.6 U	2.8 U	2.2 U	3.5 U

Table 2
Dioxins in Sediment in the Lower Columbia River
Oregon and Washington

Study	Boise St. Helens Pulp and Paper Mill Remedial Investigation			Bachelor Slough Study, Dredge Material Evaluation				
Location	Columbia Slough	Columbia Slough	Columbia Slough	BACH-02	BACH-04	BACH-07	BACH-08	BACH-09
Sample ID	B-1-A	B-1-B	B-1-C	BACH-BC-02	BACH-BC-04	BACH-BC-07	BACH-BC-08	BACH-BC-09
Date Collected	9/2009 - 10/2009	9/2009 - 10/2009	9/2009 - 10/2009	06/03/2003	06/03/2003	06/03/2003	06/03/2003	06/03/2003
Sample Type	IS Composite	IS Composite	IS Composite	Discrete	Discrete	Discrete	Discrete	Discrete
Sample Depth (below mudline)	10 to 30 cm	10 to 30 cm	10 to 30 cm	0 to 15 cm	0 to 10 cm	0 to 20 cm	0 to 10 cm	0 to 20 cm
Analyte								
Total HpCDD	37.2	39	44.1	13	12	16	30	27
Total HpCDF	9.73	11	25.9	1.3 U	2.7 U	1.9 U	2 U	3.1 U
Total HxCDD	8.53	8.39	8.97	0.83 U	0.79 U	1.3 U	1.6 U	1.6 U
Total HxCDF	5.57	5.38	22.5	0.44 U	0.86 U	0.76 U	0.91 U	1.1 U
Total PeCDD	1.37	1.04	1.36	0.18 U	0.18 U	0.19 U	0.13 U	0.32 U
Total PeCDF	3.06	3.04	3.27	0.29 U	0.22 U	0.3 U	0.32 U	0.43 U
Total TCDD	2	1.78	1.81	0.34 U	0.25 U	0.49 U	0.24 U	0.43 U
Total TCDF	3.44	3.1	3.17	0.4 U	0.27 U	0.55 U	0.42 U	0.6 U

Table 2
Dioxins in Sediment in the Lower Columbia River
Oregon and Washington

Study	Oregon Dioxin Sediment Study					Columbia River Mile 29-34, Brookfield Mound and Skamakawa Turn Sediment Evaluation			Westport Slough Sediment Evaluation
Location	CR17/18	CR23/24	CR25/26	CR-GC-16	CR-GC-4	CRM-BC1	CRM-BC3	CRM-BC5	WP-GC-13
Sample ID	CR17/18	CR23/24	CR25/26	CR-GC-16	CR-GC-4	CRM-BC1	CRM-BC3	CRM-BC5	WP-GC-13
Date Collected	05/10/1990	05/10/1990	05/10/1990	05/10/1990	05/09/1990	08/09/2000	08/09/2000	08/09/2000	06/04/1998
Sample Type	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Composite
Sample Depth (below mudline)	0 to 46 cm	0 to 38 cm	0 to 23 cm	0 to 46 cm	0 to 40 cm	0 to 20 cm	0 to 20 cm	0 to 20 cm	0 to 53 cm
Analyte									
Total Organic Carbon (percent)	NA	NA	NA	NA	NA	0.05700	0.05000	0.04500	NA
Grain Size (percent)									
Gravel	NA	NA	NA	NA	NA	0	0	0	NA
Coarse Sand	NA	NA	NA	NA	NA	99.08	99.52	99.96	NA
Medium Sand	NA	NA	NA	NA	NA				
Fine Sand	NA	NA	NA	NA	NA				
Silt	NA	NA	NA	NA	NA	0.92	0.48	0.04	NA
Clay	NA	NA	NA	NA	NA				
Dioxins/Furans (pg/g)									
2,3,7,8-TCDD	0.74 U	0.46 U	0.45 U	0.98 U	0.38 U	0.13 U	0.14 U	0.12 U	0.2 U
1,2,3,7,8-PeCDD	1.2 U	0.25 U	0.054 U	0.24 U	0.17 U	0.2 U	0.22 U	0.23 U	0.19 U
1,2,3,4,7,8-HxCDD	0.8 U	0.43 U	0.25 U	0.88 U	0.11 U	0.17 U	0.16 U	0.14 U	0.14 U
1,2,3,6,7,8-HxCDD	1 U	0.29 U	0.22 U	0.99 U	0.28	0.16 U	0.15 U	0.13 U	0.8 U
1,2,3,7,8,9-HxCDD	0.85 U	0.25 U	0.36 U	1.9 U	0.27 U	0.15 U	0.14 U	0.12 U	0.51 U
1,2,3,4,6,7,8-HpCDD	4.1	1.5	2.8	3.5	2.9	0.39 U	0.6 U	0.76 U	15
OCDD	53	8.6	45	30	25	2.8 U	3.4 U	3.6 U	170
2,3,7,8-TCDF	1.1	0.57 U	0.43	0.58	0.8	0.11 U	0.1 U	0.1 U	0.94 J
1,2,3,7,8-PeCDF	0.83 U	0.057 U	0.085 U	0.59 U	0.2 U	0.11 U	0.14 U	0.11 U	0.26 U
2,3,4,7,8-PeCDF	0.68 U	0.18 U	0.1 U	0.39 U	0.16 U	0.11 U	0.13 U	0.11 U	0.26 U
1,2,3,4,7,8-HxCDF	0.47 U	0.23 U	0.13 U	0.8 U	0.2 U	0.12 U	0.11 U	0.12 U	0.33 U
1,2,3,6,7,8-HxCDF	0.61 U	0.18 U	0.074 U	0.75 U	0.22 U	0.1 U	0.096 U	0.083 U	0.13 U
1,2,3,7,8,9-HxCDF	0.49	0.28 U	0.22	1.4 U	0.27	0.13 U	0.12 U	0.1 U	0.092 U
2,3,4,6,7,8-HxCDF	0.69 U	0.27 U	0.096 U	1.5 U	0.08 U	0.13 U	0.12 U	0.1 U	0.085 U
1,2,3,4,6,7,8-HpCDF	0.47	0.27 U	0.62 U	0.74 U	0.48	0.15 U	0.17 U	0.2 U	1.9 U
1,2,3,4,7,8,9-HpCDF	0.25 U	0.21 U	0.13 U	3.3 U	0.12 U	0.11 U	0.12 U	0.15 U	0.16 U
OCDF	1.6	0.41 U	0.97	0.73	0.66	0.22 U	0.26 U	0.27 U	5.3 J

Table 2
Dioxins in Sediment in the Lower Columbia River
Oregon and Washington

Study	Oregon Dioxin Sediment Study					Columbia River Mile 29-34, Brookfield Mound and Skamakawa Turn Sediment Evaluation			Westport Slough Sediment Evaluation
Location	CR17/18	CR23/24	CR25/26	CR-GC-16	CR-GC-4	CRM-BC1	CRM-BC3	CRM-BC5	WP-GC-13
Sample ID	CR17/18	CR23/24	CR25/26	CR-GC-16	CR-GC-4	CRM-BC1	CRM-BC3	CRM-BC5	WP-GC-13
Date Collected	05/10/1990	05/10/1990	05/10/1990	05/10/1990	05/09/1990	08/09/2000	08/09/2000	08/09/2000	06/04/1998
Sample Type	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Composite
Sample Depth (below mudline)	0 to 46 cm	0 to 38 cm	0 to 23 cm	0 to 46 cm	0 to 40 cm	0 to 20 cm	0 to 20 cm	0 to 20 cm	0 to 53 cm
Analyte									
Total HpCDD	11	1.5	5.8	5.1	5	0.42 U	0.6 U	0.76 U	33
Total HpCDF	1.3	0.27 U	0.67	3.3 U	1.3	0.15 U	0.17 U	0.2 U	4.3
Total HxCDD	1 U	0.43 U	0.31	1.9 U	1.6	0.17 U	0.26 U	0.14 U	2.3 U
Total HxCDF	0.49	0.28 U	0.22	1.5 U	0.49	0.13 U	0.12 U	0.12 U	1.2 U
Total PeCDD	1.2 U	0.25 U	0.054 U	0.24 U	0.17 U	0.55 U	0.44 U	0.4 U	0.48 U
Total PeCDF	0.83 U	0.18 U	0.1 U	0.59 U	0.2 U	0.11 U	0.14 U	0.11 U	1.1 U
Total TCDD	3.7	0.46 U	0.45 U	0.63	3.5	0.13 U	0.14 U	0.12 U	0.71 U
Total TCDF	1.1	0.57 U	0.43	1.2	1.1	0.11 U	0.1 U	0.1 U	1.9

Table 3
Summary Statistics for Dioxins in Sediment
Lower Columbia River
Oregon and Washington

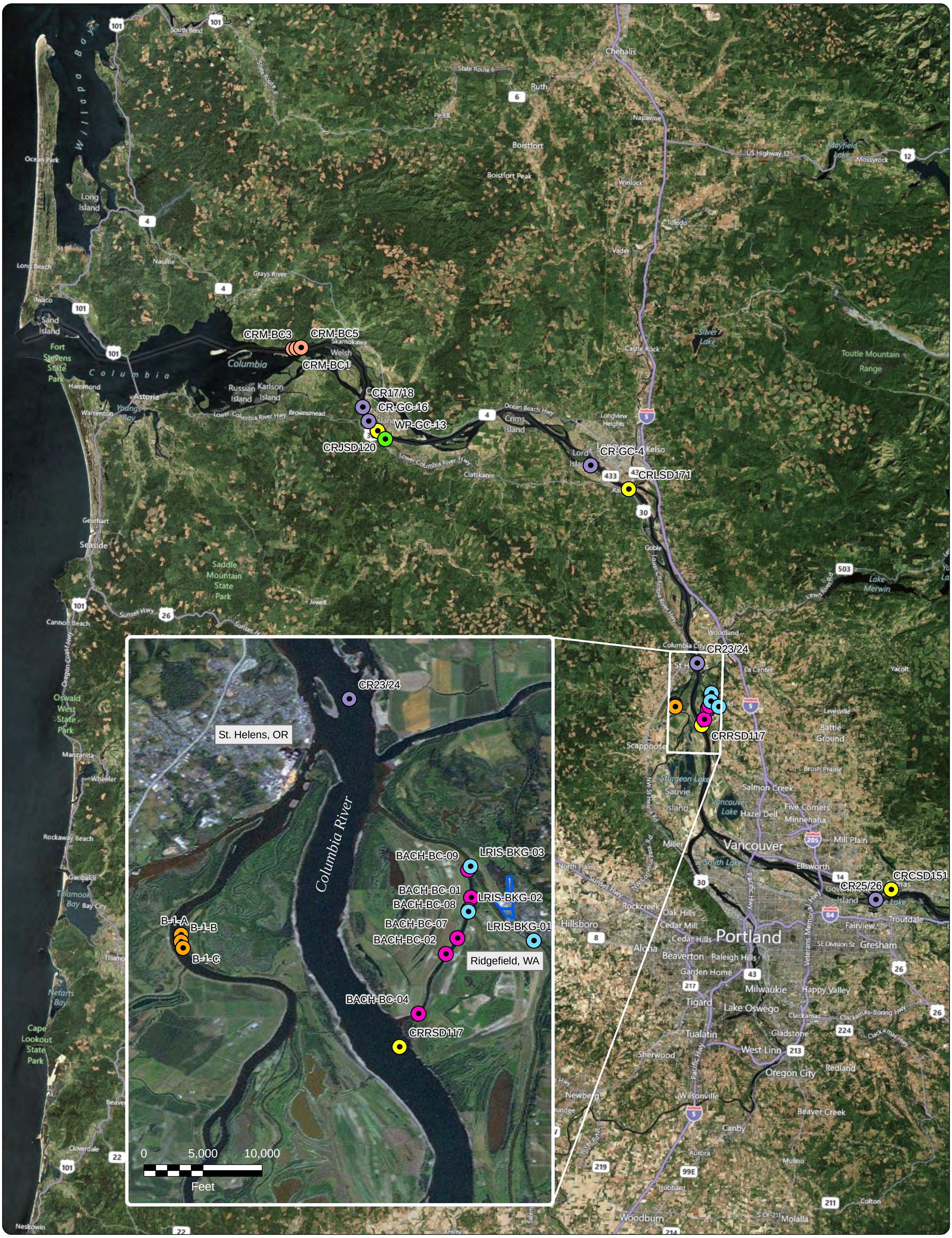
Analyte	Units	Minimum	Maximum	Average	Median	90th UCL on the 90th Percentile	90th Percentile	Upper Tolerance Limit (UTL)
Dioxins/Furans (pg/g)								
Total 2,3,7,8-TCDD Equivalence U=1/2)	pg/g	0.18	2.75	0.73	0.53	1.64	1.41	2.0

NOTE:

pg/g = picograms per gram.

Upper tolerance limit is calculated to one significant figure.

FIGURE



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Notes:
1. Boise St. Helens and US Fish & Wildlife sample locations are approximate (based on composite sample locations).
2. Davy Crockett sample locations estimated.

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Legend

- ● Lake River Industrial Site Remedial Investigation (2010)
- ● Boise St. Helens Pulp and Paper Mill Remedial Investigation (2009)
- ● Bachelor Slough Study, Dredged Material Evaluation (2003)
- ● Brookfield Mound and Skamakawa Turn Sediment Evaluation (2000)
- ● Westport Slough Sediment Evaluation (1998)
- ● Oregon Dioxin Sediment Study (1990)
- ● US Fish & Wildlife Columbia River Study (1991)
- ▭ POR Cell Boundaries

Figure
Natural Dioxin Background Sediment Sample Locations

Lower Columbia River
Oregon and Washington

0 20,000 40,000
Feet

ATTACHMENT

Nonparametric Background Statistics for Data Sets with Non-Detects

User Selected Options	
From File	WorkSheet.wst
Full Precision	OFF
Confidence Coefficient	90%
Coverage	90%
Different or Future K Values	1

Total 2,3,7,8-TCDD Equivalence (ND=0.5*EDL)

Total Number of Data	24
Number of Non-Detect Data	3
Number of Detected Data	21
Minimum Detected	0.182
Maximum Detected	2.749
Percent Non-Detects	12.50%
Minimum Non-detect	0.24
Maximum Non-detect	0.256
Mean of Detected Data	0.796
SD of Detected Data	0.543
Mean of Log-Transformed Detected Data	-0.387
SD of Log-Transformed Detected Data	0.557

Data Follow Appr. Gamma Distribution at 5% Significance Level

Nonparametric Background Statistics

90% UTL with 90% Coverage

Order Statistic	23
Achieved CC	0.92
UTL	1.528
Largest Non-detect at Order	4

90% UPL

90% UPL	1.369

Kaplan-Meier (KM) Method

Mean	0.719
SD	0.535
Standard Error of Mean	0.112
90% UTL 90% Coverage	1.636
90% KM Chebyshev UPL	2.359
90% KM UPL (t)	1.44
90% KM Percentile (z)	1.405
95% KM Percentile (z)	1.6
99% KM Percentile (z)	1.965

Note: UPL (or upper percentile for gamma distributed data)
represents a preferred estimate of BTV. For an Example:
KM-UPL may be used when multiple detection limits are present

APPENDIX L

CITY STORMWATER DISCUSSION

APPENDIX L CITY STORMWATER DISCUSSION CONTENTS

This appendix consists of the LRIS City Stormwater Discussion which was submitted to the Washington State Department of Ecology (Ecology) on February 10, 2012. This appendix is presented exactly as it was submitted to Ecology. As such, it is important to note that what has previously been referred to as "toxicity equivalent concentration" ("TEC") is the same as what is currently referred to as "toxicity equivalent" ("TEQ"). That is to say, the dioxin TEC presented in this letter is the sum of the dioxin congeners multiplied by their respective toxicity equivalent factors.

The dioxin data has been updated, as part of the Draft RI/FS revisions, to ensure consistent treatment of interferences and non-detects during data qualification and calculation of TEQs. Updated TEQs are calculated according to the methodology developed in coordination with Ecology and are described in Appendix F.

This updated calculation method changes the dioxin TEQ of sample LRIS-SS-16 from 14.3 ng/kg to 14 ng/kg, and the LRIS-SS-52 sample from 6.0 ng/kg to 3.2 ng/kg; however, these changes do not affect the interpretation of the data as originally presented.

MAUL FOSTER ALONGI
2001 NW 19th Avenue, Suite 200 | Portland, OR 97209 | 971 544-2139 | www.maulfoster.com

February 10, 2012
Project No. 9003.01.49

Mr. Craig Rankine
Washington State Department of Ecology
2108 Grand Boulevard, MS: S-70
Vancouver, Washington 98661-462

Re: City of Ridgefield Stormwater Outfall Evaluation

Dear Mr. Rankine:

On behalf of the Port of Ridgefield (Port), Maul Foster & Alongi, Inc. (MFA) has prepared this letter describing the drainage area of a City of Ridgefield (City) stormwater outfall and the potential sources of chlorinated dibenzo-p-dioxins and dibenzofurans (collectively referred to in this letter as dioxins) detected in Lake River sediment collected near the outfall. The outfall discharges south of the Port's Lake River Industrial Site (LRIS) property (see the attached figure). The Washington State Department of Ecology (Ecology) requested this evaluation at a meeting held on January 5, 2012, as part of the remedial investigations (RIs) and feasibility study being performed to evaluate and manage site-related chemical impacts to soil, sediment, and groundwater resulting from historical Pacific Wood Treating Company (PWT) operations. The work is being completed consistent with the requirements of the Model Toxics Control Act (MTCA) and the Agreed Order No. 01TCPSR-3119 between Ecology and the Port.

BACKGROUND

Sediment samples were collected in 2010 in Lake River to characterize the nature and extent of potential impacts from historical PWT operations near the LRIS. The results were reported in an RI technical memorandum (Anchor QEA and MFA, 2011). Sample LRIS-SS-16 was collected upstream of the LRIS property near the City stormwater outfall on April 20, 2010 (see the attached figure) with the intent to identify potential upstream sources of contamination. The location was selected because it was near a City outfall and over-water structures that had the potential to contribute to Lake River impacts. Multiple attempts were required to collect sample LRIS-SS-16 because a significant quantity of debris was encountered, preventing the Van Veen grab sampler from closing. The debris included household waste, plastic bags, and asphalt roofing shingles (presumably used as a dock antiskid coating). Substantial amounts of organic fibers and woody debris were observed in the sample, and upon homogenization a sheen was observed (Anchor QEA and MFA, 2011, Appendix A). The dioxin toxicity equivalent concentration (TEC) in sample LRIS-SS-16 was 14.3 nanograms per kilogram (ng/kg). The area of contamination at sample LRIS-SS-16 was discontinuous from the areas of elevated dioxins in sediments adjacent to the LRIS property.

STORMWATER SYSTEM AND DRAINAGE AREA

The City stormwater outfall is located approximately 900 feet south of Cell 3, the southern portion of the LRIS (see the attached figure). The drainage basin for this outfall had not been determined by the City, but MFA was able to model it using city stormwater maps and direct observation. Catchment areas in the city stormwater outfall drainage area were calculated by using a combination of Civil3D and ArcGIS Spatial Analysis tools, as well as surface topography. These preliminary catchment areas were based on the information available; as described below, a site visit was conducted by MFA staff to observe site conditions and stormwater flow and to help refine the computer-generated catchment areas.

The estimated area drained by the city outfall is shown on the attached figure. The drainage area is approximately 61 acres, which includes Pioneer Street (the main street in town), 9th Avenue, View Ridge (middle school), and parts of side streets (see the figure). The city impervious drainage area is calculated as approximately 20 acres. Stormwater from this area is collected in a ditch extending along the east side of the Burlington Northern Santa Fe railroad tracks and is then routed to the north side of a private road used by McCuddy's Marina (see the attached figure and photographs). A culvert redirects this water under the road to the west and into a vegetated swale. The swale is approximately 170 feet long and 10 feet wide. At the bank of Lake River, the stormwater in the swale enters a culvert and is discharged into Lake River. It appears that, during large flow events, some water from the swale bypasses the culvert and flows over the bank directly into Lake River.

On January 30, 2012, MFA personnel performed a site visit to verify stormwater features draining to the city outfall. A second pipe outlet was identified on the east side of the McCuddy's roadway, and appears to drain the large vegetated slope into the ditch running along the east side of the McCuddy's roadway (see the attached figure). Standing water was observed in this ditch during the site visit. The ditch then passes under the McCuddy's roadway, where it connects to the swale described above. Some of the pervious land area immediately adjacent to the swale has the potential to drain into the swale during large storm events. This area is outlined in orange on the attached figure and is approximately 1 acre in size. The portion of the McCuddy's property located north of the swale and parking area is grassy (pervious) and hummocky in appearance, indicating that stormwater would likely pool and infiltrate in this area. Storage of decaying, treated lumber was observed in this vicinity during the site visit. Also, the ditch running along the west side of the McCuddy's roadway was being excavated at the time of the site visit, and treated lumber was observed in this ditch.

In order to evaluate the relative contribution of the Ridgefield drainage area (outlined in blue on the figure) to stormwater entering the system from the area around the swale (outlined in orange on the figure) to the City outfall, the annual runoff volumes of each of these catchments were calculated and compared.

Runoff for the Ridgefield drainage area and the swale drainage area was calculated using the Simple Method. The Simple Method is a mathematical equation that is appropriate for smaller watersheds (less than 640 acres). The annual runoff volume was calculated as follows:

$$R_0 = P \times R_v \times 0.9 \times A_{basin}$$

R_0 = annual runoff volume (cubic feet)
P = annual rainfall (feet)
R_v= runoff coefficient (unitless)
A_{basin} = area of drainage basin (square feet)
0.9 = standard factor representing the fraction of rainfall that produces runoff (unitless)

$$R_v = 0.05 + 0.9 \times I_a$$

I_a = impervious fraction of the drainage basin

Rainfall data were obtained from the Clark County Water Resources Department. Monthly rainfall data from water years 2004 to 2010 were summed for each water year, and the geometric mean value of annual rainfalls was calculated (n=7). An annual rainfall of 31.49 inches was used in the above equation.

Calculations are presented in the attached table. The estimated runoff volume for the Ridgefield drainage area that enters the City outfall is 60,323,331 liters. The runoff volume of water that could enter the swale directly is 2,763,123 liters. The volume of water entering the outfall from the swale drainage area represents only 4.4 percent of the total volume. Also, given the larger city drainage area, it can be concluded that Pioneer Street, 9th Avenue, the middle school, and adjacent neighborhoods are by far the most significant sources of stormwater to the City outfall.

UPLAND DIOXIN CONCENTRATIONS

Dioxin compounds are ubiquitous in the environment and can result from both natural and anthropogenic sources (U.S. Environmental Protection Agency [USEPA], 2006). The area around the LRIS is an urban environment where industrial activity has been conducted and a city has been established for over 100 years. In urban areas, dioxin compounds can result from vehicle emissions, back-yard trash burning, structure fires, stormwater runoff, and other common events and activities. Dioxin concentrations in urban environments are typically higher than on land that is not near development. Ecology has defined the natural background concentration of dioxins for Washington area soils as 5.2 ng/kg (Ecology, 2010).

One soil sample was collected near the swale on the McCuddy's Marina property during upland characterization events. The soil sample (SS-52) had a dioxin TEC concentration of 6.0 ng/kg. As described further below, Ecology has conducted numerous studies of background levels of dioxins in urban soils. These studies indicate that the soil sample from SS-52 observed in the McCuddy's Marina swale is consistent with background concentrations.

Rogowski and Yake (2005) studied the typical concentrations of dioxins in soil of Washington State and found that dioxins were present in soil throughout the state, even including remote wilderness areas. Consistent with the findings of several others, they discovered that dioxin concentrations were relatively high in urban environments, even when there was no known local source.

An early Ecology study of background soils included a number of samples collected from urban areas. In these urban soil samples, dioxin TECs ranged from 0.639 ng/kg to 21.9 ng/kg (Ecology, 1999, Appendix 3-G). Ecology more recently completed an investigation of surface soils from each of six Seattle neighborhoods (South Park, Georgetown, West Seattle, Ballard, Capitol Hill, and Ravenna) (Ecology, 2011). In these samples, dioxin TECs ranged from 1.7 ng/kg to 110 ng/kg, with an average concentration of 19 ng/kg. The median concentrations measured in the neighborhoods was 12 ng/kg overall, and the median concentrations for individual neighborhoods were as high as 23 ng/kg (under MTCA, background-based concentrations can be established using concentrations equal to four times the median concentration, or 48 to 92 ng/kg, if based on this study). The 90th percentile concentration measured in the Seattle study was 46 ng/kg overall, or as high as 60 ng/kg for individual neighborhoods (under MTCA, background-based concentrations can be established using concentrations equal to the 90th percentile concentrations, or 46 to 60 in this case, without additional statistical evaluations). In conclusion, the dioxin TEC in soil upland of the City outfall is well within the range typical of urban areas and does not appear to be the result of historical PWT operations.

POTENTIAL SOURCES OF DIOXINS

Mechanisms by which PWT historical activities have impacted Lake River sediments directly offshore of the LRIS include historical stormwater discharge, direct discharge of wood-treating chemicals, and overwater activities (Anchor QEA and MFA, 2011). As mentioned above, dioxin compounds can result from many industrial, commercial, and residential activities, including being a byproduct of and impurity in pentachlorophenol (PCP). While PCP was used in industrial activities at the LRIS, it was also commonly used in the preservation of wood structures such as utility poles, fences, and docks, as well as non-wood-preserving applications such as herbicides, mossicides, and defoliants prior to 1987 (USEPA, 2007, 2008). Dioxins are produced by combustion processes, including the burning of wood, coal, gas and oil (FDA, 2003). These combustion processes can be industrial or residential in nature, including the heating of homes or other structures. In the same manner, any barrel burning of trash or other wastes can release dioxins from papers, plastics, and treated woods.

Currently, the most significant contributions of dioxins to the environment include combustion sources such as industrial coal, oil, and wood burning, residential wood and oil burning, and diesel fuel combustion (ATSDR, 1998). Emissions from incineration are both wet and dry deposited where the particles can become entrained in stormwater, contributing to dioxin contamination in surface waters and sediments (ASTDR, 1998). Other potential sources of dioxins include metal smelting, cement kilns, automobile shredding, PCP contaminants, polychlorinated biphenyl-containing transformer oil leaks, gravel road dust suppressants, forest fires, and cigarette smoke.

Several potential sources of dioxins exist along the Pioneer Street drainage area as well as the area near sediment sample LRIS-SS-16. Pioneer Street is the major transportation corridor through the city; as a result, vehicle exhaust is prominent along this street. A significant number of diesel-powered school buses provide student transportation along Pioneer Street to the View Ridge Middle School, located in the Pioneer Street drainage area. During sports events, school buses park along 5th Avenue.

The property located south of the LRIS and the boat launch property was formerly occupied by a mill that produced wood roofing materials. In 1929 or possibly earlier, a mill operated on the southern portion of the McCuddy's property. This mill was removed sometime before 1939 and a second mill was built near the center of the property and operated until the mid-1950s, although it burned to the ground three times Sawdust from mill operations was landfilled on the Property and reportedly spontaneously combusted from time to time.

A fuel storage and distribution facility was located at the center of the Property from approximately 1960 to 1992. It appears from aerial photographs that, in the 1960s and early 1970s, more than 20 large, aboveground storage tanks (ASTs) (25 to 30 feet long by 8 feet in diameter) were located on the Property as part of this facility. In the late 1970s and the 1980s, two large, vertical ASTs were in use by Harbor Oil, at least part of the time. The contents of all the tanks during the lifetime of their use have not been identified, but Harbor Oil reportedly collected and stored used oil and bunker "C" fuel oil in these tanks.

A railroad siding was present on the north end of the McCuddy's property from the 1920s to the early 1960s.

Further, there is the potential for releases from houseboats and other overwater structures near LRIS-SS-16 from activities such as wood burning.

In conclusion, there are multiple potential sources of dioxins detected at LRIS-SS-16 that could originate upland in the city and subsequently become entrained in and transported by stormwater in addition to overwater activities near the sample location.

CONCLUSIONS

There is no indication that the dioxin contamination detected at station LRIS-SS-16 is related to historical PWT operations or the LRIS site:

- The drainage area for the outfall is large and does not overlap with either the LRIS or the adjacent off-site area containing elevated dioxins. There is no evidence of a complete stormwater pathway by which PWT-associated contamination may have come to be located at LRIS-SS-16.

- Most of the drainage area serviced by the stormwater outfall (approximately 95.6 percent of the estimated runoff) consists of the city's Pioneer Street stormwater basin. The previous off-site soil sampling shows that the area of elevated dioxin concentrations near the LRIS does not overlap with this basin.

- A small portion of the total basin (approximately 4.4 percent of the estimated runoff) includes a portion of the McCuddy's Marina property. That area has measured soil dioxin levels that are consistent with natural background levels.

- The source of the elevated dioxin concentrations present at sediment sample location LRIS-SS-16 has not been determined, but could include either stormwater-associated pollutants from urban sources located in the Pioneer Street stormwater basin, or a more localized source of contamination present in the sediments at the LRIS-SS-16 sampling location. As noted previously, a significant amount of debris and sheen was noted in the sample, suggesting a potential localized contamination source.

Sincerely,

Maul Foster & Alongi, Inc.

Madi Novak

Mike Murray
Project Scientist

Madi Novak
Senior Environmental Scientist

Attachments: Limitations
References
Table

Figure
Photographs

cc: Brent Grening and Laurie Olin, Port of Ridgefield
Cindy Donnerberg, CH2M Hill

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not, therefore, be construed as a guarantee of the absence of such materials on the site.

Environmental conditions that cannot be identified by visual observation may exist at the site. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported by others, naturally occurring toxic substances, potential environmental contaminates inside buildings, or contaminate concentrations that are not of current environmental concern may not be reflected in this document.

REFERENCES

Anchor QEA and MFA. 2011. Memorandum (re: sediment remedial investigation, Lake River industrial site). Prepared by Anchor QEA, LLC, and Maul Foster & Alongi, Inc., for Port of Ridgefield and Union Pacific Railroad Company. February.

ATSDR. 1998. Toxicological profile for chlorinated dibenzo-p-dioxins. U.S. Department of Health and Human Services, Public Health Service. Agency for Toxic Substances and Disease Registry, Atlanta, Georgia. December.

Ecology. 1999. Final report, screening survey for metals and dioxins in fertilizer products and soils in Washington State. Publication 99-309. Washington State Department of Ecology. April.

Ecology. 2010. Technical memorandum #8 (re: natural background for dioxins/furans in WA soils). Washington State Department of Ecology. August 9.

Ecology. 2011. Urban Seattle area soil dioxin and PAH concentrations initial summary report. Publication no. 11-09-049. Washington State Department of Ecology. September.

FDA. 2003. Questions and answers about dioxins. http://www.fda.gov/Food/FoodSafety/FoodContaminantsAdulteration/ChemicalContaminants/DioxinsPCBs/ucm077524.htm (January 9, 2012). May 2010.

Rogowski, D. L., and W. Yake. 2005. Typical dioxin concentrations in agricultural soils of Washington State and potential sources. Environmental Science and Technology 39:5170–5176.

USEPA. 2006. An inventory of sources and environmental releases of dioxin-like compounds in the United States for the years 1987, 1995 and 2000. EPA/600/P-03/002F. U.S. Environmental Protection Agency National Center for Environmental Assessment, Washington DC. Available from: National Technical Information Service, Springfield, Virginia, and online at http://epa.gov/ncea.

USEPA. 2007. Preliminary risk assessment pentachlorophenol (“penta”), HCB, and dioxin: questions and answers. http://www.epa.gov/pesticides/factsheets/chemicals/pentachlorophenol.htm (January 9, 2012).

USEPA. 2008. Pentachlorophenol and its use as a wood preservative. http://www.epa.gov/pesticides/factsheets/chemicals/pentachlorophenol_main.htm (January 9, 2012).

TABLE

Table
Runoff Volumes
Port of Ridgefield
Ridgefield, Washington

Drainage Area Description	Drainage Area (acres)	Drainage Area (square feet)	Average Annual Runoff Volume (cubic feet)	Average Annual Runoff Volume (liters)
Pioneer Street Catchment	61	2,657,160	2,130,298	**60,323,331**
Vegetated Swale	1	43,560	97,579	**2,763,123**
TOTAL				**63,086,453**

NOTES:

Annual rainfall (feet) = 2.62.

Fraction of rainfall producing runoff = 0.9.

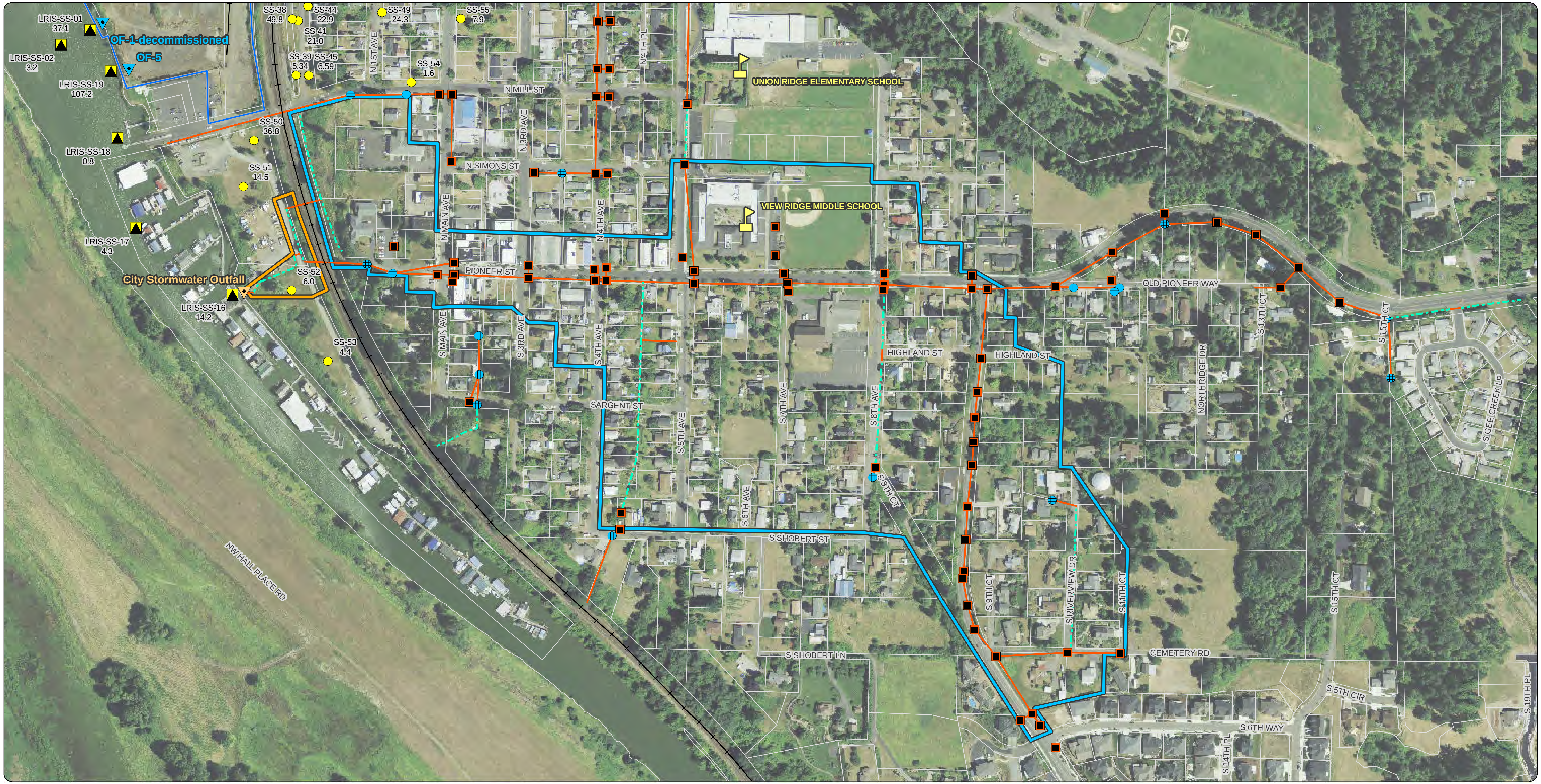
Impervious fraction of city drainage basin = 0.32.

Swale runoff coefficient = 0.95.

City runoff coefficient = 0.34.

FIGURE

Path: X:\9003.01 Port of Ridgefield\49\Projects\WorkingFig_Stormwater RIFS.mxd



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps.

Notes:

1. ng/kg = nanograms per kilogram.
2. Utilities are approximate.
3. Utility data digitized from City of Ridgefield GIS Utility Map Book Page 43.
4. Mapbook created by Gray and Osborne, Inc.

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Legend

▭	Approximate Drainage Basin (61 acres)
▭	Swale Area Approximate Drainage Basin (1 acre)
▲	Sediment Sample Location with Dioxin TEQ (ng/kg)
●	Surface Soil Sample Location with Dioxin TEQ (ng/kg)
■	Catch Basin
⊕	Stormwater Filter
⋰	Ditch
╱	Storm System Line
▼	Private Outfalls
▽	City of Ridgefield Outfalls
▭	Port of Ridgefield Cells

Figure
City Stormwater Outfall Approximate Stormwater System and Drainage Basin

Port of Ridgefield
Ridgefield, Washington

0 175 350
Feet

Print Date: 2/9/2012 Approved By: M. Murray Produced By: jschane Project: 9003.01.49

ATTACHMENT

PHOTOGRAPHS

PHOTOGRAPHS

Project Name: Port of Ridgefield
Project Number: 9003.01.49

]

Photo No.
1

Date
January 31, 2012

Description
Catch basin on Mill St. Looking south to the drainage ditch.

Photo No.
2

Date
January 31, 2012

Description
Looking south along the ditch that drains the vegetated slope.

PHOTOGRAPHS

Photo No.
3

Date
January 31, 2012

Description
Looking south along the ditch that drains the vegetated slope. Note debris in ditch.

Photo No.
4

Date
January 31, 2012

Description
Treated wood debris in the ditch that drains the vegetated slope.

PHOTOGRAPHS

Project Name: Port of Ridgefield
Project Number: 9003.01.49

Photo No.
5

Date
January 31, 2012

Description
Hummocky area near SS-51. Note treated lumber storage and low-lying nature of the area. Photographed from the McCuddy's roadway, looking west.

Photo No.
6

Date
January 31, 2012

Description
Treated lumber storage in the area of SS-51.

PHOTOGRAPHS

Project Name: Port of Ridgefield
Project Number: 9003.01.49

Photo No.
7

Date
January 31, 2012

Description
Burn barrel in the area of SS-51.

Photo No.
8

Date
January 31, 2012

Description
Ditch along eastern edge of the McCuddy's roadway. Looking south.

PHOTOGRAPHS

Project Name: Port of Ridgefield
Project Number: 9003.01.49

Photo No.
9

Date
January 31, 2012

Description
Swale leading to City outfall. Looking west.

Photo No.
10

Date
January 31, 2012

Description
Looking west toward Lake River and the swale area (left side of photograph). Note storage yard and drop-boxes near swale.

APPENDIX M

CLEANUP LEVEL DEVELOPMENT

APPENDIX M CLEANUP LEVEL DEVELOPMENT CONTENTS

APPENDIX M-1

RISK-BASED CUL DEVELOPMENT METHODS

APPENDIX M-1 RISK-BASED CLEANUP LEVEL DEVELOPMENT METHODS

This appendix describes the development of risk-based cleanup levels (CULs) for polychlorinated dibenzo-p-dioxins and dibenzofurans (hereafter dioxins) in Lake River and Carty Lake, adjacent to the Lake River Industrial Site (LRIS). Dioxins are hydrophobic compounds that adsorb strongly to sediment, bioaccumulate in animal tissue, and are less abundant in surface water. The CUL development focuses on exposure of human and ecological receptors to dioxins in sediment and tissue; exposure to dioxins in surface water is considered negligible.

The Model Toxics Control Act (MTCA) provides that CULs may be set at the higher of natural background concentration or the practical quantitation limit (PQL) if the calculated risk-based values are below those levels. An evaluation of natural background levels of dioxins in the Lower Columbia River is presented in Appendix K of this remedial investigation and feasibility study (RI/FS) report, and an appropriate dioxin toxicity equivalent (TEQ) PQL was determined in consultation with the Washington State Department of Ecology (Ecology), based on a survey of dioxin laboratories. The basis for the PQL determination is in Ecology's central files for the Site (defined in the body of the RI/FS as the LRIS, upland off-property areas, and nearby surface water bodies Lake River and Carty Lake), and the development of risk-based CULs is described further below.

Risk-based CULs for sediment are addressed in MTCA by reference to the Sediment Management Standards (Chapter 173-204 Washington Administrative Code [WAC]). Because Ecology has not promulgated a framework or specific parameters to evaluate the risk from sediments, the CULs developed in this appendix rely on standard default assumptions commonly used and in rule, when available. Human-health-based CULs are evaluated on a dioxin TEQ basis, whereas ecological-receptor-based CULs are developed on a congener-specific basis. Limited site-specific assumptions, where applicable, are integrated into CUL models, although models developed do not represent refined, site-specific risk analyses. Establishing certain site-specific parameters (e.g., fish consumption rates) can be time-consuming and may result in CULs that are below natural background and the PQL. Therefore, this process was not carried out for either Lake River or Carty Lake, as defaulting to natural background or the PQL is likely.

CULs are developed for the following potential receptors and exposure pathways identified for human health (see Sections 6.3.1 and 6.3.2 of the main body of the RI/FS) for Lake River and/or Carty Lake:

- Recreationist direct contact with dioxins in sediment and incidental ingestion (Lake River). Recreationist exposure to dioxins in sediment likely is limited, as use of nearshore LRIS areas and/or sustained contact with sediment near the LRIS are currently unlikely. Future use of the nearshore environment may increase when the shoreline is regraded as part of upland LRIS remedial actions; however, remedial actions include capping the bank, which will limit future transport and exposure. The CUL protective against this pathway is therefore developed as a precaution.

- Human consumption of dioxins in fish tissue (Lake River). The level of fishing activity in Lake River is not known. In the absence of site-specific fish consumption data, a CUL was developed using default assumptions for development of surface water cleanup levels.
- Human consumption of dioxins in fish tissue (Carty Lake). In Carty Lake fishing activity is expected to be very low, based on U.S. Department of Fish and Wildlife (USFWS) staff observations (see Section 6.3.2 of the main body of this RI/FS). However, it is unknown what would constitute an appropriate site-specific fish consumption rate, or if fish consumption occurs. A CUL was therefore not calculated; rather, the amount of fish that could be consumed to meet acceptable risk levels (ARLs) was calculated to investigate if a risk-based CUL is likely to be below natural background and the PQL.
- Worker direct contact with dioxins in sediment and incidental ingestion (Carty Lake) during reed canary grass removal activities. CULs are based on conservative estimates of exposures that may occur during management of invasive vegetation in the future (but not currently), as identified by the USFWS (see Section 6.3.2 of the main body of this RI/FS).

CULs are developed for the following potential ecological receptor exposures (see Sections 6.3.1 and 6.3.2 of the main body of the RI/FS) for both Lake River and Carty Lake:

- Fish (salmonid) uptake of dioxins in sediment
- Bird consumption of dioxins accumulated in prey
- Mammal consumption of dioxins accumulated in prey

1. Recreationist Incidental Ingestion of and Direct Contact with Sediment

This section describes the development of a CUL protective of a hypothetical recreationist exposed to impacted sediment via direct contact and incidental ingestion. As noted above, recreationist exposure to dioxins in sediment likely is limited, as use of nearshore LRIS areas and/or sustained contact with sediment near the LRIS is unlikely. Although the recreationist pathway is not likely to be significant, CULs protective against direct contact with dioxins in sediment are developed as a precaution.

All values used in CUL_R (sediment CUL protective of recreationists) development and value references for Lake River are summarized in Table M-1-1. The recreationist CUL is protective of children exposed to sediment six hours per day, for three days a week, over 12 weeks per year for six years. This equates to 216 hours per year, or an exposure frequency of approximately 0.025. The exposure assumptions are very conservative and are not representative of current use. However, the resulting CUL provides a high level of certainty that any future populations directly contacting sediment offshore of Lake River will not experience adverse effects.

The CUL protective of this exposure scenario was calculated consistent with WAC 173-340-740 equation 740-5:

$$\mathrm{CUL_R} = \frac{10^6\ \mathrm{ng/kg} * \mathrm{ARLc} * \mathrm{BW} * \mathrm{AT}}{\mathrm{EF} * \mathrm{ED}[(\mathrm{IR} * \mathrm{AB} * \mathrm{SFo})/10^6\ \mathrm{mg/kg}) + (\mathrm{SA} * \mathrm{AF} * \mathrm{ABS} * \mathrm{SFd})/10^6\ \mathrm{mg/kg})]}$$

where:

$\mathrm{CUL_R}$ is the sediment CUL for recreationists (nanograms [ng] per kilogram [kg]);

$\mathrm{ARL_C}$ is the ARL for carcinogenic dioxins (unitless, 1 X 10^{-6});

BW is body weight over the exposure duration (16 kg);

AT is averaging time (75 years);

EF is exposure frequency (unitless, 0.025);

ED is exposure duration (six years);

IR is the sediment ingestion rate (200 milligrams [mg] per day);

AB is the gastrointestinal absorption factor (unitless, 0.6);

SFo is oral cancer potency factor (1.5 X 10^5 [kg-day/mg]);

GI is gastrointestinal absorption conversion factor (unitless, 0.8);

SA is dermal surface area (2,200 square centimeters [cm^2]);

AF is adherence factor (3.3 mg/cm^2/day);

ABS is dermal absorption fraction (unitless, 0.03); and

SFd is dermal cancer potency factor (kg-day/mg) derived by SFo/GI.

Assumptions of low body weight, high sediment ingestion rate, and a high sediment adherence factor result in a conservative $\mathrm{CUL_R}$ of 138 ng/kg dioxin TEQ.

There are significant uncertainties associated with several model parameters, including the duration and frequency of exposure, the sediment ingestion rate, and the adherence factor. All model parameters except exposure frequency and adherence factor are based on MTCA defaults. Exposure frequency was determined as noted above, based on the site-specific reasonable maximum exposure scenario for recreational contact with sediments. The sediment adherence factor was selected based on a reasonable maximum exposure scenario for children (Integral et al., 2009) and is significantly greater than the MTCA default soil adherence factor of 0.2 mg/cm^2/day (WAC 173-340-740). Given the conservative assumptions, the $\mathrm{CUL_R}$ is expected to be protective for a reasonable maximum exposure scenario.

2. Human Consumption of Fish

The CULs for human health fish consumption in Lake River represent dioxin concentrations in sediment at and below which dioxins would not be expected to accumulate in fish tissue above levels acceptable for human consumption. These values were calculated as follows:

$\mathrm{CUL_H} = (10^6\ \mathrm{ng/kg} * f_{OC} * (\mathrm{ATL_H}\ /\ (\mathrm{BSAF} * f_{FL})$

where:

CUL_H is the sediment bioaccumulation screening level values for human population (ng/kg);

f_{OC} is the fraction of organic carbon in surface sediment (unitless, 0.01);

ATL_H is the acceptable tissue levels for carcinogens such as dioxins (mg/kg, calculated value of 4.3 X 10^{-8});

BSAF is the biota-sediment accumulation factor for organic contaminants (kg sediment carbon/kg organism lipid, 1); and

f_{FL} is the fraction of organism lipid content of fillet or portion of fish/shellfish consumed (unitless, 0.03).

Under MTCA, when establishing and determining compliance with human health CULs, including determining compliance with excess cancer risk, mixtures of dioxins must be considered a single hazardous substance, i.e., expressed as a dioxin TEQ. This is achieved by using the CUL established for 2,3,7,8-tetrachloro dibenzo-p-dioxin as the CUL for mixtures of dioxins (WAC 173-340-708).

A BSAF equal to 1 was selected, consistent with the State of Washington's common practice. Because of the uncertainties and wide range of literature values for BSAFs, Ecology has applied the value of 1 as a somewhat conservative BSAF to develop dioxin TEQ screening levels. This assumes that 100 percent of the sediment TEQ concentration transfers to tissue.

ATL_H were calculated from ARLs in accordance with the MTCA rule for fish consumption limits and for conducting human health assessments. Separate levels are not calculated for men and women, as differences in consumption rates to body weight are minor. ATL_H was calculated as follows:

$ATL_H = (ARL_C * BW * AT) / (SF * IR * ED * FDF)$

where:

ATL_H represents the maximum concentration of dioxins in fish tissue that will not result in a risk of cancer;

ARL_C is the ARL for carcinogenic dioxins (unitless, 1 X 10^{-6});

BW is body weight (kg);

AT is averaging time (years);

SF is the oral slope factor (kg-day/mg);

IR is fish/shellfish ingestion rate (kg/day);

ED is exposure duration (years); and

FDF is fish diet fraction (unitless, 0.5).

A conservative CUL_H of 0.014 ng/kg dioxin TEQ protective of human consumption was calculated for Lake River. All values applied in CUL and acceptable tissue level development for human fish consumption, as well as the basis of the values, are summarized in Table M-1-2.

A CUL for human fish consumption at Carty Lake was not developed. At Carty Lake, fishing for consumption is likely to be very limited (see Section 5.6). There are approximately 260 fishing visits annually throughout the entire Ridgefield National Wildlife Refuge, with use distributed between Gee Creek, Duck Lake, Middle Lake, and Carty Lake, suggesting that fishing, and therefore Carty Lake fish consumption, is rare. In the absence of reliable information on fish consumption rates for Carty Lake, the fish consumption model described above for Lake River was used to calculate the amount of fish that could be consumed to meet the ARL of 1 X 10^{-6}, with the exception that a site-specific f_{OC} value of 0.029 for Carty Lake (see Section 4.1 below) was used. Under current conditions (i.e., at the current Carty Lake dioxin TEQ surface weighted average concentration [SWAC] of 44 ng/kg; see the Attachment in Appendix T) approximately 1 ounce of fish per year could be consumed to meet the ARL of 1 X 10^{-6}. Therefore, even a very low fish consumption rate at Carty Lake would exceed the ARL, indicating that a risk-based CUL is likely to be below natural background or the PQL. Remedial actions that reduce the Carty Lake dioxin TEQ SWAC would increase the amount of fish that could be consumed while meeting the ARL.

Risk assessment calculations based on procedures for developing surface water CULs (WAC 173-340-730, Equation 730-2) as applied above provide an initial framework for developing sediment concentrations that are predicted to result in acceptable tissue levels in fish. However, to most accurately develop risk-based sediment CULs for Lake River and Carty Lake, it would be necessary to conduct site-specific studies of fish consumption and the relationship between sediment and fish tissue contamination.

3. Worker Incidental Ingestion of and Direct Contact with Sediment

The CUL for direct contact and incidental ingestion of sediment is developed to be protective of workers exposed to dioxin-impacted sediment in Carty Lake during potential future vegetation restoration efforts (e.g., removal of reed canary grass). Values were calculated consistent with WAC 173-340-745 equation 745-5:

$$\mathrm{CUL_W} = \frac{10^6\ \mathrm{ng/kg} * \mathrm{ARLc} * \mathrm{BW} * \mathrm{AT}}{\mathrm{EF} * \mathrm{ED}[(\mathrm{IR} * \mathrm{AB} * \mathrm{SFo})/10^6\ \mathrm{mg/kg}) + (\mathrm{SA} * \mathrm{AF} * \mathrm{ABS} * \mathrm{SFd})/10^6\ \mathrm{mg/kg})]}$$

where:

$\mathrm{CUL_W}$ is the sediment CUL for workers (ng/kg);

$\mathrm{ARL_C}$ is the ARL for carcinogenic dioxins (unitless, 1 X 10^{-5});

BW is body weight over the exposure duration (70 kg);

AT is averaging time (75 years);

EF is exposure frequency (unitless, 0.005);

ED is exposure duration (20 years);

IR is the sediment ingestion rate (50 mg/day);

AB is the gastrointestinal absorption factor (unitless, 0.6);

SFo is oral cancer potency factor (1.5 X 10^5 kg-day/mg);

GI is gastrointestinal absorption conversion factor (unitless, 0.8);

SA is dermal surface area (2,500 cm^2);

AF is adherence factor (0.3 $mg/cm^2/day$);

ABS is dermal absorption fraction (unitless, 0.03); and

SFd is dermal cancer potency factor (kg-day/mg) derived by SFo/GI.

USFWS indicated that future workers who may be tasked with disking reed canary grass are likely to require a full work week (i.e., 40 hours) (Lapp, 2012). Further, workers likely would disk the vegetation about once every three years (Lapp, 2012). The assumptions applied in the model above are based on communications with USFWS, but add a layer of conservatism by assuming that workers would conduct 40 hours of vegetation restoration every year. Assumptions of exposure frequency of 40 hours per year for 20 years result in a conservative CULW of 66,000 ng/kg dioxin TEQ protective of workers. All values used in CULW development and value references for Carty Lake are summarized in Table M-1-3.

There are uncertainties associated with several model parameters, including the duration and frequency of exposure, the adherence factor, and sediment ingestion rates. As explained above, assumptions were based on default values and on communications with the USFWS, with an additional layer of conservatism to estimate a reasonable maximum exposure.

4. CULs for Ecological Receptors

Dioxins are bioaccumulative chemicals that also biomagnify, that is, dioxins accumulate to successively higher concentrations at higher trophic levels. To evaluate the potential adverse effects at higher trophic levels (i.e., piscivorous birds and mammals, in this case) resulting from dioxins in sediment, it is necessary to evaluate accumulation. Accumulation in aquatic organisms can be assessed in one of two ways: (1) direct measurement through the collection and analysis of tissue, or (2) modeling expected concentrations in tissue, applying default or site-specific assumptions. Appropriate tissue data are not available at the Site; therefore, CULs based on default assumptions or site-derived data were developed using standard U.S. Environmental Protection Agency (USEPA) models (Oregon Department of Environmental Quality [DEQ], 2007; USEPA, 1989; WAC 173-340-730). These models evaluate risk on a congener-specific basis, and the default assumptions incorporated into models rely on studies and reports, including the following: USEPA (1985), USEPA (1995), Sample et al. (1996), Steevens et al. (2005), and COE et al. (2009). Models and assumptions used to generate CULs for fish, birds, and mammals are further explained below.

4.1 Fish

The CULs for fish represent dioxin concentrations in sediment at and below which dioxins would not be expected to accumulate in fish tissue above acceptable levels for fish. These values were calculated as follows:

$$CUL_F = 10^6 \text{ ng/kg} * f_{OC} * (CTL / (BSAF * f_L)) / SU$$

where:

CUL_F is the CUL for fish (ng/kg);

f_{OC} is the fraction of total organic carbon in surface sediment (unitless);

CTL is the critical tissue levels for fish (mg/kg);

BSAF is the biota-sediment accumulation factor for organic contaminants (kg sediment carbon/kg organism lipid);

f_L is the fraction of organism lipid content (unitless); and

SU is the site use factor for the fish (unitless).

Values used in CUL development, as well as the basis of the values, are summarized in Table M-1-4 for Lake River and in Table M-1-5 for Carty Lake. Selected values are based on defaults selected and discussed in DEQ (2007), with the exception of f_{OC} and SU. Fraction of organic carbon is generally assumed at 0.01 (DEQ, 2007), but surface f_{OC} at the Lake River site ranges from 0.0034 to 0.032, with an average of 0.0128. At Carty Lake, surface f_{OC} ranges from 0.013 to 0.054, with a mean of 0.029 (see Sections 2.7.1.3 and 2.7.2.2 of the main body of the RI/FS).

An SU of 0.5 was applied. This value is a conservative assumption relevant for salmonids that accounts for the life cycles of species (i.e., coastal cutthroat trout and coho salmon) likely present in Lake River and in Gee Creek. Salmonids in Gee Creek may use Carty Lake if a permanent connection to Gee Creek is restored (see Section 2.8.4 of the main body of the RI/FS). Coastal cutthroat trout exhibit varied life cycles and may range greater than 50 kilometers away from their natal stream, while coho salmon spend approximately half of their life cycle away from their natal stream or other freshwater habitat (Moore et al., 2010). Assuming the presence of other salmonids in Lake River and Carty Lake at this time or in the future, these species are also likely to use Carty Lake for substantially less than 50 percent of their life cycle, given their anadromous life history.

CTLs represent concentrations in tissue at or below which approximately 95 percent of aquatic organisms would be highly unlikely to experience adverse health effects. CTLs are not species-specific and are calculated using the species sensitivity distribution approach, which employs empirical-effects data. DEQ (2007) calculated CTLs used in CUL model calculations based on the methodology of Steevens et al. (2005) and toxic equivalency factors (Van den Berg, 1998, 2006). The CTL developed by DEQ is based on four species endpoints, including immature coho salmon [*Oncorhynchus kisutch*] and immature rainbow trout [*Oncorhynchus mykiss*]). Therefore, the fish CULs developed here likely are protective of juvenile salmonids that may occur in Lake River or Carty Lake in the event that a connection between Carty Lake and the Columbia River is restored (see Section 2.8.4 in the main body of the RI/FS). Sediment CULs for individual dioxin congeners protective of fish are summarized in Tables M-1-4 and M-1-5 for Lake River and Carty Lake, respectively.

4.2 Birds

The CULs for birds represent dioxin concentrations in sediment at and below which dioxins are not expected to result in tissue residue levels in prey that could adversely affect the health of birds that prey on fish or other aquatic organisms. Thus, contaminants in prey items at or below the CULs are predicted not to harm the most sensitive life stage of bird predators. CULs can be calculated for both individual and population bird receptors. Individual CULs are based on no-observed-adverse-effect levels (NOAEL), which are appropriate when Endangered Species Act (ESA)-listed species are likely to utilize areas of concern. Population CULs are based on lowest-observed-adverse-effects levels. Because no ESA-listed bird species reside or are likely to reside in the area of concern (see Appendix C of the RI/FS report), population-level CULs were used for birds. The great blue heron was the selected receptor for determining protection of piscivorous birds. CULs were calculated as follows:

$CUL_B = 10^6 \text{ ng/kg} * f_{OC} * (ATL_B / (BSAF * f_L))$

where:

CUL_B is the sediment bioaccumulation screening level values for piscivorous bird receptors (ng/kg);

f_{OC} is the fraction of total organic carbon in surface sediment (unitless);

ATL_B is the acceptable tissue levels in diet for birds (mg/kg);

BSAF is the biota-sediment accumulation factor for organic contaminants (kg sediment carbon/kg organism lipid);

f_L is the fraction of organism lipid content of whole body wet weight (unitless).

Specifically, ATL_B represents the concentration of a contaminant that a bird could consume that would result in a dose equal to a given toxicity reference value (TRV) (mg/kg/day) at or below which the population of bird receptors would be protected.

ATL_B was calculated as follows:

$ATL_B = TRV / (IR / BW)$

where IR is the daily food ingestion rate (kg/day) and BW is body weight (kg) of the selected receptor bird (great blue heron). This calculation is inherently conservative in that it assumes that birds are present year-round and that they obtain all of their food from areas of impacted sediment.

Site-specific organic carbon values were applied for both Lake River and Carty Lake; all other parameters are default values. All values used in bird CUL development, as well as the basis for these values, is summarized in Tables M-1-6 and M-1-7.

4.3 Mammals

The CULs for mammals represent dioxin concentrations in sediment at and below which dioxins are not expected to result in tissue residue levels in prey that could adversely affect the health of mammals that prey on fish or other aquatic organisms.

Thus, contaminants present in prey items at or below the CULs are predicted not to harm the most sensitive life stage of mammal predators. CULs can be calculated for both individual and population mammal receptors. Individual CULs are based on NOAEL, which are appropriate when ESA-listed species are likely to utilize areas of concern. Population CULs are based on lowest-observed-adverse-effects-levels. Because no ESA-listed mammal species reside or are likely to reside in the area of concern (see Appendix C of the of the RI/FS report), population-level CULs were used for mammals. Mink was the selected receptor for determining protection of piscivorous mammals. CULs were calculated as follows:

$CUL_M = 10^6$ ng/kg * f_{OC} * (ATL_M / (BSAF * f_L))

where:

CUL_M is the sediment bioaccumulation screening level values for piscivorous mammal receptors (ng/kg);

f_{OC} is the fraction of total organic carbon in surface sediment (unitless);

ATL_M is the acceptable tissue levels in diet for mammals (mg/kg);

BSAF is the biota-sediment accumulation factor for organic contaminants (kg sediment carbon/kg organism lipid);

f_L is the fraction of organism lipid content of whole body wet weight (unitless).

Specifically, ATL_M represents the concentration of a contaminant that a mammal could consume that would result in a dose equal to a given TRV (mg/kg/day) at or below which the population of mammal receptors would be protected.

ATL_M was calculated as follows:

ATL_M = TRV / (IR / BW)

where IR is the daily food ingestion rate (kg/day) and BW is body weight (kg) of the selected receptor mammal (mink). This calculation is inherently conservative in that it assumes that mammals are active year-round and that they obtain all of their food from areas of impacted sediment. Site-specific organic carbon values were applied for both Lake River and Carty Lake; all other parameters are default values. All values used in mammal CUL development, as well as the basis for these values, are summarized in Tables M-1-8 and M-1-9.

As described above, selection of primarily default values (which are inherently conservative) and susceptible end-point receptors for the ecological risk assessments likely result in overestimates of risk to receptors evaluated.

However, evaluation of ecological risk is often limited by lack of site-specific data, generating considerable uncertainty in model estimates. This uncertainty is often circumvented by making conservative estimates based on other available site- or laboratory-derived data; however, because these assumptions do not necessarily correlate to the site of investigation, results of the risk calculations are themselves uncertain.

One of the most significant sources of uncertainty is the BSAF, which tends to be species-specific and affected by environmental factors such as grain size and organic carbon. In the absence of empirically derived site- and species-specific BSAFs, conservative literature values are applied, likely resulting in overestimates of risk.

5. References

COE, USEPA, Ecology, DNR, DEQ, IDEQ, NMFS, and USFWS. 2009. Sediment evaluation framework for the Pacific Northwest. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Washington State Department of Ecology, Washington State Department of

Natural Resources, Oregon Department of Environmental Quality, Idaho Department of Environmental Quality, National Marine Fisheries Service, and U.S. Fish and Wildlife Service. May.

DEQ. 2007. Guidance for assessing bioaccumulative chemicals of concern in sediment. Oregon Department of Environmental Quality, Portland, Oregon. April.

Integral, Windward, Kennedy/Jenks, and Anchor. 2009. Portland Harbor RI/FS remedial investigation report IC09-0003. Prepared for the Lower Willamette Group, Portland, Oregon. Integral Consulting Inc., Portland, Oregon; Windward Environmental LLC, Inc., Seattle, Washington; Kennedy/Jenks Consultants, Portland, Oregon; and Anchor QEA, LLC, Seattle, Washington and Portland Oregon. October.

Lapp, C. 2012. Personal communication (re: restoration worker exposure parameters) with M. Novak, Maul Foster & Alongi, Inc. February.

Moore, M. E., F. A. Goetz, D. M. Van Doornik, E. P. Tezak, and T. P. Quinn. 2010. Early marine migration patterns of wild coastal cutthroat trout (*Oncorhynchus clarki clarki*), steelhead trout (*Oncorhynchus mykiss*), and their hybrids. PLoS ONE 5(9): e12881. September.

Sample, B. E., D. M. Opresko, and G. W. Suter II. 1996. Toxicological benchmarks for wildlife. ES/ER/TM-86/R3. Oak Ridge National Laboratory, Oak Ridge, Tennessee. June.

Steevens, J. A., M. R. Reiss, and A. V. Pawlisz. 2005. A methodology for deriving tissue residue benchmarks for aquatic biota: a case study for fish exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin and equivalents. Integrated Environmental Management 1(2):142-151. April.

USEPA. 1985. Health assessment document for polychlorinated dibenzo-p-dioxins. EPA report no. 600/8-84/014. U.S. Environmental Protection Agency, Washington, DC. September.

USEPA. 1989. Risk assessment guidance for superfund (RAGS). Vol. 1, human health evaluation manual (part A), interim final. EPA/540/I-89/002. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington, DC. December.

USEPA. 1995. Great Lakes water quality initiative criteria documents for the protection of wildlife, DDT, mercury, 2,3,7,8-TCDD, PCBs. EPA-820-B-95-008. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

Van den Berg, M., L. S. Birnbaum, A. T. Bosveld, B. Brunstrom., P. Cook, and M. Feeley. 1998. Toxic equivalency factors (TEFs) for PCBs, PCDDs, PCDFs for humans and wildlife. Environmental Health Perspectives 106(12): 775-92. December.

Van den Berg M., L. S. Birnbaum, M. Denison, M. De Vito, W. Farland, and M. Feeley. 2006. The 2005 World Health Organization reevaluation of human and mammalian toxic equivalency factors for dioxins and dioxin-like compounds. Toxicological Sciences 93(2): 223-41. October.

TABLES

Table M-1-1
Lake River Sediment Direct Ingestion and Contact CUL
Former PWT Site RI/FS

Model Parameter	Description	Value
CUL_R	Sediment dioxin TEQ cleanup level (ng/kg)	138
RISK	Acceptable cancer risk (unitless)	1E-06
BW	Average body weight over the exposure duration (kg)	16
AT	Averaging time (years)	75
EF	Exposure frequency (unitless)[a]	**0.025**
ED	Exposure duration (years)	6
SIR	Soil ingestion rate (mg/day)	200
AB	Gastrointestinal absorption fraction (unitless) for mixtures of dioxins and/or furans	0.6
SFo	Oral cancer potency factor (USEPA, 1985) (mg/kg/day)	1.5E+05
SFd	Dermal cancer potency factor (mg/kg/day) derived by SFo/GI	1.9E+05
GI	Gastrointestinal absorption conversion factor (unitless) for mixtures of dioxins and/or furans	0.8
SA	Dermal surface area (cm^2)	2200
AF	Adherence factor ($mg/cm^2/day$)[b]	**3.3**
ABS	Dermal absorption fraction (unitless) for mixtures of dioxins and/or furans	0.03

NOTES:

CUL_R derived using Washington State Model Toxics Control Act Equation 740-5.

Defaults applied except values shown in **bold**.

cm^2 = square centimeter.

CUL = cleanup level.

kg = kilogram(s).

$mg/cm^2/day$ = milligrams per square centimeter per day.

mg/day = milligrams per day.

mg/kg = milligrams per kilogram.

mg/kg/day = milligrams per kilogram per day.

ng/kg = nanograms per kilogram.

TEQ = toxicity equivalent.

USEPA = U.S. Environmental Protection Agency.

[a] See text for derivation.

[b] Reasonable maximum exposure for a child (Integral et al., 2009).

Table M-1-2
Lake River Human Fish Consumption CUL
Former PWT Site RI/FS

Dioxin Congener	ATLh (mg/kg)	CULh (ng/kg)	CULh Dioxin TEQ (ng/kg)
2,3,7,8-TCDD	4.3E-08	1.4E-02	1.4E-02

Model Parameters	Description	Value	Reference
CULh	Sediment bioaccumulation CULs for human receptors (mg/kg)	See table above	Calculated
ATLh	Acceptable carcinogenic tissue levels in diet for human receptors (mg/kg)—wet	See table above	Calculated
AT	Averaging time in years	75	MTCA (WAC 173-340-730)
ED	Exposure duration in years	30	MTCA (WAC 173-340-730)
ARLc	Acceptable risk level for carcinogens (unitless)	1.E-06	MTCA (WAC 173-340-730)
Sfo	Slope factor—oral (mg/kg day)$^{-1}$	1.5E+05	USEPA (1985)
BSAF	Biota-sediment accumulation factor for organic COIs (kg sediment organic carbon / kg organism lipid)	1	See appendix text
IR	Daily Fish Ingestion Rate (kg/day)—wet	0.054	MTCA (WAC 173-340-730)
FDF	Fish diet fraction (unitless)	0.5	MTCA (WAC 173-340-730)
BW	Body weight, adult human (kg)	70	MTCA (WAC 173-340-730)
f(oc)	Fraction of total organic carbon in surface sediment (unitless)	0.01	DEQ (2007)
f(l)—fillet	Fraction of organism lipid content of fillet (unitless; default=0.03)	0.03	DEQ (2007)

NOTES:

CUL = cleanup level.

DEQ = Oregon Department of Environmental Quality.

kg = kilogram(s).

kg/day = kilograms per day.

mg/kg = milligrams per kilogram.

mg/kg/day = milligrams per kilogram per day.

MTCA = Model Toxics Control Act.

ng/kg = nanograms per kilogram.

TEQ = toxicity equivalent.

USEPA = U.S. Environmental Protection Agency.

WAC = Washington Administrative Code.

Table M-1-3
Carty Lake Sediment Direct Ingestion and Contact CUL
Former PWT Site RI/FS

Model Parameter	Description	Value
CUL_W	Sediment cleanup level (ng/kg)	6.6E+04
RISK	Acceptable cancer risk (unitless)	1E-05
ABW	Average body weight over the exposure duration (kg)	70
AT	Averaging time (years)	75
EF	Exposure frequency (unitless)^a	**0.005**
ED	Exposure duration (years)	20
SIR	Soil ingestion rate (mg/day)	50
AB1	Gastrointestinal absorption fraction (unitless) for mixtures of dioxins and/or furans	0.6
SFo	Oral cancer potency factor (USEPA, 1985) (mg/kg/day)	1.5E+05
SFd	Dermal cancer potency factor (mg/kg/day) derived by SFo/GI	1.9E+05
GI	Gastrointestinal absorption conversion factor (unitless) for mixtures of dioxins and/or furans	0.8
SA	Dermal surface area (cm^2)	2500
AF	Adherence factor ($mg/cm^2/day$)^b	**0.3**
ABS	Dermal absorption fraction (unitless) for mixtures of dioxins and/or furans	0.03

NOTES:

CUL_W derived using Washington State Model Toxics Control Act Equation 745-5 MTCA

Defaults applied except values shown in **bold**.

cm^2 = square centimeter.

CUL = cleanup level.

kg = kilogram(s).

$mg/cm^2/day$ = milligrams per square centimeter per day.

mg/day = milligrams per day.

mg/kg = milligrams per kilogram.

mg/kg/day = milligrams per kilogram per day.

ng/kg = nanograms per kilogram.

USEPA = U.S. Environmental Protection Agency.

[a] See report text for derivation.

[b] Reasonable maximum exposure for adult (Integral et al., 2009).

Table M-1-4
Lake River Fish CULs
Former PWT Site RI/FS

Analyte	BSAF (kg oc/kg lipid)	CTL (mg/kg)	CULf (ng/kg)	TEF—Fish
		Freshwater	Freshwater	
Dioxins				
2,3,7,8-TCDD	2.268	6.4E-06	1.4E+00	1
1,2,3,7,8-PeCDD	0.076	6.4E-06	4.3E+01	1
1,2,3,4,7,8-HxCDD	0.076	1.3E-05	8.6E+01	0.5
1,2,3,6,7,8-HxCDD	0.076	6.4E-04	4.3E+03	0.01
1,2,3,7,8,9-HxCDD	0.076	6.4E-04	4.3E+03	0.01
1,2,3,4,6,7,8-HpCDD	0.003	6.4E-03	1.1E+06	0.001
OCDD	0.003	6.4E-02	1.1E+07	0.0001
Furans				
2,3,7,8-TCDF	0.270	1.3E-04	2.4E+02	0.05
1,2,3,7,8-PeCDF	0.270	1.3E-04	2.4E+02	0.05
2,3,4,7,8-PeCDF	2.268	1.3E-05	2.9E+00	0.5
1,2,3,4,7,8-HxCDF	0.076	6.4E-05	4.3E+02	0.1
1,2,3,6,7,8-HxCDF	0.076	6.4E-05	4.3E+02	0.1
1,2,3,7,8,9-HxCDF	0.076	6.4E-05	4.3E+02	0.1
2,3,4,6,7,8-HxCDF	0.076	6.4E-05	4.3E+02	0.1
1,2,3,4,6,7,8-HpCDF	0.003	6.4E-04	1.1E+05	0.01
1,2,3,4,7,8,9-HpCDF	0.003	6.4E-04	1.1E+05	0.01
OCDF	0.003	6.4E-02	1.1E+07	0.0001

Model Parameters	Description	Value	Reference
CULf	Sediment bioaccumulation cleanup level for fish receptors (ng/kg)	See table above	DEQ (2007)
CTL	Critical tissue levels (mg/kg)	See table above	DEQ (2007); Steevens et al. (2005)
BSAF	Biota-sediment accumulation factor for organic COIs (kg sediment organic carbon / kg organism lipid)	See table above	DEQ (2007)
f(oc)	Fraction of total organic carbon in surface sediment (unitless)	0.0128	Section 2
f(l)—whole	Fraction of organism lipid content of whole body wet weight (unitless)	0.05	DEQ (2007)

Table M-1-4
Lake River Fish CULs
Former PWT Site RI/FS

Model Parameters	Description	Value	Reference
SU	Site-use factor (unitless)	0.5	See text; Moore et al. (2010)
TEF	Toxic equivalency factor for fish	See table above	Van den Berg et al. (1998, 2006)

NOTES:

COI = chemical of interest.

CUL = cleanup level.

DEQ = Oregon Department of Environmental Quality.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

kg = kilogram(s).

kg oc/kg lipid = kilogram organic carbon per kilogram lipid.

mg/kg = milligrams per kilogram.

ng/kg = nanograms per kilogram.

OCDD = 1,2,3,4,6,7,8,9-octachloro dibenzo-p-dioxin.

OCDF = 1,2,3,4,6,7,8,9-octachloro dibenzofuran.

PeCDD = pentachloro dibenzo-p-dioxin.

PeCDF = pentachloro dibenzofuran.

TCDD = tetrachloro dibenzo-p-dioxin.

TCDF = tetrachloro dibenzofuran.

Table M-1-5
Carty Lake Fish CULs
Former PWT Site RI/FS

Analyte	BSAF (kg oc/kg lipid)	CTL (mg/kg)	CULf (ng/kg)	TEF—Fish
		Freshwater	Freshwater	
Dioxins				
2,3,7,8-TCDD	2.268	6.4E-06	3.3E+00	1
1,2,3,7,8-PeCDD	0.076	6.4E-06	9.8E+01	1
1,2,3,4,7,8-HxCDD	0.076	1.3E-05	2.0E+02	0.5
1,2,3,6,7,8-HxCDD	0.076	6.4E-04	9.8E+03	0.01
1,2,3,7,8,9-HxCDD	0.076	6.4E-04	9.8E+03	0.01
1,2,3,4,6,7,8-HpCDD	0.003	6.4E-03	2.5E+06	0.001
OCDD	0.003	6.4E-02	2.5E+07	0.0001
Furans				
2,3,7,8-TCDF	0.270	1.3E-04	5.5E+02	0.05
1,2,3,7,8-PeCDF	0.270	1.3E-04	5.5E+02	0.05
2,3,4,7,8-PeCDF	2.268	1.3E-05	6.5E+00	0.5
1,2,3,4,7,8-HxCDF	0.076	6.4E-05	9.8E+02	0.1
1,2,3,6,7,8-HxCDF	0.076	6.4E-05	9.8E+02	0.1
1,2,3,7,8,9-HxCDF	0.076	6.4E-05	9.8E+02	0.1
2,3,4,6,7,8-HxCDF	0.076	6.4E-05	9.8E+02	0.1
1,2,3,4,6,7,8-HpCDF	0.003	6.4E-04	2.5E+05	0.01
1,2,3,4,7,8,9-HpCDF	0.003	6.4E-04	2.5E+05	0.01
OCDF	0.003	6.4E-02	2.5E+07	0.0001

Model Parameters	Description	Value	Reference
CULf	Sediment bioaccumulation cleanup level for fish receptors (ng/kg)	See table above	DEQ (2007)
CTL	Critical tissue levels (mg/kg)	See table above	DEQ (2007); Steevens et al. (2005)
BSAF	Biota-sediment accumulation factor for organic COIs (kg sediment organic carbon / kg organism lipid)	See table above	DEQ (2007)
f(oc)	Fraction of total organic carbon in surface sediment (unitless)	0.029	RI/FS report Section 2
f(l)—whole	Fraction of organism lipid content of whole body wet weight (unitless)	0.05	DEQ (2007)

Table M-1-5
Carty Lake Fish CULs
Former PWT Site RI/FS

Model Parameters	Description	Value	Reference
SU	Site-use factor (unitless)	0.5	Based on salmonid life-history; Moore et al. (2010)
TEF	Toxic equivalency factor for fish	See table above	Van den Berg et al. (1998, 2006)

NOTES:

COI = chemical of interest.

CUL = cleanup level.

DEQ = Oregon Department of Environmental Quality.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

kg = kilogram(s).

kg oc/kg lipid = kilogram organic carbon per kilogram lipid.

mg/kg = milligrams per kilogram.

ng/kg = nanograms per kilogram.

OCDD = 1,2,3,4,6,7,8,9-octachloro dibenzo-p-dioxin.

OCDF = 1,2,3,4,6,7,8,9-octachloro dibenzofuran.

PeCDD = pentachloro dibenzo-p-dioxin.

PeCDF = pentachloro dibenzofuran.

TCDD = tetrachloro dibenzo-p-dioxin.

TCDF = tetrachloro dibenzofuran.

Table M-1-6
Lake River Bird CULs
Former PWT Site RI/FS

Analyte	BSAF (kg oc/kg lipid)	TRVb (mg/kg/day)	ATLb (mg/kg)	CULb (ng/kg)
Dioxins				
2,3,7,8-TCDD	2.268	7.0E-06	4.0E-05	4.5E+00
1,2,3,7,8-PeCDD	0.076	7.0E-06	4.0E-05	1.3E+02
1,2,3,4,7,8-HxCDD	0.076	1.4E-04	8.0E-04	2.7E+03
1,2,3,6,7,8-HxCDD	0.076	7.0E-04	4.0E-03	1.3E+04
1,2,3,7,8,9-HxCDD	0.076	7.0E-05	4.0E-04	1.3E+03
1,2,3,4,6,7,8-HpCDD	0.003	7.0E-03	4.0E-02	3.4E+06
OCDD	0.003	7.0E-02	4.0E-01	3.4E+07
Furans				
2,3,7,8-TCDF	0.270	7.0E-06	4.0E-05	3.8E+01
1,2,3,7,8-PeCDF	0.270	7.0E-05	4.0E-04	3.8E+02
2,3,4,7,8-PeCDF	2.268	7.0E-06	4.0E-05	4.5E+00
1,2,3,4,7,8-HxCDF	0.076	7.0E-05	4.0E-04	1.3E+03
1,2,3,6,7,8-HxCDF	0.076	7.0E-05	4.0E-04	1.3E+03
1,2,3,7,8,9-HxCDF	0.076	7.0E-05	4.0E-04	1.3E+03
2,3,4,6,7,8-HxCDF	0.076	7.0E-05	4.0E-04	1.3E+03
1,2,3,4,6,7,8-HpCDF	0.003	7.0E-04	4.0E-03	3.4E+05
1,2,3,4,7,8,9-HpCDF	0.003	7.0E-04	4.0E-03	3.4E+05
OCDF	0.003	7.0E-02	4.0E-01	3.4E+07

Model Parameters	Description	Value	Reference
CULb	Sediment bioaccumulation cleanup level for bird receptors (ng/kg)	See table above	DEQ (2007)
ATLb	Acceptable tissue levels in diet for wildlife receptors (mg/kg)	See table above	DEQ (2007), COE et al. (2009), Sample et al. (1996)
BSAF	Biota-sediment accumulation factor for organic COIs (kg sediment organic carbon / kg organism lipid)	See table above	DEQ (2007)
TRVb	Toxicity reference value for wildlife (mg/kg body weight/day)	See table above	DEQ (2007), USEPA (1995)

Table M-1-6
Lake River Bird CULs
Former PWT Site RI/FS

Model Parameters	Description	Value	Reference
IR	Daily Food Ingestion Rate (kg/d)- wet; based on Great Blue Heron to represent piscivorous birds	0.42	DEQ (2007)
BW	Body weight (kg)- based on Great Blue Heron to represent piscivorous birds	2.39	DEQ (2007)
f(oc)	Fraction of total organic carbon in surface sediment (unitless)	0.0128	RI/FS report Section 2
f(l)	Fraction of organism lipid content of whole body wet weight (unitless)	0.05	DEQ (2007)
SU	Site-use factor (unitless)	1	DEQ (2007)

NOTES:

COE = U.S. Army Corps of Engineers.

COI = chemical of interest.

CUL = cleanup level.

DEQ = Oregon Department of Environmental Quality.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

kg = kilogram(s).

kg/d = kilograms per day.

kg oc/kg lipid = kilogram organic carbon per kilogram lipid.

mg/kg = milligrams per kilogram.

mg/kg/day = milligrams per kilogram per day.

ng/kg = nanograms per kilogram.

OCDD = 1,2,3,4,6,7,8,9-octachloro dibenzo-p-dioxin.

OCDF = 1,2,3,4,6,7,8,9-octachloro dibenzofuran.

PeCDD = pentachloro dibenzo-p-dioxin.

PeCDF = pentachloro dibenzofuran.

TCDD = tetrachloro dibenzo-p-dioxin.

TCDF = tetrachloro dibenzofuran.

USEPA = U.S. Environmental Protection Agency.

Table M-1-7
Carty Lake Bird CULs
Former PWT Site RI/FS

Analyte	BSAF (kg oc/kg lipid)	TRVb (mg/kg/day)	ATLb (mg/kg)	CULb (ng/kg)
Dioxins				
2,3,7,8-TCDD	2.268	7.0E-06	4.0E-05	1.0E+01
1,2,3,7,8-PeCDD	0.076	7.0E-06	4.0E-05	3.0E+02
1,2,3,4,7,8-HxCDD	0.076	1.4E-04	8.0E-04	6.1E+03
1,2,3,6,7,8-HxCDD	0.076	7.0E-04	4.0E-03	3.0E+04
1,2,3,7,8,9-HxCDD	0.076	7.0E-05	4.0E-04	3.0E+03
1,2,3,4,6,7,8-HpCDD	0.003	7.0E-03	4.0E-02	7.7E+06
OCDD	0.003	7.0E-02	4.0E-01	7.7E+07
Furans				
2,3,7,8-TCDF	0.270	7.0E-06	4.0E-05	8.6E+01
1,2,3,7,8-PeCDF	0.270	7.0E-05	4.0E-04	8.6E+02
2,3,4,7,8-PeCDF	2.268	7.0E-06	4.0E-05	1.0E+01
1,2,3,4,7,8-HxCDF	0.076	7.0E-05	4.0E-04	3.0E+03
1,2,3,6,7,8-HxCDF	0.076	7.0E-05	4.0E-04	3.0E+03
1,2,3,7,8,9-HxCDF	0.076	7.0E-05	4.0E-04	3.0E+03
2,3,4,6,7,8-HxCDF	0.076	7.0E-05	4.0E-04	3.0E+03
1,2,3,4,6,7,8-HpCDF	0.003	7.0E-04	4.0E-03	7.7E+05
1,2,3,4,7,8,9-HpCDF	0.003	7.0E-04	4.0E-03	7.7E+05
OCDF	0.003	7.0E-02	4.0E-01	7.7E+07

Model Parameters	Description	Value	Reference
CULb	Sediment bioaccumulation cleanup level for bird receptors (ng/kg)	See table above	DEQ (2007)
ATLb	Acceptable tissue levels in diet for wildlife receptors (mg/kg)	See table above	DEQ (2007), COE et al. (2009), Sample et al. (1996)
BSAF	Biota-sediment accumulation factor for organic COIs (kg sediment organic carbon / kg organism lipid)	See table above	DEQ (2007)
TRVb	Toxicity reference value for wildlife (mg/kg body weight/day)	See table above	DEQ (2007), USEPA (1995)

Table M-1-7
Carty Lake Bird CULs
Former PWT Site RI/FS

Model Parameters	Description	Value	Reference
IR	Daily Food Ingestion Rate (kg/d)- wet; based on Great Blue Heron to represent piscivorous birds	0.42	DEQ (2007)
BW	Body weight (kg)- based on Great Blue Heron to represent piscivorous birds	2.39	DEQ (2007)
f(oc)	Fraction of total organic carbon in surface sediment (unitless)	0.029	Report Section 2
f(l)	Fraction of organism lipid content of whole body wet weight (unitless)	0.05	DEQ (2007)
SU	Site-use factor (unitless)	1	DEQ (2007)

NOTES:

COE = U.S. Army Corps of Engineers.

COI = chemical of interst.

DEQ = Oregon Department of Environmental Quality.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

kg = kilogram(s).

kg/d = kilograms per day.

kg oc/kg lipid = kilogram organic carbon per kilogram lipid.

mg/kg = milligrams per kilogram.

mg/kg/day = milligrams per kilogram per day.

ng/kg = nanograms per kilogram.

OCDD = 1,2,3,4,6,7,8,9-octachloro dibenzo-p-dioxin.

OCDF = 1,2,3,4,6,7,8,9-octachloro dibenzofuran.

PeCDD = pentachloro dibenzo-p-dioxin.

PeCDF = pentachloro dibenzofuran.

TCDD = tetrachloro dibenzo-p-dioxin.

TCDF = tetrachloro dibenzofuran.

USEPA = U.S. Environmental Protection Agency.

Table M-1-8
Lake River Mammal CULs
Former PWT Site RI/FS

Analyte	BSAF (kg oc/kg lipid)	ATLm (mg/kg)	CULm (ng/kg)
Dioxins			
2,3,7,8-TCDD	2.268	1.6E-05	1.8E+00
1,2,3,7,8-PeCDD	0.076	1.6E-05	5.4E+01
1,2,3,4,7,8-HxCDD	0.076	1.6E-04	5.4E+02
1,2,3,6,7,8-HxCDD	0.076	1.6E-04	5.4E+02
1,2,3,7,8,9-HxCDD	0.076	1.6E-04	5.4E+02
1,2,3,4,6,7,8-HpCDD	0.003	1.6E-03	1.4E+05
OCDD	0.003	5.4E-02	4.6E+06
Furans			
2,3,7,8-TCDF	0.270	1.6E-04	1.5E+02
1,2,3,7,8-PeCDF	0.270	5.4E-04	5.1E+02
2,3,4,7,8-PeCDF	2.268	5.4E-05	6.0E+00
1,2,3,4,7,8-HxCDF	0.076	1.6E-04	5.4E+02
1,2,3,6,7,8-HxCDF	0.076	1.6E-04	5.4E+02
1,2,3,7,8,9-HxCDF	0.076	1.6E-04	5.4E+02
2,3,4,6,7,8-HxCDF	0.076	1.6E-04	5.4E+02
1,2,3,4,6,7,8-HpCDF	0.003	1.6E-03	1.4E+05
1,2,3,4,7,8,9-HpCDF	0.003	1.6E-03	1.4E+05
OCDF	0.003	5.4E-02	4.6E+06

Model Parameters	Description	Value	Reference
CULm	Sediment bioaccumulation cleanup level for mammal receptors (ng/kg)	See table above	DEQ (2007)
ATLm	Acceptable tissue levels in diet for wildlife receptors (mg/kg)	See table above	DEQ (2007), COE et al. (2009), Sample et al. (1996)
BSAF	Biota-sediment accumulation factor for organic COIs (kg sediment organic carbon / kg organism lipid)	See table above	DEQ (2007)
TRVm	Toxicity reference value for wildlife (mg/kg body weight/day)	See table above	DEQ (2007), USEPA (1995)
IR	Daily Food Ingestion Rate (kg/d)- wet; based on mink to represent piscivorous mammals	0.137	DEQ (2007)

Table M-1-8
Lake River Mammal CULs
Former PWT Site RI/FS

Model Parameters	Description	Value	Reference
BW	Body weight (kg)- based on mink to represent piscivorous mammals	1	DEQ (2007)
f(oc)	Fraction of total organic carbon in surface sediment (unitless)	0.0128	Report Section 2
f(l)	Fraction of organism lipid content of whole body wet weight (unitless)	0.05	DEQ (2007)
SU	Site-use factor (unitless)	1	DEQ (2007)

NOTES:

COE = U.S. Army Corps of Engineers.
COI = chemical of interst.
CUL = cleanup level.
DEQ = Oregon Department of Environmental Quality.
HpCDD = heptachloro dibenzo-p-dioxin.
HpCDF = heptachloro dibenzofuran.
HxCDD = hexachloro dibenzo-p-dioxin.
HxCDF = hexachloro dibenzofuran.
kg = kilogram(s).
kg/d = kilograms per day.
kg oc/kg lipid = kilogram organic carbon per kilogram lipid.
mg/kg = milligrams per kilogram.
ng/kg = nanograms per kilogram.
OCDD = 1,2,3,4,6,7,8,9-octachloro dibenzo-p-dioxin.
OCDF = 1,2,3,4,6,7,8,9-octachloro dibenzofuran.
PeCDD = pentachloro dibenzo-p-dioxin.
PeCDF = pentachloro dibenzofuran.
TCDD = tetrachloro dibenzo-p-dioxin.
TCDF = tetrachloro dibenzofuran.
USEPA = U.S. Environmental Protection Agency.

Table M-1-9
Carty Lake Mammal CULs
Former PWT Site RI/FS

Analyte	BSAF (kg oc/kg lipid)	ATLm (mg/kg)	CULm (ng/kg)
Dioxins			
2,3,7,8-TCDD	2.268	1.6E-05	4.1E+00
1,2,3,7,8-PeCDD	0.076	1.6E-05	1.2E+02
1,2,3,4,7,8-HxCDD	0.076	1.6E-04	1.2E+03
1,2,3,6,7,8-HxCDD	0.076	1.6E-04	1.2E+03
1,2,3,7,8,9-HxCDD	0.076	1.6E-04	1.2E+03
1,2,3,4,6,7,8-HpCDD	0.003	1.6E-03	3.1E+05
OCDD	0.003	5.4E-02	1.0E+07
Furans			
2,3,7,8-TCDF	0.270	1.6E-04	3.4E+02
1,2,3,7,8-PeCDF	0.270	5.4E-04	1.1E+03
2,3,4,7,8-PeCDF	2.268	5.4E-05	1.4E+01
1,2,3,4,7,8-HxCDF	0.076	1.6E-04	1.2E+03
1,2,3,6,7,8-HxCDF	0.076	1.6E-04	1.2E+03
1,2,3,7,8,9-HxCDF	0.076	1.6E-04	1.2E+03
2,3,4,6,7,8-HxCDF	0.076	1.6E-04	1.2E+03
1,2,3,4,6,7,8-HpCDF	0.003	1.6E-03	3.1E+05
1,2,3,4,7,8,9-HpCDF	0.003	1.6E-03	3.1E+05
OCDF	0.003	5.4E-02	1.0E+07
Model Parameters	Description	Value	Reference
CULm	Sediment bioaccumulation cleanup level for mammal receptors (ng/kg)	See table above	DEQ (2007)
ATLm	Acceptable tissue levels in diet for wildlife receptors (mg/kg)	See table above	DEQ (2007), COE et al. (2009), Sample et al. (1996)
BSAF	Biota-sediment accumulation factor for organic COIs (kg sediment organic carbon / kg organism lipid)	See table above	DEQ (2007)
TRVm	Toxicity reference value for wildlife (mg/kg body weight/day)	See table above	DEQ (2007), USEPA (1995)

Table M-1-9
Carty Lake Mammal CULs
Former PWT Site RI/FS

Model Parameters	Description	Value	Reference
IR	Daily Food Ingestion Rate (kg/d)- wet; based on mink to represent piscivorous mammals	0.137	DEQ (2007)
BW	Body weight (kg)- based on mink to represent piscivorous mammals	1	DEQ (2007)
f(oc)	Fraction of total organic carbon in surface sediment (unitless)	0.029	Report Section 2
f(l)	Fraction of organism lipid content of whole body wet weight (unitless)	0.05	DEQ (2007)
SU	Site-use factor (unitless)	1	DEQ (2007)

NOTES:

COE = U.S. Army Corps of Engineers.

COI = chemical of interst.

CUL = cleanup level.

DEQ = Oregon Department of Environmental Quality.

HpCDD = heptachloro dibenzo-p-dioxin.

HpCDF = heptachloro dibenzofuran.

HxCDD = hexachloro dibenzo-p-dioxin.

HxCDF = hexachloro dibenzofuran.

kg = kilogram(s).

kg/d = kilogram per day.

kg oc/kg lipid = kilogram organic carbon per kilogram lipid.

mg/kg = milligrams per kilogram.

ng/kg = nanograms per kilogram.

OCDD = 1,2,3,4,6,7,8,9-octachloro dibenzo-p-dioxin.

OCDF = 1,2,3,4,6,7,8,9-octachloro dibenzofuran.

PeCDD = pentachloro dibenzo-p-dioxin.

PeCDF = pentachloro dibenzofuran.

TCDD = tetrachloro dibenzo-p-dioxin.

TCDF = tetrachloro dibenzofuran.

USEPA = U.S. Environmental Protection Agency.

APPENDIX M-2

EVALUATION OF PRACTICAL QUANTITATION LIMITS FOR DIOXIN ANALYSIS

MAUL
FOSTER
ALONGI

MEMORANDUM

To: Craig Rankine and Joyce Mercuri
Washington State Department of Ecology

Date: December 15, 2011

From: Madi Novak

Project: 9003.01.40

Madi Novak

RE: Evaluation of Practical Quantitation Limits for Dioxin Analysis
Port of Ridgefield Lake River Industrial Site
Agreed Order No. 01TCPSR-3119

On behalf of the Port of Ridgefield (Port), Maul Foster & Alongi, Inc. (MFA) has prepared this memorandum to provide the results of a review of practical quantitation limits (PQLs) that can be achieved by various laboratories in the analysis of polychlorinated dibenzo-*p*-dioxins and polychlorinated dibenzofurans (collectively herein referred to as dioxins). This evaluation is being conducted as part of ongoing remedial investigation and feasibility study activities being performed at the Lake River Industrial Site (LRIS) in Ridgefield, Washington, under an Agreed Order between the Port and the Washington State Department of Ecology (Ecology). Ecology has requested an evaluation of achievable PQLs as part of the dioxin cleanup level development process for Carty Lake and Lake River, adjacent to the Port's LRIS property.

MFA assembled PQL and quality control (i.e., method blank) information from six laboratories that specialize in dioxin analysis to evaluate the quality and usability of laboratory-reported PQLs. As with site concentrations, dioxin PQLs are expressed as toxicity equivalent quotients[1] (TEQs). A PQL TEQ of 5.2 nanograms per kilogram (ng/kg) is the lowest, most applicable limit for use as a cleanup level.

BACKGROUND

The PQL is the lowest concentration that can be reliably measured within specified limits of precision, accuracy, representativeness, completeness, and comparability during routine laboratory operating conditions (Washington Administrative Code [WAC] 173-340-200). While laboratories may report concentrations of congeners to a variety of possible limits (e.g., method detection limit or

---

[1] TEQs are shown to two significant figures.

400 East Mill Plain Blvd., Suite 400 | Vancouver, Washington 98660 | p. 360 694 2691 | f. 360 906 1958
www.maulfoster.com

estimated detection limits), the PQL is the lowest point at which the laboratory can report a definitive concentration (i.e., not qualified as estimated) of a compound. Ecology may consider using PQLs as cleanup levels where risk-based cleanup levels and background levels are below PQLs (WAC 173-340-700).

METHOD AND RESULTS

To evaluate the range of achievable PQLs, MFA contacted multiple laboratories and requested each laboratory's lowest achievable PQL (see Table 1 for a list of laboratories). Submittals from and communications with the laboratories are provided as an attachment. Table 2 summarizes PQLs for each of the 17 commonly analyzed dioxin congeners provided by each laboratory. Note that two laboratories reported multiple sets of PQLs. Columbia Analytical Services, Inc. (CAS) has two sets of PQLs, depending on the U.S. Environmental Protection Agency (USEPA) Method applied (i.e., Method 8290 versus 1613), and Cape Fear Analytical, LLC (Cape Fear) has three sets of PQLs that are described as follows: (1) standard PQLs, (2) one-half of their standard PQLs, and (3) PQLs requested by Ecology. Only the second and the third sets of PQLs from Cape Fear appear in Table 2.

TEQs for PQLs were calculated for each laboratory. The toxicity equivalency factor for each congener (as listed in Table 708-1 of WAC 173-340-900) was applied to the respective congener PQL provided by the laboratory. The resulting PQL-based toxicity equivalent concentration for each congener were then summed for a TEQ. TEQs are summarized in Table 2.

To further evaluate applicability of laboratory-reported PQLs, method blank results were reviewed. Method blanks are required by dioxin analytical methods (USEPA Methods 8290 and 1613) to demonstrate that all parts of the analytical equipment in contact with the sample and reagents are interference-free. Method blank analysis is considered "critical to the provision of meaningful sample results" (USEPA, 2007). Method blank results are evaluated during standard data quality assurance/quality control review as follows:

- Method blank results may not exceed the PQL except in the case of octachlorinated dibenzo-*p*-dioxin (OCDD)/octachlorinated dibenzofuran (OCDF) (for OCDD and OCDF the maximum allowable amount is less than three times the PQL). If method blank contamination is greater than the PQL (or greater than three times the PQL for OCDD/OCDF), then the detections must be qualified as estimates or non-detects, and the non-detected congener PQLs must be qualified as estimates. Further, professional judgment may be applied to qualify detects as unusable if method blank contaminant concentrations are similar to levels reported in samples (USEPA, 2005).

- If method blank contamination is less than the PQL, then the sample detections less than the PQL are qualified as non-detect and sample results higher than the PQL are qualified using best professional judgment. It is common practice to qualify sample results that are less than five times the method blank detection as non-detect; this practice has historically been applied to site data (Anchor and MFA, 2011).

Method blank data were evaluated relative to PQLs provided by Cape Fear to understand potential implications for data usability. While method blank results were requested from additional laboratories (CAS and AXYS Analytical Services, Ltd.), as of this writing only Cape Fear in North Carolina provided method blank results. Cape Fear-reported method blank detections are provided in the attachment; MFA averaged method blank detections and summarized the results in Table 3.

A method blank contamination-modified PQL TEQ was calculated. To start, the average method blank contamination was multiplied by five (MB*5) and compared with PQLs. If MB*5 was less than the PQL, then the PQL was applied in the TEQ calculation. However, to be consistent with data review practices, if MB*5 was greater than the PQL, the MB*5 result was applied in the TEQ calculation. Table 3 shows the method blank contamination-modified PQL TEQ for the Cape Fear Ecology-requested PQL of 5.2 ng/kg.

CONCLUSIONS AND RECOMMENDATION

Laboratory PQLs are a product of what can be technically achieved using the instruments available while following the prescribed method. While laboratories may be able to calibrate to very low levels, it is still necessary to evaluate the results in terms of precision, accuracy, representativeness, completeness, and comparability to achieve high-quality, usable results. The USEPA contract-required quantitation limit (i.e. PQL) for 2,3,7,8-TCDD TEQ is 11 parts per trillion (ppt), which is the same PQL achieved by three of the seven laboratories surveyed (TestAmerica, Analytical Resources, Incorporated, and Pace Analytical Services, Inc.). Cape Fear reported PQL TEQs of 5.7 and 4.3 ppt, one-half the typical PQL and an Ecology-requested PQL, respectively. After evaluating data usability given average method blank contamination levels, the 4.3 ppt PQL TEQ was raised to a 5.2 ppt PQL TEQ. Two laboratories, AXYS and CAS, provided PQL TEQs at the lowest end of the range at 2.3 ppt. Unfortunately, neither laboratory provided method blank contamination data. However, given the method blank contamination observed in dioxin analysis in site samples and also the method blank contamination reported by Cape Fear, it is considered likely that laboratories reporting to 2.3 ppt PQL TEQ would be affected by method blank contamination at these extremely low levels. Therefore, MFA recommends use of the lowest PQL TEQ usable without qualifiers: 5.2 ng/kg.

Attachments: Tables 1 through 3
Laboratory PQL Information (Located on CD)

REFERENCES

Anchor and MFA. 2011. Memorandum (re: sediment remedial investigation, Lake River industrial site). Anchor QEA, Seattle, Washington, and Maul Foster & Alongi, Vancouver, Washington. February.

USEPA. 2005. National functional guidelines for chlorinated dibenzo-p-dioxins (CDDs) and chlorinated dibenzofurans (CDFs) data review. EPA-540-R-05-001. U.S. Environmental Protection Agency, Analytical Services Branch. September.

USEPA. 2007. Test methods for evaluating solid waste, physical/chemical methods (SW-846). Method 8290A, polychlorinated dibenzo-*p*-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) by high-resolution gas chromatography/high-resolution mass spectrometry (HRGC/HRMS). Revision 1. U.S. Environmental Protection Agency. February.

TABLES

Table 1
Laboratories Contacted

Laboratory	Location	Contact
TestAmerica	West Sacramento, CA	Nilo Ligi
Analytical Resources, Incorporated	Tukwila, WA	Cheronne Oreiro
Pace Analytical Services, Inc.	Minneapolis, MN	Scott Unze
Columbia Analytical Services, Inc.	Houston, TX	Michael Cosson
Cape Fear Analytical, LLC	Wilmington, NC	Mike Larkins
AXYS Analytical Services, Ltd.	Sidney, BC	Devin Mitchell

Table 2
Practical Quantitation Limits in Solids (pg/g)

Analyte	TestAmerica[a]	Analytical Resources, Incorporated	Pace Analytical Services, Inc.	Columbia Analytical Services, Inc.[a]	Columbia Analytical Services, Inc.[b]	Cape Fear Analytical, LLC	Cape Fear Analytical, LLC[c]	AXYS Analytical Services, Ltd.
2,3,7,8-TCDD	1	1	1	0.2	1	0.5	1	0.2
1,2,3,7,8-PeCDD	5	5	5	1	2.5	2.5	1	1
1,2,3,4,7,8-HxCDD	5	5	5	1	2.5	2.5	2.5	1
1,2,3,6,7,8-HxCDD	5	5	5	1	2.5	2.5	2.5	1
1,2,3,7,8,9-HxCDD	5	5	5	1	2.5	2.5	2.5	1
1,2,3,4,6,7,8-HpCDD	5	5	5	1	2.5	2.5	2.5	1
OCDD	10	10	10	2	5	5	5	2
2,3,7,8-TCDF	1	1	1	0.2	1	0.5	1	0.2
1,2,3,7,8-PeCDF	5	5	5	1	2.5	2.5	2.5	1
2,3,4,7,8-PeCDF	5	5	5	1	2.5	2.5	1	1
1,2,3,4,7,8-HxCDF	5	5	5	1	2.5	2.5	2.5	1
1,2,3,6,7,8-HxCDF	5	5	5	1	2.5	2.5	2.5	1
2,3,4,6,7,8-HxCDF	5	5	5	1	2.5	2.5	2.5	1
1,2,3,7,8,9-HxCDF	5	5	5	1	2.5	2.5	2.5	1
1,2,3,4,6,7,8-HpCDF	5	5	5	1	2.5	2.5	2.5	1
1,2,3,4,7,8,9-HpCDF	5	5	5	1	2.5	2.5	2.5	1
OCDF	10	10	10	2	5	5	5	2
2,3,7,8-TCDD TEQ	**11**	**11**	**11**	**2.3**	**6.3**	**5.7**	**4.3**	**2.3**

NOTES:

PQLs are for both methods 1613 and 8290 unless otherwise noted.

pg/g = picograms per gram.

PQL = practical quantitation limit.

TEQ = toxicity equivalent quotient.

USEPA = U.S. Environmental Protection Agency.

[a] USEPA Method 1613.

[b] USEPA Method 8290.

[c] Washington State Department of Ecology-requested PQLs.

Table 3
Cape Fear Analytical, Inc. Practical Quantitation Limits and Method Blank Detections (pg/g)

Analyte	Solids PQL	Solids—Ecology-Requested PQL	Average Method Blank Detections	Average Method Blank Detections *5	Ecology-Requested PQL Modified for Method Blank Qualification
2,3,7,8-TCDD	0.5	1	0.147	0.735	1
1,2,3,7,8-PeCDD	2.5	1	0.345	1.73	1.7
1,2,3,4,7,8-HxCDD	2.5	2.5	0.376	1.88	2.5
1,2,3,6,7,8-HxCDD	2.5	2.5	0.366	1.83	2.5
1,2,3,7,8,9-HxCDD	2.5	2.5	0.38	1.9	2.5
1,2,3,4,6,7,8-HpCDD	2.5	2.5	0.417	2.09	2.5
OCDD	5	5	1.097	5.49	5
2,3,7,8-TCDF	0.5	1	0.213	1.07	1
1,2,3,7,8-PeCDF	2.5	2.5	0.352	1.76	2.5
2,3,4,7,8-PeCDF	2.5	1	0.353	1.77	1.7
1,2,3,4,7,8-HxCDF	2.5	2.5	0.36	1.8	2.5
1,2,3,6,7,8-HxCDF	2.5	2.5	0.354	1.77	2.5
2,3,4,6,7,8-HxCDF	2.5	2.5	0.378	1.89	2.5
1,2,3,7,8,9-HxCDF	2.5	2.5	0.361	1.81	2.5
1,2,3,4,6,7,8-HpCDF	2.5	2.5	0.358	1.79	2.5
1,2,3,4,7,8,9-HpCDF	2.5	2.5	0.37	1.85	2.5
OCDF	5	5	0.783	3.92	5
2,3,7,8-TCDD TEQ	**5.7**	**4.3**	**NA**	**NA**	**5.2**

NOTES:

Ecology = Washington State Department of Ecology.

NA = not applicable.

pg/g = picograms per gram.

PQL = practical quantitation limit.

TEQ = toxicity equivalent quotient.

LABORATORY PQL INFORMATION (Located on CD)

APPENDIX N

CAMU ELIGIBILITY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

June 8, 2011

Ms. Laurie Olin
Director of Operations
Port of Ridgefield
P.O. Box 55
111 West Division
Ridgefield, WA 98642

RE: CAMU-eligible soils at the Pacific Wood Treating/Port of Ridgefield Site
Facility Site ID 1019

Dear Ms. Olin:

This letter documents the Department of Ecology's (Ecology's) determination that contaminated soils from Pacific Wood Treating Site are Corrective Action Management Unit (CAMU)-eligible waste under the Dangerous Waste Regulations (Chapter 173-303 WAC). These soils may be disposed off-site at a designated hazardous waste landfill according to WAC 173-303-646920.

In a March 16 e-mail to Jennifer King, Ecology stated that adequate information had been submitted by Maul Foster & Alongi, Inc, the Port of Ridgefield's consultant, for Ecology to tentatively approve placement of soils from the Pacific Wood Treating Site in an off-site dangerous waste landfill as CAMU-eligible waste.

The Dangerous Waste Regulations require Ecology to determine principal hazardous constituents (PHCs) in the soils and proposed treatment levels for each PHC. For the Pacific Wood Treating Site these are found in Appendix A (Corrective Action Management Unit Documentation) in *Cells 1 and 2 Interim Action Work Plan, Former Pacific Wood Treating Corporation*, dated April 13, specifically in the table entitled "Table Proposed Treatment Levels for CAMU Disposal, Port of Ridgefield - Lake River Industrial Site, Ridgefield, Washington."

The Dangerous Waste Regulations require Ecology to provide public notice and a reasonable opportunity for public comment before approving placement of CAMU-eligible waste in an off-site landfill. The recent public comment period (April 25 to May 25, 2011) on the interim action work plan included information and a request to comment about the off-site disposal of site soils as CAMU-eligible waste. No comments were received specific to the CAMU-eligible waste proposal.

The federal regulations (40 CFR 264.555) outline the remaining requirements for approving placement of CAMU-eligible waste in an off-site landfill. Part 264.555(e) outlines the necessary procedures for public comment and regulatory approval at the landfill before CAMU-eligible waste may be placed in the off-site landfill. Ecology understands that soils from the Pacific Wood Treating Site will be sent to the Chemical Waste Management (CWM) Subtitle C Facility in Arlington, Oregon, and that this facility is permitted to accept CAMU-eligible waste. For each cleanup generating a CAMU-eligible waste, CWM must request an additional permit modification from the Oregon Department of Environmental Quality (DEQ), including the source of the CAMU waste, its PHCs, and the applicable treatment requirements. Public notice by CWM is also required (40 CFR § 264.555(d)-(e)). The DEQ may object to the off-site placement of CAMU-eligible waste within 30 days of CWM's notification (40 CFR §264.555(e)(3)). CAMU-eligible wastes may not be placed in the landfill until DEQ has notified CWM that DEQ does not object to its placement.

WAC 173-303-646910(6) requires generators of CAMU-eligible wastes sent to an off-site dangerous waste landfill to comply with the reporting, tracking, and recordkeeping requirements of 40 CFR 268.7(a)(4).

If you have any questions about this letter, please contact me at 360-407-6359.

Sincerely,

Kaia Petersen

Kaia Petersen
Licensed Hydrogeologist
Department of Ecology
Hazardous Waste and Toxics Reduction
Southwest Regional Office
kaia.petersen@ecy.wa.gov

cc: Craig Rankine, Department of Ecology, craig.rankine@ecy.wa.gov
Jennifer King, Maul Foster & Alongi, Inc., jking@maulfoster.com
Rich Duval, Oregon Department of Environmental Quality, duval.rich@deq.state.or.us

MAUL
FOSTER
ALONGI

MEMORANDUM

To: Kaia Petersen, Washington State Department of Ecology

Date: April 13, 2011

From: Jennifer King

Project: 9003.01.47

RE: Port of Ridgefield – Site Information

The Port of Ridgefield (Port) is requesting that the Washington State Department of Ecology consider waste at the Lake River Industrial Site (LRIS) as CAMU-eligible. The Port is preparing to conduct an interim action in Cells 1 and 2 of the LRIS during the summers of 2011 and 2012.

Per Washington Administrative Code (WAC) 173-303-64650(3)(a), "CAMU-eligible wastes" are defined as "all solid and dangerous wastes, and all media (including ground water, surface water, soils, and sediments) and debris, that are managed for implementing cleanup." Under WAC 173-303-646920, the Department of Ecology (Ecology) may approve the disposal of CAMU-eligible waste in a Resource Conservation and Recovery Act (RCRA) Subtitle C landfill located outside of the State of Washington, without the soils meeting the land disposal restrictions (LDRs) of 40 CFR 268. The following site information is provided to inform the process of making the CAMU-eligible determination.

SITE HISTORY

The physical address of the LRIS is 111 West Division Street, Ridgefield, Washington. It is located in section 24, township 4 north, range 1 west, Willamette Meridian. The LRIS is the former location of the Pacific Wood Treating Co. (PWT) facility. The Port owns the property, which PWT leased from approximately 1964 to 1993. PWT's former operations involved pressure-treating wood products with oil-based treatment solutions containing creosote, pentachlorophenol (PCP), and a water-based mixture of copper, chromium, and arsenic and copper, chromium, and zinc. Figure 1 shows the historical and current site features related to PWT's operations.

Impacts to the site occurred through different mechanisms, such as spills, drippage, storage of treated lumber, and treatment of wastes. The impacts occurred throughout PWTs operation.

Investigations on the LRIS show that wood-treating solutions were released to the surface throughout most of the site and have impacted soil and groundwater. Impacted soil is believed to have been caused by the incidental drippage and associated activities from wood storage. Because the soil contains listed wood-preserving wastes from former PWT operations, the soils have to be

2001 NW 19th Avenue, Suite 200 | Portland, Oregon 97209 | p. 971 544 2139 | f. 971 544 2140
www.maulfoster.com

managed as dangerous waste. The following waste codes (WAC 173-303-9904) apply to soil that will be removed from LRIS:

- Listed Waste code F032—Preservative drippage in soil that contains chlorophenolic wastes (listed December 6, 1990; land disposal requirements in effect August 12, 1997)
- Listed Waste code F034—Preservative drippage in soil that contains creosote wastes (listed December 6, 1990; land disposal requirements in effect August 12, 1997)
- Listed Waste code F035—Preservative drippage in soil that contains arsenic and chromium wastes (listed December 6, 1990; land disposal requirements in effect August 12, 1997)

At this time the Port plans to excavate soil with waste codes F032, F034, and F035 from two locations, SS-14 and TP-03 (see Figure 2). Additional soil from the SER treatment area as identified on Figure 2 may be generated, which would carry the same F-listed waste codes.

Site impacts also occur around a former wastewater treatment feature, the "concrete pond" (see Figure 2). Impacts in the concrete pond area (including TP-13 location) are understood to be the result of treatment of wastewater from wood preserving processes. Because soils in the concrete pond area contain listed wood-preserving wastes from former PWT operations, the soils have to be managed as dangerous waste. The following waste code (WAC 173-303-9904) applies to soil that would be removed from the concrete pond area:

- Listed Waste code K001—Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol (listed May 19, 1980; land disposal requirements in effect August 8, 1988).

The attached Table includes the proposed levels where treatment is required prior to landfilling at a Subtitle C disposal facility as a CAMU-eligible waste. The principal hazardous constituents are based on chemicals that exceeded cleanup levels and regulated hazardous constituents listed under waste codes F032, F034, F035, and K001.

Attachment: Table
Figures 1 and 2

Table
Proposed Treatment Levels for CAMU Disposal
Port of Ridgefield - Lake River Industrial Site
Ridgefield, Washington

CAS #:	Principal Hazardous Constitutents (PHCs)	Waste Codes	Proposed Treatment Levels (mg/kg unless noted as mg/L TCLP)	Source of Proposed Treatment Level
83-32-9	Acenaphthene	F032, F034	2.10E+05	Soil, Method C, Non-carcinogen[1]
120-12-7	Anthracene	F032, F034	1.05E+06	Soil, Method C, Non-carcinogen
191-24-2	Benzo(g,h,i)perylene	--	1.80E+01	10 times UTS[2]
56-55-3	Benzo[a]anthracene	F032, F034	3.40E+01	10 times UTS
50-32-8	Benzo[a]pyrene	F032, F034	3.40E+01	10 times UTS
205-99-2	Benzo[b]fluoranthene	F032, F034	6.80E+01	10 times UTS
207-08-9	Benzo[k]fluoranthene	F032, F034	6.80E+01	10 times UTS
86-74-8	Carbazole	--	6.56E+03	Soil, Method C, Carcinogen
218-01-9	Chrysene	F032, F034	2.70E+02	DEQ Direct Contact Soil, occupational[3]
53-70-3	Dibenzo[a,h]anthracene	F032, F034	8.20E+01	10 times UTS
132-64-9	Dibenzofuran	--	7.00E+03	Soil, Method C, Non-carcinogen
105-67-9	Dimethylphenol;2,4-	F032	7.00E+04	Soil, Method C, Non-carcinogen
206-44-0	Fluoranthene	--	1.40E+05	Soil, Method C, Non-carcinogen
86-73-7	Fluorene	F032, F034	1.40E+05	Soil, Method C, Non-carcinogen
193-39-5	Indeno[1,2,3-cd]Pyrene	F032, F034	3.40E+01	10 times UTS
91-57-6	Methyl Naphthalene;2-	--	1.40E+04	Soil, Method C, Non-carcinogen
91-20-3	Naphthalene	F032, F034, K001	7.00E+04	Soil, Method C, Non-carcinogen
87-86-5	Pentachlorophenol	F032, K001	1.09E+03	Soil, Method C, Carcinogen
85-01-8	Phenanthrene	F032, F034, K001	5.60E+01	10 times UTS
108-95-2	Phenol	F032	2.10E+06	Soil, Method C, Non-carcinogen
129-00-0	Pyrene	F032, F034, K001	1.05E+05	Soil, Method C, Non-carcinogen
58-90-2	Tetrachlorophenol;2,3,4,6-	F032	1.05E+05	Soil, Method C, Non-carcinogen
88-06-2	Trichlorophenol;2,4,6-	F032	1.19E+04	Soil, Method C, Carcinogen
71-43-2	Benzene	--	2.39E+03	Soil, Method C, Carcinogen
100-41-4	Ethylbenzene	--	3.50E+05	Soil, Method C, Non-carcinogen

Table
Proposed Treatment Levels for CAMU Disposal
Port of Ridgefield - Lake River Industrial Site
Ridgefield, Washington

CAS #:	Principal Hazardous Constitutents (PHCs)	Waste Codes	Proposed Treatment Levels (mg/kg unless noted as mg/L TCLP)	Source of Proposed Treatment Level
98-82-8	Isopropylbenzene (Cumene)	--	3.50E+05	Soil, Method C, Non-carcinogen
75-09-2	Methylene Chloride	--	1.75E+04	Soil, Method C, Carcinogen
100-42-5	Styrene	--	3.60E+04	EPA Screening Level, Soil, Industrial[4]
79-34-5	Tetrachloroethane;1,1,2,2-	--	6.56E+02	Soil, Method C, Carcinogen
127-18-4	Tetrachloroethylene	--	2.43E+02	Soil, Method C, Carcinogen
108-88-3	Toluene	K001	2.80E+05	Soil, Method C, Non-carcinogen
95-63-6	Trimethylbenzene;1,2,4-	--	1.75E+05	Soil, Method C, Non-carcinogen
1330-20-7	Xylenes	K001	7.00E+05	Soil, Method C, Non-carcinogen
NA	Heptachlorodibenzofurans (Hpcdfs)	--	2.50E-02	10 times UTS
NA	Heptachlorodibenzo-P-Dioxin (Hpcdd)	--	2.50E-02	10 times UTS
NA	Hexachlorodibenzofurans (Hxcdfs)	F032	1.00E-02	10 times UTS
NA	Hexachlorodibenzo-P-Dioxins (Hxcdds)	F032	1.00E-02	10 times UTS
39001-02-0	Octachlorodibenzofuran (Ocdf)	--	5.00E-02	10 times UTS
3268-87-9	Octachlorodibenzo-P-Dioxin (Ocdd)	--	5.00E-02	10 times UTS
NA	Pentachlorodibenzofurans (Pecdfs)	F032	1.00E-02	10 times UTS
NA	Pentachlorodibenzo-P-Dioxins (Pecdds)	F032	1.00E-02	10 times UTS
NA	Tetrachlorodibenzo-Furans (Tcdf)	F032	1.00E-02	10 times UTS
NA	Tetrachlorodibenzo-P-Dioxins (Tcdd)	F032	1.00E-02	10 times UTS
NA	Tph, Diesel Range Organics	--	7.00E+04	DEQ Direct Contact Soil, occupational
NA	Tph, Gasoline Range Organics	--	2.20E+04	DEQ Direct Contact Soil, occupational
7440-38-2	Arsenic, Inorganic	F032, F034, F035	5.0 mg/L TCLP	Maximum TCLP Concentration[5]

Table
Proposed Treatment Levels for CAMU Disposal
Port of Ridgefield - Lake River Industrial Site
Ridgefield, Washington

CAS #:	Principal Hazardous Constitutents (PHCs)	Waste Codes	Proposed Treatment Levels (mg/kg unless noted as mg/L TCLP)	Source of Proposed Treatment Level
7440-43-9a	Cadmium In Soil	--	1.0 mg/L TCLP	Maximum TCLP Concentration
7440-47-3	Chromium (Total)	F032, F034, F035	5.0 mg/L TCLP	Maximum TCLP Concentration
7440-50-8	Copper	--	1.30E+05	Soil, Method C, Non-carcinogen
7439-92-1	Lead	K001	5.0 mg/L TCLP	Maximum TCLP Concentration

Notes:

[1] Soil, Method C, Non-carcinogen and Carcinogen levels are from Ecology's CLARC (Cleanup Levels and Risk Calculations) Database (https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx)

[2] 10 times UTS means ten times the Universal Treatment Standard for that constituent (40 CFR 268.48 Table UTS)

[3] DEQ Direct Contact Soil, occupational levels are from Oregon DEQ Risk-Based Concentrations (http://www.deq.state.or.us/lq/pubs/docs/RBDMTable.pdf)

[4] EPA Screening Level, Soil, Industrial (http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/pdf/indsoil_sl_table_run_NOVEMBER2010.pdf)

[5] Maximum concentration of contaminant for the Toxicity Charactistic (see WAC 173-303-090(8))

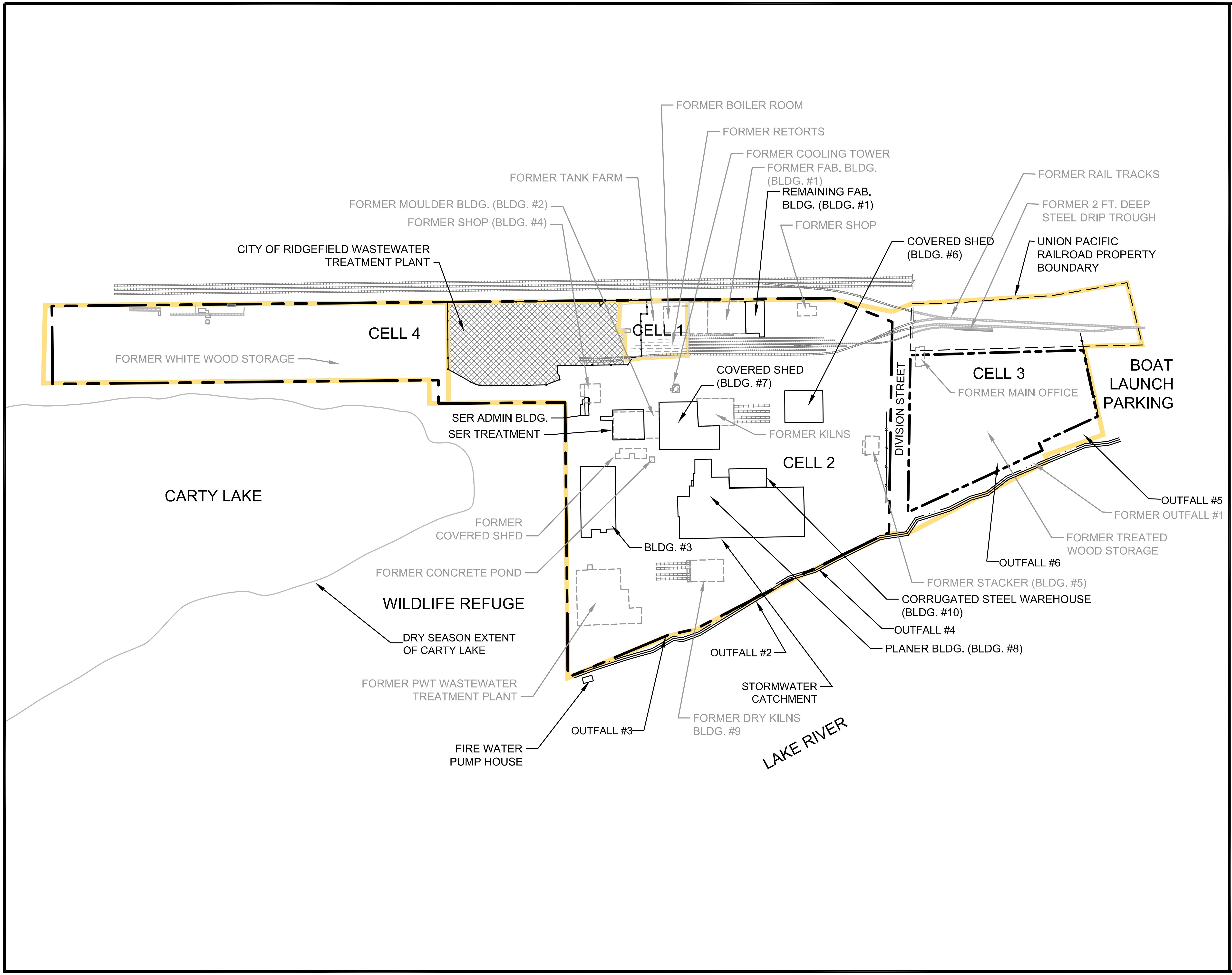


Figure 1
Site Features

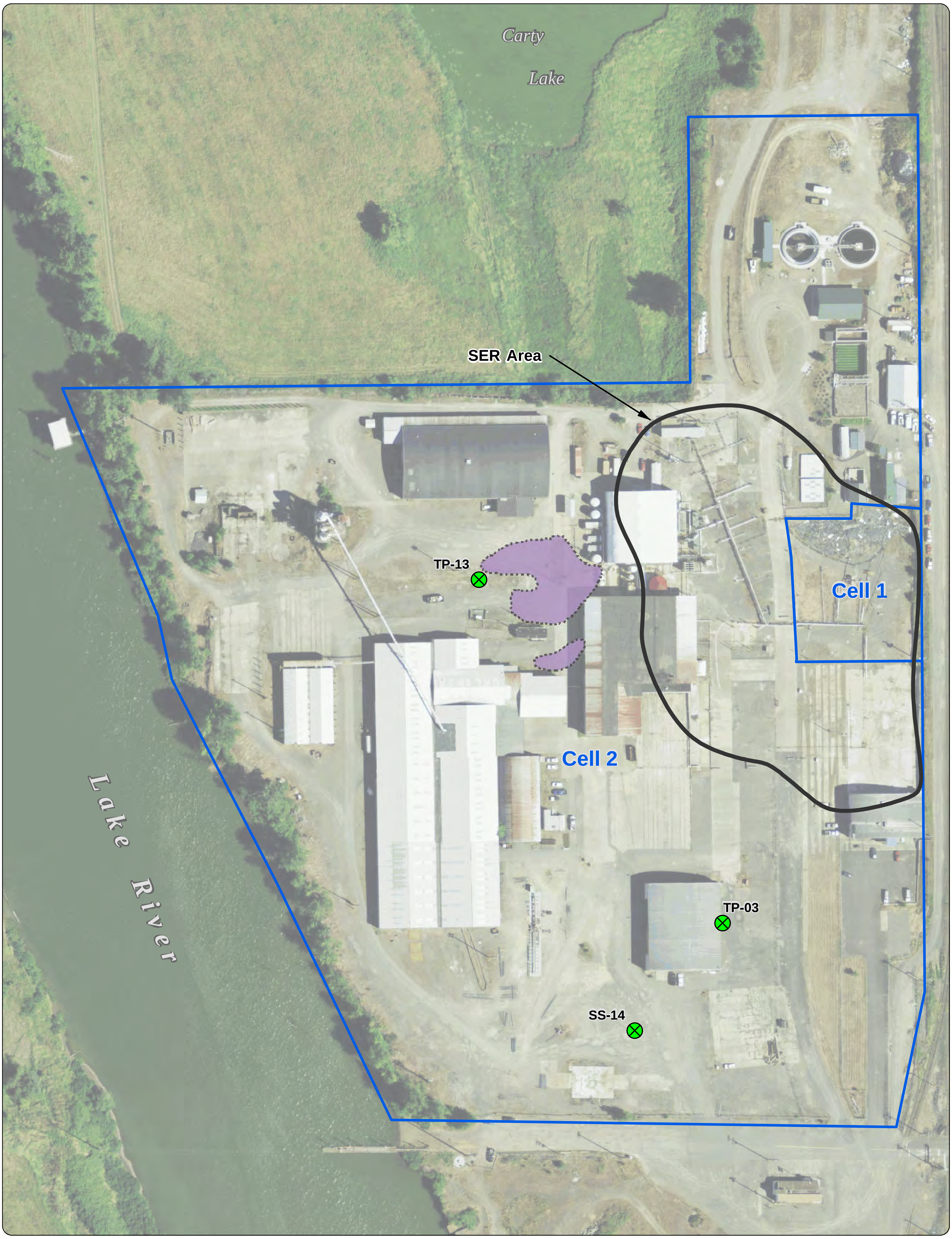
Port of Ridgefield
Ridgefield, Washington

LEGEND:

▨	CITY OF RIDGEFIELD WASTEWATER TREATMENT PLANT
— · —	PORT OF RIDGEFIELD PROPERTY BOUNDARY
— — —	UNION PACIFIC PROPERTY BOUNDARY
▬	CELL BOUNDARY
—	CURRENT FEATURES
┼┼┼	RAIL LINE
—×—×—	FENCE LINE
- - -	FORMER PWT FEATURES

MAUL FOSTER ALONGI

File: X:\9003.01 Port of Ridgefield\47\Fig2_Cells 1 & 2 Interim Action Excavation Locations.mxd



Source: Aerial photograph obtained from
Clark County GIS Department (August 2007)

Notes:
1. MTCA = Model Toxics Control Act
2. CUL = cleanup level
3. SER = Steam Enhanced Remediation

Legend

⊗	Soil to be excavated exceeding MTCA C CULs
▨	Concrete Pond Excavation
◯	SER treatment area: may be considered for soil removal at a later date
☐	Cell Boundaries

Figure 2
Cells 1 & 2 Interim Action Excavation Locations

Port of Ridgefield
Ridgefield, Washington

0 100 200
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Print Date: 04-12-2011
Approved By: J. King
Produced By: J. Schane
Project: 9003.01.47

APPENDIX O

TECHNOLOGY SCREENS

APPENDIX O TECHNOLOGY SCREENS

Table O-1
Summary of Remedial Technology Screening Process for Port-Owned Properties
Former PWT Site RI/FS

General Response Action	Remedial Technology	Process Options	Description	Retained for Alternatives	Screening Comments
No Action	None	Not Applicable	No Action	Yes	A no-action alternative was considered and dismissed as an option because of ecological exposure concerns.
Institutional Controls	Restrictions	Deed Notifications	Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Institutional controls are meant to supplement engineering controls.	Yes	Institutional controls, specifically deed restrictions, is retained for further evaluation as a remedial technology for the Port-owned Railroad Avenue property.
		Access/Fencing	Access restrictions such as fencing create a physical impedance in order to protect human receptors.	Yes	For the Port-owned Railroad Avenue property, access restrictions such as fencing and signage are retained as viable remedial technologies.
In Situ Containment	Capping	Clean Soil Cap	Capping is commonly used at contaminated sites because it is generally less expensive than active remediation technologies and can effectively manage the human and ecological risks associated with a remediation site. Caps can range from a one-layer system of vegetated soil to a complex, multi-layer system of soils, geosynthetics, and impervious surfaces. Capping does not lessen toxicity, mobility, or volume of hazardous wastes, but does mitigate migration and eliminate some exposure pathways.	Yes	For the Port-owned Railroad Avenue property, a cap alternative is easily implementable and cost effective, and is therefore retained for further evaluation.
In Situ Treatment	Biological	Natural Attenuation	Consideration of this option usually requires modeling and evaluation of contaminant degradation rates and pathways, as well as predicting contaminant concentration at downgradient receptor points, especially when the plume is still expanding/migrating. The primary objective of site modeling is to demonstrate that natural processes of contaminant degradation will reduce contaminant concentrations below regulatory standards or risk-based levels before potential exposure pathways are completed. In addition, long-term monitoring must be conducted throughout the process to confirm that degradation is proceeding at rates consistent with meeting cleanup objectives.	No	As dioxins do not readily degrade in the environment, requiring more than 50 years to reduce the highest concentrations to CULs in the area, the natural attenuation option is not retained.
		Slurry Bioremediation	Addition of nutrients and other amendments to enhance bioremediation, the process in which microorganisms degrade organic contaminants, converting them to innocuous end products.	No	This technology is not retained for further evaluation because of limited effectiveness and low implementability.
		Phytoremediation	Use of plants to remove, transfer, stabilize, and destroy contaminants in soil and sediments.	No	This technology is not retained for further evaluation because of limited effectiveness and low implementability.
		Aerobic Biodegradation/ Bioventing	Bioremediation is a process in which microorganisms degrade organic contaminants, converting them to innocuous end products. Nutrients, oxygen, or other amendments may be used to enhance bioremediation and contaminant desorption from subsurface materials. Aerobic bioremediation requires an oxygen source. Bioventing stimulates the natural in situ biodegradation of any aerobically degradable compounds in soil by providing oxygen to existing soil microorganisms. Oxygen is most commonly supplied through direct air injection into residual contamination in soil.	No	This technology is not retained for further evaluation because of limited effectiveness (especially related to dioxins) as well as implementability issues.
		Anaerobic Biodegradation	Bioremediation conducted in the absence of oxygen.	No	This technology is not retained for further evaluation because of limited effectiveness (especially related to dioxins) as well as implementability issues.

Table O-1
Summary of Remedial Technology Screening Process for Port-Owned Properties
Former PWT Site RI/FS

General Response Action	Remedial Technology	Process Options	Description	Retained for Alternatives	Screening Comments
In Situ Treatment, cont.	Chemical	Chemical Oxidation	Application of chemical oxidants to contaminated soil to convert hazardous contaminants to nonhazardous or less toxic compounds that are more stable, less mobile, and/or inert. Chemical oxidation typically involves reduction/oxidation (redox) reactions. The oxidizing agents most commonly used are ozone, hydrogen peroxide (H2O2), hypochlorites, chlorine, and chlorine dioxide.	No	This technology is not retained for further evaluation because of limited effectiveness as well as low implementability. Oxidation would not be effective for reducing total dioxin concentrations. Implementing this cleanup action alternative component would pose many logistical issues.
	Physical—Extractive Processes	Soil Flushing	In situ flushing is defined as the injection or infiltration of an aqueous solution into a zone of contaminated soil/groundwater, followed by downgradient extraction of groundwater and elutriate (flushing solution mixed with the contaminants) and aboveground treatment and discharge or reinjection.	No	Screened out because of limited effectiveness and implementability issues. The technology mobilizes contaminants from the soils and should be used only where flushed contaminants and flushing fluid can be contained and recaptured. The potential exists for washing the contaminant beyond the capture zone. Costs associated with treatment of the recaptured fluids are high.
		Vapor Extraction	Soil vapor extraction (SVE) is an in situ unsaturated (vadose) zone soil remediation technology in which a vacuum is applied to the soil to induce the controlled flow of air and remove volatile and some semivolatile contaminants from the soil. The gas leaving the soil may be treated to recover or destroy the contaminants, depending on local and state air discharge regulations.	No	This technology is not effective for the remediation of dioxins and therefore is not retained for further consideration.
		Thermal Extraction	Thermally enhanced SVE is a full-scale technology that uses electrical resistance/electromagnetic/fiber optic/radio frequency heating or hot-air/steam injection to increase the volatilization rate of semivolatiles and facilitate extraction.	No	This technology is not effective for the remediation of dioxins and therefore is not retained for further consideration.
	Enhancement	Fracturing	Fracturing is an enhancement technology designed to increase the efficiency of other in situ technologies in difficult soil conditions. The fracturing extends and enlarges existing fissures and introduces new fractures, primarily in the horizontal direction. After fracturing has been completed, the formation is subjected to vapor extraction, either by applying a vacuum to all wells or by extracting from selected wells, while other wells are capped or used for passive air inlet or forced air injection.	No	None of the retained technologies will benefit from the fracturing enhancement, and therefore fracturing is not retained for further consideration.
	Physical—Immobilization	Solidification/Stabilization	The addition of reagents that immobilize and/or bind contaminants to the sediment in a solid matrix or chemically stable form.	No	This technology is not retained for further evaluation because of limited effectiveness, constraints on future use, and low implementability. The technology is effective for inorganics at a limited depth. Because residential properties are impacted, the technology is not highly implementable.
		Vitrification	Use of strong electrical current to heat sediment to temperatures above 2400ºF to fuse it into a glassy solid.	No	This technology is not retained for further evaluation because of limited effectiveness and low implementability.
		Electrokinetic Separation	Application of a low-intensity direct current through the soil between ceramic electrodes divided into a cathode array and an anode array mobilizing charged species. Two primary mechanisms transport contaminants through the soil toward one or the other electrode: electromigration and electro-osmosis.	No	This technology is effective only on polar contaminants and fine-grained soils, and is not retained for further evaluation because of limited effectiveness for the IHSs present in the soil and because of many implementability issues. Additionally, there have been few, if any, commercial applications of electrokinetic remediation in the United States.

Table O-1
Summary of Remedial Technology Screening Process for Port-Owned Properties
Former PWT Site RI/FS

General Response Action	Remedial Technology	Process Options	Description	Retained for Alternatives	Screening Comments
In Situ Treatment, cont.	Physical—Immobilization, cont.	Ground Freezing	The ground-freezing process converts in situ pore water to ice through the circulation of a chilled liquid via a system of small-diameter pipes placed in drilled holes. The ice acts to fuse the soil or rock particles together, creating a frozen mass of improved compressive strength and impermeability. Brine is the typical cooling agent, although liquid nitrogen can be used in emergency situations or where the freeze is required to be maintained only for a few days.	No	This technology is not retained for further evaluation because of limited effectiveness and serious implementability issues.
Ex Situ Treatment	Containment	Excavation and Off-Site Disposal	Contaminated material is removed and transported to permitted off-site treatment and/or disposal facilities. Some pretreatment of the contaminated media usually is required in order to meet land disposal restrictions.	Yes	Easily implementable, cost effective, retained for further evaluation.
	Biological	Biopiles, Composting, Land Farming, Slurry Phase	Biopile treatment is a full-scale technology in which excavated soils are mixed with soil amendments and placed on a treatment area that includes leachate collection systems and some form of aeration. It is used to reduce concentrations of petroleum constituents in excavated soils through the use of biodegradation. Moisture, heat, nutrients, oxygen, and pH can be controlled to enhance biodegradation.	No	This technology is not retained for further evaluation because it is not effective for the remediation of dioxins. It also poses logistical implementability issues.
	Chemical	Extraction	Chemical extraction does not destroy wastes but is a means of separating hazardous contaminants from soils, sludges, and sediments, thereby reducing the volume of the hazardous waste that must be treated. The technology uses an extracting chemical and differs from soil washing, which generally uses water or water with wash-improving additives. Commercial-scale units are in operation. They vary in regard to the chemical employed, type of equipment used, and mode of operation.	No	These technologies are not retained for further evaluation because the contamination levels in the soil and sediment associated with these projects do not require treatment prior to disposal.
		Reduction/Oxidation	Reduction/oxidation (redox) reactions chemically convert hazardous contaminants to nonhazardous or less toxic compounds that are more stable, less mobile, and/or inert. Redox reactions involve the transfer of electrons from one compound to another. Specifically, one reactant is oxidized (loses electrons) and one is reduced (gains electrons). The oxidizing agents most commonly used for treatment of hazardous contaminants are ozone, hydrogen peroxide, hypochlorites, chlorine, and chlorine dioxide. Chemical redox is a short- to medium-term technology.	No	
		Soil Washing	Ex situ soil separation processes (often referred to as "soil washing") are based mostly on mineral processing techniques. Soil washing is a water-based process for scrubbing soils ex situ to remove contaminants. The process removes contaminants from soils in one of the following two ways: by dissolving or suspending them in the wash solution (which can be sustained by chemical manipulation of pH for a period of time); or by conc+D26entrating them into a smaller volume of soil through particle size separation, gravity separation, and attrition scrubbing.	No	

General Response Action	Remedial Technology	Process Options	Description	Retained for Alternatives	Screening Comments
Ex Situ Treatment, cont.	Chemical, cont.	Dehalogenation	Contaminated soil is screened, processed with a crusher and pug mill, and mixed with reagents. The mixture is heated in a reactor. The dehalogenation process is achieved by either the replacement of the halogen molecules or the decomposition and partial volatilization of the contaminants.	No	These technologies are not retained for further evaluation because the contamination levels in the soil and sediment associated with these projects do not require treatment prior to disposal.
	Physical	Separation/Screening	The separation processes are used for removing contaminated concentrates from soils, to leave relatively uncontaminated fractions that can then be regarded as treated soil. Ex situ separation can be performed by many processes. Gravity separation and sieving/physical separation are two well-developed processes that have long been primary methods for treating municipal wastewaters. Magnetic separation, on the other hand, is a much newer separation process that is still being tested.	No	
		Solidification/Stabilization	Ex situ S/S contaminants are physically bound or enclosed within a stabilized mass (solidification), or chemical reactions are induced between the stabilizing agent and contaminants to reduce their mobility (stabilization). Ex situ S/S, however, typically requires disposal of the resultant materials.	No	
		Thermal Treatment	The process involves raising the temperature of the contaminated equipment or material to 260°C (500°F) for a specified period of time. The gas effluent from the material is treated in an afterburner system to destroy all volatilized contaminants. The method eliminates a waste that currently is stockpiled and requires disposal as a hazardous material. This method will permit reuse or disposal of scrap as nonhazardous material.	No	

Table O-2
Summary of Remedial Technology Screening Process for Carty Lake and Lake River
Former PWT Site RI/FS

General Response Action	Remedial Technology	Process Options	Description	Retained for Alternatives	Screening Comments
No Action	None	Not Applicable	No Action	No	Does not meet cleanup standards for either site.
Institutional Controls	Governmental Controls	Waterway Use Restrictions or Regulated Navigation	Notice to marine vessels to prevent damage to caps; in situ treatment; EMNR, etc.	Yes	Institutional controls will be necessary for all remedial options and are therefore included in the Carty Lake and Lake River alternatives.
	Proprietary Controls	Land Use/Access Restrictions	Restrictions, such as deed restrictions, easements, and covenants, placed in property-related documents or physical implements such as fences or signs.	Yes	Institutional controls will be necessary for all remedial options and are therefore included in the Carty Lake and Lake River alternatives.
	Enforcement and Permit Tools	Permit Processes or Provisions of Administrative Orders or Consent Decrees	Legal implements intended to place restrictions on certain site activities.	Yes	Institutional controls will be necessary for all remedial options and are therefore included in the Carty Lake and Lake River alternatives.
	Informational Devices	Fish Consumption Advisories	Fish consumption advisories provide information to the public from state departments of health or other governmental entities on acceptable fish consumption rates and fish preparation techniques.	Yes	Institutional controls will be necessary for all remedial options and are therefore included in the Carty Lake and Lake River alternatives.
Natural Attenuation	Chemical and Biological Degradation	Dechlorination (aerobic and anaerobic), biodegradation	Includes chemical and/or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of contaminants in sediment.	No	Bioremediation, including biodegradation, is regarded as an attractive possibility for cleaning up dioxin-contaminated soil, but its real applicability and effectiveness are unknown. The following technical obstacles continue to limit the application of bioremediation: 1) only very specialized biological systems can be effective against the high toxicity, low volubility, and high absorptivity of dioxin; 2) a very stringent cleanup standard must be met; and 3) it may be difficult to find a microorganism that can effectively deactivate dioxins under the different conditions present at existing dioxin-contaminated sites.
	Physical Burial Process	Sedimentation	A physical process that, under favorable conditions, acts without human intervention to reduce the mobility and/or concentration of contaminants in sediment.	Yes	This technology is retained for further consideration for both Carty Lake and Lake River.
Enhanced Natural Recovery	Enhanced Burial/Dilution	Thin-Layer Cap	Enhancement of natural attenuation consisting of a thin-layer cap (i.e., 6 inches to 1 foot of sand) that provides a surface layer of cleaner sediment accelerating physical isolation that occurs from the natural sedimentation process.	Yes	An ENR cap is a cost-effective, easily implemented, and low-impact technology. This technology is retained for further consideration for both Carty Lake and Lake River.
In Situ Containment	Capping	Sand Cap	Physical isolation of contaminants with sand cover. Capping does not lessen toxicity or volume of hazardous wastes nor does it completely eradicate mobility, but it does mitigate migration and eliminate some exposure pathways.	Yes	Capping is an effective and easily implemented technology. The fluvial environment associated with Carty Lake would be conducive to the longevity of a cap. However, in the case of Lake River, the sediment cap would be vulnerable to river velocities, tidal fluctuations, wave energy, propeller wash, and other damaging environmental effects. The cap also limits future use, navigability, and access to shore.
		Armored Cap	Physical isolation of contaminants with sand cover and an additional armor layer to safeguard the integrity of the cap.	Yes	Adding armor protects the isolation layer of the cap but further limits navigability and access to shore by increasing the cap section, decreasing the depth of water. In addition, environmental impacts on features such as habitat must be considered. This technology is retained for further consideration for Lake River.

Table O-2
Summary of Remedial Technology Screening Process for Carty Lake and Lake River
Former PWT Site RI/FS

General Response Action	Remedial Technology	Process Options	Description	Retained for Alternatives	Screening Comments
In Situ Containment, cont.	Capping, cont.	Composite Cap—Geosynthetic Fabrics and Membranes	Geomembranes provide multiple functions, including providing a bioturbation barrier, stabilizing the cap, reducing contaminant flux, preventing mixing of cap materials with underlying sediments, promoting uniform consolidation, and reducing erosion of the capping materials.	No	Geomembranes (e.g., HDPE) have constructability issues as well as questions regarding their long-term integrity. Impermeable layers have been known to trap gas and lift off of the sediment. Geosynthetics (e.g., GCL and RCM) are widely available and easily implemented; however, the cost of these components can be high and the application limits future use, development, navigability, and access to shore. The requirements for future navigation channel dredging by the Corps of Engineers removes the feasibility of using geosynthetics and geomembranes in the alternatives.
		Reactive Cap	Placement of active capping layers such as activated carbon or organoclay to reduce contaminant flux through capping materials.	No	Reactive caps are easily implemented and limit loss of water depth by reducing the cross section because of the multiple layers associated with traditional armored caps; however, this technology places the same constraints as the above option on future navigation dredging as well as on future development.
In Situ Treatment	Biological	Slurry Bioremediation	Addition of nutrients and other amendments to enhance bioremediation, the process in which microorganisms degrade organic contaminants, converting them to innocuous end products.	No	This technology is not retained for further evaluation because of limited effectiveness and low implementability.
		Phytoremediation	Use of plants to remove, transfer, stabilize, and destroy contaminants in soil and sediments.	No	This technology is not retained for further evaluation because of limited effectiveness and low implementability.
		Aerobic Biodegradation	Bioremediation is a process in which microorganisms degrade organic contaminants, converting them to innocuous end products. Nutrients, oxygen, or other amendments may be used to enhance bioremediation and contaminant desorption from subsurface materials. Aerobic bioremediation requires an oxygen source.	No	This technology is not retained for further evaluation because of limited effectiveness (especially related to dioxins) as well as implementability issues. Enhanced bioremediation of sediments can be impeded by the environmental constraints found underwater such as low temperature, oxygen deficiency (if an aerobic condition is needed), and varying organic and nutrient concentrations.
		Anaerobic Biodegradation	Bioremediation is a process in which microorganisms degrade organic contaminants, converting them to innocuous end products. Nutrients, oxygen, or other amendments may be used to enhance bioremediation and contaminant desorption from subsurface materials. Anaerobic processes take place in the absence of oxygen.	No	This technology is not retained for further evaluation because of limited effectiveness (especially related to dioxins) as well as implementability issues. Enhanced bioremediation of sediments can be impeded by the environmental constraints found underwater such as low temperature, oxygen deficiency (if an aerobic condition is needed), and varying organic and nutrient concentrations.
	Chemical	Chemical Slurry Oxidation	Application of chemical oxidants to contaminated sediments to convert hazardous contaminants to nonhazardous or less toxic compounds that are more stable, less mobile, and/or inert. Chemical oxidation typically involves reduction/oxidation (redox) reactions. The oxidizing agents most commonly used are ozone, hydrogen peroxide (H_2O_2), hypochlorites, chlorine, and chlorine dioxide.	No	This technology is not retained for further evaluation because of limited effectiveness as well as low implementability. Chemical oxidation has limited demonstrated effectiveness for PCP. Oxidation would not be effective for reducing total dioxin concentrations. Chemical oxidation is not proven to be effective for treating all PAHs. Implementing this cleanup action alternative component would pose many implementability issues.

General Response Action	Remedial Technology	Process Options	Description	Retained for Alternatives	Screening Comments
In Situ Treatment, cont.	Physical—Immobilization	Solidification/Stabilization	The addition of reagents that immobilize and/or bind contaminants to the sediment in a solid matrix or chemically stable form.	No	This technology is not retained for further evaluation because of limited effectiveness, constraints on future use, and low implementability. The technology is effective for inorganics at a limited depth. The technology is not effective for PAHs and has limited effectiveness for PCP.
		Vitrification	Use of strong electrical current to heat sediment to temperatures above 2400ºF to fuse it into a glassy solid.	No	This technology is not retained for further evaluation because of limited effectiveness and low implementability.
		Electrokinetic Separation	Application of a low-intensity direct current through the soil between ceramic electrodes divided into a cathode array and an anode array mobilizing charged species. Two primary mechanisms transport contaminants through the soil toward one or the other electrode: electromigration and electro-osmosis.	No	This technology is not retained for further evaluation because of limited effectiveness for the IHSs present in the sediment as well as because of many implementability issues. Additionally, there have been few, if any, commercial applications of electrokinetic remediation in the United States.
		Ground Freezing	The ground-freezing process converts in situ pore water to ice through the circulation of a chilled liquid via a system of small-diameter pipes placed in drilled holes. The ice acts to fuse the soil or rock particles together, creating a frozen mass of improved compressive strength and impermeability. Brine is the typical cooling agent, although liquid nitrogen can be used in emergency situations or where the freeze is required to be maintained only for a few days.	No	This technology is not retained for further evaluation because of limited effectiveness and serious implementability issues.
Removal	Dredging	Mechanical Dredging	Use of a clamshell, closed, hydraulic, or other bucket from a barge or other vessel to remove contaminated sediment from the submerged substrate. Includes use of excavator or derrick.	Yes	Dredging is easily implementable and highly effective. This technology is retained for further consideration for Lake River for all sediments below the slope break considered the bank. Removal actions will not be feasible above the slope break at the beach to bank interface because of the discovery of cultural artifacts in the bank and the requirements to preserve the artifacts in place.
		Mechanical Dredging, Land-Based	Use of excavators, buckets, etc., deployed from land-based equipment. Can be "in the wet" or "in the dry" in combination with sheet piles, coffer dams, or other measures to remove water.	Yes	Mechanical, land-based dredging is easily implementable for Carty Lake and is a highly effective removal technology. It is retained for further consideration for the Carty Lake site.
		Hydraulic Dredging	Use of hydraulic dredges (e.g., cutter-head, horizontal auger, plain suction, pneumatic, or specialty dredges) to remove contaminated sediments from submerged substrates in a slurry phase. Requires extensive dewatering facilities.	No	Hydraulic dredging requires extensive dewatering facilities, generally consisting of settlement ponds, earthen dikes, multiple tanks, geotextile tubes, or some combination of these. Because of site constraints, this technology has low implementability.
Confinement	Commercial Landfill	Various	A disposal site where solid waste is buried between layers of dirt and other materials in such a way as to reduce contamination of the surrounding land. Modern landfills are often lined with layers of absorbent material and sheets of plastic to keep pollutants from leaking into the soil and water.	Yes	The wastes generated at these sites are nonhazardous and may therefore be disposed of at a Subtitle C landfill.
	Confined Aquatic Disposal (CAD)		Holes dug in open water or low spots in the aquatic environment that are filled and then covered with clean material (e.g., cap).	No	This technology is not retained for further evaluation because of low implementability and logistical issues associated with material-laden barges successfully passing through the shallow mouth of Lake River.

Table O-2
Summary of Remedial Technology Screening Process for Carty Lake and Lake River
Former PWT Site RI/FS

General Response Action	Remedial Technology	Process Options	Description	Retained for Alternatives	Screening Comments
Confinement, cont.	Confined Disposal Facility (CDF)	Various	Engineered structures enclosed by dikes and designed to retain dredged materials.	No	This technology is not retained for further evaluation because of low implementability and logistical issues associated with material-laden barges successfully passing through the shallow mouth of Lake River.
Ex Situ Treatment	Physical	In-barge Dewatering	Dewatering through passive dewatering on a barge.	Yes	This technology is retained for further consideration for Lake River.
		Lagoon Dewatering	Dewatering through placement in a lagoon. Water discharge takes place on particles that have settled out.	No	This technology is not retained for further evaluation because of low implementability due to site constraints and dewatering logistics.
		Geotextile Tube Dewatering	Geotextile tubes allow water to migrate through membrane sediment-retaining membranes.	No	This technology is not retained for further evaluation because it would be left up to the contractor to decide whether to employ.
		Mechanical Dewatering	Use of filter presses or similar equipment.	No	This technology is not retained for further evaluation because of low implementability due to dewatering logistics.
		Reagent Dewatering	Use of reagents to chemically absorb excess water.	No	This technology is not retained for further evaluation because of low implementability due to dewatering logistics.
		Cement Solidification/Stabilization	Solidification/stabilization of contaminated sediments through the addition of Portland cement.	Yes	This technology is retained for further consideration for both Lake River and Carty Lake.
		Sorbent Clay Solidification/Stabilization	Solidification/stabilization of contaminated sediments through the D49addition of sorbent clays such as bentonite.	Yes	This technology is retained for further consideration for both Lake River and Carty Lake.
	Biological Methods	Land Treatment	Large-scale land treatment to reduce contaminant concentrations through biological processes.	No	These technologies are not retained for further evaluation because the contamination levels in the soil and sediment associated with these projects do not require treatment prior to disposal.
		Composting	Large-scale land treatment to reduce contaminant concentrations through composting.		
		Biopiles	Large-scale land treatment to reduce contaminant concentrations through biopiles.		
		Fungal Biodegradation	Large-scale land treatment to reduce contaminant concentrations through fungal plants.		
		Slurry-phase Treatment	Biological treatment in a slurry phase.		
		Enhanced Biodegradation	Acceleration of the natural bioremediation processes by providing oxygen, reducing agents, nutrients, and degrading microorganisms.		
	Chemical	Acid Extraction	Use of acids to extract contaminants from dredged sediments.	No	These technologies are not retained for further evaluation because the contamination levels in the soil and sediment associated with these projects do not require treatment prior to disposal.
		Solvent Extraction	Use of solvents to extract contaminants from dredged sediments.		

General Response Action	Remedial Technology	Process Options	Description	Retained for Alternatives	Screening Comments
Ex Situ Treatment, cont.	Physical/Chemical	Sediment Washing	Wash sediments with water to remove contaminants.	No	These technologies are not retained for further evaluation because the contamination levels in the soil and sediment associated with these projects do not require treatment prior to disposal.
		Chemical Oxidation/Reduction/ Oxidation	Reduction/oxidation (redox) reactions chemically convert hazardous contaminants to nonhazardous or less toxic compounds that are more stable, less mobile, and/or inert. Redox reactions involve the transfer of electrons from one compound to another. Specifically, one reactant is oxidized (loses electrons) and one is reduced (gains electrons). The oxidizing agents most commonly used for treatment of hazardous contaminants are ozone, hydrogen peroxide, hypochlorites, chlorine, and chlorine dioxide. Chemical redox is a short- to medium-term technology.		
		Dehalogenation	Removal of halogens (e.g., chlorine) through chemical dehalogenation reactions.		
		Slurry Oxidation	Involves mixing an oxidizing agent with contaminated sediments. The oxidation process mineralizes most organic compounds to carbon dioxide, water, and salts. Typical oxidizing agents include: sodium hypochlorite (or other hypochlorite compounds), hydrogen peroxide, chlorine, chlorine dioxide, potassium permanganate, and ozone.		
	Thermal Methods	Incineration	Thermal treatment through incineration.	No	These technologies are not retained for further evaluation because the contamination levels in the soil and sediment associated with these projects do not require treatment prior to disposal.
		Pyrolysis	Thermal treatment through pyrolysis. Chemical decomposition induced in organic materials by heat in the absence of oxygen. Pyrolysis typically occurs under pressure and at operating temperatures above 430ºC (800ºF).		
		High-Temperature Thermal Desorption	Heating of contaminated sediment to drive off and capture contaminants. Involves the application of heat (320 to 560ºC or 600 to 1,000ºF) to excavated wastes to volatilize organic contaminants and water. Typically, a carrier gas or vacuum system transports the volatilized water and organics to a treatment system, such as a thermal oxidation or recovery unit.		
		Low-Temperature Thermal Desorption	Involves the application of heat (90 to 320ºC or 200 to 600ºF) to excavated wastes to volatilize organic contaminants and water. Typically, a carrier gas or vacuum system transports the volatilized water and organics to a treatment system, such as a thermal oxidation or recovery unit.		
		High-Pressure Oxidation	This category includes two related technologies: wet air oxidation and supercritical water oxidation. Both processes use the combination of high temperature and pressure to break down organic compounds.		
		Vitrification	Application of electrical current to heat contaminated sediments to high temperatures.		

APPENDIX P

UPLAND OFF-PROPERTY DIOXIN WASTE DESIGNATION

MAUL
FOSTER
ALONGI

MEMORANDUM

To: Craig Rankine
Date: December 20, 2012
From: Madi Novak Madi Novak
Project: 9003.01.39
Steve Taylor, PE

RE: Upland Off-Property Dioxin Waste Designation
Former Pacific Wood Treating Site, Ridgefield, Washington
Agreed Order No. 01TCPSR-3119

On behalf of the Port of Ridgefield, (Port), Maul Foster & Alongi, Inc. (MFA) has prepared this memorandum to determine the waste designation for soils containing dibenzo-p-dioxins and furans (collectively referred to as dioxins) off-property of the Lake River Industrial Site (LRIS) in Ridgefield, Washington. The LRIS is the location of the former Pacific Wood Treating Corporation (PWT) facility where historical operations primarily involved pressure-treating wood products with oil-based treatment solutions containing creosote, pentachlorophenol (PCP), and water-based mixtures of copper, chromium, arsenic, and/or zinc.

Soils that are located off property of the LRIS in the adjoining residential neighborhood and McCuddy's Marina parking area (i.e., off-property area) contain dioxins. However, the source of the dioxins is not readily apparent. Sources of dioxins at the PWT facility may have included spent formulations from wood preserving processes, combustion of waste by PWT and a previous shingle mill, combustion of fuels at the facility, and by trucks and trains traveling adjacent to the facility and to the offsite properties.

The U.S. Environmental Protection Agency (USEPA) has prepared a document clarifying RCRA policy for remediation waste[1] which provides the following on page 5 of the document.

> *Where a facility owner/operator makes a good faith effort to determine if a material is a listed hazardous waste but cannot make such a determination because documentation regarding a source of contamination, contaminant, or waste is unavailable or inconclusive, EPA has stated that one may assume the source, contaminant or waste is not listed hazardous waste and, therefore, provided the material in question does not*

---

[1] USEPA, 1998. Management of Remediation Waste under RCRA. Office of Solid Waste and Emergency Response. Ref. EPA530-F-98-026. October 14.

> *exhibit a characteristic of hazardous waste, RCRA requirements do not apply... This approach was confirmed in the final NCP[2] preamble. See, 53 FR 51444, December 21, 1988 for proposed NCP preamble discussion; 55 FR 8758, March 13, 1990 for final NCP preamble discussion.*

There are no historical records of a release off- property from PWT's operation that would result in the determination that the off-property soils are a listed hazardous waste, specifically the F032, F034 and F035 listings that are assigned to *wastewater, process residuals, preservative drippage, and spent formulations from wood preserving processes that used chlorophenolic formulations, creosote or arsenic based treating solutions respectively.* These waste codes have been applied to soils on the property because of known releases on the property.

The soil containing dioxins that is located offsite of the former PWT facility (i.e., LRIS) is not designated as hazardous waste under the guidelines provided by USEPA. The operation that generated the dioxin compounds cannot be determined because there are several potential sources (including the wood treating operations) that could have led to contamination of soils in the offsite areas. Given this information, the F032, F034 and F035 listed hazardous waste codes are not applicable to the soil that could be generated during any future remedial action in the off-property area.

The soil sample results have also been reviewed for possible designation as a characteristic hazardous waste or a Washington state-only dangerous waste Per WAC 173-303-100 Dangerous Waste Criteria. The concentration of dioxins, polycyclic aromatic hydrocarbons (PAHs) and halogenated organic compounds (HOCs) were reviewed in accordance with the WAC 173-303-100 requirements as follows:

> Toxic Dangerous Wastes - The equivalent concentration for the toxic constituents (metals, PAHs, HOCs, and dioxins) is below the 0.001 percent threshold in WAC 173-303-100(5), and the material does not designate as a state-only toxic waste.
>
> Persistent Dangerous Wastes - PAHs, HOCs, and dioxins are below the 0.01 percent threshold for characterizing a material as a persistent dangerous waste as described in WAC 173-303-100(6).

Based on the above review, the soil to be generated during the off-property remedial action would not designate as a Washington state-only dangerous waste.

---

[2] National Contingency Plan

1889

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
2108 Grand Boulevard ▪ Vancouver, Washington 98661-4622 ▪ (360) 690-7171

January 30, 2013

Mr. Brent Grening
Executive Director
Port of Ridgefield
Post Office Box 55
Ridgefield, WA 98642

Re: Approval of January 29, 2013, *Upland Off-Property Dioxin Waste Designation Former Pacific Wood Treating Site, Ridgefield Washington* Memorandum, prepared by Maul, Foster, Alongi, Inc.
Ecology Facility Site Identification #1019

Dear Mr. Grening:

This letter provides the Port of Ridgefield (Port) with the Washington State Department of Ecology's (Ecology) written approval of the above-referenced memorandum. Approval of project documentation by this agency is required by Agreed Order Number 01TCPSR-3119 executed by Ecology and the Port of Ridgefield for cleanup efforts at the former Pacific Wood Treating (PWT) Corporation facility and surrounding environs.

If you have any questions or care to discuss items in this letter, please contact me by telephone at (360) 690-4795 or by e-mail at cran461@ecy.wa.gov.

Sincerely,

Craig Rankine, RG, LHG
Site Manager/Hydrogeologist
Toxic Cleanup Program
Vancouver Field Office

lc/CR

cc: Laurie Olin, Port of Ridgefield, Ridgefield, WA
Steven Taylor and Alan Hughes Maul Foster & Alongi Inc., Vancouver, WA
Madi Novak, Maul Foster & Alongi Inc., Portland, OR
Cindy Donnerberg, CH2MHill, Portland, OR
James DeMay, Ecology Southwest Regional Office, Lacey, WA

Ecology Southwest Regional Office Records Center, Lacey, WA

APPENDIX Q

APPLICABLE OR RELEVANT AND APPROPRIATE FEDERAL LAWS AND REGULATIONS

APPENDIX Q APPLICABLE OR RELEVANT AND APPROPRIATE FEDERAL LAWS AND REGULATIONS

CONTENTS

APPENDIX Q-1

APPLICABLE OR RELEVANT AND APPROPRIATE FEDERAL LAWS AND REGULATIONS—UPLAND OFF-PROPERTY

1 INTRODUCTION

Washington Administrative Code (WAC) 173-340-710 states that cleanup actions conducted under the Model Toxics Control Act (MTCA) shall comply with applicable state and federal laws. This WAC section also addresses relevant and appropriate requirements, substantive (as opposed to procedural) requirements, and local government permits and approvals. This appendix summarizes the analysis completed to ensure conformance with WAC 173-340-710.

1.1 EXEMPTIONS FOR REMEDIAL ACTIONS

MTCA exempts persons conducting a remedial action at a facility, under a consent decree, order, or agreed order, from the procedural requirements of Chapters 70.94 (Air), 70.95 (Solid Waste), 70.105 (Hazardous Waste), 75.20 (Hydraulic Permit), 90.48 (Water Quality), and 90.58 (Shorelands) Revised Code of Washington (RCW), and the procedural requirements of any laws requiring or authorizing local government permits or approvals for the remedial action. This exemption does not apply to independent actions.

The Washington State Department of Ecology (Ecology) is required to ensure compliance with the substantive provisions of Chapters 70.94, 70.95, 70.105, 75.20, 90.48, and 90.58 RCW, and the substantive provisions for laws requiring or authorizing local government permits or approvals. Ecology makes the final decision regarding which substantive provisions are applicable. Under policy and procedure directive 130B, Ecology describes how these exemptions will be implemented and compliance assured.

Effect on Design:

The remedial action likely will be conducted in accordance with either the Port of Ridgefield's (the Port) existing Agreed Order with Ecology (Agreed Order No. 01TCPSR-3119), or an amended order or consent decree, and therefore evaluation of the allowed exemptions to the laws, regulations, and rules will be conducted during the design of the remedial action. The remedial action will be developed to ensure conformance with the substantive provisions of these laws, regulations, and rules.

2 SUMMARY OF GENERALLY APPLICABLE OR RELEVANT AND APPROPRIATE FEDERAL LAWS AND REGULATIONS

Remediation at the upland off-property portion of the Port site will be subject to a variety of federal laws and regulations that govern site cleanup. The applicable or relevant and appropriate requirements (ARARs) are discussed below.

2.1 CLEAN WATER ACT

The federal Water Pollution Control Act (FWPCA) Amendments of 1972, commonly referred to as the Clean Water Act (CWA), sets forth a number of provisions that require the development of regulations to protect the nation's waters. Section 402 of the CWA requires the development of comprehensive programs for preventing, reducing, or eliminating pollution in the nation's waterways. National Pollutant Discharge Elimination System (NPDES) requirements are specified in Section 402. This program has been delegated to the State of Washington (see Section 3.4).

The objective of the CWA (33 U.S. Code [USC] 1251-1376 and 40 Code of Federal Regulations [CFR] 129 and 131) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Sections 303 and 304 of the CWA require the U.S. Environmental Protection Agency (USEPA) to issue ambient surface water quality criteria for the protection of aquatic life and human health. The federal water quality criteria (FWQC), as specified in 40 CFR 131, are nonenforceable guidelines to be used by states to set water quality standards for surface water. FWQC, based on chronic and acute effects to aquatic life, have been developed for 120 priority toxic pollutants and 45 nonpriority pollutants for marine waters and freshwater.

Effect on Design:

During construction, water will be directed through erosion- and sediment-control features to meet any water quality standards. There should be no releases of water to the surrounding waterways associated with the upland off-property work. Any water discharged to Carty Lake or Lake River will be required to meet the FWQC. The State of Washington has been delegated the authority to implement the CWA and has rules and regulations corresponding to all of those stated in the CWA. Therefore, for the Port, any discharges to surface water will be managed under the state program. In addition, ambient surface water quality criteria are considered screening criteria.

2.2 MIGRATORY BIRD TREATY ACT

The federal Migratory Bird Treaty Act (MBTA) of 1918 makes it unlawful to kill migratory birds by any means unless permitted by regulations. Furthermore, the MBTA requires that identified ecosystems of special importance to migratory birds be protected against pollution, detrimental alterations, and other environmental degradations.

Effect on Design:

Implementing the remedial action in conformance with MTCA will protect wildlife, including migratory birds. Consequently, no additional actions are needed to conform to the MBTA.

2.3 THE SAFE DRINKING WATER ACT

The Safe Drinking Water Act (SDWA) was initially passed by Congress in 1974 and then amended in 1986. The SDWA establishes maximum contaminant levels (MCLs) and maximum contaminant level goals (MCLGs) for the protection of the nation's public water systems. The USEPA has established MCLs in 40 CFR Part 141 as the maximum permissible concentrations of specific contaminants in water that is delivered to any user of a public water system. While nonenforceable, MCLGs represent the maximum level beyond which persons drinking the water may experience adverse effects.

Under the SDWA amendments, the USEPA is required, every three years, to develop a list of contaminants that must be regulated in the form of MCLs or MCLGs. Those regulations must be finalized within a year of their proposal. In addition, the USEPA identifies contaminants that are under consideration for listing as MCLs, as well as contaminants that are under consideration for modification of the MCL concentration.

The State of Washington has authorization from the USEPA to administer and enforce this act, and although the state has developed and continues to develop state-specific MCLs and MCLGs, it incorporates the federal standards by reference.

Effect on Design:

The upland off-property remedial action will have no effect on groundwater or any other water source used as drinking water.

2.4 NATURAL RESOURCE DAMAGES

The Natural Resource Damage provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Oil Pollution Act of 1990, and the CWA allow natural resource trustees to assess damages for losses arising from injury to public natural resources caused by the release of oil or hazardous substances. 43 CFR 11.62 provides the definitions of what constitutes an injury to a natural resource, particularly the definitions of injury to surface-water resources, groundwater resources, air resources, geologic resources, and biological resources. The definition of injury either must be met or likely will be met for natural-resource damages to be included for a given facility or property.

Once natural resource damages have been established by federal, state, or Native American Tribe trustees, the responsible party must take action to restore the damaged resource. These actions can take the form of cash payment to a trustee, or the responsible party can undertake its own restoration projects, or both.

Effect on Design:

In accordance with MTCA, the remedial design will establish means and methods to ensure that the remedial action minimizes short-term risks during implementation. Consequently, natural-resource damages caused by remedial action implementation will be avoided.

2.5 NATIONAL PRETREATMENT STANDARDS FOR DISCHARGES TO A PUBLICLY OWNED SEWER SYSTEM

In general, the discharge of wastewater to a publicly owned treatment works is considered an off-site activity. Requirements of the National Pretreatment Program include general and specific discharge prohibitions (40 CFR 403).

Effect on Design:

No water treatment system will be discharged to a publicly owned sewer system as part of the remedial action; therefore, this requirement is not applicable.

2.6 IDENTIFICATION AND LISTING OF HAZARDOUS WASTE AND STANDARDS FOR GENERATORS

The Solid Waste Disposal Act (42 USC 6921 Subtitle C) incorporated under the federal Resource Conservation and Recovery Act (RCRA, 40 CFR § 260 through 266) contains requirements for "cradle to grave" management of materials that meet the RCRA definition of hazardous waste. These requirements may apply to wastes generated during the remedial action.

RCRA defines hazardous wastes as either those wastes specifically listed in 40 CFR § 261 Subpart D or wastes that exhibit one of four hazardous characteristics: ignitability, corrosivity, reactivity, or toxicity as determined by the toxicity characteristic leaching procedure (TCLP). Requirements to determine whether waste being generated is hazardous, whether by sampling and analysis or by process knowledge, are listed in 40 CFR § 262.11.

Effect on Design:

The source of the material cannot be determined; therefore, under the guidelines provided by the USEPA, the dioxin-contaminated soil is not designated as hazardous waste, and this requirement is not applicable.

2.7 TREATMENT, STORAGE, AND DISPOSAL FACILITY STANDARDS

The Solid Waste Disposal Act (42 USC 6921 Subtitle C) incorporated under RCRA (40 CFR § 264) provides design standards for treatment, storage, and disposal (TSD) facilities. The TSD requirements for hazardous wastes are normally associated with facilities applying for, or having received, a RCRA permit.

Applicability of the TSD facility requirements to an on-site remedial action is contingent on whether the remedy includes on-site disposal. According to USEPA guidance, "disposal" is synonymous only with a new "placement" of hazardous waste. No "placement" occurs in connection with in situ treatment or containment of contamination. "Placement" occurs whenever hazardous wastes are moved from one area of containment (AOC) to another, or are removed, treated, and later returned to the same AOC (National Contingency Plan (NCP) Preamble at 8759; USEPA Office of Solid Waste and Emergency Response Directive 9347.3-05FS [Superfund land-disposal restriction (LDR) Guide 5]). The boundaries of an AOC are formed by the areal extent of contiguous contamination, regardless of variations in contaminant type or concentration (NCP Preamble at 8758).

Ecology incorporated this policy into MTCA as an interprogram policy in 1991.

Effect on Design:

No consolidation or off-site (outside the AOC) treatment is associated with the remedial action. Any excavation, stockpiling, or sorting of soil and debris on the site is not subject to the TSD facility requirements.

2.8 LAND-DISPOSAL RESTRICTIONS

LDRs for RCRA wastes characterized as toxic (40 CFR § 268) require that the waste be treated to specified concentrations before placement in a land-based unit. LDRs would apply to wastes removed from the site that exceed treatment standards for waste codes or that fail a TCLP analysis.

Effect on Design:

No waste characterized as toxic under RCRA is known to be present on site; therefore, this requirement is not applicable.

2.9 U.S. DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS REGULATIONS

The U.S. Department of Transportation has published regulations, including requirements regarding communications and emergency response, shipping, and packaging (40 CFR 171 through 180), that govern the transportation of hazardous materials to or from the site.

The provisions of 40 CFR § 263 establish minimum standards that apply to persons transporting hazardous waste by air or water.

Effect on Design:

No elements of the remedial action involve off-site transportation of hazardous waste; therefore, this requirement is not applicable.

2.10 NATIONAL AMBIENT AIR QUALITY STANDARDS ATTAINMENT AREA

The USEPA has established national ambient air quality standards (NAAQS) for a variety of potentially airborne substances known as criteria pollutants. NAAQS are ARARs for any conditions at a site that may result in emissions to the air of any listed criteria pollutant. Criteria pollutants include carbon monoxide, nitrogen dioxide, ozone, lead, particulates smaller than 10 micrometers, and sulfur dioxide.

Effect on Design:

Some of the alternatives involve soil handling and/or excavation. The air emissions generated by handling soil at the site are subject to applicable air-quality standards to control or prevent the emission of air contaminants. Based on the contaminants present at the site, the applicable criteria pollutant at the site would be particulate matter (dust).

2.11 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

Federal Occupational Safety and Health Administration (OSHA) regulations pertaining to hazardous waste sites are addressed under 29 CFR 1910.120, the Hazardous Waste Operations and Emergency Response Standard. This standard applies to cleanup and corrective actions, as well as to operations involving hazardous wastes, that are conducted at a permitted TSD facility, unless the employer can demonstrate that the operations do not involve employee exposure or the reasonable possibility of employee exposure to safety or health hazards.

Effect on Design:

All work will be performed under a site health and safety plan in conformance with the applicable federal and state OSHA regulations.

3 SUMMARY OF GENERALLY APPLICABLE OR RELEVANT AND APPROPRIATE WASHINGTON STATE LAWS AND REGULATIONS

The following state laws and regulations and local requirements were determined to be ARARs.

3.1 MODEL TOXICS CONTROL ACT

In Washington State, MTCA governs the investigation and cleanup of contaminated sites (Chapter 70.105D RCW). A contaminant is defined by MTCA 173-340-200 as any hazardous substance that does not occur naturally or that occurs at concentrations greater than natural levels.

MTCA became effective in March 1989 and was enacted through a voter initiative process. The MTCA cleanup regulation, cited under Chapter 173-340 WAC, was amended in February 2001. MTCA contains provisions controlling site cleanup activities, including site discovery, priority, listing, investigation, and cleanup; liability provisions; administrative options for remedial actions, payment of costs, and funding; public participation; cleanup standards; and other general provisions. The law regulates the cleanup of sites contaminated with CERCLA hazardous substances, all state and federal RCRA hazardous and dangerous wastes, and petroleum products.

Effect on Design:

All elements of the remedial design and remedial action will comply with MTCA standards.

3.2 WATER QUALITY STANDARDS FOR SURFACE WATERS AND GROUNDWATERS OF THE STATE

In Washington, water quality standards for surface waters of the state are promulgated under Chapter 173-201A WAC. The purpose of this chapter is to establish water quality standards for surface waters of Washington State that are consistent with public health and related public enjoyment, and with the propagation and protection of fish, shellfish, and wildlife, pursuant to the provisions of Chapter 90.48 RCW. The criteria listed in Chapter 173-201A WAC for surface water quality provide protective numbers for both freshwater and marine aquatic life for both acute and chronic exposure to toxic substances.

Water quality standards for groundwater are promulgated under Chapter 173-200 WAC. This chapter implements the FWPCA and Chapters 90.48 and 90.54 of the RCW, as well as the federal Water Resources Act of 1971. Chapter 173-200 WAC applies to all groundwaters of the state that occur in a saturated zone or stratum beneath the land surface or below a surface-water body. The water quality standards listed in Chapter 173-200 WAC apply to cleanup actions, conducted under MTCA, involving potable groundwater.

Effect on Design:

No water will be generated or discharged to Lake River or Carty Lake during construction. During construction, water will be directed through erosion- and sediment-control features to meet any water quality standards. In addition, state water quality standards are considered screening criteria.

3.3 WASHINGTON DANGEROUS WASTE REGULATIONS

Washington regulations identify RCRA F-listed and K-listed wastes as dangerous waste (WAC 173-303-9904). Designated dangerous wastes may be treated, stored, or disposed of at a permitted TSD facility.

Effect on Design:

Material generated on site would not be considered dangerous waste; therefore, this requirement is not applicable.

3.4 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER PERMIT PROGRAM

Chapter 173-220 WAC establishes a state permit program, applicable to the discharge of pollutants and other wastes and materials to the surface waters of the state, operating under state law as a part of the NPDES created by Section 402 of the FWPCA. Permits issued under this chapter are intended to satisfy the requirements for discharge permits under both Section 402(b) of the FWPCA and Chapter 90.48 RCW.

Effect on Design:

NPDES construction stormwater permits are required for construction sites of 1 acre or larger. The remedial alternatives involving soil handling will have a construction footprint greater than 1 acre; therefore, the substantive requirements of the NPDES construction stormwater permit will be met in the design of the selected alternative.

3.5 SHORELINE MANAGEMENT ACT

The state Shoreline Management Act (SMA) (Chapter 173-22 WAC) regulates any action within 200 feet of the ordinary high-water mark of a shoreline. Shorelines in towns and cities are regulated by shoreline master programs (Chapter 173-26 WAC) adopted by local municipalities. Substantive shoreline management requirements in the City of Ridgefield's shoreline master program, may be triggered by cleanup actions at McCuddy's Marina (see

Section 4, Local Requirements, below). However, cleanup actions are exempt from the procedural (permitting) requirements (Chapter 173-27 WAC).

Effect on Design:

The effect of the SMA on design is discussed in Section 4.1, Shoreline Master Program, below.

3.6 AIR QUALITY STANDARDS

Chapters 173-400, -460, and -470 WAC establish provisions for general regulation of air pollution sources, ambient air quality standards, and acceptable levels for particulate matter, and stipulate requirements for new sources of toxic air pollutant emissions. These regulations may be applicable to cleanup actions at the site; for example, to control particulate emissions generated during soil excavation activities, or emissions resulting from air stripping or other groundwater treatment technologies. These standards are typically administered and enforced by the local clean air agency, which in this case would be the Southwest Clean Air Agency. Chapter 173-401 operating permits may be required for fugitive emissions from new sources. Emission standards for volatile organic compounds are set in Chapter 173-490.

Effect on Design:

All of the alternatives include soil handling. During soil-excavation activities, it may be necessary to implement engineering controls such as soil wetting to control particulate emissions. Air testing may be required to show that emissions meet the substantive requirements of applicable air quality permits and rules. If results illustrate that substantive requirements have not been met, the design will require modification.

3.7 NOISE REGULATIONS

Maximum environmental noise levels have been determined and are contained in Chapter 173-60 WAC. Approved procedures for measurement of environmental noise are contained in Chapter 173-58 WAC.

Effect on Design:

During design, expected noise levels will be estimated and compared to the limitations established in 173-60 WAC. The need to adjust the approach to meet these requirements will be determined. For example, the noise level regulations may limit the operating hours of some parts of the remedial action.

3.8 STATE ENVIRONMENTAL POLICY ACT

The State of Washington administers and enforces a program equivalent to the federal National Environmental Policy Act. The State Environmental Policy Act (SEPA), contained in Chapter 43.21C RCW, provides the framework for agencies to consider the environmental consequences of a proposal before taking action. It also gives agencies the ability to condition or deny a proposal because of identified likely significant adverse impacts. The act is implemented through the SEPA Rules and Procedures, Chapters 197-11 and 173-802 WAC, respectively.

SEPA review is a comprehensive assessment of potential environmental, economic, and cultural impacts from a specific development project or a proposed policy, plan, or program. The SEPA review process requires the preparation of an environmental checklist, which may be achieved by review of the environmental impacts and proposal of mitigation measures. The completed checklist helps to identify potential environmental impacts associated with the proposed action. Following a threshold determination, the lead agency will issue either a Determination of Non-Significance that will allow the action or permitting process to continue, or a Determination of Significance that will require that an environmental impact statement (EIS) be prepared before agency action can be taken. Typically, one checklist or EIS is required for a project, although it may require modification or application of numerous permits by federal, state, or local agencies.

Effect on Design:

SEPA review will be conducted for the project design. The Port or Ecology can act as the lead agency for SEPA review. The Port will prepare a SEPA checklist to be reviewed during Ecology's evaluation of the project design.

3.9 WASHINGTON INDUSTRIAL SAFETY AND HEALTH ADMINISTRATION

Washington Industrial Safety and Health Administration (WISHA) regulations pertaining to hazardous waste sites are addressed under WAC 296-843, Hazardous Waste Operations. This standard applies to cleanup and corrective actions at MTCA-regulated sites.

Effect on Design:

All work will be performed under a site health and safety plan in conformance with the applicable WISHA regulations.

4 LOCAL REQUIREMENTS

4.1 SHORELINE MASTER PROGRAM

A cleanup action or "substantial development" conducted along any shoreline of statewide significance in the city of Ridgefield is regulated under the Shoreline Master Program (Chapter 18.820 of the Ridgefield Municipal Code [RMC]). A Substantial Development Permit (SDP) is required for such an action. The City of Ridgefield adopted an updated Shoreline Master Program in 2012. The environmental designation for the Lake River shoreline under the updated program is High Intensity.

Effect on Design:

Most of the proposed locations for off-property remedial actions are outside the shoreline jurisdiction. If a remedial action associated with McCuddy's Marina is completed within 200 feet of a shoreline, the substantive requirements of the SDP will be met as part of the remedial design.

4.2 CITY OF RIDGEFIELD CRITICAL AREAS ORDINANCE

The City of Ridgefield Critical Areas Ordinance designates and regulates projects that may impact ecologically sensitive areas, including wetlands and fish and wildlife habitat conservation areas, or geophysical hazards such as geologically hazardous areas and frequently flooded areas (RMC 18.280.120).

Effect on Design:

Most of the locations for proposed off-property remedial actions are designated as critical aquifer recharge areas, but do not include other critical area designations. The remedial design will meet the substantive requirements of the ordinance to protect these resources.

APPENDIX Q-2

APPLICABLE OR RELEVANT AND APPROPRIATE FEDERAL LAWS AND REGULATIONS—LAKE RIVER AND CARTY LAKE

1 INTRODUCTION

Washington Administrative Code (WAC) 173-340-710 states that cleanup actions associated with sediments and conducted under the Model Toxics Control Act (MTCA) shall comply with the sediment management requirements (WAC 173-204, Sediment Management Standards [SMS]) and applicable state and federal laws. This WAC section also addresses relevant and appropriate requirements, substantive (as opposed to procedural) requirements, and local government permits and approvals. This appendix summarizes the analysis completed to ensure conformance with WAC 173-340-710.

1.1 EXEMPTIONS FOR REMEDIAL ACTIONS

MTCA exempts persons conducting a remedial action at a facility, under a consent decree, order, or agreed order, from the procedural requirements of Chapters 70.94 (Air), 70.95 (Solid Waste), 70.105 (Hazardous Waste), 75.20 (Hydraulic Permit), 90.48 (Water Quality), and 90.58 (Shorelands) Revised Code of Washington (RCW), and the procedural requirements of any laws requiring or authorizing local government permits or approvals for the remedial action. This exemption does not apply to independent actions.

The Washington State Department of Ecology (Ecology) is required to ensure compliance with the substantive provisions of Chapters 70.94, 70.95, 70.105, 75.20, 90.48, and 90.58 RCW, and the substantive provisions of laws requiring or authorizing local government permits or approvals. Ecology makes the final decision regarding which substantive provisions are applicable. Under policy and procedure directive 130B, Ecology describes how these exemptions will be implemented and compliance assured.

Effect on Design:

Any interim or remedial action likely will be conducted in accordance with the Port of Ridgefield's (the Port) existing Agreed Order with Ecology (Agreed Order No. 01TCPSR-3119) or an amended order or consent decree, and therefore evaluation of the allowed exemptions to the laws, regulations, and rules will be conducted during the design of the remedial action. The remedial action will be developed to ensure conformance with the substantive provisions of these laws, regulations, and rules.

2 SUMMARY OF GENERALLY APPLICABLE OR RELEVANT AND APPROPRIATE FEDERAL LAWS AND REGULATIONS

Remediation at Lake River and Carty Lake will be subject to a variety of federal laws and regulations that govern site cleanup. The applicable or relevant and appropriate requirements (ARARs) for both are discussed below.

2.1 U.S. ARMY CORPS OF ENGINEERS PERMITTING REQUIREMENTS

The U.S. Army Corps of Engineers (COE) requires that a dredge/fill permit be obtained consistent with Section 404 of the Federal Water Pollution Control Act (FWPCA) Amendments of 1972, commonly referred to as the Clean Water Act (CWA). The permit also requires that the state issue a certification of the project under CWA Section 401, which is described in Section 2.3. Section 404 requires that a permit be obtained to perform dredge and fill operations in U.S. waterways and wetlands. Discharges of dredged or fill materials are not permitted unless there is no practicable alternative that will have less adverse impact on the aquatic ecosystem.

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S. Code [USC] 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. This section states that any other work affecting the course, location, condition, or physical capacity of U.S. waterways is unlawful unless the work has been permitted by the COE.

The National Historic Preservation Act (NHPA), passed in 1966 (16 USC 470 et seq.), established a national policy for the protection of important historic buildings and archeological sites and outlined responsibilities for federal and state governments. Under Section 106 of the NHPA, each agency must consult with the Washington State Department of Archaeology and Historic Preservation (DAHP) to assure that cultural resources are identified and to obtain the formal opinion of the DAHP on each site's significance and the impact of an action upon the site. The responsibilities of all parties in the Section 106 review process are set forth in federal regulations developed by the Advisory Council on Historic Preservation (ACHP) as 36 Code of Federal Regulations (CFR) 800. Section 106 compliance is required, as state funds are being used to facilitate a portion of the cleanup and activities requiring a permit from the COE are being conducted.

Effect on Design:

COE permitting to fulfill the requirements of CWA Section 404, Section 10 of the Rivers and Harbors Act, and federal requirements under Section 106, through the preparation of a Joint Aquatic Resources Permit Application, will be included in the implementation of all alternatives in conjunction with design. Because the dredged sediment will not be discharged to waters of the U.S. and no adverse effect on the historic integrity of the site is expected, approval of the action is expected, provided that the Endangered Species Act (ESA) consultation and the Section 401 Water Quality Certification are successfully completed.

2.2 ENDANGERED SPECIES ACT AND BIOLOGICAL OPINION

Permitting requirements with the COE may prompt an ESA consultation with the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS). The consultation would result in a biological opinion in which NMFS would document their opinion as to whether an in-water project or action is likely to jeopardize the existence of a species recorded on the ESA list or to result in the destruction or improper modification of the habitat of that protected species.

Effect on Design:

Permitting is likely to include an ESA consultation with NOAA, as this is typically requested by the COE for projects of this magnitude. A biological evaluation or assessment will be conducted to evaluate whether adverse or negative impacts to endangered species and their critical habitats are anticipated during or as a result of remedy implementation.

2.3 WATER QUALITY PROVISIONS OF CLEAN WATER ACT

The CWA sets forth a number of provisions that require the development of regulations to protect the quality of the nation's waters. Section 401 requires that applicants for a federal license or permit to conduct work that may result in discharges into navigable U.S. waters provide the licensing or permitting agency a certification from the state that the discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA. Section 402 of the CWA requires the development of comprehensive programs for preventing, reducing, or eliminating pollution in the nation's waterways. National Pollutant Discharge Elimination System (NPDES) requirements are specified in Section 402. This program has been delegated to the State of Washington (see Section 3.5). Section 404 regulates the discharge of dredged or fill materials into waters of the U.S. (see Section 2.1, above).

Section 401 requests every applicant for a federal permit for any activity that may result in a discharge to a water body to obtain a certification from the state that the proposed activity will comply with state water quality standards. The objective of the CWA (33 USC 1251-1376 and 40 CFR 129 and 131) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Sections 303 and 304 of the CWA require the U.S. Environmental Protection Agency (USEPA) to issue ambient surface-water quality criteria for the protection of aquatic life and human health. The federal water quality criteria (FWQC) as specified in 40 CFR 131 are nonenforceable guidelines to be used by states to set water-quality standards for surface water. FWQC, based on chronic and acute effects to aquatic life, have been developed for 120 priority toxic pollutants and 45 nonpriority pollutants for marine waters and freshwaters.

Effect on Design:

A Section 401 Water Quality Certification from Ecology will be required for permitting of this project. Water quality impacts resulting from the remedy will be further evaluated in the design phase. Best management practices may be required along with water quality monitoring (i.e., turbidity monitoring) during all in-water work activity. The elements of the water quality program will be developed by the design team and evaluated by Ecology during the design and permitting process.

The dredging remedy is likely to result in the discharge of water from dredged sediments over water and in upland handling facilities. If water from the dredged material is discharged to Carty Lake or Lake River, it will be required to meet the FWQC. The State of Washington has been delegated the authority to implement the water quality programs under CWA, and has rules and regulations corresponding to all of those stated in the CWA. Therefore, any discharges to surface water will be managed under the state water quality program. Upland activities will be required to meet construction standards for erosion- and sediment-control such that water quality standards are met.

2.4 MIGRATORY BIRD TREATY ACT

The federal Migratory Bird Treaty Act (MBTA) of 1918 makes it unlawful to kill migratory birds by any means unless permitted by regulations. Furthermore, the MBTA requires that identified ecosystems of special importance to migratory birds be protected against pollution, detrimental alterations, and other environmental degradations.

Effect on Design:

Implementing the remedial action in conformance with MTCA and SMS will protect wildlife, including migratory birds. If site activities are anticipated to occur during the nesting season, special care will be taken to prevent the establishment of nests in the work area, or the area may have to be protected until the nest has been vacated. Additional consultation with the U.S. Fish and Wildlife Service is recommended during construction planning because of the close proximity of the Ridgefield National Wildlife Refuge.

2.5 NATURAL RESOURCE DAMAGES

The Natural Resource Damage provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Oil Pollution Act of 1990, and the CWA allow natural resource trustees to assess damages for losses arising from injury to public natural resources caused by the release of oil or hazardous substances. 43 CFR 11.62 provides the definitions of what constitutes an injury to a natural resource, particularly the definitions of injury to surface-water resources, groundwater resources, air resources, geologic resources, and biological resources. The definition of injury either must be met or likely will be met for natural resource damages (NRDs) to be included for a given facility or property.

Once NRDs have been established by federal, state, or Native American Tribe trustees, the responsible party must take action to restore the damaged resource. These actions can take the form of cash payment to a trustee, or the responsible party can undertake its own restoration projects, or both.

Effect on Design:

No injury has been identified by natural resource trustees, and no NRD claim has been initiated. Because the action is not a federal action, such a claim is unlikely.

2.6 NATIONAL PRETREATMENT STANDARDS FOR DISCHARGES TO A PUBLICLY OWNED SEWER SYSTEM

In general, the discharge of wastewater to a publicly owned treatment works is considered an off-site activity. Requirements of the National Pretreatment Program include general and specific discharge prohibitions (40 CFR 403).

Effect on Design:

No water is anticipated to be discharged to a publicly owned sewer system as part of the remedial action; therefore, this requirement is not applicable.

2.7 IDENTIFICATION AND LISTING OF HAZARDOUS WASTE AND STANDARDS FOR GENERATORS

The Solid Waste Disposal Act (42 USC 6921 Subtitle C) incorporated under the federal Resource Conservation and Recovery Act (RCRA, 40 CFR § 260 through 266) contains requirements for "cradle to grave" management of materials that meet the RCRA definition of hazardous waste. These requirements may apply to wastes generated during the remedial action.

RCRA defines hazardous wastes as either those wastes specifically listed in 40 CFR § 261 Subpart D or wastes that exhibit one of four hazardous characteristics: ignitability, corrosivity, reactivity, or toxicity as determined by the toxicity characteristic leaching procedure (TCLP). Requirements to determine whether waste being generated is hazardous, whether by sampling and analysis or by process knowledge, are listed in 40 CFR § 262.11.

Any soil, sludge, or debris that is excavated from the site and is treated or disposed of off site will be subject to the hazardous waste requirements if it contains a hazardous waste or exhibits a characteristic of hazardous waste.

Effect on Design:

The sediment data have been reviewed for waste designation purposes and the dredged material would not be designated as either a RCRA listed hazardous waste or a RCRA characteristic waste. The dredged material will be designated as a nonhazardous waste; therefore, this requirement has already been fulfilled.

2.8 LAND-DISPOSAL RESTRICTIONS

Land-disposal restrictions for RCRA wastes characterized as toxic (40 CFR§ 268) require that the waste be treated to specified concentrations before placement in a land-based unit. Land-disposal restrictions would apply to wastes removed from the site that exceed treatment standards for waste codes or that fail a TCLP analysis.

Effect on Design:

The dredged material will be designated and disposed of as a nonhazardous waste.

2.9 U.S. DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS REGULATIONS

The U.S. Department of Transportation has published regulations, including requirements regarding communications and emergency response, shipping, and packaging (40 CFR 171 through 180), that govern the transportation of hazardous materials to or from the site.

The provisions of 40 CFR § 263 establish minimum standards that apply to persons transporting hazardous waste by air or water.

Effect on Design:

The dredged material will be designated and transported as a nonhazardous waste.

2.10 NATIONAL AMBIENT AIR QUALITY STANDARDS ATTAINMENT AREA

The USEPA has established national ambient air quality standards (NAAQS) for a variety of potentially airborne substances known as criteria pollutants. NAAQS are ARARs for any conditions at a site that may result in emissions to the air of any listed criteria pollutant. Criteria pollutants include carbon monoxide, nitrogen dioxide, ozone, lead, particulates smaller than 10 micrometers, and sulfur dioxide.

Effect on Design:

Some of the alternatives involve dredging and/or upland sediment handling. The air emissions generated by handling sediment upland at the site are subject to applicable air-quality standards to control or prevent the emission of air contaminants. Based on the contaminants present at the site, the applicable criteria pollutant at the site would be particulate matter (dust).

2.11 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

Occupational Safety and Health Administration (OSHA) regulations pertaining to construction, cleanup, and corrective actions will apply, unless the employer can demonstrate that the operations do not involve employee exposure or the reasonable possibility of employee exposure to safety or health hazards.

Effect on Design:

All work will be performed under a site health and safety plan in conformance with the applicable federal and state OSHA regulations.

2.12 CULTURAL RESOURCES

The federal Antiquities Act (1906) laid out penalties for the unauthorized excavation of archaeological sites, granted the president the authority to designate national monuments, and authorized the managers of federal lands to grant permits for examinations of archaeological resources. The law granted the government the authority not only to declare landmarks on federal lands but also to receive "relinquished" segments of private land. Permits for "examination, excavation, and gathering…of objects of an antiquity" are to be granted by the secretaries of the interior, agriculture, and army only to organizations conducting work to expand the knowledge of those objects and only so that they may be displayed in public museums 16 USC 431-433).

The 1966 NHPA states the importance of "historic heritage" to the nation, and spells out in general terms the federal government's intentions to protect and administer cultural resources. Section 101 directs the secretary of the interior to establish the National Register of Historic Places (NRHP); to set rules and guidelines relating to nominations; to appoint state historic preservation officers and establish state preservation programs; to assist tribes in historic preservation and in designating tribal historic preservation officers; and to make traditional cultural properties eligible for listing. Section 106 has had a large impact on, and is central to, resource management. Section 106 requires that federal agencies that have any indirect or direct jurisdiction over undertakings that involve federal funds or federal licensing take into account the effect the undertaking will have on a resource that is listed, or that is potentially eligible for listing, on the NRHP. Agencies are required to allow the ACHP time to comment on the proposed undertakings. 36 CFR provides regulations regarding parks, forests, and public property; 36 CFR 60.4 outlines criteria used to evaluate the eligibility of a property for listing on the NRHP. Section 110 of the law makes it the specific responsibility of federal agencies to implement historic preservation plans, list eligible properties, appoint "preservation officers," and generally comply with the NHPA for properties under the agencies' management. In other sections the law generally mandates federal agencies to protect, list on the NRHP, manage, and identify properties, and to assist and consult with other agencies and private groups on resource management. In Title II it establishes the ACHP and empowers the council to implement NHPA regulations.

The 1978 American Indian Religious Freedom Act made it the policy of the U.S. government and federal agencies to "…protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions…." This protection is centered on religious practice but encompasses and recognizes the importance of place and objects. The act requires federal agencies to consult with traditional religious leaders on potential impacts to rights and practices (42 USC 1996).

The 1979 Archaeological Resources Protection Act (ARPA) defines archaeological resources and stipulates that the act applies to resources older than 100 years of age; furthermore, it strengthens the permit process for work on these resources on federal and Indian lands. Permits granted under this law for work that may disturb archaeological resources are subject to review by Tribes "which may consider the site as having religious or cultural importance" 16 USC 470cc(c)). The law grants the secretary of the interior authority to develop regulations regarding the exchange and curation of excavated materials and encourages the coordination of efforts between federal agencies and private individuals with archaeological collections. 43 CFR 7.9 outlines permit requirements, including an agreement about the final disposition of collected artifacts. It also criminalizes the removal of resources without a permit, specifies criminal and civil penalties for doing so, and exempts the disclosure of the location of archaeological resources from the public record (16 USC 470aa-470mm). 32 CFR 229 provides the regulations, definitions, and standards needed to implement ARPA.

The 1990 Native American Graves Protection and Repatriation Act deals with the disposition of indigenous tribal cultural items recovered on tribal or federal lands. It defines and addresses human remains, funerary goods, sacred objects, and objects of cultural patrimony, which are referred to as cultural items, and specifies the return of those objects to lineal descendants of the individual or tribe on whose land the items were recovered. The act further outlines the process by which permits are granted (under the ARPA framework) for excavation of described cultural items.

36 CFR 79 (Curation of Federally Owned and Administered Archeological Collections) was codified in 1990 to "…establish definitions, standards, procedures and guidelines to be followed by Federal agencies to preserve collections of prehistoric and historic material remains, and associated records…" as stipulated in the Antiquities Act, the Reservoir Salvage Act, the NHPA, and ARPA (36 CFR 79.1). This complicated set of regulations lays out many guidelines on the care and management of existing and future collections of archaeological material.

Effect on Design:

Affected tribes will review a site cultural resource protection plan under which work will be conducted.

3 SUMMARY OF GENERALLY APPLICABLE OR RELEVANT AND APPROPRIATE WASHINGTON STATE LAWS AND REGULATIONS

The following state laws and regulations and local requirements were determined to be ARARs.

3.1 REMEDIAL ACTION UNDER SEDIMENT MANAGEMENT STANDARDS

In Washington State, the SMS governs the investigation and cleanup of contaminated sediment sites (WAC 173-204). The SMS includes procedures for conducting hazard assessments to identify cleanup sites, determining the appropriate site cleanup authority, conducting a site cleanup study, determining the site-specific cleanup standard, and selecting a site cleanup action.

The sediment quality standards of the SMS include chemical concentration criteria; biological effects criteria; human health criteria; other toxic, radioactive, biological, or deleterious substances criteria; and nonanthropogenically affected sediment quality criteria, all of which are used to identify sediments that have no adverse effects on biological resources and that correspond to no significant health risk to humans.

Effect on Design:

All elements of the remedial design and remedial action will comply with the SMS.

3.2 SITE CLEANUP UNDER MODEL TOXICS CONTROL ACT

In Washington State, MTCA governs the investigation and cleanup of contaminated sites (Chapter 70.105D RCW). A contaminant is defined by MTCA 173-340-200 as any hazardous substance that does not occur naturally or that occurs at concentrations greater than natural levels.

MTCA became effective in March 1989 and was enacted through a voter initiative process. The MTCA cleanup regulation, cited under Chapter 173-340 WAC, was amended in February 2001. MTCA contains provisions controlling site cleanup activities, including site discovery, priority, listing, investigation, and cleanup; liability provisions; administrative options for remedial actions, payment of costs, and funding; public participation; cleanup standards; and other general provisions. The law regulates the cleanup of sites contaminated with CERCLA hazardous substances, all state and federal RCRA hazardous and dangerous wastes, and petroleum products.

Effect on Design:

All elements of the remedial design and remedial action will comply with MTCA as well as the SMS.

3.3 WATER QUALITY STANDARDS FOR SURFACE WATERS AND GROUNDWATERS OF THE STATE

In Washington, water-quality standards for surface waters of the state are promulgated under Chapter 173-201A WAC. The purpose of this chapter is to establish water-quality standards for surface waters of Washington State that are consistent with public health and related public enjoyment, and with the propagation and protection of fish, shellfish, and wildlife, pursuant to the provisions of Chapter 90.48 RCW. The criteria listed in Chapter 173-201A WAC for surface-water quality provide protective numbers for both freshwater and marine aquatic life for both acute and chronic exposure to toxic substances.

Effect on Design:

Water quality monitoring during all in-water work activity is anticipated and will be specifically addressed in the design phase of the project and through issuance of the Section 401 Water Quality Certification (see Section 2.3).

The developed dredging remedy alternative includes treatment of water following dewatering of sediment. If water from the dredged material is discharged to Carty Lake or Lake River, it will be required to meet the water quality standards.

During access improvements and sediment-handling operations, water will be directed through erosion- and sediment-control features to meet any water quality standards. In addition, state water quality standards are considered screening criteria.

3.4 WASHINGTON DANGEROUS WASTE REGULATIONS

Washington regulations identify RCRA F-listed and K-listed wastes as dangerous waste (WAC 173-303-9904). Designated dangerous wastes may be treated, stored, or disposed of at a permitted treatment, storage, and disposal facility.

Effect on Design:

The dredged material will not be designated as either a RCRA listed hazardous waste or a RCRA characteristic waste. The dredged material will be designated as a nonhazardous waste; therefore, this requirement is not applicable.

3.5 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER PERMIT PROGRAM

Chapter 173-220 WAC establishes a state permit program, applicable to the discharge of pollutants and other wastes and materials to the surface waters of the state, operating under state law as a part of the NPDES created by Section 402 of the FWPCA. Permits issued under this chapter are intended to satisfy the requirements for discharge permits under both Section 402(b) of the FWPCA and Chapter 90.48 RCW.

Effect on Design:

NPDES construction stormwater permits would be required for discharging surface water from the site, including from sediment dewatering. The substantive requirements of the NPDES construction stormwater permit will be met in the design of the selected alternative, should the alternative warrant the permit. A stormwater pollution prevention plan and best management practices will be prepared and implemented as part of the final design.

3.6 SHORELINE MANAGEMENT ACT

The state Shoreline Management Act (SMA) (Chapter 173-22 WAC) regulates any action within 200 feet of the ordinary high-water mark of a shoreline. Shorelines in towns and cities are regulated by shoreline master programs (Chapter 173-26 WAC) adopted by local municipalities. Substantive shoreline management requirements in the City of Ridgefield's shoreline master program, may be triggered by cleanup actions associated with dredging. However, cleanup actions are exempt from the procedural (permitting) requirements (Chapter 173-27 WAC).

Effect on Design:

The SMA may be applicable in association with the access improvements and construction of an upland sediment handling site, and will be addressed during the design.

3.7 WASHINGTON DEPARTMENT OF NATURAL RESOURCES STATE AQUATIC LANDS REQUIREMENTS

The Washington Department of Natural Resources (DNR) requires that an authorization be obtained to perform any work over state-owned aquatic lands. A DNR authorization is different from other regulatory permits in that it is a legal contract in which DNR outlines the terms and conditions of the use, as well as conveying property rights to the user in exchange for rent.

DNR suggests contacting them early in the design process to avoid delays in receiving authorization. The consultation will work to ensure that land is available, to determine if the proposed use is appropriate, and to avoid or minimize impacts to aquatic resources.

Effect on Design:

DNR will be contacted early in the design and permitting process to ensure a timely consult.

3.8 WASHINGTON DEPARTMENT OF FISH AND WILDLIFE HYDRAULIC PROJECT APPROVAL PERMITTING

The Washington State Legislature developed the Hydraulic Project Approval (HPA) process to provide requirements for the protection of fish and fish habitat from the impacts of hydraulic projects (Chapter 77.55 RCW). These projects are considered to be any work that would use, divert, obstruct, or change the natural flow or bed of any river or stream or utilize any waters of the state.

The Hydraulic Code requires any person or agency that desires to undertake a hydraulic project to obtain approval from the Washington Department of Fish and Wildlife in the form of a permit, before beginning work.

Effect on Design:

In conjunction with design, an HPA will be obtained as part of the permitting process by coordinating with the Washington Department of Fish and Wildlife. All prescribed work windows will be observed.

3.9 AIR QUALITY STANDARDS

Chapters 173-400, -460, and -470 WAC establish provisions for general regulation of air pollution sources, ambient air quality standards, and acceptable levels for particulate matter, and stipulate requirements for new sources of toxic air pollutant emissions. These standards are typically administered and enforced by the local clean air agency, which in this case would be the Southwest Clean Air Agency.

Effect on Design:

Some of the alternatives include sediment handling. During sediment-handling activities, it may be necessary to implement engineering controls to manage particulate emissions. Air testing may be required to show that emissions meet the substantive requirements of applicable air quality permits and rules. If results illustrate that substantive requirements have not been met, the design will require modification.

3.10 NOISE REGULATIONS

Maximum environmental noise levels have been determined and are contained in Chapter 173-60 WAC. Approved procedures for measurement of environmental noise are contained in Chapter 173-58 WAC.

Effect on Design:

During design, expected noise levels will be estimated and compared to the limitations established in 173-60 WAC. The need to adjust the approach to meet these requirements will be determined. For example, the noise level regulations may limit the operating hours of some parts of the remedial action.

3.11 STATE ENVIRONMENTAL POLICY ACT

The State of Washington administers a program similar to the federal National Environmental Policy Act. The State Environmental Policy Act (SEPA), contained in Chapter 43.21C RCW, provides the framework for state and local agencies to consider the environmental consequences of a proposal before taking action. It also gives agencies the ability to condition or deny a proposal because of identified likely significant adverse impacts. The act is implemented through the SEPA Rules and Procedures, Chapters 197-11 and 173-802 WAC, respectively.

SEPA review is a comprehensive assessment of potential environmental, economic, and cultural impacts from a specific development project or a proposed policy, plan, or program. The SEPA review process requires the preparation of an environmental checklist, which may be achieved by review of the environmental impacts and proposal of mitigation measures. The completed checklist helps to identify potential environmental impacts associated with the proposed action. Following a threshold determination, the lead agency will issue either a Determination of Non-Significance that will allow the action or permitting process to continue, or a Determination of Significance that will require that an environmental impact statement (EIS) be prepared before agency action can be taken. Typically, one checklist or EIS is required for a project, although it may require modification or application of numerous permits by federal, state, or local agencies.

Effect on Design:

SEPA review will be conducted for the project design. The Port or Ecology can act as the lead agency for SEPA review. The Port will complete a SEPA checklist for Ecology's review.

3.12 WASHINGTON STATE DEPARTMENT OF ARCHEOLOGICAL AND HISTORIC PRESERVATION AND WASHINGTON STATE STATUTORY GUIDELINES

Under the Washington State governor's Executive Order 05-05, archeological and cultural resources must be evaluated to satisfy federal regulations 36 CFR 800. The order compels agencies to "review capital construction projects and land acquisitions for the purpose of a capital construction project, not undergoing Section 106 review…with DAHP and affected Tribes to determine the potential impacts to cultural resources." The order outlines mitigation procedures when impacts to "significant resources" will occur, directs funding to be allocated for review, and directs the agency to report back to the governor's office on progress.

RCW 27.44 (Indian Graves and Records) addresses the need to protect Indian graves, cairns, and glyptic marks, and outlines penalties, civil actions, and procedures for unintentional disturbance of skeletal human remains. RCW 27.5 (Archaeological Sites and Resources) lays out the State of Washington's interest in protecting archaeological resources and establishes and empowers DAHP to complete an inventory, study, make NRHP nominations, and identify and excavate the "state's archeological resources" (RCW 27.53.020). The code establishes permit requirements, lays out penalties, and describes the contracting process.

WAC 25-48 establishes procedures for implementing the permit sections of RCW 27.53. WAC 25-46 establishes regulation procedures for historic archaeological resources on, in, or under aquatic lands owned by the state; RCW 79.105.600 deals with "archaeological activities" on state aquatic lands, and addresses shoreline management (via RCW 79.105). RCW 42.56.300 exempts disclosure of the location of archaeological sites.

Effect on Design:

The DAHP and affected Tribes will review a site cultural resource protection plan under which work will be conducted.

3.13 WASHINGTON INDUSTRIAL SAFETY AND HEALTH ADMINISTRATION

Washington Industrial Safety and Health Administration (WISHA) regulations pertaining to hazardous waste sites are addressed under WAC 296-843, Hazardous Waste Operations. This standard applies to cleanup and corrective actions at MTCA-regulated sites.

Effect on Design:

All work will be performed under a site health and safety plan in conformance with the applicable WISHA regulations.

4 LOCAL REQUIREMENTS

4.1 SHORELINE MASTER PROGRAM

A cleanup action or "substantial development" performed along any shoreline of statewide significance in the city of Ridgefield is regulated under the Shoreline Master Program (Chapter 18.820 of the Ridgefield Municipal Code [RMC]). A Substantial Development Permit (SDP) is required for such an action. The City of Ridgefield adopted an updated

Shoreline Master Program in 2012. The environmental designation for the Lake River shoreline under the updated program is High Intensity.

Effect on Design:

Since the remedial action may include upland construction of a sediment-handling facility, bank work, and possible access improvements completed within 200 feet of a shoreline, the substantive requirements of the SDP will be met as part of the remedial design.

4.2 CITY OF RIDGEFIELD CRITICAL AREAS ORDINANCE

The City of Ridgefield Critical Areas Ordinance designates and regulates projects that may impact ecologically sensitive areas, including wetlands and fish and wildlife habitat conservation areas, or geophysical hazards such as geologically hazardous areas and frequently flooded areas (RMC 18.280.120).

Effect on Design:

The remedial action will be conducted in an area that includes designated fish and wildlife habitat conservation areas, critical aquifer recharge areas, and frequently flooded areas. The design will meet the substantive requirements designed to protect these resources.

4.3 CITY OF RIDGEFIELD FLOOD CONTROL ORDINANCE

The purpose of the Flood Control Ordinance is to promote public health, safety, and general welfare; reduce the cost of flood insurance; and minimize public and private losses due to flooding (RMC 18.750). Elements of the remedial action will be conducted in an area designated as being in the 100-year floodplain. The ordinance requires a demonstration that development, grading, and filling projects will not exacerbate flood conditions through hydrologic and hydraulic analyses showing that the proposed encroachment would not result in a net increase in base flood elevation or flood velocity.

Effect on Design:

The alternatives will be designed to ensure that there is no net increase in fill in the floodway and that there is no net increase in base flood elevation or velocity due to fill in the floodway. Hydraulic analysis will be provided. Consultation with the city will confirm that the design meets the substantive requirements.

APPENDIX R

COST ESTIMATES

APPENDIX R RETAINED ALTERNATIVES COST ESTIMATES CONTENTS

TABLE

Table R-1
Retained Alternatives Cost Estimate Summary
Former PWT Site RI/FS

Area	Alternative	Remedial Action	Total cost	Table
Port-Owned Properties	1	Institutional Controls	$53,000	R-2
	2	Engineered Cap: ▪ Placement of a cap at the Port Railroad Avenue properties; and ▪ Annual cap monitoring and development of a site management plan.	$116,000	R-3
	3	Sampling and Soil Removal: ▪ Prefinal design sampling at the Port Railroad Avenue properties; ▪ Removal of soil at the Port Railroad Avenue properties; and ▪ Placement of crushed rock for operational surface	$273,000	R-4
Lake River	1	Monitored Natural Recovery: ▪ Natural attenuation in the form of sedimentation; ▪ Multiple sampling events; ▪ Long-term monitoring plan; and ▪ Institutional controls.	$679,000	R-5
	2	Enhanced Monitored Natural Recovery: ▪ Placement of a sand layer to enhance natural attenuation; ▪ Long-term monitoring plan; and ▪ Institutional controls.	$2,815,000	R-6
	3	Engineered Cap: ▪ Placement of an engineered sand cap; ▪ Placement of a protective armor layer; ▪ Implementation of long-term monitoring and maintenance; and ▪ Institutional controls.	$7,718,000	R-7
	4	Dredging and ENR: ▪ The removal of impacted sediment through mechanical dredging; ▪ Existing in-water structure removal; ▪ Lower bank stabilization; and ▪ Placement of an enhanced natural recovery (ENR) layer.	$9,492,000	R-8

Table R-1
Retained Alternatives Cost Estimate Summary
Former PWT Site RI/FS

Area	Alternative	Remedial Action	Total cost	Table
Carty Lake	1	Monitored Natural Recovery: ▪ Natural attenuation; ▪ Multiple sampling events; ▪ Long-term monitoring plan; and ▪ Institutional controls to protect receptors.	$280,500	R-9
	2	Focused Dredge and Limited Residuals Cap: ▪ Dredging the highly impacted southern area of Carty Lake; ▪ Placement of residuals cap layer over the dredged area; ▪ Post-Remedy Monitoring; and ▪ Institutional controls to protect receptors.	$1,633,000	R-10
	3	Focused Dredge and Expanded Residuals Cap: ▪ Dredging the highly impacted southern area of Carty Lake; ▪ Placement of residuals cap layer over an expanded area; ▪ Post-Remedy Monitoring; and ▪ Institutional controls to protect receptors.	$2,308,000	R-11
	4	Focused Dredge and Full Residuals Cap: ▪ Dredging the highly impacted southern area; ▪ Placement of sediment cap layer over the entire lake; ▪ Implementation of long-term monitoring and maintenance; and ▪ Institutional controls to protect receptors.	$7,340,000	R-12

COST ESTIMATES

PORT-OWNED PROPERTIES

Table R-2
Alternative 1 Cost Estimate - Port-Owned Properties Institutional Controls
Former PWT Areawide RI/FS

Title: Port of Ridgefield
Project: Port-Owned Properties
Institutional Controls Remedy
Client: Port of Ridgefield
Project #: 9003.01.49/00
Prepared By: Connor Lamb
Checked By: Jennifer King
Date: 5/31/2013
Revision #: 0

MAUL FOSTER ALONGI

2001 NW 19th Avenue, Suite 200
Portland, OR 97209
971.544.2139 (p)
971.544.2140 (f)
www.maulfoster.com

Assumptions

1 Institutional controls to be implemented include:
- Installation of a fence around the entire property
- Installation of signs
- Deed restrictions

2 Permitting and negotiations includes legal cost for development of deed restrictions.
4 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Remedial area delineation	$2,000	LS	1	$2,000
1.2 Permitting and negotiations	$10,000	LS	1	$10,000
Total Design and Permitting Cost				**$12,000**
2.0 Controls				
2.1 Fence installation	$21	LF	1200	$25,200
2.2 Acquisition and installation of signs	$2,000	LS	1	$2,000
Total Controls Cost				**$27,200**
Subtotal				**$39,200**
Tax			**8.20%**	**$2,230**
Contingency			**30%**	**$11,760**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$53,000**

Table R-3
Alternative 2 Cost Estimate - Port-Owned Properties Engineered Cap
Former PWT Areawide RI/FS

Title: Port of Ridgefield
Project: Port-Owned Properties
Engineered Cap Remedy
Client: Port of Ridgefield
Project #: 9003.01.49/00
Prepared By: Connor Lamb
Checked By: Jennifer King
Date: 5/31/2013
Revision #: 0

MAUL FOSTER ALONGI
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
971.544.2139 (p)
971.544.2140 (f)
www.maulfoster.com

Assumptions

1 Design includes construction plans and documents.
2 Permitting includes approval and processing with City of Ridgefield and Ecology.
3 The Railroad Avenue property east of the rails receives a gravel cap.
5 Two feet of clean gravel will be placed at the Railroad Avenue property.
6 Minimal regrading and subgrade preparation for placement or drainage will occur.
7 Possible addition of retaining wall not included in cost estimate.
8 City will require management of stormwater incorporated into the design.
9 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Remedial area delineation	$2,000	LS	1	$2,000
1.2 Engineering design, construction plans, and specifications	$20,000	LS	1	$20,000
1.3 Permitting	$5,000	LS	1	$5,000
1.4 Plans (HASP, construction QA plan)	$2,000	LS	1	$2,000
1.5 As-built report labor	$5,000	LS	1	$2,500
Total Design and Permitting Cost				**$31,500**
2.0 Railroad Avenue Cap				
2.1 Erosion and sediment control	$1,000	LS	1	$1,000
2.2 Mobilize equipment	$5,000	LS	1	$5,000
2.3 Excavation/Subgrade preparation	$6	CY	400	$2,400
2.4 Acquisition and placement of demarcation fabric	$3	SY	2,800	$8,400
2.5 Placement and compaction of crushed rock/cap	$40	CY	1,800	$72,000
2.6 Stormwater improvements	$15,000	LS	1	$15,000
Total Construction Cost				**$103,800**
Subtotal				**$135,300**
Tax			**8.20%**	**$8,512**
Contingency			**30%**	**$40,590**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$184,000**

Table R-4
Alternative 3 Cost Estimate - Port-Owned Properties Sampling and Soil Removal
Former PWT Areawide RI/FS

Title: Port of Ridgefield	MAUL FOSTER ALONG 2001 NW 19th Avenue, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com
Project: Port Owned Properties	
Sampling and Soil Removal Remedy	
Client: Port of Ridgefield	
Project #: 9003.01.49/00	
Prepared By: Connor Lamb	
Checked By: Jennifer King	
Date: 5/31/2013	
Revision #: 0	

Assumptions

1 Design includes construction plans and documents, contract support, and contractor procurement.
2 Additional sampling will be completed prior to final design to refine depth and extent.
3 Permitting includes approval and processing with City of Ridgefield and Ecology.
4 Approximately one half-acre area is remedied.
5 1 foot of material will be removed and replaced with crushed rock.
6 Duration of work requiring oversight estimated to be one month.
7 Direct landfill of soil as nonhazardous at Waste Management's Hillsboro Subtitle D disposal facility.
8 Soil density: 1.5 Tons/CY
9 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Work plan and negotiations	$3,000	LS	1	$3,000
1.2 Remedial area delineation and predesign sampling	$10,000	LS	1	$10,000
1.3 Engineering design, construction plans, and specifications	$25,000	LS	1	$25,000
1.4 Permitting	$5,000	LS	1	$5,000
1.5 Plans (HASP, construction QA plan, sampling and analysis plan)	$3,000	LS	1	$3,000
1.6 As-built report labor	$7,500	LS	1	$7,500
Total Design and Permitting Cost				**$53,500**
2.0 Construction				
2.1 Erosion and sediment control	$2,000	LS	1	$2,000
2.2 Mobilize equipment	$10,000	LS	1	$10,000
2.3 Excavation and loading into trucks	$6	CY	900	$5,400
2.4 Landfill transport and disposal	$40	TON	1,350	$54,000
2.5 Acquisition and placement of demarcation fabric	$3	SY	2,800	$8,400
2.6 Placement and compaction of crushed rock	$40	CY	1,000	$40,000

Table R-4
Alternative 3 Cost Estimate - Port-Owned Properties Sampling and Soil Removal
Former PWT Areawide RI/FS

Item	Unit Cost	Unit	Quantity	Total Cost
2.7 Surveying support during construction, as-built survey	$5,000	LS	1	$5,000
2.8 Confirmation sampling	$1,000	EA	10	$10,000
2.9 Construction quality assurance	$1,000	Day	30	$30,000
Total Construction Cost				**$164,800**
Subtotal				**$218,300**
Tax			**8.20%**	**$13,514**
Contingency			**30%**	**$65,490**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$297,000**

COST ESTIMATES

LAKE RIVER

Table R-5

Alternative 1 Cost Estimate - Lake River Monitored Natural Recovery

Former PWT Areawide RI/FS

Title: Port of Ridgefield
Project: Former PWT Areawide RI/FS
Alternative 1, Monitored Natural Recovery
Client: Port of Ridgefield
Project #/Task: 9003.01.49/00
Prepared By: Erik Naylor
Checked By: Erik Bakkom, P.E.
Date: 3/16/2012
Revision #.: 0

MAUL FOSTER ALONGI

2001 NW 19th Avenue, Suite 200
Portland, OR 97209
971.544.2139 (p)
971.544.2140 (f)
www.maulfoster.com

Assumptions

1 One sampling event every other year for ten years (five events).
2 Ten samples taken per event.
3 Analytical work will be for dioxins/furans only.
4 Duration of each sampling event will be approximately 12 hours, with two full-time employees.
5 A comprehensive work plan will be produced.
6 A report will be generated after each sampling event.
7 Surface sediment sampling only.
8 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Work plan and negotiations	$15,000	LS	1	$15,000
Total Design and Permitting Cost				**$15,000**
2.0 Sediment Sampling (5 events)				
2.1 Labor cost per sampling event	$2,400	EA	5	$12,000
2.2 Equipment cost per sampling event	$700	EA	5	$3,500
Total Sediment Sampling Cost				**$15,500**
3.0 Monitoring and Reporting (5 events)				
3.1 Sample analysis for dioxins/furans per sampling event	$6,500	EA	5	$32,500
3.2 Reporting per sampling event	$10,000	EA	5	$50,000
4.0 Bank Stabilization				
4.1 Bank stripping and grubbing	$7,946	AC	1	$7,946
4.2 Bank armor geosynthetic	$3	SY	12,500	$34,500
4.3 Acquisition and placement of 8" minus river rock armor	$80	CY	4,200	$336,000
Total Monitoring and Maintenance Cost				**$460,946**
Subtotal				**$491,446**
Tax			8.20%	**$40,299**
Contingency			**30%**	**$147,434**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$679,178**

Table R-6
Alternative 2 Cost Estimate - Lake River Enhanced Monitored Natural Recovery
Former PWT Areawide RI/FS

Title: Port of Ridgefield	MAUL FOSTER ALONG 2001 NW 19th Avenue, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com
Project: Former PWT Areawide RI/FS	
Alternative 2, Enhanced Monitored Natural Recovery	
Client: Port of Ridgefield	
Project #/Task: 9003.01.49/00	
Prepared By: Connor Lamb, EIT	
Checked By: Erik Bakkom, PE	
Date: 3/16/2012	
Revision #: 0	

Assumptions

1 Design includes bathymetric survey, construction plans and documents.

2 Permitting includes approval and processing with City of Ridgefield and Ecology, U.S. Army Corps of Engineers, USFWS, 401 Certification, HPA, and NMFS consultation.

3 Assume silt curtain required in water.

4 Access improvements include clearing and grubbing, grading staging area, and haul road construction.

5 Placement of sand for ENR by barge derrick.

6 ENR cap over all sediment above 5 ppt dioxins at 1-foot thickness.

7 Duration of work estimated to be 20 days.

8 Water quality monitoring will be for turbidity only. Fieldwork to be conducted by MFA field crew, testing to be completed on site.

9 10% volume contingency to include irregularities in placement.

10 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Work plan and negotiations	$100,000	LS	1	$100,000
1.2 Engineering design, construction plans, and specifications	$10,000	LS	1	$10,000
1.3 Permitting	$150,000	LS	1	$150,000
1.4 Plans (HASP, construction QA plan, sampling and analysis plan)	$50,000	LS	1	$50,000
1.5 Bid support	$10,000	LS	1	$10,000
Total Design and Permitting Cost				**$320,000**

Table R-6
Alternative 2 Cost Estimate - Lake River Enhanced Monitored Natural Recovery
Former PWT Areawide RI/FS

Item	Unit Cost	Unit	Quantity	Total Cost
Construction				
2.0 Sediment Removal				
2.1 Access improvements	$10,000	LS	1	$10,000
2.2 Mobilize equipment	$500,000	LS	1	$500,000
2.3 Water quality monitoring before, during, and after construction	$1,500	Day	20	$30,000
2.4 Removal and disposal of in-water structures and debris	$50,000	LS	1	$50,000
2.5 Acquisition and installation of silt curtain	$60	LF	2,100	$126,000
2.6 Acquisition and placement of sand for ENR	$30	CY	14,220	$426,600
2.7 Construction oversight	$2,100	Day	20	$42,000
2.8 Project manager/ superintendent	$2,200	Day	10	$22,000
2.9 As-built report labor	$10,000	LS	1	$10,000
3.0 Bank Stabilization				
3.1 Bank stripping and grubbing	$7,946	AC	1	$7,946
3.2 Bank armor geosynthetic	$3	SY	12,500	$34,500
3.3 Acquisition and placement of 8" minus river rock armor	$80	CY	4,200	$336,000
Total Construction Cost				**$1,595,046**
4.0 Monitoring and Maintenance (years 1, 5, 10)				
4.1 Below-water stability inspection (bathymetry and dive survey)	$50,000	EA	3	$150,000
Total Monitoring and Maintenance Cost				**$150,000**
Subtotal				**$2,065,046**
Tax			8.20%	**$130,794**
Contingency			**30%**	**$619,514**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$2,815,354**

Table R-7
Alternative 3 Cost Estimate - Lake River Engineered Cap
Former PWT Areawide RI/FS

Title: Port of Ridgefield
Project: Former PWT Areawide RI/FS
Alternative 3, Engineered Cap
Client: Port of Ridgefield
Project #/Task: 9003.01.49/00
Prepared By: Connor Lamb, EIT
Checked By: Erik Bakkom, PE
Date: 3/16/2012
Revision #.: 0

MAUL FOSTER ALONGI

2001 NW 19th Avenue, Suite 200
Portland, OR 97209
971.544.2139 (p)
971.544.2140 (f)
www.maulfoster.com

Assumptions

1 Design includes bathymetric survey, construction plans and documents.

2 Permitting includes approval and processing with City of Ridgefield and Ecology, U.S. Army Corps of Engineers, USFWS, 401 Certification, HPA, and NMFS consultation.

3 Quantities based on 2-foot-minimum cap and armor thicknesses.

4 Assume silt curtain required in water.

5 Access improvements include clearing and grubbing, grading staging area, and haul road construction.

6 Mechanical placement rate assumed to be approximately 1,000 CY/Day.

7 Cap placement over all sediment above 10 ppt dioxins.

8 Duration of work estimated to be two months.

9 Water quality monitoring will be for turbidity only. Fieldwork to be conducted by MFA field crew, testing to be completed on site.

10 A barge slip will be excavated and a second crane derrick will be used to skip the material upland.

11 10% sand cap volume contingency to include irregularities in placement.

12 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Work plan and negotiations	$100,000	LS	1	$100,000
1.2 Engineering design, construction plans, and specifications	$250,000	LS	1	$250,000
1.3 Permitting	$150,000	LS	1	$150,000
1.4 Plans (HASP, construction QA plan, sampling and analysis plan)	$75,000	LS	1	$75,000
1.5 Bid support	$10,000	LS	1	$10,000

Table R-7
Alternative 3 Cost Estimate - Lake River Engineered Cap
Former PWT Areawide RI/FS

Item	Unit Cost	Unit	Quantity	Total Cost
Total Design and Permitting Cost				**$585,000**
Construction				
2.0 Sediment Removal				
2.1 Access improvements	$10,000	LS	1	$10,000
2.2 Preconstruction services (contractor work plans, etc.)	$8,000	LS	1	$8,000
2.3 Mobilize equipment	$500,000	LS	1	$500,000
2.4 Water quality monitoring before, during, and after construction	$1,500	Day	60	$90,000
2.5 Removal and disposal of in-water structures and debris	$50,000	LS	1	$50,000
2.6 Acquisition and installation of silt curtain	$60	LF	2,100	$126,000
2.7 Acquisition and placement of sand for cap	$30	CY	28,440	$853,200
2.8 Acquisition and placement of 8" minus river rock armor	$80	CY	28,440	$2,275,200
2.9 Barge slip dredging	$85	CY	1,700	$144,500
2.10 Surveying support during construction, as-built survey	$150,000	LS	1	$150,000
2.11 Construction oversight	$2,100	Day	60	$126,000
2.12 Project manager/superintendent	$2,200	Day	60	$132,000
2.13 As-built report labor	$50,000	LS	1	$50,000
3.0 Bank Stabilization				
3.1 Bank stripping and grubbing	$7,946	AC	1	$7,946
3.2 Bank armor geosynthetic	$3	SY	12,500	$34,500
3.3 Acquisition and placement of 8" minus river rock armor	$80	CY	4,200	$336,000
Total Construction Cost				**$4,893,346**
4.0 Monitoring and Maintenance (years 1, 5, 10)				
4.1 Below-water stability inspection (bathymetry and dive survey)	$50,000	EA	3	$150,000
Total Monitoring and Maintenance Cost				**$150,000**
Subtotal				**$5,628,346**
Tax			8.20%	**$401,254**
Contingency			**30%**	**$1,688,504**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$7,718,104**

Table R-8
Alternative 4 Cost Estimate - Lake River Dredge and ENR
Former PWT Areawide RI/FS

Title: Port of Ridgefield
Project: Former PWT Areawide RI/FS
Alternative 4, Dredging and ENR
Client: Port of Ridgefield
Project #/Task: 9003.01.49/00
Prepared By: Connor Lamb, EIT
Checked By: Erik Bakkom, PE
Date: 3/16/2012
Revision #: 0

MAUL FOSTER ALONG

2001 NW 19th Avenue, Suite 200
Portland, OR 97209
971.544.2139 (p)
971.544.2140 (f)
www.maulfoster.com

Assumptions

1 Design includes bathymetric survey, construction plans and documents.
2 Permitting includes approval and processing with City of Ridgefield and Ecology, U.S. Army Corps of Engineers, USFWS, 401 Certification, HPA, and NMFS consultation.
3 Dredge quantities based on neatline depth plus 1 foot of overdredge.
4 Assume silt curtain required in water.
5 Access improvements include clearing and grubbing, grading staging area, dewatering facility, and haul road construction.
6 Mechanical dredging rate assumed to be 800–1,000 CY/Day.
7 ENR cap (1-foot thickness) over all sediment above 10 ppt dioxins and all dredged locations.
8 Duration of work estimated to be 2 months.
9 Water quality monitoring will be for turbidity only. Fieldwork to be conducted by MFA field crew, testing to be completed on site.
10 Primary dewatering will occur on the barges prior to off-site disposal.
11 A barge slip will be excavated and a second crane derrick will be used to skip the material upland.
12 Dredged material will be cement amended upland at a rate of 7%.
13 10% dredge volume contingency to include side slopes and volume uncertainty.
14 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Work plan and negotiations	$100,000	LS	1	$100,000
1.2 Engineering design, construction plans, and specifications	$250,000	LS	1	$250,000
1.3 Permitting	$150,000	LS	1	$150,000
1.4 Plans (HASP, construction QA plan, sampling and analysis plan)	$75,000	LS	1	$75,000
1.5 Bid support	$10,000	LS	1	$10,000

Table R-8
Alternative 4 Cost Estimate - Lake River Dredge and ENR
Former PWT Areawide RI/FS

Item	Unit Cost	Unit	Quantity	Total Cost
Total Design and Permitting Cost				**$585,000**
Construction				
2.0 Sediment Removal				
2.1 Access improvements	$20,000	LS	1	$20,000
2.2 Preconstruction services (contractor work plans, etc.)	$8,000	LS	1	$8,000
2.3 Mobilize equipment	$500,000	LS	1	$500,000
2.4 Water quality monitoring before, during, and after construction	$1,500	Day	40	$60,000
2.5 Removal and disposal of in-water structures and debris	$50,000	LS	1	$50,000
2.6 Acquisition and installation of silt curtain	$60	LF	2,100	$126,000
2.7 Sediment dredging and unloading to shore	$85	CY	23,401	$1,989,085
2.8 Dewatering and disposal of water (on barge)	$141,000	LS	1	$141,000
2.9 Barge slip dredging	$85	CY	1,700	$144,500
2.10 Water treatment	$15,000	LS	1	$15,000
2.11 Cement amendment	$6.60	CY	25,101	$165,667
2.12 Sediment landfill transportation and disposal	$39	Ton	44,730	$1,744,469
2.13 Acquisition and placement of sand for ENR	$30	CY	14,220	$426,600
2.17 Surveying support during construction, as-built survey	$150,000	LS	1	$150,000
2.18 Construction oversight	$2,100	Day	40	$84,000
2.19 Project manager/ superintendent	$2,200	Day	40	$88,000
2.20 As-built report labor	$50,000	LS	1	$50,000
2.21 Cultural resource monitoring/artifact repository/reporting	$800	Day	45	$36,000
3.0 Bank Stabilization				
3.1 Bank stripping and grubbing	$7,946	AC	1	$7,946
3.2 Bank armor geosynthetic	$3	SY	12,500	$34,500
3.3 Acquisition and placement of 8" minus river rock armor	$80	CY	4,200	$336,000
Total Construction Cost				**$6,176,767**
4.0 Monitoring and Maintenance (years 1, 5, 10)				
4.1 Bathymetric Surveys, Analysis and Reporting	$50,000	EA	3	$150,000
Total Monitoring and Maintenance Cost				**$150,000**
Subtotal				**$6,911,767**
Tax			8.20%	**$506,495**
Contingency			**30%**	**$2,073,530**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$9,491,792**

COST ESTIMATES

CARTY LAKE

Table R-9
Alternative 1 Cost Estimate - Carty Lake Monitored Natural Recovery
Former PWT Site RI/FS

Title: Port of Ridgefield
Project: Former PWT Areawide RI/FS
Alternative 1, Monitored Natural Recovery
Client: Port of Ridgefield
Project #/Task: 9003.01.49/00
Prepared By: Erik Naylor
Checked By: Erik Bakkom, PE
Date: 3/16/2012
Revision #: 0

MAUL FOSTER ALONG

2001 NW 19th Avenue, Suite 200
Portland, OR 97209
971.544.2139 (p)
971.544.2140 (f)
www.maulfoster.com

Assumptions

1 One sampling event every other year for ten years (five events).
2 Ten samples taken per event.
3 Analytical work will be for dioxins/furans only.
4 Duration of each sampling event will be approximately 12 hours, with two full-time employees.
5 A comprehensive work plan will be needed.
6 Reporting will be needed for each sampling event.
7 Further site characterization will be needed (bathymetry/remedial area delineation).
8 Surface sediment sampling only.
9 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Work plan and negotiations	$15,000	LS	1	$15,000
1.2 Monitored area delineation	$50,000	LS	1	$50,000
1.3 Baseline bathymetry	$40,000	LS	1	$40,000
Total Design and Permitting Cost				**$105,000**
2.0 Sediment Sampling (5 events)				
2.1 Labor cost per sampling event	$2,400	EA	5	$12,000
2.2 Equipment cost per sampling event	$700	EA	5	$3,500
Total Sediment Sampling Cost				**$15,500**
3.0 Monitoring and Reporting (5 events)				
3.1 Sample analysis for dioxins/furans per sampling event	$6,500	EA	5	$32,500
3.2 Reporting per sampling event	$10,000	EA	5	$50,000
Total Monitoring and Maintenance Cost				**$82,500**
Subtotal				**$203,000**
Tax			8.2%	**$16,646**
Contingency			**30%**	**$60,900**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$280,546**

Table R-10
Alternative 2 Cost Estimate - Carty Lake Focused Dredge and Limited Residuals Cap
Former PWT Site RI/FS

Title: Port of Ridgefield
Project: Former PWT Areawide RI/FS
Alternative 2, Focused Dredge and Limited ENR
Client: Port of Ridgefield
Project #/Task: 9003.01.49/00
Prepared By: Connor Lamb, EIT
Checked By: Erik Bakkom, PE
Date: 3/16/2012
Revision #: 1

MAUL FOSTER ALONG
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
971.544.2139 (p)
971.544.2140 (f)
www.maulfoster.com

Assumptions

1. Design includes survey, construction plans and documents.
2. Permitting includes approval and processing with City of Ridgefield and Ecology, U.S. Army Corps of Engineers, USFWS, 401 Certification, HPA, and NMFS consultation.
3. 5,540-CY volume dredge prism including 1-ft overdredge.
4. Access improvements include clearing and grubbing, and staging area.
5. Excavation of sediments using tracked equipment.
6. Transport of sediment by truck.
7. Direct landfill of sediment as nonhazardous material at Waste Management's Hillsboro Subtitle D disposal facility.
8. One foot of clean sand ENR backfill to be placed.
9. 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Work plan and negotiations	$75,000	LS	1	$75,000
1.2 Remedial area delineation	$50,000	LS	1	$50,000
1.3 Engineering design, construction plans, and specifications	$50,000	LS	1	$50,000
1.4 Permitting	$100,000	LS	1	$100,000
1.5 Plans (HASP, construction QA plan, sampling and analysis plan)	$30,000	LS	1	$30,000
Total Design and Permitting Cost				**$305,000**
2.0 Construction				
2.1 Access improvements	$15,000	LS	1	$15,000
2.2 Preconstruction (survey, contractor work plans, etc.)	$8,000	LS	1	$8,000
2.3 Mobilize equipment	$50,000	LS	1	$50,000
2.4 Silt curtain	$60	LF	350	$21,000
2.5 Sediment removal	$25	CY	5,649	$141,225
2.6 Dewater and cement amend	$7	CY	5,649	$39,543
2.7 Sediment landfill transport and disposal	$40	TON	9,942	$397,690
2.8 Acquisition and placement of ENR backfill	$20	CY	2,701	$54,020

Table R-10
Alternative 2 Cost Estimate - Carty Lake Focused Dredge and Limited Residuals Cap
Former PWT Site RI/FS

Item	Unit Cost	Unit	Quantity	Total Cost
2.9 Surveying support during construction, as-built survey	$15,000	LS	1	$15,000
2.11 Construction quality assurance	$2,100	Day	30	$63,000
2.12 As-built report labor	$15,000	LS	1	$15,000
Total Construction Cost				**$819,478**
3.0 Monitoring and Maintenance				
2.1 Post remedy monitoring	$80,000	LS	1	$80,000
Total Monitoring and Maintenance Cost				**$80,000**
Subtotal				**$1,204,478**
Tax			**8.20%**	**$67,197**
Contingency			**30%**	**$361,343**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$1,633,018**

Table R-11
Alternative 3 Cost Estimate - Carty Lake Focused Dredge and Expanded Residuals Cap
Former PWT Site RI/FS

Title: Port of Ridgefield
Project: Former PWT Areawide RI/FS
Alternative 3, Focused Dredge and Expanded ENR
Client: Port of Ridgefield
Project #/Task: 9003.01.49/00
Prepared By: Connor Lamb, EIT
Checked By: Erik Bakkom, PE
Date: 11/27/2012
Revision #: 0

MAUL FOSTER ALONG
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
971.544.2139 (p)
971.544.2140 (f)
www.maulfoster.com

Assumptions

1. Design includes survey, construction plans and documents.
2. Permitting includes approval and processing with City of Ridgefield and Ecology, U.S. Army Corps of Engineers, USFWS, 401 Certification, HPA, and NMFS consultation.
3. 5,540-CY volume dredge prism including 1-ft overdredge.
4. Access improvements include clearing and grubbing, and staging area.
5. Excavation of sediments using tracked equipment.
6. Transport of sediment by truck.
7. Direct landfill of sediment as nonhazardous material at Waste Management's Hillsboro Subtitle D disposal facility.
8. One foot of clean sand ENR backfill to be placed.
9. 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Work plan and negotiations	$75,000	LS	1	$75,000
1.2 Remedial area delineation	$50,000	LS	1	$50,000
1.3 Engineering design, construction plans, and specifications	$50,000	LS	1	$50,000
1.4 Permitting	$100,000	LS	1	$100,000
1.5 Plans (HASP, construction QA plan, sampling and analysis plan)	$30,000	LS	1	$30,000
Total Design and Permitting Cost				**$305,000**
2.0 Construction				
2.1 Access improvements	$15,000	LS	1	$15,000
2.2 Preconstruction (survey, contractor work plans, etc.)	$8,000	LS	1	$8,000
2.3 Mobilize equipment	$50,000	LS	1	$50,000
2.4 Silt curtain	$60	LF	350	$21,000
2.5 Sediment removal	$25	CY	5,649	$141,225
2.6 Dewater and cement amend	$7	CY	5,649	$39,543
2.7 Sediment landfill transport and disposal	$40	TON	9,942	$397,690
2.8 Acquisition and placement of ENR backfill	$40	CY	12,776	$511,040

Table R-11
Alternative 3 Cost Estimate - Carty Lake Focused Dredge and Expanded Residuals Cap
Former PWT Site RI/FS

Item	Unit Cost	Unit	Quantity	Total Cost
2.9 Surveying support during construction, as-built survey	$15,000	LS	1	$15,000
2.11 Construction quality assurance	$2,100	Day	45	$94,500
2.12 As-built report labor	$15,000	LS	1	$15,000
Total Construction Cost				**$1,307,998**
3.0 Monitoring and Maintenance				
2.1 Post remedy monitoring	$80,000	LS	1	$80,000
Total Monitoring and Maintenance Cost				**$80,000**
Subtotal				**$1,692,998**
Tax			**8.20%**	**$107,256**
Contingency			**30%**	**$507,899**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$2,308,153**

Table R-12
Alternative 4 Cost Estimate - Carty Lake Focused Dredge and Full Residuals Cap
Former PWT Site RI/FS

Title: Port of Ridgefield
Project: Sediment Interim Action, Preliminary Alternatives
Alternative 4, Focused Dredge and Full ENR
Client: Port of Ridgefield
Project #/Task: 9003.01.49/00
Prepared By: Connor Lamb, EIT
Checked By: Erik Bakkom, PE
Date: 11/27/2012
Revision #: 1

MAUL FOSTER ALONG
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
971.544.2139 (p)
971.544.2140 (f)
www.maulfoster.com

Assumptions

1 Design includes survey, construction plans and documents.
2 Permitting includes approval and processing with City of Ridgefield and Ecology, U.S. Army Corps of Engineers, USFWS, 401 Certification, HPA, and NMFS consultation.
3 5,540-CY volume dredge prism including 1-ft overdredge.
4 Access improvements include clearing and grubbing, and staging area.
5 Excavation of sediments using tracked equipment.
6 Transport of sediment by truck.
7 Direct landfill of sediment as nonhazardous material at Waste Management's Hillsboro Subtitle D disposal facility.
8 One foot of clean sand ENR backfill to be placed.
9 30% contingency.

Item	Unit Cost	Unit	Quantity	Total Cost
1.0 Design and Permitting				
1.1 Work plan and negotiations	$75,000	LS	1	$75,000
1.2 Remedial area delineation	$50,000	LS	1	$50,000
1.3 Engineering design, construction plans, and specifications	$50,000	LS	1	$50,000
1.4 Permitting	$100,000	LS	1	$100,000
1.5 Plans (HASP, construction QA plan, sampling and analysis plan)	$30,000	LS	1	$30,000
Total Design and Permitting Cost				**$305,000**
2.0 Construction				
2.1 Access improvements	$20,000	LS	1	$20,000
2.2 Preconstruction (survey, contractor work plans, etc.)	$8,000	LS	1	$8,000
2.3 Mobilize equipment	$50,000	LS	1	$50,000
2.4 Silt curtain	$60	LF	350	$21,000
2.5 Sediment removal	$25	CY	5,649	$141,225
2.6 Dewater and cement amend	$7	CY	5,649	$39,543
2.7 Sediment landfill transport and disposal	$40	TON	9,942	$397,690
2.8 Acquisition and placement of ENR backfill	$50	CY	82,256	$4,112,800
2.9 Surveying support during construction, as-built survey	$15,000	LS	1	$15,000

Table R-12
Alternative 4 Cost Estimate - Carty Lake Focused Dredge and Full Residuals Cap
Former PWT Site RI/FS

Item	Unit Cost	Unit	Quantity	Total Cost
2.11 Construction quality assurance	$2,100	Day	30	$63,000
2.12 As-built report labor	$15,000	LS	1	$15,000
Total Construction Cost				**$4,883,258**
4.0 Monitoring and Maintenance (years 1, 5, 10)				
4.1 Bathymetric Surveys, Analysis and Reporting	$50,000	EA	3	$150,000
Total Monitoring and Maintenance Cost				**$150,000**
Subtotal				**$5,338,258**
Tax			**8.20%**	**$400,427**
Contingency			**30%**	**$1,601,477**
TOTAL COST ESTIMATE, INCLUDING 30% CONTINGENCY				**$7,340,162**

APPENDIX S

LAKE RIVER DREDGE SCENARIOS

APPENDIX S LAKE RIVER DREDGE SCENARIOS CONTENTS

The dioxin data have been updated, as part of the draft RI/FS revisions, to ensure consistent treatment of interferences and non-detects during data qualification and calculation of TEQs. Updated TEQs are calculated according to the methodology developed in coordination with Ecology and are described in Appendix F.

APPENDIX S LAKE RIVER DREDGE SCENARIOS

Various dredging scenarios were evaluated to select the most appropriate dredging remedy, based on technical feasibility, meeting of cleanup levels (CULs), and cost/benefit associated with reduction of concentrations of dioxins (evaluated as toxic equivalents, or TEQs) in sediment.

Five dredge scenarios[1] were evaluated:

- Scenario A—removal of dioxin concentrations above 100 nanograms per kilogram (ng/kg)
- Scenario B—removal of dioxin concentrations above 60 ng/kg
- Scenario C—removal of dioxin concentrations above 30 ng/kg
- Scenario D—removal of dioxin concentrations above 10 ng/kg
- Scenario E—removal of dioxin concentrations above 5 ng/kg

The scenarios were selected based on evaluation of the distribution of concentrations in surface and subsurface sediment. Measured dioxin TEQ concentrations and modeled concentrations for subsurface areas not measured (see Attachment 1) were used to estimate both the lateral and vertical dredging footprint for each scenario. For each scenario, any surface or interval (e.g., 1 to 2 foot interval) with measured or modeled concentrations above the scenario target (e.g., 30 ng/kg for Scenario C) would be removed. In all scenarios, the leave surface in dredged areas and areas not dredged exceeding the dioxin CUL of 5 ng/kg TEQ are additionally covered with 1 foot of sand; this enhanced natural recovery (ENR) layer would cover any residuals generated during dredging. Finally, all scenarios include long term monitoring of the ENR layer to ensure continued dioxin TEQ reductions. See Attachment 1 for further description and a figure showing estimated post-remedial surface concentrations. Attachment 2 discusses a detailed residuals analysis.

All non-dioxin hazardous substances above screening levels occur only in areas with dioxin concentrations exceeding 100 ng/kg (see Section 3 of the report), and would be removed in all of these scenarios. In addition, the CUL protective of human direct contact and incidental ingestion of impacted sediment is 138 ng/kg (see Appendix M of the report). Because all dredge scenarios achieve removal of dioxin concentrations exceeding 100 ng/kg and other elevated hazardous substances, they are protective of this exposure scenario.

1. Concentration Reduction

To evaluate the dioxin TEQ concentrations anticipated in post-remedy conditions, surface weighted average concentrations (SWACs) were calculated for each dredge scenario. SWACs are used to evaluate remedy protectiveness of beneficial uses represented by aquatic-dependent wildlife and human seafood consumption. SWACs were calculating by placing Thiessen polygons around each dioxin sample result in the study area (see attached Figure S-1). Only areas currently above the CUL

---

[1] Dredge scenarios include removal of sediment and placement of 1 foot of sand to enhance natural recovery; see Section 11.3 of the main body of this remedial investigation and feasibility study for a description of the remedial alternative; see Attachment 1 for a description of how enhanced natural recovery ENR) was incorporated into the remedial evaluation.

of 5 ng/kg dioxin TEQ (see Section 2) were included in SWAC calculations. Thiessen polygons define the area around each sample point, using an algorithm to calculate the location of a boundary midway between available points. Each Thiessen polygon is then assigned the concentration represented by the sample it encompasses. In this way, the concentrations are spatially weighted, based on the area the polygon represents. This technique is well established and in use throughout the country at sediment remedial sites (see Attachment 1). Attachment 1 provides details on the SWAC calculation methods and assumptions. In brief, the predicted post-dredge concentration was initially determined from actual sample results or by extrapolating, assuming similar percent reduction as observed at other areas where dioxin data at depth were available. Next, the concentration at the bottom of the dredge cut was presumed to fully mix with the sand layer, so concentrations of the sand layer and the post-dredge surface were averaged for the resultant SWAC. This is a conservative assumption, as 100 percent mixing is unlikely and resulting surface concentrations are therefore likely to be lower at the point of compliance (i.e., the top 10 centimeters of the resulting Lake River bottom) than assumed for these hypothetical scenarios. The resulting post-remedy SWACs for each scenario are shown in the Table. This evaluation is an initial conservative estimate, and more specific information (e.g. dioxin concentrations at depth) will be collected during the design phase to refine estimates.

To understand the cost/benefit of each of the dredge scenarios, the post-remedy SWACs are compared with cost for each scenario. Cost estimate details are provided in Appendix R of the report. Figure S-2 shows a graph of the results and demonstrates that removal of concentrations for all scenarios provides substantial risk reduction. Removing dioxin concentrations above 100 ng/kg reduces the initial dioxin TEQ SWAC of 147 ng/kg to 16 ng/kg at a cost of $7.1M. Removing concentrations over 60 ng/kg and 30 ng/kg reduces the SWAC to 10 ng/kg and 7 ng/kg, respectively, at an additional cost of approximately $1M to $2M. Removal of dioxin concentrations above 10 and 5 ng/kg results in a SWAC of 3 or 2 ng/kg, respectively, at an additional cost of approximately $5M to $6M.

2. Comparison with CUL

A dioxin TEQ CUL of 5 ng/kg was selected, based on a reliably attainable practical quantitation limit (Section 6 of the report). Scenarios D and E immediately meet the CUL, based on post-remediation SWAC estimates. Note that only areas currently exceeding the CUL were included in SWAC calculations; when including all Lake River areas, Scenarios B through E meet the CUL. Scenarios B through E also achieve SWACs that meet ecological CULs developed for individual congeners (see Attachment 1). In all scenarios surfaces above 5 ng/kg will receive a sand layer of 1 foot, and long-term deposition is expected to ensure compliance with the CUL. More specific information (e.g. dioxin concentrations at depth) will be collected during the design phase to refine postremedial estimates.

3. Feasibility

Evaluation of technical feasibility is especially important when considering dredging remedies. A primary consideration is generation of dredging residuals. Generated residuals are sediment disturbed or resuspended during dredging that settles back to the sediment bed. A range of factors can impact residuals generation, including dredging methods, sediment geotechnical and geophysical characteristics, and physical site conditions. Residuals are expected to result from dredging and are addressed by placement of a clean sand layer. The uncertainty associated with estimating the nature and extent of residual contamination can make prediction of dredging effectiveness difficult and achieving levels in the low parts per trillion highly ambitious (see Attachment 2). A residuals analysis integrating site-specific characteristics, including sediment dioxin TEQ concentration data, estimates that surface concentrations between approximately 20 percent and 60 percent of the starting concentration may remain after dredging. Methods such as best management practices (BMPs) may help to limit residuals re-contamination. Dredging areas below 10 ng/kg (e.g. areas currently at approximately 2 ng/kg) may result in marginal dioxin reductions (~1 ng/kg) in those areas, resulting in minute SWAC reductions (see Table 3 in Attachment 2). Dredging studies show that residuals contamination, combined with dredging disturbance of sequestered contamination at depth, can actually increase postremedial concentrations[2] in areas with relatively low surface contamination. Sequestered dioxins are unlikely to occur at depth in areas where surface dioxin TEQ is relatively low (i.e., between 5-10 ng/kg). It is crucial to carefully consider the limited benefits of dredging to address the lowest TEQ areas (minimal dioxin TEQ reductions at best) with considerable additional monetary costs (see Section 2 above). Dredging areas below approximately 5 to 10 ng/kg dioxin TEQ may result in minimal dioxin reductions and is therefore not considered feasible.

4. Conclusion

Scenarios B and C result in significant dioxin TEQ reductions. Scenario B consists of dredging concentrations above 60 ng/kg while Scenario C consists of dredging concentrations above 30 ng/kg. ENR application to surfaces with concentrations above 5 ng/kg would occur for both scenarios. These scenarios are the preferred dredging remedial alternatives for the following reasons:

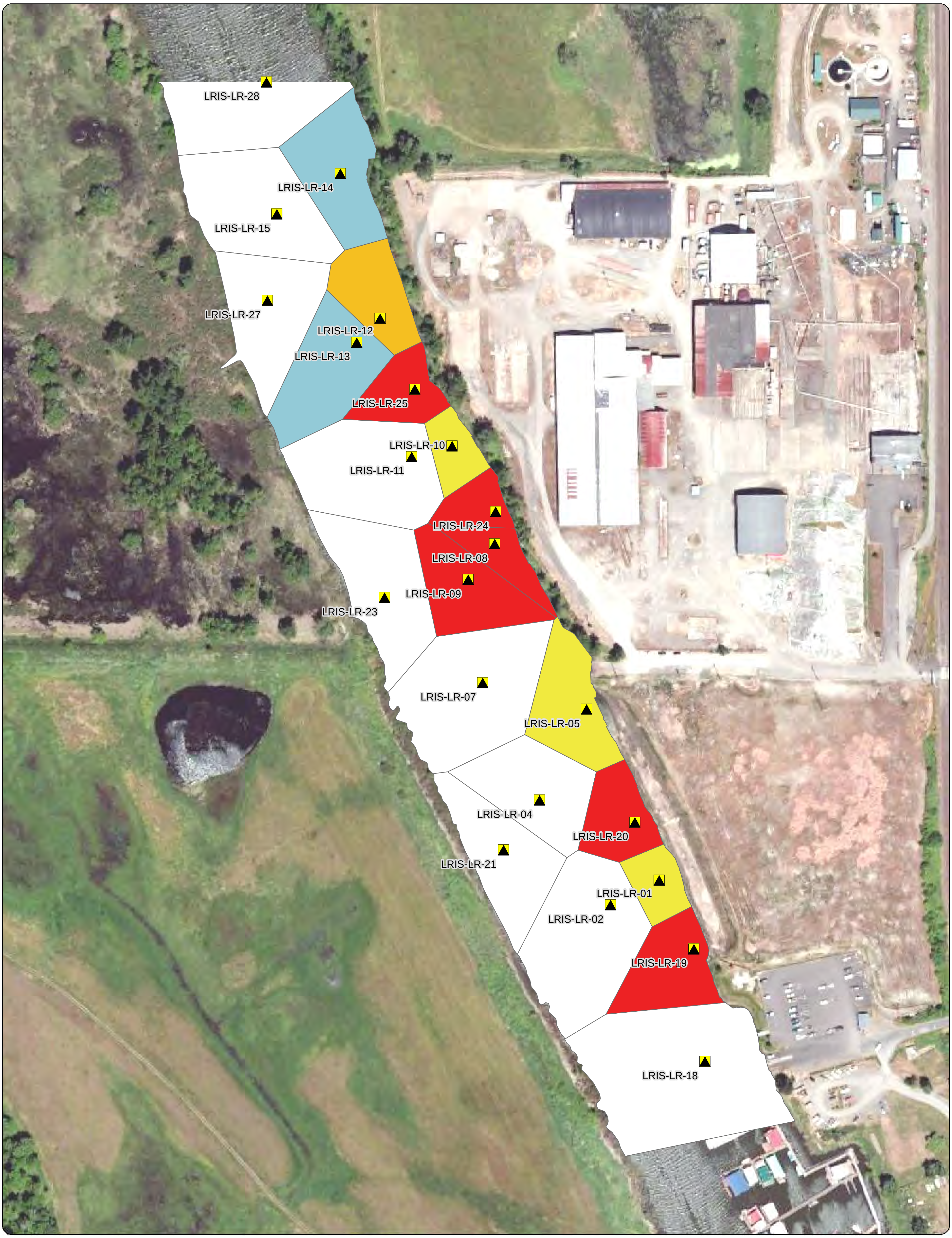
- Scenario B and C approach the dioxin TEQ CUL on an areawide basis; Scenario B results in a SWAC of 10 ng/kg while Scenario C results in a SWAC of 7 ng/kg.
- The additional estimated reduction in dioxin TEQ SWACs is minimal for Scenarios D through E, and cost analysis shows significant additional cost disproportionate to the benefit.
- Residuals analysis shows that dredging areas below 30 ng/kg may result in minimal additional dioxin reduction, and additional dioxin reductions may not occur at all in very low concentration areas (e.g. <10 ng/kg). As a result, residuals in these areas would need to be managed with additional ENR sand placement, resulting in significantly increased costs and relatively minimal additional dioxin TEQ reduction.
- Removing sediment achieves greater than 90 percent reduction in dioxin TEQ SWACs for Scenarios B and C.
- Removing sediment at concentrations above 60 ng/kg or 30 ng/kg dioxin TEQ achieves dioxin congener SWACs protective of ecological receptors.
- Scenario C is more expensive than Scenario B, but has the added benefit of removing almost all the elevated dioxin along the eastern shoreline, which is the area most likely to be used by people and impacted by processes that may disturb or re-suspend affected sediment (e.g., prop wash from boats).

---

[2] Patmont, C., and M. Palermo. 2007. Case studies of environmental dredging residuals and management implications. Proceedings, Fourth International Conference on Remediation of Contaminated Sediments, January 22-25, Savannah, Georgia.

FIGURES

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\FigS-1_Thiessen Polygons Used in Surface Weighted Average Calculations.mxd



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Notes:
1. TEQ = Toxicity Equivalent
2. ng/kg = nanograms per kilogram

Legend

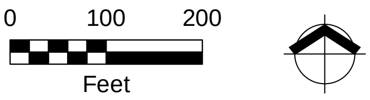
▲ Surface Sediment Sample

Surface Dioxin TEQ (ng/kg)

- ⬜ 0 - 5 ng/kg TEQ
- 🟩 5 - 10 ng/kg TEQ
- 🟦 10 - 30 ng/kg TEQ
- 🟨 30 - 60 ng/kg TEQ
- 🟧 60 - 100 ng/kg TEQ
- 🟥 > 100 ng/kg TEQ

Figure S-1
Thiessen Polygons Used in Surface Weighted Average Calculations

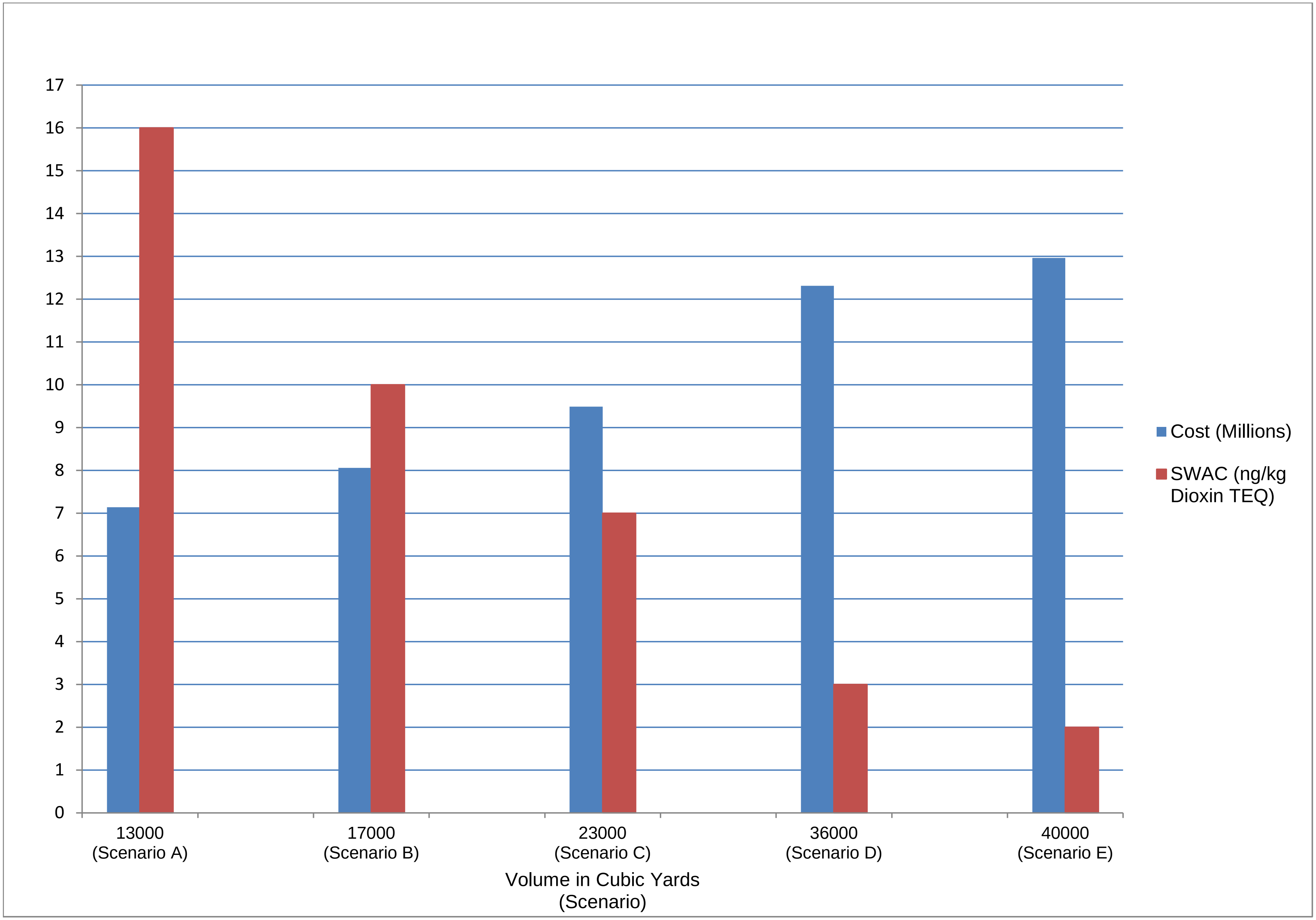
Former PWT Site RI/FS
Ridgefield, Washington



MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Project: 9003.01.40/05 Produced By: Hines/Schane Approved By: M. Novak Print Date: 1/2/2013

Figure S-2
Surface Weighted Average Concentrations (SWACs) and Dredge Volumes and Costs
Former PWT Site RI/FS



TABLE

Table
Lake River Dredge Scenario Post-Remedy SWACs
Former PWT Site RI/FS

Dredge Scenario	Dioxin TEQ SWAC (ng/kg)
Current Condition	147
Scenario A Post-Remedy SWAC	16
Scenario B Post-Remedy SWAC	10
Scenario C Post-Remedy SWAC	7
Scenario D Post-Remedy SWAC	3
Scenario E Post-Remedy SWAC	2

NOTES:

ng/kg = nanogram per kilogram.

SWAC = surface weighted average concentration; calculated using only areas initally above 5 ng/kg dioxin TEQ.

TEQ = toxicity equivalent.

ATTACHMENT 1

DREDGE VOLUME AND SWAC ANALYSIS

ATTACHMENT 1 DREDGE VOLUME AND SWAC ANALYSIS

1. Overview

The relationship between estimated volume of sediment dredged and concomitant reductions in modeled Lake River final surface sediment dioxin TEQ concentrations was analyzed. Variations of the general dredging scenario, Dredging with Enhanced Natural Recovery (DENR), were addressed to span potential approaches aimed at reducing dioxin concentrations. The general DENR scenario consists of dredging specified areas (generated via Thiessen polygon analysis; see below) and placement of a 1-foot sand cover over all areas dredged. In addition, a 1-foot sand cover is placed over all undredged areas exceeding 5 nanograms per kilogram (ng/kg) toxicity equivalent quotient (TEQ) in each scenario. Results for the preferred dredging alternatives (Scenarios B and C) are shown in the Figure.

2. Dioxin TEQ and Volume Analysis

Surface Weighted Average Concentration (SWAC) Analysis

The shape and surface area of potential areas to be dredged were identified using the "Build Thiessen Polygons" tool in the XTools Pro (ver. 8.0) toolset for ArcGIS 10. Briefly, Thiessen polygons are the polygons generated from points, defined by the perpendicular bisectors of the lines between all points and drawn so that each polygon bounds the region that is closer to one point than to any adjacent point.

In this analysis, sample locations represent the points used to define polygons; associated sample dioxin TEQ concentrations at surface and at depth were assigned to polygons generated for Lake River (see Appendix S). A SWAC approach was used to estimate overall current dioxin concentrations, where:

$$\text{SWACc} = \sum (\text{SAi} / \text{TSA}) * \text{SCi}))$$

SAi is the surface area of the ith polygon, TSA is the sum of all polygon surface areas, and SCi is the current measured surface concentration (SC) of the ith polygon. This results in a currently existing dioxin SWAC of 147 ng/kg dioxin TEQ. Only areas exceeding 5 ng/kg were included in all evaluations. LRIS-LR-16 and LRIS-LR-17 were not included in any calculations, as dioxin extent is defined to the north of these areas at LRIS-LR-19 (see Section 3.5.2 in the main body RI/FS).

The SWAC technique is well established and in use throughout a broad range of sciences, as well as at many nationally known sediment remedial investigation sites, including the Hudson River, Portland Harbor Cleanup, the Duwamish River Cleanup, Lower Passaic River Cleanup, Fort Ord, and others. With respect to fish consumption, the likelihood that anglers will consume fish caught from the same location every day for 30 or more years is low, since anglers are likely to use different fishing locations from time to time based on fish abundance, which can be seasonal or vary year to year. Therefore, using a SWAC is expected to be conservative with respect to anticipated human consumption patterns. Similarly, non-sessile aquatic organisms also use different locations throughout the aquatic environment, and thus a spatial averaging of concentrations may best represent expected contamination contact. SWAC analysis will be refined following collection of additional data during pre-design activities.

Dredge and ENR Volumes

Five specific DENR scenarios were analyzed:

- Scenario A: dredge all polygons > 100 ng/kg dioxin TEQ.
- Scenario B: dredge all polygons > 60 ng/kg dioxin TEQ.
- Scenario C: dredge all polygons > 30 ng/kg dioxin TEQ.
- Scenario D: dredge all polygons > 10 ng/kg dioxin TEQ.
- Scenario E: dredge all polygons > 5 ng/kg dioxin TEQ.

For each of the five scenarios (S-X) described in the overview, the final calculated dredge removal volume included neatline (NL) dredge volume, an additional 1-foot overdredge (OD), and a 10 percent contingency. Dredge volumes will be refined following collection of additional data during pre-design activities. Associated ENR sand volumes were assigned a 20 percent contingency.

Estimates of dredge volumes and hypothetical final surface concentrations (FSCs) were calculated under the following assumptions:

- For each scenario S-X, all polygons with SCs > X ng/kg were targeted for at least 1 foot NL depth removal.
- If measured dioxin TEQ concentrations were < X ng/kg at 1- to 2-foot depth, then:
    - One-foot NL dredge removal was assumed.
- If measured dioxin TEQ concentrations at 1- to 2-foot depth were not available, then:
    - One-foot NL dredge removal was assumed if the calculated post-dredge surface (PDSC1) was < X ng/kg. PDSC1 was calculated as: PDSC1 = SC * (100%-75%); this equation assumes a 75 percent reduction in dioxin concentration of the measured SC. Seventy-five percent reduction was chosen based on calculations showing a mean reduction of 77 percent for sample locations at which both surface and 1- to 2-foot depth measurements were taken and a decrease from surface to 1- to 2-foot depth was observed. Four sample locations (LRIS-LR-01, LRIS-LR-05, LRIS-LR-09, and LRIS-LR-12) met these criteria.

  - If the calculated PDSC1 remained > X ng/kg, then additional 1-foot dredge removal was assumed until the final PDSCi was < X ng/kg, where PDSCi = PDSCi-1 * (100%-75%); see above for derivation.

- If measured dioxin TEQ concentrations were > X ng/kg at 1- to 2-foot depth, then:

  - Two-foot dredge removal was assumed if the calculated post-dredge SC (PDSC2) was < X ng/kg; see above for derivation.

  - If the calculated PDSC2 remained > X ng/kg, then additional 1-foot dredge removal was assumed until the final PDSCi was < X ng/kg, where final PDSCi = PDSCi-1 * (100%-75%); see above for derivation.

  - Three-foot NL removal was assumed for LR-08 in all scenarios because of high concentration at 1 to 2 feet (910 ng/kg TEQ) but comparatively low concentration at 3 to 4 feet (6.9 ng/kg).

This procedure was developed because it utilized all available measured dioxin TEQ concentrations—estimates were generated only for depths at which no data were available.

- For each S-X scenario, dredge volume for each polygon (DVi) was calculated as:

  - DVi (cubic yards) = DRi (yards) * SAi (square yards); DRi is the calculated dredge removal depth of the ith polygon plus a 1-foot OD; SAi is the surface area of the ith polygon.

- Dredge volume total (DVTx) for each S-X scenario (Table 1) includes a 10 percent contingency and was calculated as: DVTx = ∑ DVi + 0.1 * ∑ DVi.

- Total ENR volume for each scenario (in all scenarios ENR is placed over the same areas—those currently exceeding 5 ng/kg) was 14,220 cubic yards, assuming a 20 percent contingency.

- SWACs following each S-X scenario (SWACx) were calculated as follows:

  - SWACx = ∑ (SAi / TSA) * FSCf)); SAi is the surface area of the ith polygon, TSA is the sum of all polygon surface areas, and FSCf is the FSC for the ith polygon (if dredged and treated with ENR, FSCf = FSCi; if not dredged, FSCf = SCi).

The FSC for each dredged polygon (FSCi) was calculated assuming 100 percent mixing between FSCf (i.e., FSC for each polygon) and the ENR sand concentration. ENR sand is estimated as 0.365 ng/kg, based on measured mean dioxin TEQ concentrations for Columbia River sand used in previous sediment sand cap remedies.[1] Although 100 percent mixing is unlikely to occur in all areas (although prop wash, anchor release, etc., could generate 100 percent mixing), this calculation

---

[1] MFA. Memorandum (re: Columbia river sand sampling with Hickey Marine Enterprises) to S. Manzano, Oregon Department of Environmental Quality, from E. Bakkom and M. Murray, Maul Foster & Alongi, Inc. June 13, 2011.

represents a conservative estimate of final surface sediment concentration for dredged areas treated with ENR. Similarly, 100 percent mixing was assumed for nondredged areas exceeding 5 ng/kg treated with ENR only.

For a summary of dredge depths estimated for all scenarios evaluated, see Table 1. Final SWACs for all scenarios are summarized in Table 2.

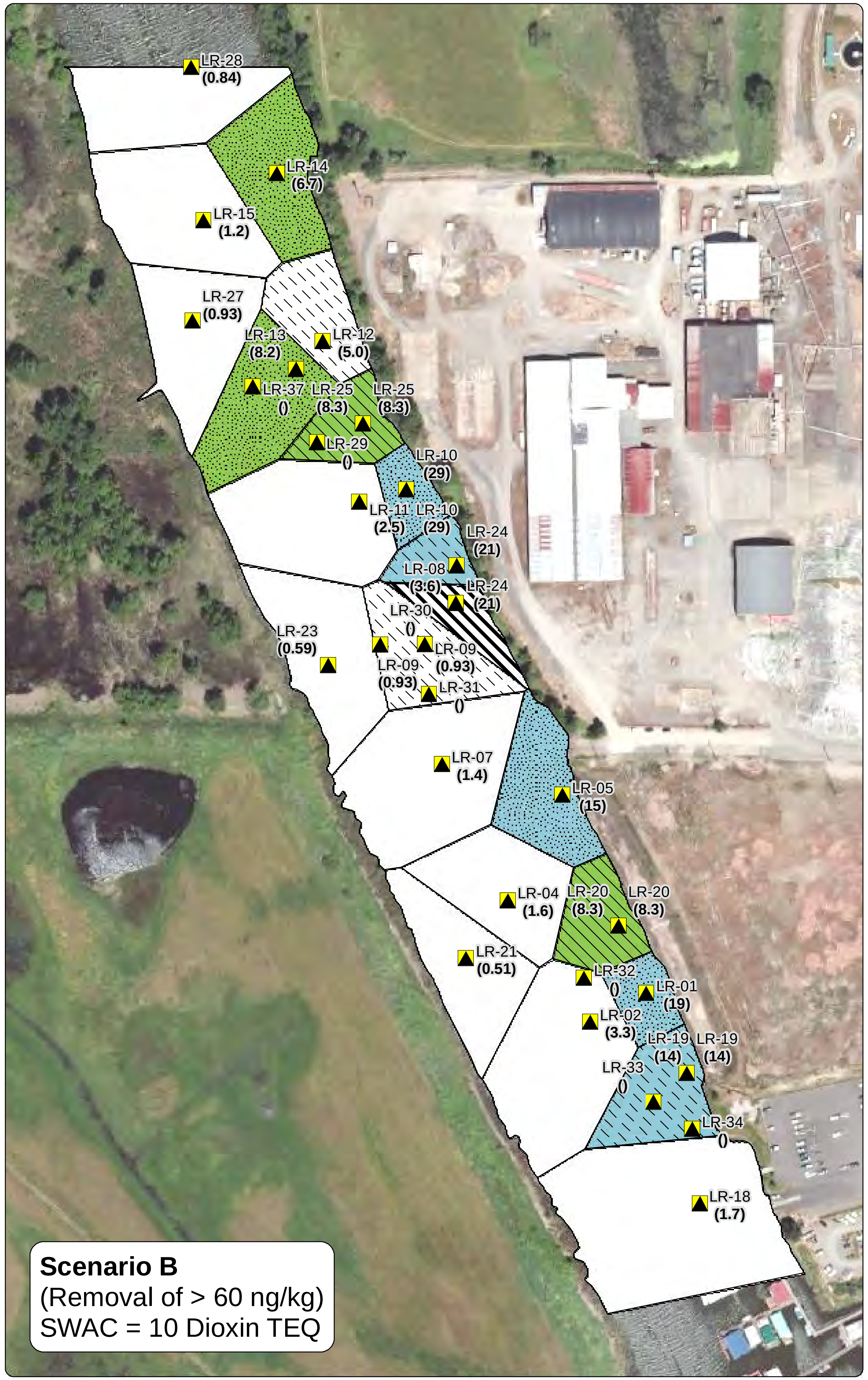
3. Dioxin Congener SWAC Analysis

How DENR scenarios may impact postdredge dioxin congener SWACs was evaluated, including the potential for ecological CUL exceedances (see Section 6 in main body of the RI/FS). Tetrachlorodibenzo-p-dioxin (TCDD) and pentachlorodibenzofuran (PeCDF) currently exceed CULs on a SWAC basis. The same percent reduction for dioxin TEQs determined for each area in each scenario (see above for derivation) was applied to congeners to model post-dredge congener SWACs. Analysis shows that Scenarios B through E resulted in TCDD and PeCDF SWACs below CULs; all other congeners were below CULs on a point-by-point and SWAC basis for these scenarios. Results for TCDD and PeCDF postdredge SWACs for only the least protective scenario (Scenario B, dredge all areas > 60 ng/kg) that meets ecological CULs are presented in Table 3.

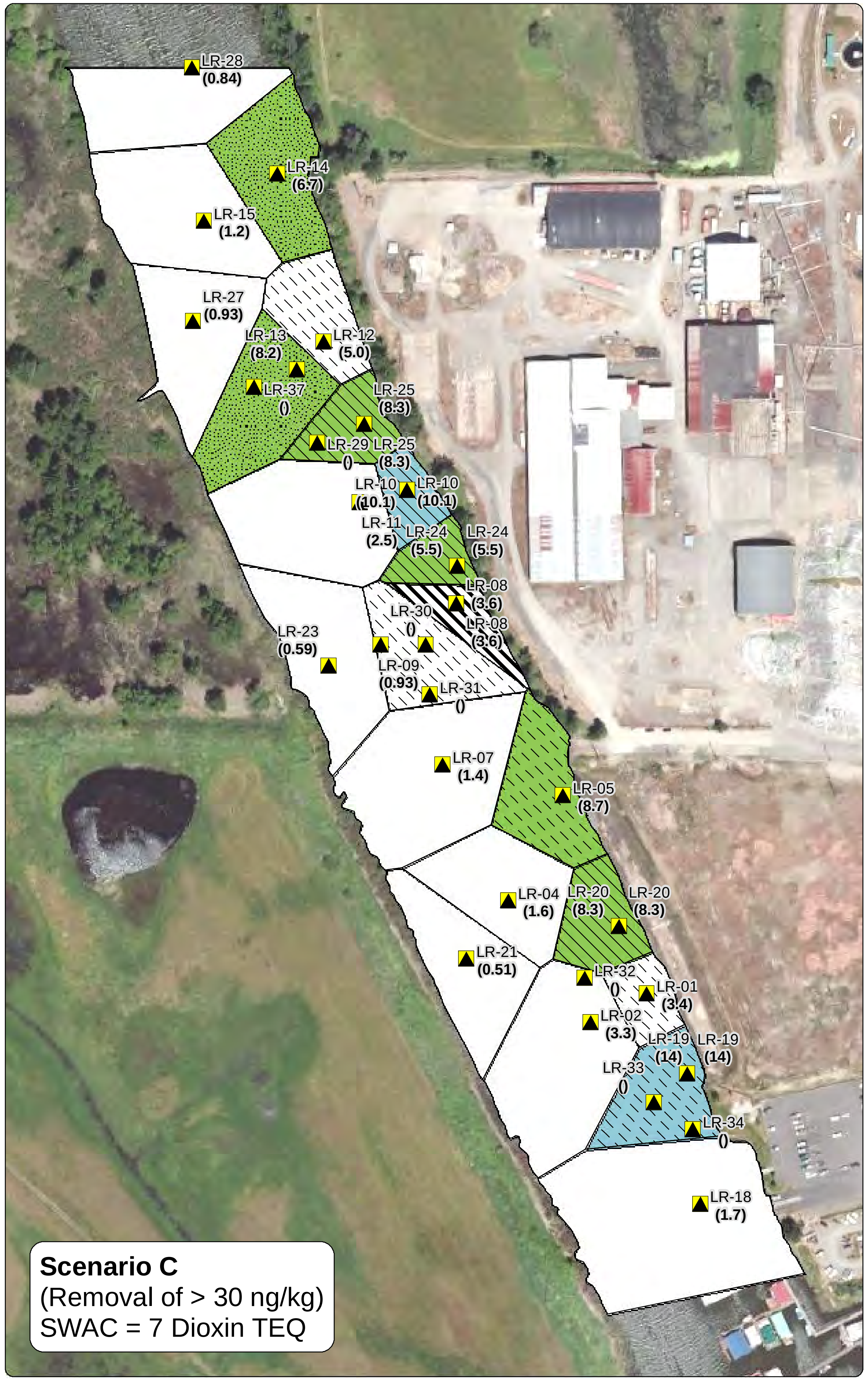
FIGURE

Figure
Lake River Remedial Scenarios Estimated Extent of Dredging and ENR and Post-Remedy Conditions

Former PWT Site RI/FS
Ridgefield, Washington



Scenario B
(Removal of > 60 ng/kg)
SWAC = 10 Dioxin TEQ



Scenario C
(Removal of > 30 ng/kg)
SWAC = 7 Dioxin TEQ

Legend

▲ Surface Sediment Sample
(Post-Dredge/ENR Concentration ng/kg)

Dredge Depth

- ▨ 2 feet
- ▨ 3 feet
- ▨ 4 feet
- ▒ ENR Only

Post-Dredge/ENR

- ⬜ 0.3 - 5 Dioxin TEQ
- 🟩 5 - 10 Dioxin TEQ
- 🟦 10 - 30 Dioxin TEQ

Notes:
1. TEQ = toxicity equivalent
2. ng/kg = nanograms per kilogram
3. ENR = enhanced natural recovery
4. SWAC = surface weighted average concentration

0 250 500
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\9003.01 Port of Ridgefield\49\Projects\AppendixFig_Lake River Remedial Scenarios Estimated Extent of Dredging and ENR and Post-Remedy Conditions.mxd

Print Date: 12/18/2012 Approved By: P. Wiescher Produced By: cmikes Project: 9003.01.49

TABLES

Table 1
Dredge and Enhanced Natural Recovery (ENR) Volumes
Former PWT Site RI/FS

	NL + OD Dredge Depth (ft)					NL + OD Dredge Volume (+10%)					Dredged Area ENR Volume (+20%)					Dredge ENR plus Additional ENR at areas > 5 ng/kg; Volume (+20%)				
Sample ID	S-A	S-B	S-C	S-D	S-E	S-A	S-B	S-C	S-D	S-E	S-A	S-B	S-C	S-D	S-E	S-A	S-B	S-C	S-D	S-E
LRIS-LR-01	0	0	2	2	3	0	0	1229	1229	1844	0	0	671	671	671	671	671	671	671	671
LRIS-LR-05	0	0	2	3	3	0	0	2873	4309	4309	0	0	1567	1567	1567	1567	1567	1567	1567	1567
LRIS-LR-08	4	4	4	4	4	2575	2575	2575	2575	2575	702	702	702	702	702	702	702	702	702	702
LRIS-LR-09	2	2	2	2	2	2871	2871	2871	2871	2871	1566	1566	1566	1566	1566	1566	1566	1566	1566	1566
LRIS-LR-10	0	0	3	4	5	0	0	1773	2364	2955	0	0	645	645	645	645	645	645	645	645
LRIS-LR-12	0	2	2	2	3	0	2279	2279	2279	3418	0	1243	1243	1243	1243	1243	1243	1243	1243	1243
LRIS-LR-13	0	0	0	2	2	0	0	0	3583	3583	0	0	0	1955	1955	1955	1955	1955	1955	1955
LRIS-LR-14	0	0	0	2	2	0	0	0	3372	3372	0	0	0	1839	1839	1839	1839	1839	1839	1839
LRIS-LR-19	2	2	2	3	4	2578	2578	2578	3866	5155	1406	1406	1406	1406	1406	1406	1406	1406	1406	1406
LRIS-LR-20	2	3	3	4	4	1968	2953	2953	3937	3937	1074	1074	1074	1074	1074	1074	1074	1074	1074	1074
LRIS-LR-24	2	2	3	4	4	1122	1122	1683	2244	2244	612	612	612	612	612	612	612	612	612	612
LRIS-LR-25	2	3	3	4	4	1725	2588	2588	3450	3450	941	941	941	941	941	941	941	941	941	941
			Total Volume			**12839**	**16964**	**23401**	**36080**	**39714**	**6301**	**7544**	**10426**	**14220**	**14220**	**14220**	**14220**	**14220**	**14220**	**14220**

Notes:

Only areas above the cleanup level of 5 ng/kg dioxin TEQ shown.

Volumes shown in cubic yards (cy).

10% contingency volume added to volume calculations.

20% contingency volume added to ENR calculations.

ft = feet.

NL = neatline.

OD = overdredge.

TEQ = toxicity equivalent.

Table 2
Lake River Dredge Scenario SWACs and Volume
Former PWT Site RI/FS

Sample ID	Area (sq ft)	Area Percent	Surface Dioxin TEQ (ng/kg)	1-2 ft Dioxin TEQ (ng/kg)	3-4 ft Dioxin TEQ (ng/kg)	4-5 ft Dioxin TEQ (ng/kg)	S-A	ENR Non-dredge Areas	S-B	ENR Non-dredge Areas	S-C	ENR Non-dredge Areas	S-D	ENR Non-dredge Areas	S-E	ENR Non-dredge Areas
LRIS-LR-01	15088	4.7%	37	6.4			19	**X**	19	**X**	3.4		3.4		0.98	
LRIS-LR-05	35259	11.0%	30	17			15	**X**	15	**X**	8.7		2.3		**2.3**	
LRIS-LR-08	15800	4.9%	220	910	6.9		3.6		3.6		3.6		3.6		1.0	
LRIS-LR-09	35235	11.0%	580	1.5		3.1	0.93		0.93		0.93		0.93		0.93	
LRIS-LR-10	14507	4.5%	57	79			29	**X**	**29**	**X**	10.1		2.7		2.7	
LRIS-LR-12	27964	8.7%	61	9.7			31	**X**	5.0		5.0		**5.0**		1.4	
LRIS-LR-13	43978	13.7%	16				8.2	**X**	8.2	**X**	8.2	**X**	2.2		2.2	
LRIS-LR-14	41380	12.9%	13				6.7	**X**	6.7	**X**	6.7	**X**	1.8		1.8	
LRIS-LR-19	31635	9.9%	110				14		14		**14**		3.6		1.0	
LRIS-LR-20	24158	7.6%	260				**33**		8.3		8.3		2.2		2.2	
LRIS-LR-24	13771	4.3%	170				21		21		5.5		1.5		1.5	
LRIS-LR-25	21172	6.6%	260				33		8.3		8.3		2.2		2.2	
		Surface SWAC (ng/kg)	147	NA	NA	NA	16		10		7		3		2	
		Percent TEQ Reduction	NA	NA	NA	NA	89%		93%		95%		98%		99%	
		Volume + 10% (cy)	NA	NA	NA	NA	12839		16964		23401		36080		39714	
		Volume ENR + 20% (cy)	NA	NA	NA	NA	6301	7919	7544	6676	10426	3794	14220	0	14220	0

Notes:

Highest post-remedy point concentration shown in **bold.**

Only areas above the cleanup level of 5 ng/kg dioxin TEQ shown.

10% contingency volume added to volume calculations.

20% contingency volume added to ENR calculations.

cy = cubic yards.

ENR = enhanced natural recovery.

ft = feet

NA = not applicable

ng/kg = nanograms per kilogram.

sq ft = square feet.

SWAC = surface weighted average concentration; calculated using only areas initally above 5 ng/kg dioxin TEQ.

TEQ = toxicity equivalent.

Table 3
Scenario B Initial and Final Surface Dioxin Congener SWACs
Former PWT Site RI/FS

Congener	Initial 2,3,7,8 TCDD	Final 2,3,7,8 TCDD	Initial 2,3,4,7,8 PeCDF	Final 2,3,4,7,8 PeCDF
Dioxin Congener SWAC	**2.1**	0.18	**14**	0.05
Dioxin Congener CUL[a]	1.4		2.9	

Notes:

[a] Values represent the lowest value protective of bird, freshwater fish, or mammal populations in ng/kg (see Appendix M).

Exceedances shown in **bold.**

In this scenario, all other congeners are also below ecological SLVs (see text in Attachment 1).

Percent reduction as calculated for S-B (see Table 2); assumes 100% mixing with ENR.

CUL = cleanup level.

ENR = enhanced natural recovery.

ng/kg = nanograms per kilograms.

PeCDF = pentachloro dibenzofuran.

SWAC = surface weighted average concentration; calculated using only areas initally above 5 ng/kg dioxin TEQ.

TCDD = tetrachloro dibenzo-p-dioxin.

ATTACHMENT 2

DREDGE RESIDUALS ANALYSIS

ATTACHMENT 2 DREDGE RESIDUALS ANALYSIS

1. Overview

Dredging residuals are contaminated sediment found at the post-dredge surface of the sediment profile, either within or adjacent to the dredging footprint. The nature and extent of post-dredging sediment residuals are related to dredging equipment, dredging methods, sediment geotechnical and geophysical characteristics, the variability in contaminant distributions, and physical site conditions (including hydrodynamics). A range of factors can impact residuals generation, and the uncertainty associated with estimating the nature and extent of residual contamination can make it difficult to predict dredging effectiveness (Patmont and Palermo, 2007). The purpose of this appendix is to first best estimate generated dredging residuals that may remain within the surficial sediment layer at Lake River following dredging operations before subsequent placement of a sand layer, i.e., enhanced natural recovery treatment. These results help define technically feasible cleanup levels, as residuals recontamination is an unavoidable feature of dredging. A point of diminishing returns, where additional dredging achieves minimal to no reductions in contamination due to residuals, is also identified.

1.1 Dredging Residuals Characteristics

There are numerous potential sources of residual sediment contaminants, and residuals can be grouped into two general categories: (1) undisturbed residuals, and (2) generated residuals. Undisturbed residuals are contaminated sediments found at the post-dredge sediment surface that have been uncovered by dredging but not fully removed. Generated residuals are contaminated post-dredge surface sediments that are dislodged or suspended by the dredging operation and are subsequently redeposited on the bottom of the water body (Patmont and Palermo, 2007).

Undisturbed and generated residuals may have similar or very different characteristics, depending on the process by which they were created. Generally, undisturbed residuals remain below the dredge cut elevation at a higher dry bulk density than generated residuals; their dry bulk density would be similar to those of the in situ sediments. Undisturbed residuals may therefore exist as relatively thick layers amenable to further cleanup pass dredging if necessary. In contrast, generated residuals are the result of the dredging process itself, and can accumulate at the sediment/water interface in thin layers and at relatively low dry bulk density if deposited from suspension or from fluid mud layers. Generated residuals may also exhibit a soft, unconsolidated layer resulting from resettlement and fluidized mud flows, along with sloughing (i.e., shallow slope failures) of dredge cut slopes. Because of these characteristics, generated residuals can resuspend and/or migrate within and outside of the dredging footprint, making them difficult to remove even with additional cleanup dredging passes (Patmont, 2006).

A number of factors impact post-dredging residual contamination at sites, including: nature of dredging equipment and operation, extent of controls on resuspended sediment dispersion, sediment characteristics, site conditions (e.g., river depth and flow velocity), and extent of vertical/horizontal sediment contamination (Palermo et al., 2008). Following pre-design data collection, which includes addition subsurface characterization, potential for undisturbed residuals at Lake River can be more fully assessed. Generally, undisturbed residuals can be caused by:

- Attempts to dredge contaminated sediment that:
  - Covers highly uneven surfaces, or debris or boulders that are left in place
  - Is located near piers, pilings, utility crossing that are left in place
  - Directly overlies bedrock or hardpan
- Not dredging contaminated sediment because of:
  - Incomplete characterization of the horizontal and vertical extent of contaminants
  - Inappropriate selection of a target dredge cut design elevation and/or inaccuracies in meeting targeted dredging elevations
  - Development of dredge plans that intentionally do not target complete removal of contaminated sediments (e.g., because of engineering limitations)

The primary causes of generated residuals include:

- Sediments dislodged but left behind by the dredgehead ("fallback") and/or left behind by debris-removal operations
- Sediment that sloughs into the dredge cut from adjacent undredged areas
- Sediment moved by slope failures caused by the process of dredging or innate slope instability
- Sediments resuspended by dredging or other dredging-related activities that resettle within or adjacent to the dredging footprint

2. Generated Residuals Model

It is important to develop a site-specific model estimating generated residuals because generated residuals: (1) are unavoidable and potentially difficult to remove, (2) can strongly impact post-dredge contaminant concentrations, and (3) are linked to site- and operation-specific factors (Patmont and Palermo, 2007). To best estimate the potential impacts of residuals, a predictive model estimating post-dredge residuals and post-dredge surface contaminant concentrations was applied (Palermo et al., 2008; Patmont, 2006). Surface and subsurface data collected at Lake River were used to parameterize the model (see Section 3 of the report). This model takes into account dredging operation factors and Lake River site and sediment characteristics.

General assumptions include application of mechanical dredging using a conventional open clamshell bucket as done in the Palermo et al. (2008) model; a different method may be applied at the Lake River site. The residual contaminant concentration is estimated as equal to the depth-averaged contaminant concentration of the sediment removed in the last dredging pass; the sediment concentration of the last pass is influenced by the residuals volume and concentration from prior dredge passes if multiple passes are performed. Residuals volume can be estimated at 5 to 20 percent of the volume of the previous pass, depending on equipment type, sediment properties, water depth, and other site conditions. The volume would be expected to be at the upper range or greater with softer sediments and/or more steeply sloped sediments. This model has a high degree of uncertainty, but no other predictive techniques are available (Palermo et al., 2008).

A total of six polygons were analyzed to model final surface concentrations given residuals contamination; these are the polygons for which both surface (0 to 10 centimeters [cm]) and 1- to 2-foot subsurface dioxin toxic equivalent (TEQs) are available (see Table 1). The following parameters were applied to best account for potential dredging operations and Lake River site and sediment characteristics:

- One dredging production pass followed by a 1-foot final partial/overdredge pass was assumed; a 1-foot production pass thickness was applied for four polygons where subsurface dioxin contaminant concentrations decreased at 1- to 2-foot depth versus 0- to 10-cm depth; a 2-foot production pass thickness was applied for two polygons where subsurface dioxin contaminant concentrations increased at 1- to 2-foot depth versus 0- to 10-cm depth.

- A 20 percent residuals volume for all dredging passes was assumed to account for soft sediments at Lake River (Palermo et al., 2008).

- Subsurface sediment bulk dry density was calculated as 930 kilograms per cubic meter (kg/m^3) for 1-foot production passes and 1040 kg/m^3 for all overdredge passes. 985 kg/m^3 was assumed for 2-foot production passes. Bulk dry density estimates were calculated from geotechnical data collected during pre-design activities for Lake River (see Table 2). The residuals layer density was estimated as 80 percent of 930 kg/m^3 (i.e., of the most shallow sediment density data available, following Palermo et al. [2008]).

- Measured dioxin TEQ concentrations were applied to estimate dredged sediment cut concentrations as follows:

    - Zero- to 10-cm TEQ for 1-foot cuts from 0- to 1-foot depth (TEQ0-1; four polygons)
    - One- to 2-foot TEQ for 1-foot cuts from 1- to 2-foot depth (TEQ1-2; four polygons)
    - ((0-10 cm TEQ + 1-2 ft TEQ) / 2) for 2-foot cuts from 0- to 2-foot depth (TEQ0-2; two polygons)
    - Three- to 4-foot TEQ (if available) for 1-foot cuts from 2- to 3-foot depth (TEQ2-3; one polygon)
    - ((100%-75%) * 1- to 2-foot TEQ) for 1-foot cuts from 2- to 3-foot depth (TEQ2-3; one polygon; for derivation see Attachment 1 on dredge volumes and SWACs)

Final concentration (FCi), the estimated dioxin concentration of the final post-dredge surface layer of the ith polygon, is calculated as:

- FCi (ng/kg) = $1x10^6$ * (Contaminant mass final composite layer (CMf mg ft/m3) / Mass final composite layer (Mf kg ft/m^3)) where:

- CMf = contaminant mass first pass residuals layer (CM1) + contaminant mass final pass overdredge layer (CM2)
    - CM1 = TEQ0-1 (ppm) * M1 *or* CM1 = TEQ0-2 (ppm) * M1
    - CM2 = TEQ1-2 (ppm) * M2 *or* CM2 = TEQ2-3 (ppm) * M2
- Mf = M1 + M2
    - M1 = residuals volume * cut depth (ft) * sediment density (kg/m^3)
    - M2 = residuals volume * 1 ft cut depth * sediment density (kg/m^3)

For each of the six sample polygons i, the percent dioxin TEQ reduction (DRi), was then estimated as:

- DRi = 100% - (FCi / SCi); SCi is the measured initial surface concentration (0 to 10 cm) of the ith polygon.

Upper, middle, and lower bound estimates of the final post-dredge surface layer dioxin TEQ concentrations were calculated to estimate the range of residuals impacts on all hypothetical post-dredge polygon surfaces. This was done by multiplying the surface concentration of all areas by the minimum, mean, and maximum of calculated DRi's.

3. Results

Percent dioxin TEQ reduction for the six modeled areas ranged from 37 percent to 85 percent, with a mean reduction of 64 percent (see Table 1). Initial surface dioxin TEQ concentrations and post-dredge surface dioxin TEQ estimates for all areas are presented in Table 3 and the attached Figure. These results show that, when accounting for residuals, the mean total dioxin TEQ reduction is estimated at 10 ng/kg or less for all areas above the CUL of 5 ng/kg and with < 30 ng/kg initial dioxin TEQ surface concentrations. As a result, if these areas are dredged, a minimal reduction of dioxin surface concentrations is expected at those locations (see the attached Figure) suggesting a high cost to benefit ratio at these locations.

4. References

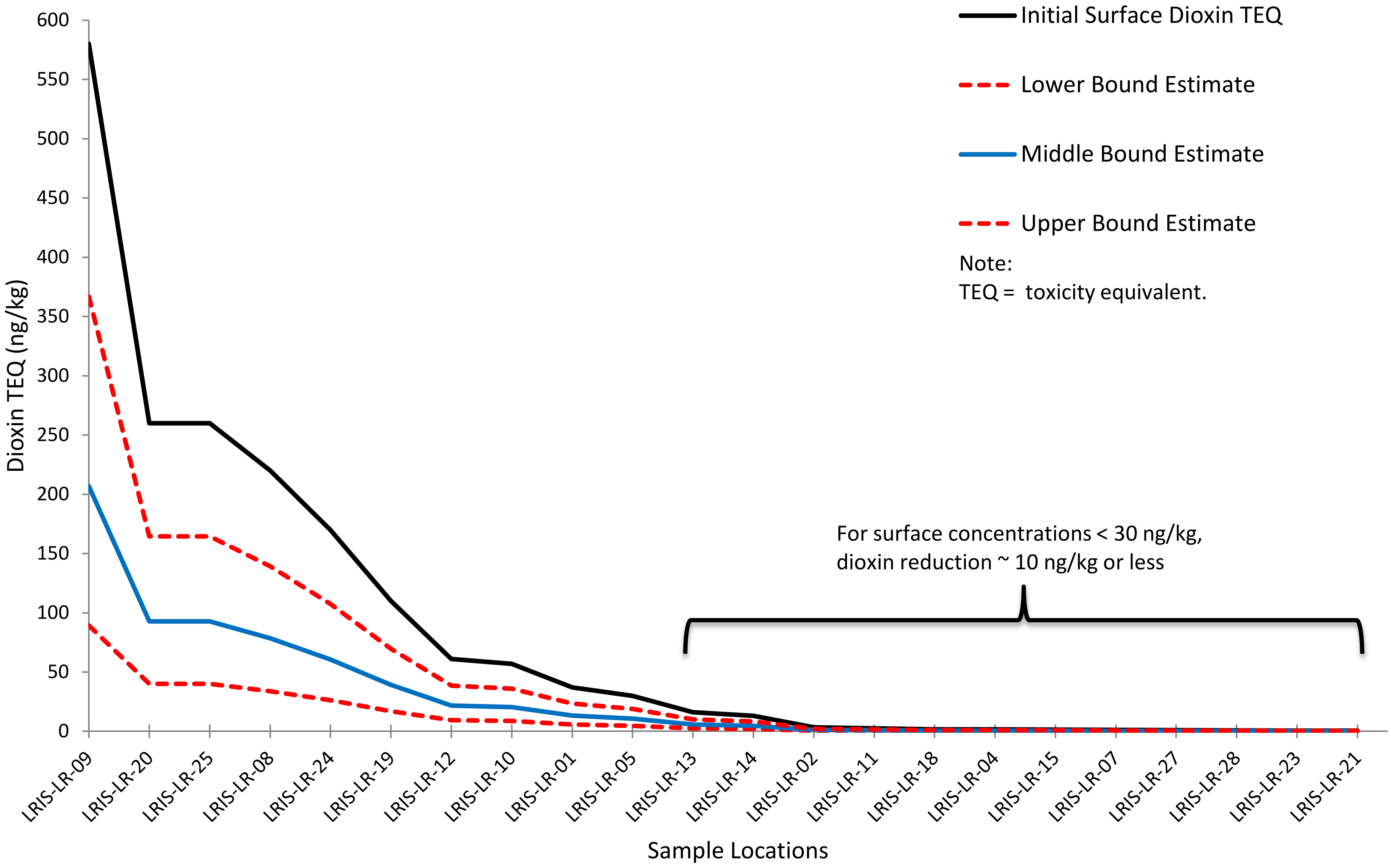
Palermo, M. R., P. R. Schroeder, T. J. Estes, and N. R. Francingues. 2008. Technical guidelines for environmental dredging of contaminated sediments. ERDC/EL TR-08-29. U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi. September.

Patmont, C. 2006. Contaminated sediment dredging residuals: recent monitoring data and management implications. Presentation to National Research Council Committee on sediment dredging at Superfund megasites. http://www.smwg.org/Patmont_NAS%20Residual%20Presentation%20-%206-7-06%20ext.pdf.

Patmont, C., and M. Palermo. 2007. Case studies of environmental dredging residuals and management implications. Proceedings, Fourth International Conference on Remediation of Contaminated Sediments, January 22-25, Savannah, Georgia.

FIGURE

Figure
Dioxin TEQ Reduction Estimates
Former PWT Site RI/FS



Note:
TEQ = toxicity equivalent.

For surface concentrations < 30 ng/kg,
dioxin reduction ~ 10 ng/kg or less

TABLES

Table 1
Generated Residuals Model
Former PWT Site RI/FS

Sample ID	Measured Dioxin TEQ (ng/kg)		Estimated Dioxin TEQ (ng/kg)	Modeled Cut Depth (feet)	Modeled Final Surface Dioxin TEQ (ng/kg)	Dioxin TEQ Reduction
	0-10 cm	1-2 feet	2-3 feet			
LRIS-LR-01	37	6.4		1 + 1 OD	11	70%
LRIS-LR-05	30	17		1 + 1 OD	19	37%
LRIS-LR-08	220	910	6.9[a]	2 + 1 OD	160	72%
LRIS-LR-09	580	1.5		1 + 1 OD	89	85%
LRIS-LR-10	57	79	20[b]	2 + 1 OD	33	51%
LRIS-LR-12	61	9.7		1+ 1 OD	17	71%

NOTES:

cm = centimeters.

ng/kg = nanograms per kilogram.

OD = overdredge cut.

TEQ = toxicity equivalent.

[a] Estimate based on concentration of 6.9 ng/kg measured at 3 to 4 feet.

[b] Based on estimate (75% reduction of 79 ng/kg found at 1 to 2 feet).

Table 2
Lake River Sediment Bulk Dry Density Data
Former PWT Site RI/FS

Sample ID	Bulk Dry Density (kg/m^3)					
	1 ft (bml)	1.5 ft (bml)	2 ft (bml)	1 ft (bml) Sample Mean	1.5-2 ft (bml) Sample Mean	1-2 ft (bml) Sample Mean
LRIS-LR-103	NV	1041	NV	930	1040	985
LRIS-LR-105	NV	977	NV			
LRIS-LR-109	1041	NV	NV			
LRIS-LR-119	785	NV	NV			
LRIS-LR-120	961	NV	NV			
LRIS-LR-126	NV	NV	1105			

NOTES:

bml = below mud line.

ft = feet.

kg/m^3 = kilograms per cubic meter

Table 3
Modeled Dioxin TEQ Reductions
Former PWT Site RI/FS

Sample ID	Initial Surface Dioxin TEQ	Final TEQ Dioxin Concentrations (ng/kg)			Mean Reduction Estimate
		Lower Bound Estimate	Middle Bound Estimate	Upper Bound Estimate	
LRIS-LR-09	**580**	89	207	367	**373**
LRIS-LR-20	**260**	40	93	164	**167**
LRIS-LR-25	**260**	40	93	164	**167**
LRIS-LR-08	**220**	34	78	139	**142**
LRIS-LR-24	**170**	26	61	108	**109**
LRIS-LR-19	**110**	17	39	70	**71**
LRIS-LR-12	**61**	9	22	39	**39**
LRIS-LR-10	**57**	8.8	20	36	**37**
LRIS-LR-01	**37**	5.7	13	23	**24**
LRIS-LR-05	**30**	4.6	11	19	**19**
LRIS-LR-13	**16**	2.5	5.7	10	**10**
LRIS-LR-14	**13**	2.0	4.6	8.2	**8.4**
LRIS-LR-02	**3.3**	0.51	1.2	2.1	**2.1**
LRIS-LR-11	**2.5**	0.38	0.89	1.6	**1.6**
LRIS-LR-18	**1.7**	0.26	0.61	1.1	**1.1**
LRIS-LR-04	**1.6**	0.25	0.57	1.0	**1.0**
LRIS-LR-15	**1.4**	0.22	0.50	0.89	**0.90**
LRIS-LR-07	**1.2**	0.18	0.43	0.76	**0.77**
LRIS-LR-27	**0.93**	0.14	0.33	0.59	**0.60**
LRIS-LR-28	**0.84**	0.13	0.30	0.53	**0.54**
LRIS-LR-23	**0.59**	0.09	0.21	0.37	**0.38**
LRIS-LR-21	**0.51**	0.08	0.18	0.32	**0.33**

NOTES:

Mean reduction estimate calculated as difference between initial surface concentration and middle bound estimate.

ng/kg = nanograms per kilogram.

TEQ = toxicity equivalent.

APPENDIX T

CARTY LAKE REMEDIAL ALTERNATIVES

APPENDIX T CARTY LAKE REMEDIAL ALTERNATIVES CONTENTS

APPENDIX T—CARTY LAKE REMEDIAL ALTERNATIVES

Four remedial scenarios for Carty Lake contamination are evaluated in the feasibility study (FS):

- Alternative 1—Monitored natural recovery
- Alternative 2 (see the attachment)—removal of significantly elevated dioxin concentrations (i.e., 100 nanograms per kilogram [ng/kg])[1] and other hazardous substances above screening levels and placement of an enhanced natural recovery (ENR) layer in these areas to address residuals
- Alternative 3 (see the attachment)—same as Alternative 2 but with additional ENR placement in areas of somewhat elevated dioxin concentrations (i.e., sample locations LRIS-CL-07 and LRIS-CL-09)[2]
- Alternative 4 (see the attachment)—removal of dioxin concentrations above 100 ng/kg and ENR placement in all areas above the cleanup level (CUL) of 5 ng/kg

Alternatives 2, 3, and 4 are evaluated here in terms of technical feasibility and cost/benefit associated with reduction of concentrations of dioxins (evaluated as toxicity equivalents [TEQs]).

The scenarios were selected based on the spatial distribution of dioxin concentrations in surface and subsurface sediment. Measured dioxin TEQ concentrations for surface and subsurface sediment (see the attachment) were used to estimate both the lateral and vertical dredging footprints for each scenario. In each scenario, any surface or interval (e.g., 1- to 2-foot interval) with measured concentrations above the scenario target (i.e., 100 ng/kg in this example) would be removed. This would effectively result in 2 feet of neatline removal in LRIS-CL-01 and LRIS-CL-04, and 3 feet of neatline removal in LRIS-CL-02 for all scenarios (see the attachment). The ENR placement would cover residuals generated during dredging for Alternative 2, while Alternative 3 additionally includes ENR for some undredged areas. Alternative 4 is the same as Alternative 3 but includes ENR for all sediment with concentrations above the practical quantitation limit-based CUL of 5 ng/kg dioxin TEQ. All scenarios include long-term monitoring of the ENR layer to ensure continued dioxin TEQ reductions.

In all areas except the highly impacted locations LRIS-CL-01, -02, and -04, dioxin congeners are found at levels below risk-based CULs for ecological receptors, and therefore all remedies are expected to result in postremedial conditions protective of ecological receptors. Risk-based CULs for ecological receptors are identified in the remedial investigation and feasibility study (RI/FS) as remediation levels. In the event that a connection between Carty Lake and the Columbia River is restored (see Section 2.8.4 in the main body of the RI/FS), access for salmonids such as cutthroat trout and coho salmon could be achieved. The fish CUL developed for Carty Lake relies on a species sensitivity distribution described by the Oregon Department of Environmental Quality

---

[1] "Elevated dioxin concentrations" are defined here as 100 ng/kg dioxin TEQ for purposes of cost/benefit comparison; if additional dioxin data are collected, the analysis will be reevaluated to optimize the benefit to cost.

[2] If additional dioxin data are collected, areas of ENR placement may be modified; for purposes of this feasibility and cost/benefit comparison, the areas represented by sediment samples LRIS-CL-07 and LRIS-CL-09, both above 30 ng/kg dioxin TEQ, are included.

(based on four species endpoints, including immature coho salmon [*Oncorhynchus kisutch*] and immature rainbow trout [*Oncorhynchus mykiss*]), and therefore is likely protective of juvenile salmonids.

1. Concentration Reduction

To evaluate the dioxin TEQ concentrations anticipated in postremedy conditions, surface weighted average concentrations (SWACs) were calculated for each scenario. SWACs are used to evaluate remedy protectiveness of beneficial uses represented by aquatic-dependent wildlife and potential human seafood consumption. SWACs were calculated by generating Thiessen polygons for each dioxin sample result in the study area (see the attached figure). Only areas initially above the CUL of 5 ng/kg dioxin TEQ (see Section 2) were included in SWAC calculations. Thiessen polygons define the area around each sample point, using an algorithm to calculate the location of a boundary midway between available points. Each Thiessen polygon is then assigned the concentration represented by the sample it encompasses. In this way, the concentrations are spatially weighted, based on the area the polygon represents. This technique is well established and in use throughout the country at sediment remedial sites (see the attachment, which provides details on the SWAC calculation methods and assumptions). In brief, the predicted postdredge concentration was initially determined from sample results. Next, the concentration at the bottom of the dredge cut was presumed to fully mix with the 1-foot ENR sand layer, so concentrations of the sand layer and the postdredge surface were averaged for the resultant SWAC. Similarly, 100 percent mixing between surface sediment and ENR sand was assumed for each area receiving only ENR treatment. This is a conservative assumption, as 100 percent mixing is unlikely and resulting surface concentrations are therefore likely to be lower at the point of compliance (i.e., the top 10 centimeters of the resulting Lake River bottom) than assumed for these hypothetical scenarios. The resulting postremedy SWACs for each scenario are shown in Table T-1. This evaluation is an initial conservative estimate, and more specific information will be collected during the design phase to refine estimates.

2. Comparison with CUL

A dioxin TEQ CUL of 5 ng/kg was selected for protection of human health, based on a reliably attainable practical quantitation limit (Section 6 of the report). No scenario meets the CUL, based on postremediation SWAC estimates.

A human health risk-based CUL for human fish consumption at Carty Lake was not developed, given the absence of reliable information on fish consumption rates for Carty Lake. The fish consumption model described for Lake River (see Appendix M) was used to calculate the amount of fish that could be consumed to meet the acceptable risk level (ARL) of 1×10^{-6}, with the exception that a site-specific organic carbon content value of 0.029 for Carty Lake was used. To evaluate the relative benefits of each scenario, the amount of fish per year that could be consumed to meet the ARL of 1×10^{-6} was calculated (see Table T-2).

All scenarios are expected to meet ecological CULs protective of ecological receptors for individual dioxin congeners; in all areas except the highly impacted LRIS-CL-01, -02, and -04 (which would be dredged under each alternative to depths at which congeners are below CULs), dioxin congeners are currently found at levels below risk-based CULs for ecological receptors (see Section 6 of the main body of the RI/FS text).

3. Feasibility

Evaluation of technical feasibility is especially important when considering dredging remedies. A primary consideration is generation of dredging residuals. Generated residuals are sediment disturbed or resuspended during dredging that settles back to the sediment bed. A range of factors can impact residuals generation, including dredging methods, sediment geotechnical and geophysical characteristics, and physical site conditions. Residuals are expected to result from dredging and are addressed by placement of a clean sand layer. The uncertainty associated with estimating the nature and extent of residual contamination can make prediction of dredging effectiveness difficult and achieving levels in the low parts per trillion highly ambitious (see Appendix S). A residuals analysis was not conducted for Carty Lake, since limited subsurface data are available. However, methods such as best management practices may help to limit residuals recontamination, but dredging areas close to 10 ng/kg may result in marginal dioxin reductions (see Appendix S). Dredging studies show that residuals contamination, combined with dredging disturbance of sequestered contamination at depth, can actually increase postremedial concentrations[3] in areas with relatively low surface contamination. Thus it is crucial to carefully consider the limited benefits of dredging to address areas of lower dioxin concentrations (minimal dioxin TEQ reductions), with additional monetary costs certain. In addition, placement of ENR throughout most of Carty Lake (i.e., Alternative 4), which is generally shallow, may have significant short-term effects on aquatic biota and fundamentally alter its bathymetry.

In the future, The U.S. Fish and Wildlife Service may consider the feasibility of reconnecting Carty Lake either to the Columbia River via Gee Creek or to Lake River through a constructed channel. Of the two options, the Gee Creek connection would likely be most feasible in terms of construction and access for salmonids such as cutthroat trout and coho salmon. The resulting hydrology of the lake could vary considerably, depending on the option selected; however, some changes to the fish, wildlife, and vegetation communities would be expected and implementation would need to consider potential for contaminant impacts to fish and potential for contaminant migration.

4. Conclusion

Table T-1 shows the anticipated reduction of dioxin concentrations upon implementation of Alternatives 2 through 4. Alternative 2 results in a dioxin TEQ reduction of nearly 50 percent and is expected to achieve ecological CULs. This is the preferred scenario for the following reasons:

- Alternative 2 targets the areas most impacted by dioxins and other hazardous substances and is expected to achieve ecological CULs.
- Alternative 2 results in nearly the same postremedial dioxin TEQ SWAC as Alternative 3, and is more cost effective because of less ENR placement (Alternative 2 is estimated at approximately $700,000 less than Alternative 3; see Appendix R).

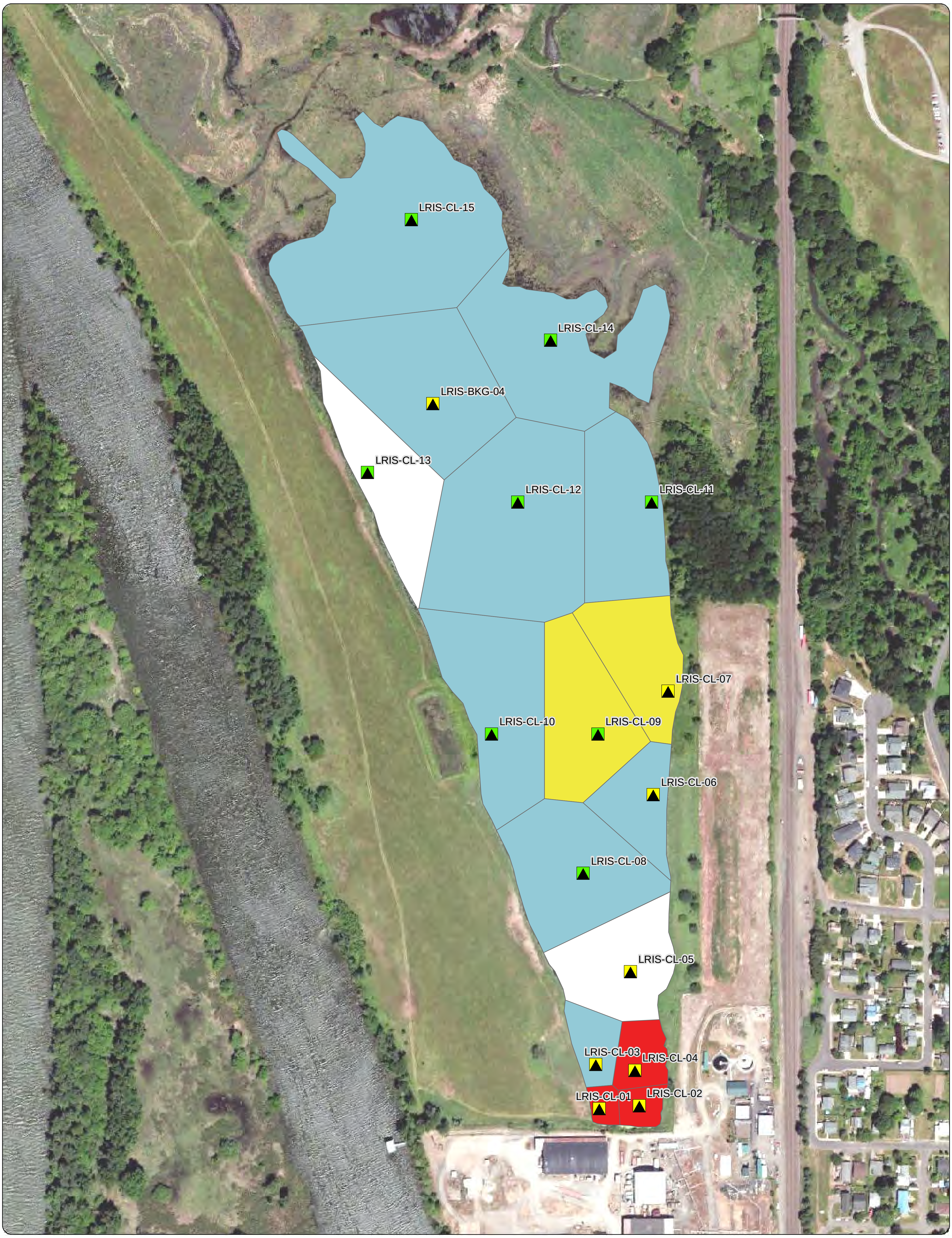
---

[3] Patmont, C., and M. Palermo. Case studies of environmental dredging residuals and management implications. Proceedings, Fourth International Conference on Remediation of Contaminated Sediments, January 22-25, Savannah, Georgia. 2007.

- While Alternative 4 results in more significant reduction in dioxin concentrations than Alternatives 2 and 3, the resulting increase (approximately 1 ounce per year) in the amount of fish that could be consumed to meet the ARL is marginal (see Table T-2).
- Alternative 4 results in greater postremedial dioxin TEQ reduction than Alternative 2, but also does not immediately meet the CUL of 5 ng/kg and is significantly more invasive, resulting in potentially extreme short-term impacts to aquatic biota.
- Alternative 4 is significantly less cost effective, at approximately 5.7 and 5 million dollars more than Alternatives 2 and 3, respectively (see Appendix R).

FIGURE

Path: X:\9003.01 Port of Ridgefield\49\Projects\POR RIFS Feb 2012\FigT-1_Thiessen Polygons Used in Surface Weighted Average Calculations.mxd



Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

Notes:
1. TEQ = Toxicity Equivalent
2. ng/kg = nanograms per kilogram

Legend

🟨 2010 Sediment Sample Location

🟩 2011 Sediment Sample Location

Surface Dioxin TEQ (ng/kg)

⬜ 0 - 5 ng/kg TEQ
🟩 5 - 10 ng/kg TEQ
🟦 10 - 30 ng/kg TEQ
🟨 30 - 60 ng/kg TEQ
🟧 60 - 100 ng/kg TEQ
🟥 > 100 ng/kg TEQ

Figure
Thiessen Polygons Used in Surface Weighted Average Calculations

Former PWT Site RI/FS
Ridgefield, Washington

0 150 300
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Print Date: 1/2/2013
Approved By: P. Wiescher
Produced By: jschane
Project: 9003.01.49

TABLES

Table T-1
Carty Lake Postremedy SWACs
Former PWT Site RI/FS

Remedial Alternatives	Dioxin TEQ SWAC (ng/kg)
Current Condition	44
Alternative 2 Postremedy SWAC	24
Alternative 3 Postremedy SWAC	22
Alternative 4 Postremedy SWAC	12

NOTES:

Postremedy estimates are reported to two significant figures.

ng/kg = nanograms per kilogram.

SWAC = surface weighted average concentration; calculated using only areas initially above 5 ng/kg dioxin TEQ.

TEQ = toxicity equivalent.

Table T-2
Carty Lake Fish Ingestion Scenarios
Former PWT Site RI/FS

	Dioxin TEQ SWAC (ng/kg)	Fish Ingestion Rate to Meet ARL (kg/day)	Fish Ingestion Rate to Meet ARL (kg/yr)	Fish Ingestion Rate to Meet ARL (oz/yr)
Existing Condition	44	5.1E-05	0.019	0.66
Alternative 2	24	9.4E-05	0.034	1.2
Alternative 3	22	1.0E-04	0.037	1.3
Alternative 4	12	1.9E-04	0.069	2.4

NOTES:

Model used to generate estimates based on Lake River Human Fish Consumption Model presented in Appendix N; Carty Lake site-specific f(oc) of 0.029 was applied.

Postremedy estimates are reported to one significant figure.

ARL = acceptable human health risk level (1X10^{-6}).

f(oc) = fraction of total organic carbon in surface sediment.

kg/day = kilograms per day.

kg/yr = kilograms per year.

ng/kg = nanogram per kilogram.

oz/yr = ounces per year.

SWAC = surface weighted average concentration; calculated using only areas initially above 5 ng/kg dioxin TEQ.

TEQ = toxicity equivalent.

ATTACHMENT

DREDGE VOLUME AND SWAC ANALYSIS

ATTACHMENT—DREDGE VOLUME AND SWAC ANALYSIS

Overview

This document provides the methods and results of an analysis of the relationship between estimated volume of sediment dredged and concomitant reductions in Carty Lake postremedial surface sediment dioxin toxicity equivalent (TEQ) concentrations. Variations of the general dredging scenario, dredging with enhanced natural recovery (ENR), were addressed to span potential approaches intended to reduce dioxin concentrations. Alternative 2 consists of dredging specified areas (generated via Thiessen polygon analysis; see below) and placement of a 1-foot ENR layer (i.e., sand cover) over all areas dredged. ENR would cover any residuals generated during dredging. In Alternative 3, a 1-foot-thick ENR layer is additionally placed over all undredged areas exceeding 30 nanograms per kilogram (ng/kg) TEQ. Areas exceeding 5 ng/kg dioxin TEQ would be treated with ENR in Alternative 4. All scenarios include long-term monitoring of the ENR layer to ensure continued dioxin TEQ reductions. Resulting estimated dioxin TEQ surface concentrations for the alternatives are shown in the attached figure.

Dioxin TEQ and Volume Analysis

Surface Weighted Average Concentration Analysis

The shape and surface area of potential areas to be dredged were identified using the "Build Thiessen Polygons" tool in the XTools Pro (ver. 8.0) toolset for ArcGIS 10. Briefly, Thiessen polygons are the polygons generated from points, defined by the perpendicular bisectors of the lines between all points and drawn so that each polygon bounds the region that is closer to one point than to any adjacent point.

In this analysis, sample locations represent the points used to define polygons; associated sample dioxin TEQ concentrations at surface and at depth were assigned to polygons generated for Carty Lake. A surface weighted average concentration (SWAC) approach was used to estimate overall current dioxin concentrations, where:

$$SWACc = \sum (SAi / TSA) * SCi))$$

SAi is the surface area of the ith polygon, TSA is the sum of all polygon surface areas, and SCi is the current measured surface concentration (SC) of the ith polygon. Only areas exceeding 5 ng/kg were included in all evaluations. This calculation indicates that current dioxin SWAC is 44 ng/kg.

The SWAC technique is well established and in use throughout a broad range of sciences, as well as at many nationally known sediment remedial investigation sites, including the Hudson River, the Portland Harbor Cleanup, the Duwamish River Cleanup, the Lower Passaic River Cleanup, and Fort Ord. With respect to exposure to sediment contamination, such as via fish consumption, exposure to larger areas rather than discrete locations are more realistic given that anglers are likely to use different fishing locations from time to time, based on fish abundance, which can be seasonal or vary year to year. Therefore, using a SWAC is expected to be conservative with respect to anticipated human consumption patterns. Similarly, nonsessile aquatic organisms also use different locations throughout the aquatic environment, and thus a spatial averaging of concentrations may best represent expected contamination exposure.

Dredge and ENR Volumes

Three dredge and ENR scenarios were evaluated:

- Alternative 2—removal of significantly elevated dioxin concentrations and other indicator hazardous substances above screening levels and ENR placement in these areas to address residuals
- Alternative 3—same as Alternative 2 but with additional ENR placement in areas of somewhat elevated dioxin concentrations (i.e., sample locations LRIS-CL-07 and LRIS-CL-09)
- Alternative 4—removal of dioxin concentrations above 100 ng/kg and ENR placement in all areas above the CUL of 5 ng/kg

For each of the Alternatives (2, 3, and 4) described, the final calculated dredge removal volume included neatline (NL) dredge volume, an additional 1-foot overdredge (OD), and a 10 percent contingency. Dredge volume was the same for each scenario. Dredge volumes will be refined following collection of additional data during predesign activities. Associated ENR sand volumes were assigned a 20 percent contingency.

Estimates of dredge volumes and hypothetical final surface concentrations (FSCs) were calculated under the following assumptions:

- For each scenario, all polygons with SCs > 100 ng/kg were targeted for at least 1 foot NL depth removal. This included LRIS CL-01, -02, and -04.
  - At LRIS CL-01 and -04, the 1- to 2-foot intervals were below 10 ng/kg dioxin TEQ, and thus only an additional 1 foot OD removal was assumed.
  - At LRIS CL-02, the 1- to 2-foot interval is elevated (130 ng/kg dioxin TEQ), whereas the 2- to 3-foot interval is 2.5 ng/kg. Thus, 2 feet NL depth removal with 1 foot OD was assumed.
- For each scenario, dredge volume for each polygon (DVi) was calculated as:
  - DVi (cubic yards) = DRi (yards) * SAi (square yards); DRi is the calculated dredge removal depth of the ith polygon plus a 1-foot OD; SAi is the surface area of the ith polygon.
- Dredge volume total (DVTx) for each scenario (Table 1) includes a 10 percent contingency and was calculated as: $DVTx = \sum DVi + 0.1 * \sum DVi$. Total dredge volume was 5,649 cubic yards for all scenarios.

- Total ENR volume for each scenario (in all scenarios ENR is placed over the dredged area, and there are additional areas for Scenarios B and C—those currently exceeding 30 ng/kg or 5 ng/kg, respectively) is shown in Table 1, assuming a 20 percent contingency.
- SWACs following each scenario (SWACx) were calculated as follows:
  - SWACx = ∑ (SAi / TSA) * FSCf)); SAi is the surface area of the ith polygon, TSA is the sum of all polygon surface areas, and FSCf is the FSC for the ith polygon (if dredged and treated with ENR, FSCf = FSCi; if not dredged, FSCf = SCi).

The FSC for each dredged polygon (FSCi) was calculated assuming 100 percent mixing between FSCf and the ENR sand concentration. ENR sand is estimated as 0.365 ng/kg, based on measured mean dioxin TEQ concentrations for Columbia River sand used in previous sediment sand cap remedies.[1] Although 100 percent mixing is unlikely to occur in all areas, this calculation represents a conservative estimate of final surface sediment concentration for dredged areas treated with ENR. Similarly, 100 percent mixing was assumed for undredged areas treated with ENR only.

For a summary of dredge depths estimated for all scenarios evaluated, see Table 1. Final SWACs for all scenarios are summarized in Table 2.

---

[1] MFA. Memorandum (re: Columbia river sand sampling with Hickey Marine Enterprises) to S. Manzano, Oregon Department of Environmental Quality, from E. Bakkom and M. Murray, Maul Foster & Alongi, Inc. June 13, 2011.

FIGURE

Path: X:\9003.01 Port of Ridgefield\49\Projects\AppendixFig_Carty Lake Remedial Alternatives Estimated Extent of Dredging and ENR and Post-Remedy Conditions.mxd

Print Date: 12/18/2012

Approved By: P. Wiescher

Produced By: cmikes

Project: 9003.01.49

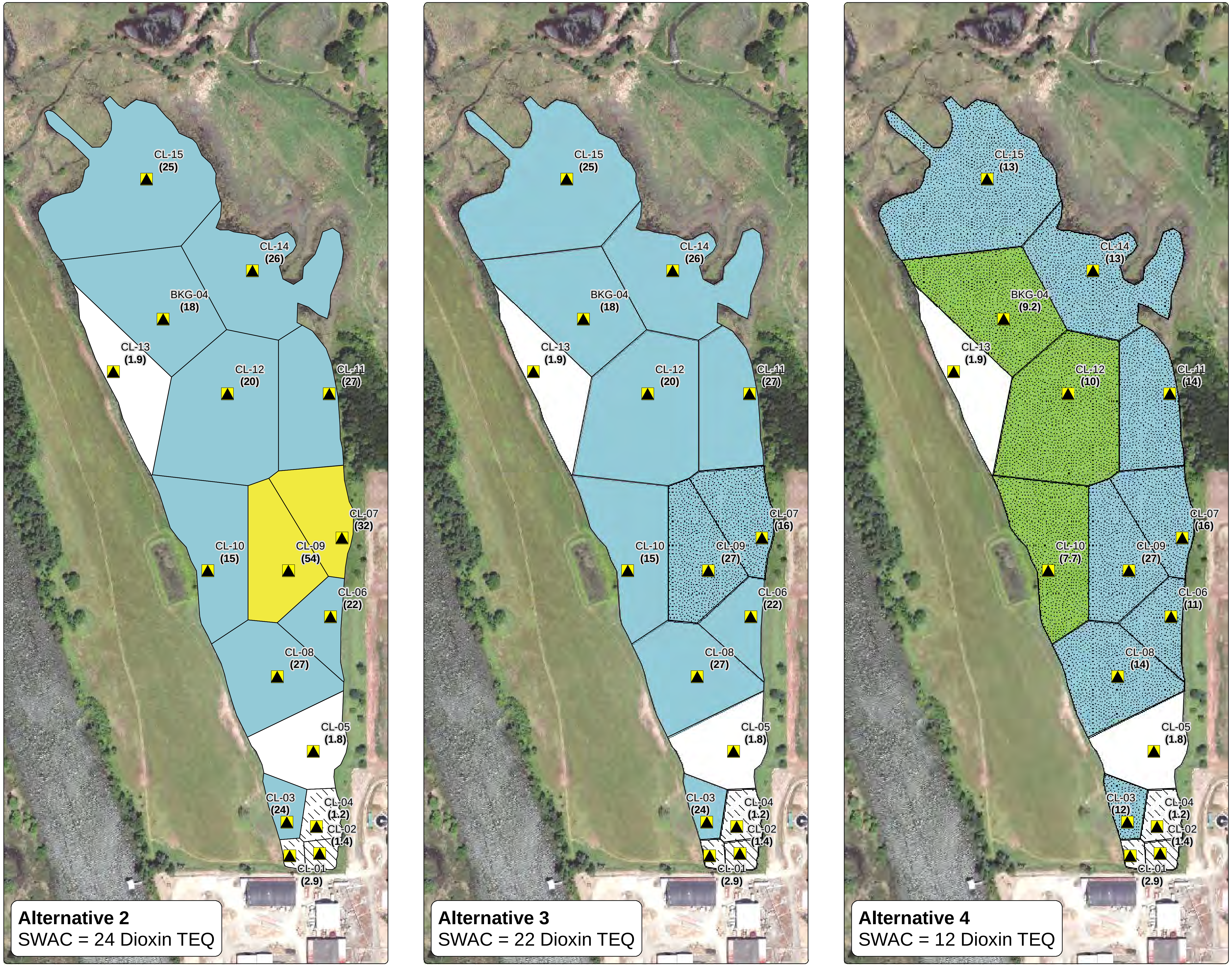


Figure
Carty Lake Remedial Alternatives Estimated Extent of Dredging and ENR and Post-Remedy Conditions

Former PWT Site RI/FS
Ridgefield, Washington

Legend

▲ Surface Sediment Sample **(Post-Dredge/ENR Concentration ng/kg)**

Dredge Depth

- ▨ 2 feet
- ▨ 3 feet
- ░ ENR Only

Post Dredge/ENR

- ⬜ 0.3 - 5 Dioxin TEQ
- 🟩 5 - 10 Dioxin TEQ
- 🟦 10 - 30 Dioxin TEQ
- 🟨 30 - 60 Dioxin TEQ

Notes:
1. TEQ = toxicity equivalent
2. ng/kg = nanograms per kilogram
3. ENR = enhanced natural recovery
4. SWAC = surface weighted average concentration

0 200 400
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

TABLES

Table 1
Dredge and Enhanced Natural Recovery Volumes
Former PWT Site RI/FS

					NL + OD Dredge Depth (ft)			NL + OD Dredge Volume (+10%)			Dredged Area ENR Volume (+20%)		
Sample ID	Area (sq ft)	Initial TEQ	1-2 ft TEQ	2-3 ft TEQ	Alt. 2	Alt. 3	Alt. 4	Alt. 2	Alt. 3	Alt. 4	Alt. 2	Alt. 3	Alt. 4
LRIS-BKG-04-SS	203795	18			0	0	0	0	0	0	0	0	9058
LRIS-CL-01-SS	11064	140	5.5		2	2	2	902	902	902	492	492	492
LRIS-CL-02-SS	17132	1400	130	2.5	3	3	3	2094	2094	2094	761	761	761
LRIS-CL-03-SS	33237	24	1.1		0	0	0	0	0	0	0	0	1477
LRIS-CL-04-SS	32570	300	2.1		2	2	2	2654	2654	2654	1448	1448	1448
LRIS-CL-06-SS	63662	22	0.31		0	0	0	0	0	0	0	0	2829
LRIS-CL-07-SS	98415	32	0.65		0	0	0	0	0	0	0	4374	4374
LRIS-CL-08-SS	155429	27			0	0	0	0	0	0	0	0	6908
LRIS-CL-09-SS	128281	54			0	0	0	0	0	0	0	5701	5701
LRIS-CL-10-SS	170332	15			0	0	0	0	0	0	0	0	7570
LRIS-CL-11-SS	134411	27			0	0	0	0	0	0	0	0	5974
LRIS-CL-12-SS	269705	20			0	0	0	0	0	0	0	0	11987
LRIS-CL-14-SS	207379	26			0	0	0	0	0	0	0	0	9217
LRIS-CL-15-SS	325340	25			0	0	0	0	0	0	0	0	14460
Total Volume								**5649**	**5649**	**5649**	**2701**	**12776**	**82256**

NOTES:

10% contingency volume added to volume calculations.

20% contingency volume added to ENR calculations.

Only areas above the cleanup level of 5 nanograms per kilogram dioxin TEQ are shown.

Volumes shown in cubic yards (cy).

Alt. = Alternative

ENR = enhanced natural recovery.

ft = feet.

NL = neatline.

OD = overdredge.

sq ft = square feet.

TEQ = toxicity equivalent.

Table 2
Carty Lake Dredge Scenario SWACs and Volume
Former PWT Site RI/FS

Sample ID	Area (sq ft)	Area Percent	Initial Dioxin TEQ (ng/kg)	Alternative 2	ENR Nondredge Areas	Alternative 3	ENR Nondredge Areas	Alternative 4	ENR Nondredge Areas
LRIS-BKG-04-SS	203795	11.0%	18	18		18		9.2	**X**
LRIS-CL-01-SS	11064	0.6%	140	2.9		2.9		2.9	
LRIS-CL-02-SS	17132	0.9%	1400	1.4		1.4		1.4	
LRIS-CL-03-SS	33237	1.8%	24	24		24		12	**X**
LRIS-CL-04-SS	32570	1.8%	300	1.2		1.2		1.2	
LRIS-CL-06-SS	63662	3.4%	22	22		22		11	**X**
LRIS-CL-07-SS	98415	5.3%	32	32		16	**X**	16	**X**
LRIS-CL-08-SS	155429	8.4%	27	27		**27**		14	**X**
LRIS-CL-09-SS	128281	6.9%	54	**54**		**27**	**X**	**27**	**X**
LRIS-CL-10-SS	170332	9.2%	15	15		15		7.7	**X**
LRIS-CL-11-SS	134411	7.3%	27	27		27		14	**X**
LRIS-CL-12-SS	269705	14.6%	20	20		20		10	**X**
LRIS-CL-14-SS	207379	11.2%	26	26		26		13	**X**
LRIS-CL-15-SS	325340	17.6%	25	25		25		13	**X**
		SWAC (ng/kg)	44	24		22		12	
		Percent TEQ Reduction	NA	44%		50%		71%	
		Dredge Volume + 10% (cy)	NA	5649		5649		5649	
		Volume ENR + 20% (cy)	NA	2701		12776		82256	

NOTES:
10% contingency volume added to volume calculations.
20% contingency volume added to ENR calculations.
Highest postremedy point concentration shown in **bold.**
Only areas above the cleanup level of 5 ng/kg dioxin TEQ are shown.
cy = cubic yards.
ENR = enhanced natural recovery.
NA = not applicable.
ng/kg = nanograms per kilogram.
sq ft = square feet.
SWAC = surface weighted average concentration; calculated using only areas initially above 5 ng/kg dioxin TEQ.
TEQ = toxicity equivalent.