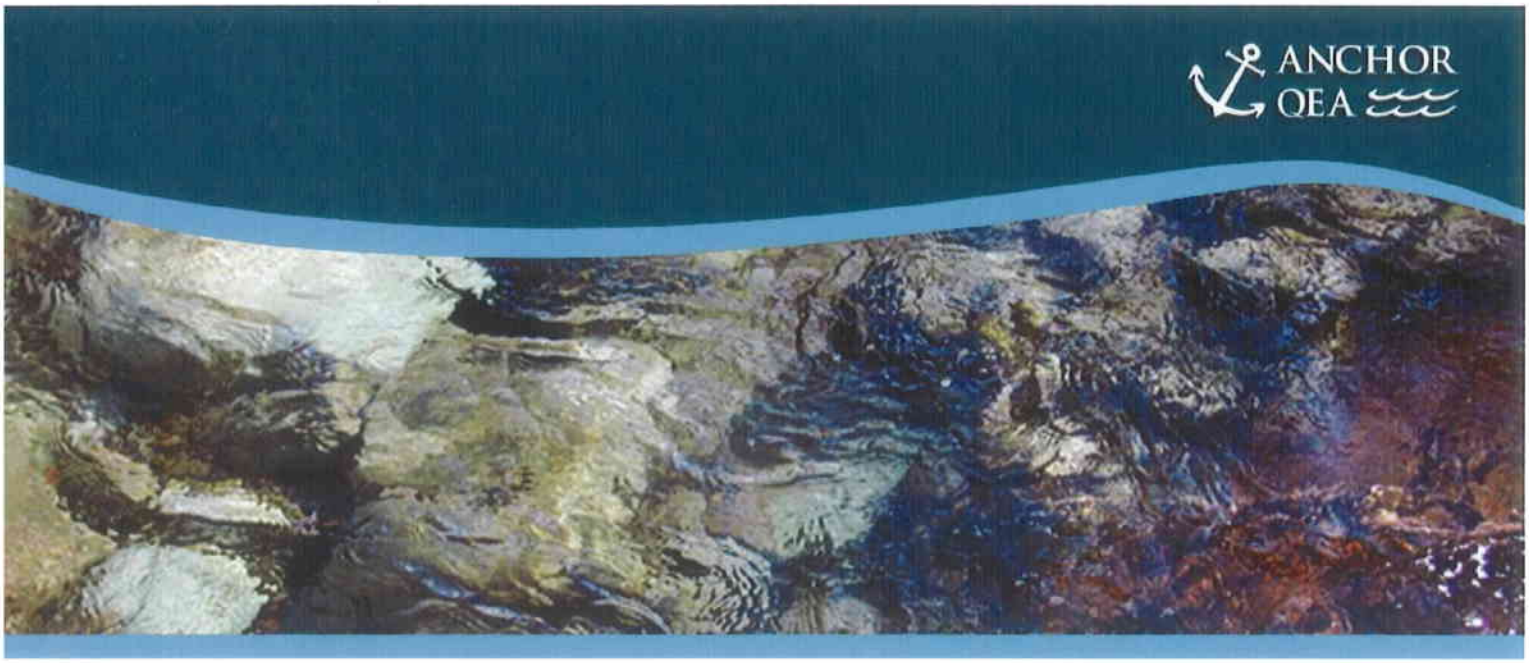

REMEDIAL INVESTIGATION/FEASIBILITY STUDY FORMER POPE & TALBOT INC. SAWMILL SITE, PORT GAMBLE, WASHINGTON

Prepared for

Pope Resources LP and Olympic Property Group L.L.C.
Poulsbo, Washington 98370

Washington State Department of Ecology
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Prepared by

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Environmental Partners, Inc.
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December 2012

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LIST OF ACRONYMS AND ABBREVIATIONS

µg/L	microgram per liter
ASTM	American Society for Testing and Materials
bgs	below ground surface
CAP	Cleanup Action Plan
CFR	Code of Federal Regulations
cm/sec	centimeters per second
COC	chain-of-custody
COPCs	chemicals of potential concern
cPAH	carcinogenic polynuclear aromatic hydrocarbon
CQAP	Construction Quality Assurance Project Plan
CSM	conceptual site model
cy	cubic yards
DAHP	Washington Department of Archaeology and Historic Preservation
DO	dissolved oxygen
DPT	direct-push technology
DRPH	diesel range petroleum hydrocarbons
DTW	depth to groundwater
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
EPI	Environmental Partners, Inc.
ft/d	feet/day
ft/s	feet/second
HRPH	hydrogen range petroleum hydrocarbons
HSA	hollow stem auger
ICP-MS	Inductively Coupled Plasma Mass Spectrometry
mg/kg	milligrams per kilogram
MLLW	mean lower low water
MTCA	Model Toxics Control Act
NAD	North American Datum
NTR	National Toxics Rule
NTU	nephelometric turbidity units

OPG	Olympic Property Group L.L.C.
ORP	oxidation-reduction potential
P&T	Pope & Talbot Inc.
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
pg/g	picograms per gram
ppt	parts per thousand
PQLs	practical quantitation limits
PR	Pope Resources LP
PVC	polyvinyl chloride
RCW	Revised Code of Washington
RI/FS	Remedial Investigation/Feasibility Study
SAP	Sampling and Analysis Plan
SEPA	State Environmental Policy Act
Site	P&T Sawmill Site or Port Gamble Mill Site
SMS	Sediment Management Standards
SVOC	semivolatile organic compounds
TEE	terrestrial ecological evaluation
TEF	Toxicity Equivalency Factor
TEQ	toxicity equivalent concentration
UCL 95	95 percent upper confidence level
USCS	Unified Soil Classification System
WAC	Washington Administrative Code
WSDOT	Washington State Department of Transportation

1 INTRODUCTION

Pope Resources LP (PR) and Olympic Property Group L.L.C. (OPG) conducted a Remedial Investigation/Feasibility Study (RI/FS) at the former Pope & Talbot Inc. (P&T) Sawmill Site (hereinafter the "Port Gamble Mill Site" or "Site") in Port Gamble, Washington, under the terms of the Washington State Department of Ecology (Ecology) Agreed Order No. DE 5631, implemented pursuant to the Model Toxics Control Act (MTCA), Revised Code of Washington (RCW) 70.105D.050 (1). Sampling under the Ecology-approved RI/FS Work Plan and Sampling and Analysis Plan (SAP; Anchor and EPI 2008) was initiated in July 2008. The overall objective of the RI/FS was to collect, develop, and evaluate sufficient information to determine if any additional cleanup, beyond the interim actions completed to date, is necessary to address remaining soil and/or groundwater contamination at the Site. For completeness, the significant findings concerning the nature and extent of contamination at the Site from earlier (pre-RI) investigations and interim actions are included in this report. This RI/FS report summarizes site characterization data describing the nature and extent of soil and groundwater contamination at the Site, summarizes interim remedial actions previously completed at the Site, and provides a recommended path forward to complete the RI/FS process and develop a Cleanup Action Plan (CAP) for the Mill Site.

Mill Site sediments are addressed under a separate RI/FS process for the Bay-wide cleanup project. Site characterization information for sediments, including nature and extent of contamination, and evaluation of options for remediation are described in the Baywide RI (Ecology 2012) and the Baywide FS (Anchor QEA 2012).

2 SITE DESCRIPTION

As defined by Ecology in the Agreed Order, the Site is generally located at the eastern terminus of Northeast View Drive in Port Gamble, Washington, and includes the uplands landward of the ordinary high water line, and is further defined by the extent of contamination caused by the release of hazardous substances at the Site. The adjacent tidelands and Port Gamble Bay are covered under a separate RI/FS as discussed in Section 1. The Site is located in north Kitsap County, Washington, and includes the former sawmill property, which is bounded by Hood Canal to the north, Port Gamble Bay to the east, and the Kitsap Peninsula to the west and south (Figure 2-1).

2.1 Background

The Site was continuously operated as a sawmill facility for a period of approximately 142 years (1853 to 1995). Over that period, the Site underwent a variety of changes, including expansion of the Site by filling, as well as changes in the location and function of buildings and structures. A detailed history of the Site operations is presented in Parametrix (1999a) and is briefly summarized below.

In 1853, the corporate predecessor to P&T established one of the first sawmills on Puget Sound at the Site. At that time, the Site was a relatively small sand spit projecting east from the base of a bluff that forms the western boundary to the mouth of Port Gamble Bay. The Site occupied the location of a former Port Gamble S'Klallam Tribe village and possibly other areas of cultural significance. The Port Gamble Bay region is known to be archaeologically sensitive. Archaeological site records on file at the Washington Department of Archaeology and Historic Preservation (DAHP) indicate that two aboriginal shell midden sites have been recorded on the eastern shore of the bay across from the Site. A third lithic and tool scatter site on the eastern side of the bay has historically been used as a cemetery by the Port Gamble S'Klallam Tribe. At the time of contact with American settlers, the Port Gamble area was home to a S'Klallam Tribe village, which relocated to the Point Julia ("Little Boston") village site directly across the bay when operations began at the sawmill in 1853.

The mill operated as a forest products manufacturing facility from 1853 to 1995. The Site underwent several changes over that period including filling activities, which expanded the

upland area of the Site, moving building locations, and causing changes in functions of buildings and structures. Between 1853 and 1995, operations at the Site included a succession of sawmill buildings, two chip loading facilities, a log transfer facility, and log rafting and storage areas.

During the mill's operating period, logs were rafted and stored offshore of the sawmill property (Figure 2-2). In the late 1920s, a chip barge loading facility was installed on the north end of the Site (denoted the northern embayment). During the mid-1970s, an additional chip barge loading facility (referred to as the alder mill) was constructed in the southeast portion of the sawmill property.

In 1985, P&T transferred ownership of the uplands and adjacent tidelands portion of the Site to PR. P&T continued wood products manufacturing at the Site until 1995 under a lease with PR. Mill operations ceased in 1995 and the sawmill facility was dismantled and removed in 1997. Since 1997, the uplands portion of the Site has been leased to a variety of parties for use as a log sort and wood chipping yard, material handling activities, a marine laboratory, and parking for Washington State Department of Transportation (WSDOT) operations.

In January 1997, Ecology conducted an initial investigation of the Site, which consisted of sampling sediment in four catch basins. The results of that investigation indicated that concentrations of petroleum hydrocarbons and metals were present at levels above MTCA (Washington Administrative Code [WAC] 173-340) and Sediment Management Standards (SMS; WAC 173-204) chemical criteria for these compounds. Subsequently, Clean Services Company, Inc. removed accumulated materials from 12 catch basins, four valve vaults, and four sumps on April 23, 1997.

In July 1998, Ecology notified P&T of the potential listing of the former sawmill site on Ecology's Confirmed and Suspected Contaminated Site List. Subsequently, detailed environmental investigations were conducted by P&T, PR, and OPG to characterize soil, groundwater, surface water, and sediment quality conditions at the Site (Parametrix 2000b). The Site characterization data confirmed the presence of hazardous substances in soil and

groundwater at the upland portion of the Site. Based on these data, Ecology added the Site to the hazardous sites list in 2001.

Between 2002 and 2005, approximately 26,310 tons of contaminated soils were excavated from the Site uplands, and in 2003 approximately 13,500 cubic yards (cy) of sediment containing accumulations of wood waste was dredged from a 2-acre area of the aquatic portion of the Site. Both the upland soils and the 2003 wood waste dredge material were disposed of at approved upland facilities.

In November 2007, P&T filed for bankruptcy (Delaware Case No. 07-11738).

3 PRE-RI DATA COMPILATION AND CONCEPTUAL SITE MODEL

As discussed above, a series of environmental investigations have been conducted prior to the RI by P&T, PR, and OPG to characterize soil and groundwater quality conditions at the Site. These data are summarized in the sections below, and a conceptual site model (CSM) for the uplands soils and groundwater is presented.

3.1 Summary of Investigations

Beginning in 1999, detailed upland investigations at the Site were performed by Parametrix and Environmental Partners, Inc. (EPI). The upland investigations are briefly summarized below. The data informed a series of upland interim actions and resulted in the removal of approximately 26,310 tons of contaminated soils from the Site uplands between 2002 and 2005 (see Section 4.1).

3.1.1 Source Area Evaluation

The upland investigations were based on a focused-area sampling strategy. Potential source areas were delineated based on historical mill site maps, records, and recollections of former mill workers. Areas containing historical structures or activities where materials were processed or stored and could have possessed the potential to release hazardous substances, contaminants, or materials into the soil or groundwater were identified as potential source areas. These areas are discussed in detail in the following documents:

- Port Gamble Mill Site, Phase I Groundwater and Surface Water Investigation Sampling and Analysis Plan (January 13, 1999; Parametrix 1999a)
- Interim Report – Phase I Soil Sampling, Pope & Talbot, Inc. Port Gamble Mill Site (June 28, 1999; Parametrix 1999b)

Eleven source areas were identified at the Site and are shown on Figure 3-1. These source areas were grouped into four main categories to aid in identifying chemicals of potential concern (COPCs). These source categories and their associated general COPCs are summarized in Table 3-1.

3.1.2 Soil and Groundwater Investigations

Multiple soil and groundwater investigations were completed at the Port Gamble Mill Site from 1999 through 2001 to characterize the nature and extent of contamination at the Site. A brief summary of the findings from these investigations is presented below. A more complete discussion of the investigations is provided in the following documents:

- Interim Report - Pope & Talbot, Inc. Port Gamble Mill Site, Phase I Soil Sampling (June 28, 1999; Parametrix 1999b)
- Interim Report No. 2 - Pope & Talbot, Inc. Port Gamble Mill Site, Results of Phase I Groundwater and Surface Water Investigation (October 10, 1999; Parametrix 1999d)
- Interim Report No. 3 – Pope & Talbot, Inc. Port Gamble Mill Site, Phase II Groundwater and Surface Water Sampling Results (May 2, 2000; Parametrix 2000a)
- Port Gamble Mill Site, Phase II Soil Sampling Investigation (January 2001; Foster Wheeler 2001)
- Revised Remedial Investigation Report, Former Pope & Talbot Sawmill Property (Mill Site), Port Gamble, Washington (September 13, 2002; EPI 2002a)

Subsurface Stratigraphy. Soil stratigraphy encountered at the Site is consistent with regional geologic conditions and with the general facility development history summarized above. Figure 3-2 shows the locations of cross-sections at the Site. Figures 3-3 through 3-5 depict the subsurface formations. Fill materials were encountered across the Site from ground surface to depths varying between 2 and 12 feet below ground surface (bgs). The fill material generally consisted of well graded to poorly graded sand and gravel with limited areas of debris, such as brick, wood chips, and concrete. Native material, deposited in nearshore marine and glaciofluvial environments, underlies the fill material and generally consisted of well graded to poorly graded sand with some gravel and shell fragments. Additional descriptions of soil conditions at the Site can be found in the following documents:

- Interim Report No. 2 - Pope & Talbot, Inc. Port Gamble Mill Site, Results of Phase I Groundwater and Surface Water Investigation (October 10, 1999; Parametrix 1999d)
- Revised Remedial Investigation Report, Former Pope & Talbot Sawmill Property (Mill Site), Port Gamble, Washington (September 13, 2002; EPI 2002a)

Hydrogeology. The depth to groundwater at the Site ranged from near ground surface in areas of standing water to greater than 12 feet bgs. Appendix A of the Ecology-approved RI/FS Work Plan (Anchor and EPI 2008) presents water level measurements and water level potentiometric contour maps from June 2001 through March 2007. The observed water level measurements indicate that the groundwater flow direction is generally towards Port Gamble Bay and Hood Canal (toward the east and northeast).

Slug tests were performed on eight monitoring wells. Calculated hydraulic conductivity values ranged from 6.3 x 10-5 to 1.5 x 10-3 feet/second (ft/s), or 5 to 130 feet/day (ft/d). Additional details on the slug tests can be found in the following document:

- Interim Report No. 2 - Pope & Talbot, Inc. Port Gamble Mill Site, Results of Phase I Groundwater and Surface Water Investigation (October 10, 1999; Parametrix 1999d)

Groundwater fluctuations due to tidal influence have been observed at the Site. A tidal study was completed at selected wells in June 1999. Four wells (MW-2, MW-3, MW-4, and MW-7) and a stilling well were monitored using continuously recording transducers for a period of 72 hours. Figure 3-6 presents the results of tidal efficiency calculations at the Site. Due to limited historical data, the tidal efficiency was calculated using the highest and lowest observed water levels in available monitoring wells. Groundwater fluctuations were highest at MW-2, located closest to the shoreline. In contrast, little tidal influence was observed at MW-3, which is located the farthest inland. The time lag was calculated between 2 to 3 hours at MW-2 and 3 to 4 hours at MW-4 and MW-7. Additional details on the tidal study can be found in the following document:

- Interim Report No. 2 - Pope & Talbot, Inc. Port Gamble Mill Site, Results of Phase I Groundwater and Surface Water Investigation (October 10, 1999; Parametrix 1999d)

Soil Chemistry. Table 3-2 presents a summary of analyses for soil samples, and Tables 3-3 through 3-11 present summaries of all soil analytical data for samples collected between 1999 and 2001. Soil sampling locations are shown on Figure 3-7.

Based on the soil chemistry data summarized in Tables 3-3 to 3-11, COPCs in soil (i.e., exceeding MTCA soil cleanup levels) were largely limited to semivolatile-range petroleum

hydrocarbons, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), arsenic, and mercury. Figure 3-8 shows the areas where soil contaminants previously exceeded applicable cleanup levels.

Groundwater Chemistry. Table 3-12 presents a summary of analyses for groundwater samples, and Tables 3-13 through 3-19 present summaries of all groundwater analytical data for samples collected between 1999 and 2001 at the Site. Groundwater sampling locations are shown on Figure 3-9.

Based on the groundwater chemistry data summarized in Tables 3-13 to 3-19, COPCs in groundwater were largely limited to arsenic. Several other metals were also detected in localized areas. Copper and nickel were detected above applicable cleanup levels at MW-2, and mercury was detected above applicable cleanup levels at MW-5.

Arsenic detected in groundwater at the Site is attributable to natural geochemical processes, as no source of arsenic contamination has been detected in Site soils. Inorganic arsenic generally occurs in two oxidation states or species in natural waters, As(V) and As(III). Reducing conditions in soil, which is common in shoreline fill areas, have been documented to result in the mobilization of naturally-occurring arsenic caused by the reduction of As(V) to As(III), with As(III) being the more mobile of these two species. Parametrix sampled Site groundwater in November 1999 and characterized the species of inorganic arsenic in groundwater. Results indicated that more than 90 percent of groundwater arsenic at the Site is present as As(III). Additional details on this investigation are presented in the following document:

- Interim Report No. 3 – Pope & Talbot, Inc. Port Gamble Mill Site, Phase II Groundwater and Surface Water Sampling Results (May 2, 2000; Parametrix 2000a)

3.2 Preliminary Conceptual Site Model

The upland data summarized in the sections above support the following CSM statements and hypotheses:

- The Site is located at the foot of a steep bluff on a peninsula bounded by Hood Canal to the west and Port Gamble Bay to the east.

- The Site was expanded over time by the addition of fill material to the original tideflat along the shore of Port Gamble Bay.
- Fill material is generally 2 to 12 feet thick and is made up of mixtures of well-graded to poorly-graded sand and gravel with minor amounts of silt, clay, shell fragments, and debris including bricks and wood in limited areas.
- Native soils underlying the fill are gray, well graded to poorly graded sand with gravel and shell fragments.
- A regionally extensive glacial lake deposit, the Kitsap Formation, consisting of clay and silt underlies the Site and separates near-surface aquifers from the regional Salmon Springs Aquifer (Parametrix 1999c).
- The fill material supported the formation of an unconfined shallow aquifer that is recharged by precipitation falling on site and over land and shallow flow from the bluffs to the west.
- The shallow aquifer is moderately tidally-influenced and is subject to transient nearshore groundwater flow reversals during high tide events. The short-term groundwater flow reversals do not prevent the eventual discharge of groundwater to Port Gamble Bay.
- Tidal efficiency is greatest in well MW-2, with an efficiency of 22.7 percent. MW-2 is located close to the shoreline with Hood Canal. However, tidal efficiency significantly dissipates farther inland and wells MW-3, MW-4, and MW-7 have tidal efficiencies of 1.1 percent, 3.6 percent, and 1.2 percent, respectively. Rapid dissipation of tidal effects with distance from the shoreline is common for unconfined aquifers.
- Groundwater is generally encountered at approximately 5 to 10 feet bgs but can range from at ground surface in areas of standing water to more than 12 feet bgs.
- Slug test data indicate that hydraulic conductivity values in the shallow aquifer range from 6.3 x 10-5 to 1.5 x 10-3 centimeters per second (cm/sec).
- Groundwater flow directions are generally toward the northeast in the northern half of the site and toward the east in the southern half of the Site. Groundwater flow from the surrounding bluffs appears to be the most significant influence on groundwater flow directions at the Site.

During the conduct of the RI, the CSM was refined as necessary based on the results of additional site characterization.

4 INTERIM REMEDIAL ACTIONS

As set forth in the Agreed Order, remedial actions completed at the Site between 2002 and 2005 are interim actions consistent with WAC 173-340-430. This section compiles and summarizes existing data regarding previous upland interim remedial actions completed at the Site.

4.1 Interim Remedial Actions

Between 2002 and 2005, approximately 26,310 tons of contaminated soils were excavated from the Site uplands and were disposed of at approved upland facilities. This section provides a summary of the upland interim actions.

4.1.1 2002 Interim Actions

The 2002 interim action addressed soil and groundwater contamination discovered during the 1999 to 2001 investigations. The selected remedial alternative consisted of excavation with off-site disposal for contaminated soils, which provided a "presumptive remedy" and thus greater certainty of environmental protection. Monitoring was performed during and following implementation of the interim action to ensure environmental protection, to verify the extent of soil impacts, and to verify expected natural attenuation of groundwater impacts. Additional details on the 2002 interim action can be found in:

- Revised Cleanup Action Plan, Former Pope & Talbot Sawmill Property (Mill Site) (September 19, 2002; EPI 2002b)
- Remedial Action Report, Former Mill Site (April 9, 2003; EPI 2003a)

Prior to any remedial activities, soil characterization samples were collected from test pit excavations near the former sawmill and near the concrete bunker. Tables 4-1 through 4-2 present the results of the characterization samples; sampling locations are presented on Figures 4-1 and 4-2.

A total of about 20,460 tons of contaminated soil were removed from the Site in 2002 from 10 discrete areas. The locations of these areas are shown on Figure 4-3. In areas with cPAH contamination, cleanup was guided using the Toxicity Equivalency Factor (TEF)

normalization of total PAHs concentrations as described in WAC 173-340-708(8)(e)(ii). A summary of the 2002 upland remediation at each discrete area is provided below:

Area	Source	COPCs	Soil Removed	Reference Tables and Figures
1	Former Sawmill and Nearby Buildings	diesel range petroleum hydrocarbons (DRPH) higher range petroleum hydrocarbons (HRPH) cPAHs Select samples analyzed for hexavalent chromium, lead, and mercury	13,200 tons	Tables 4-3 to 4-6 Figure 4-4
2	Former Wood Treatment Buildings	Lead	1,900 tons	Table 4-7 Figure 4-5
3	Area Formerly Used for Diesel Fuel and Oil Storage	cPAHs Arsenic	500 tons	Tables 4-8 to 4-9 Figure 4-6
4	Area Formerly Used for Oil Storage	cPAHs	570 tons	Table 4-10 Figure 4-7
5	Area Formerly Used for Diesel Fuel and Oil Storage	DRPH HRPH	2,300 tons	Table 4-11 Figure 4-8
6	Area Formerly Used for Diesel Fuel and Oil Storage	cPAHs	150 tons	Table 4-12 Figure 4-9
7	Area Formerly Used for Oil Storage and Wood Treatment	cPAHs Mercury	1,000 tons	Tables 4-13 to 4-14 Figure 4-10
8	Area Formerly Used for Wood Treatment	Mercury One sample analyzed for hexavalent chromium	320 tons	Table 4-15 Figure 4-11
9	Area Formerly Used for Wood Treatment	Mercury	300 tons	Table 4-16 Figure 4-12
10	Area Formerly Used for Wood Treatment and Maintenance	Mercury	220 tons	Table 4-17 Figure 4-13

Groundwater Performance Monitoring. Post-remediation performance monitoring was completed to monitor changes in groundwater quality resulting from the 2002 upland interim action. Monitoring was also performed to verify predictions that the interim action removal of contaminated soil from the Site would eliminate an ongoing source of COPC dissolution to groundwater and would result in improved groundwater quality.

Prior to the start of the 2002 interim action, two monitoring wells, MW-3 and MW-5, were decommissioned. After completion of the interim action, five additional groundwater monitoring wells (MW-9 through MW-13) were installed downgradient of the remedial excavations. Figure 4-14 shows the location of all monitoring wells at the Site. Monitoring well installation, development, and sampling procedures are described in detail in the following document:

- Quarterly Groundwater Monitoring Report, Former Mill Site (September 30, 2003; EPI 2003b)

Groundwater performance monitoring data are presented on Tables 4-18 through 4-21. During the two years of quarterly monitoring following the 2002 interim action (September 2002 through September 2004), all analytes were below laboratory detection limits and/or below cleanup levels for at least four sequential quarters with the exception of the following:

- Chromium and nickel at MW-2
- Mercury at MW-7
- Arsenic and lead at MW-8
- Mercury at MW-9
- Mercury and nickel at MW-10

4.1.2 2004/2005 Interim Actions

Due to the consistent presence of mercury impacts in groundwater near MW-9 and MW-10 and arsenic impacts in groundwater near MW-8, several focused investigations were completed in 2004 to determine if residual sources were present in Site soil. These investigations are discussed in Mill Site Status and Remedial Action Scope of Work Memorandum to Gail Colburn (Ecology) (August 17, 2004; EPI 2004). Tables 4-22 through 4-26 present the analytical results of the 2004 investigations. Figures 4-15 and 4-16 present the sampling locations along with the extent of identified soil impacts.

Soil impacts identified during the 2004 investigations led to the development of the 2004/2005 interim action. The selected remedial alternative for the 2004/2005 interim action was the same as the 2002 interim action outlined above: excavation and off-site disposal of contaminated soils, followed by monitored natural attenuation of groundwater impacts.

Since arsenic was not observed at concentrations exceeding applicable soil cleanup levels near MW-8 during the 2004 investigations, the presence of petroleum hydrocarbons was used to determine the extent of soil excavation because it was thought to be increasing the mobility of arsenic in groundwater.

Approximately 5,850 tons of contaminated soil was removed from the Site in 2004 and 2005 from two discrete areas. Figure 4-17 shows the extent of the 2004/2005 interim action excavation areas. Additional details on the interim action can be found in Supplemental Remedial Action Report, Former Pope & Talbot Sawmill Property (Mill Site) (EPI 2005). A summary of the remediation at each area is provided below:

Area	Source	COPCs	Soil Removed	Reference Tables and Figures
Near MW-8	Formerly Used for Wood Treatment	DRPH HRPH	704 cy stockpiled for backfill 343 tons transported off-site	Table 4-27 Figure 4-18
Near MW-9/ MW-10	Former Sawmill	Mercury	5,508 tons	Table 4-28 Figure 4-19

Groundwater Performance Monitoring. Post-remediation performance monitoring was completed to monitor changes in groundwater quality resulting from the 2004/2005 interim action. During the 2004/2005 interim action, one monitoring well, MW-10, was decommissioned. After the completion of the interim action, two wells were installed, MW-10R (replacement well for MW-10) and MW-14. Figure 4-14 shows the location of all monitoring wells at the Site.

Table 4-20 presents the groundwater performance monitoring data for the 2004/2005 interim action (February 2005 through March 2007). Mercury impacts to groundwater at MW-9 and MW-10 continued for approximately three quarters following completion of the 2004/2005 interim action, but were below laboratory detection limits during the subsequent four quarters. Arsenic impacts at MW-8 continued to be observed in groundwater following the 2004/2005 interim action.

Since the 2004/2005 interim action, several additional investigations have been completed at the Site to characterize arsenic in groundwater near MW-8. Follow-up sampling was also performed after the discovery of additional Permatox formulations that were potentially used at the Site. These investigations are discussed below.

Arsenic Investigations 2005/2006. Additional focused investigations near MW-8 were performed in December 2005 and October 2006. A total of 35 direct-push borings were advanced to approximately 12 feet bgs. Soil and groundwater samples were collected from each boring. Groundwater samples were analyzed for total and dissolved arsenic concentrations. Soil samples were only analyzed at those boring locations where arsenic was detected in groundwater. Turbidity was measured in the field to determine if detected total arsenic concentrations were biased high due to direct-push sampling techniques. Tables 4-29 and 4-30 present the groundwater and soil analytical data from these investigations. Sampling locations and groundwater concentrations are presented on Figure 4-20.

The results of the additional arsenic investigation did not indicate a clear source of arsenic in Site soils. The extent of observed dissolved arsenic impacts are shown on Figure 4-20. Sampling locations SP-A-21 and SP-A-22 had arsenic in soil concentrations of 30 and 40 milligrams per kilogram (mg/kg), respectively, for the 10.0 to 10.5 foot bgs interval. Further investigation of the area to the west of those two probe locations is limited by the steep bluff. Based on the available data, the source of the arsenic in groundwater near MW-8 is likely attributable to limited areas of moderately elevated arsenic concentrations in soil in combination with reducing groundwater geochemistry that mobilizes the arsenic. Geochemical conditions in groundwater were evaluated further during the RI (see Section 6).

Permatox Investigation 2006. Permatox 100 was previously identified as a wood treatment chemical used at the Site. In 2006, during an informal interview with a former mill employee, EPI discovered additional Permatox formulations that may have been used at the former Port Gamble Mill Site. Table 4-31 presents the Permatox formulations and their main compounds, which include chlorophenols, mercury, tributyltin, and carbamates. Chlorophenols and mercury had previously been analyzed at the Site; however, tributyltin and carbamates had not. During the June 2006 quarterly groundwater sampling event,

additional samples were collected and analyzed for tributyltin and carbamates to verify that these compounds were not present in groundwater at the Site. The analytical results are presented on Table 4-32. None of the groundwater samples contained detectable tributyltin or carbamates.

5 RI DATA COLLECTION

The following upland data gaps were identified to complete the RI for the upland portion of the Site and were addressed in the Ecology-approved Work Plan and SAP (Anchor and EPI 2008):

- Mercury impacts in soil identified during the 1999 to 2001 investigations were removed during the 2002 interim action. However, total mercury continued to be detected sporadically at concentrations greater than its cleanup level in groundwater samples from MW-7. Dissolved mercury has never been detected in groundwater samples from MW-7. Additional quarterly sampling for mercury in groundwater was performed to demonstrate four consecutive "clean" quarters, as described in Sections 6 and 7. Clean is defined as not detected at a reporting limit of 0.2 micrograms per liter (µg/L).
- Arsenic has been detected at concentrations greater than its cleanup levels in groundwater samples from MW-8. Investigations in 2005/2006 delineated the extent of arsenic in groundwater toward the south and partially delineated the extent of arsenic in groundwater toward the west. The northern and eastern extents of arsenic in groundwater were not fully characterized during previous studies and therefore warranted further investigation. Accordingly, Ecology required installation of two new monitoring wells, MW-15 and MW-16, located near the shoreline of Port Gamble Bay downgradient of existing well MW-8. The two new wells, along with MW-8, were sampled for total and dissolved arsenic as described in Sections 6 and 7.
- Arsenic was detected in soil at sampling locations SP-A-21 and SP-A-22 along the foot of the bluff west of well MW-8. Additional soil sampling west of that location was warranted to help define the western extent of elevated arsenic concentrations in soil. A source of elevated arsenic concentrations in soil has not been identified.
- Ecology was concerned that the former hog fuel burner might have released dioxins and furans when burning wood wastes from logs that were soaked in the seawater at Port Gamble Bay. Ecology required a focused soil investigation to evaluate the potential presence of dioxins and furans in shallow soil in the area west and northwest of the former hog fuel burner.
- Ecology required an additional surface soil investigation to test for the potential presence of organochlorine pesticides in shallow surface soil in the north and south

ends of the Site.

- Consistent with MTCA requirements, a simplified site-specific terrestrial ecological evaluation (TEE) was performed to characterize the potential for wildlife to become exposed to soil-borne chemicals on the upland portion of the Site and to characterize the expected future presence of plants and soil invertebrates that are the food base for wildlife. While additional analysis of invertebrate tissue lead concentrations within the former Mill fueling area was initially determined to be desirable to support the TEE, habitat conditions within the target sampling area (active roadway areas with a gravel surface) precluded collection of tissue data at this location. As presented in Sections 6.2 and 7.2.6 and in Appendix C, the TEE was successfully completed without the invertebrate tissue data.

6 SUPPLEMENTAL RI INVESTIGATIONS

6.1 Supplemental Upland Investigations

As presented in the RI/FS Work Plan, upland data gaps at the Site addressed by the SAP included:

- Total mercury and cadmium in groundwater at monitoring well MW-7
- Arsenic in groundwater at and around MW-8 and arsenic in soil along the bluff west of MW-8, including the installation and sampling new monitoring wells MW-15 and MW-16 downgradient of MW-8
- Dioxins and furans in shallow soil downwind of the former hog fuel burner
- Organochlorine pesticides in shallow soil at the north and south ends of the Site

The four upland data gaps identified above are described in greater detail in the following paragraphs.

Mercury and Cadmium at MW-7: Quarterly groundwater samples were collected from monitoring well MW-7, which is located along the eastern shoreline of the southern portion of the Site as shown in Figure 6-1. Groundwater samples were collected from MW-7 in February, May, August, and November 2009 and were analyzed for total and dissolved mercury. Based on data from these sampling events (summarized in Table 7-2), Ecology's objective of four consecutive "clean" quarters (not detected at a reporting limit of 0.2 µg/L) has been achieved.

Although total mercury was detected historically at well MW-7, dissolved mercury was not previously detected in groundwater samples collected from this well. This indicates that the previous total mercury detections were likely due to mercury adsorbed onto silt particles present in the unfiltered total mercury sample aliquot rather than mercury dissolved in groundwater. Careful application of low-flow purging and sampling techniques and verifying low turbidity prior to sample collection has provided four consecutive quarters of non-detects at a reporting limit of 0.2 µg/L in samples from MW-7.

Between 1999 and 2004, nine quarterly samples were collected from MW-7 and submitted for cadmium analysis (see Section 3.1.2). Cadmium was detected only once during this

period, followed by two consecutive quarters of non-detects. At Ecology's request, additional sampling of MW-7 was conducted in June and September 2010. During both sampling events, cadmium was not detected in groundwater collected from MW-7 (at a reporting limit of 0.4 µg/L). Based on data from these sampling events (summarized in Table 7-2), Ecology's objective of four consecutive "clean" quarters has been achieved.

Arsenic at and near MW-8: Direct-push technology (DPT) was used to advance 14 borings near MW-8. Soil and groundwater samples were collected at all 14 borings to provide data to delineate the northern and eastern extent of elevated arsenic concentrations in soil and groundwater near MW-8. Soil samples were also collected at two hand-auger sampling locations to the west of soil sampling locations SP-A-21 and SP-A-22, where elevated arsenic concentrations were noted during a previous investigation. These additional soil samples were obtained to evaluate arsenic concentrations in soil to the west. Two new monitoring wells, MW-15 and MW-16, were installed to the east and northeast of MW-8 to monitor concentrations of arsenic in groundwater near the bay. Figure 6-1 presents the DPT groundwater sampling locations, hand auger locations, and new monitoring wells MW-15 and MW-16, which were located between MW-8 and the Port Gamble Bay shoreline.

All 14 DPT borings were advanced to approximately 12 feet bgs, which was approximately 4 feet below the static water table at the time of drilling. Soil and groundwater samples were collected from each location. All groundwater samples were analyzed; soil samples were archived pending evaluation of the analytical results for the groundwater samples. Because arsenic was detected at concentrations greater than its most conservative cleanup level in all but three of the groundwater samples, all soil samples were subsequently submitted for analysis.

Monitoring wells MW-15 and MW-16 were installed using standard hollow stem auger (HSA) drilling techniques and constructed in accordance with WAC 173-160, Minimum Standards for Construction and Maintenance of Wells. Each well has 15 feet of screened interval extending from approximately 9 feet below the water table to approximately 6 feet above the water table at the time of drilling. This screened interval intersects the unsaturated/saturated interface throughout the expected range of tidal fluctuations. Monitoring wells were completed to a depth of approximately 20 feet bgs, with depths and

screened intervals similar to existing nearby well MW-8. Boring logs and as-built well completion drawings are presented in Appendix A.

Moderately elevated salinity (approximately 3 to 5 parts per thousand [ppt]) was observed in groundwater collected from the new shoreline monitoring wells MW-15 and MW-16, relative to interior monitoring well MW-8 (salinity of 0.9 ppt). The elevated salinity observed at MW-15 and MW-16 is likely a result of tidal-induced mixing of groundwater and seawater near the Site shoreline. Under these conditions, the standard Inductively Coupled Plasma Mass Spectrometry (ICP-MS) method often used for arsenic analyses can be affected by spectral interferences originating from the saline sample matrix. Saline matrix interferences have been documented to cause false positive results and a high bias in arsenic analyses, which can produce results that are significantly greater than the true concentrations in the samples. A more accurate analytical method for arsenic analysis in saline water, known as the hydride method, has been used successfully at other sites to overcome the matrix interference issues.

During the May 2009 groundwater sampling event, two sets of groundwater samples were collected from wells MW-8, MW-15, and MW-16 and submitted for dissolved arsenic analysis. One set of samples was analyzed by the standard ICP-MS method and the second set of samples was analyzed by the hydride method. All hydride method results were less than the standard ICP-MS method results by a range of 10 to 97 percent (see Section 7.2.4). Consistent with spectral interferences from saline matrices, the degree of high bias was correlated with salinity. These data verified that there was a matrix interference affecting the results of the standard ICP-MS analytical method. Based on the results of the side-by-side analytical testing, Ecology approved use of the hydride method for subsequent dissolved and total arsenic monitoring.

Dioxins and Furans in Surface Soil. Ten discrete surface soil samples were obtained from the 0 to 6-inch depth interval in the area surrounding the former refuse (hog fuel) burner. Five of the ten surface soil samples were submitted for dioxin and furan analyses. The remaining five surface soil samples were archived pending evaluation of analytical results from the five samples that were submitted for analysis.

Soil sampling was performed in the areas west and northwest of the former refuse burner at the locations shown in Figure 6-2. Areas that were previously excavated and backfilled with clean fill material were not sampled because they were not exposed to potential windborne deposition of dioxins and furans during historical operation of the former refuse burner. In addition, soil from beneath former buildings was also not sampled for the same reason.

Organochlorine Pesticides in Surface Soil. Fifteen surface soil samples were obtained from the 0 to 6-inch depth interval in the north and south ends of the Site. Ten of the samples were obtained at the north end of the site near the former refuse burner at the same locations as the dioxin and furan surface soil samples as shown in Figure 6-2. Five of the samples were obtained at the south end of the Site near the former log storage yard at five of the DPT arsenic sampling locations as shown in Figure 6-1.

6.2 Preliminary Upland Cleanup Levels

Preliminary soil and groundwater cleanup levels for the Site were presented in the Revised Cleanup Action Plan, Former Pope & Talbot Sawmill Property (Mill Site) (EPI 2002b). The preliminary soil cleanup levels included a TEE; the completed simplified TEE exposure analysis worksheet is presented in Appendix C of the Ecology-approved RI/FS Work Plan. Final cleanup levels will be set at the CAP stage.

Preliminary Soil Cleanup Levels. During prior interim actions, COPCs in shallow unsaturated soils at the Site were generally remediated to MTCA Method A soil cleanup levels for unrestricted land use, based on direct contact exposure scenarios. COPCs in deeper saturated soils were assessed relative to National Toxics Rule Criteria (40 Code of Federal Regulations [CFR] 131.36) for protection of human health for consumption of aquatic organisms, using Equation 747-1 (WAC 173-340-747(4)(b)) to derive soil concentrations for the protection of surface water. Additionally, all soils (i.e., unsaturated and saturated) impacted with petroleum hydrocarbons were remediated to applicable MTCA Method A or Method B soil cleanup levels. MTCA Method A or Method B soil cleanup levels and the derived soil concentrations, which are protective of the National Toxics Rule Criteria for COPCs, are summarized in Table 6-1. Modifications to previous cleanup levels for individual

cPAHs have been made due to physical property data updates and application of the TEF normalization method [WAC 173-340-708(8)(e)(ii)].

In June 2009, pitfall traps were deployed at the Site in an attempt to collect invertebrate tissue (and co-located soil) samples at selected locations within the Site uplands, consistent with an Ecology-approved RI/FS Work Plan addendum to develop site-specific TEE-based soil cleanup criteria. However, all of the targeted soil sampling areas with marginally elevated soil COPC concentrations were located within active roadway areas with a gravel surface, rendering the pitfall sampling method unsuccessful. Therefore, preliminary soil cleanup levels were developed based on Simplified TEE values for unrestricted land use [WAC 173-340-900, Table 749-2] and are presented in Appendix C. Statistical (MTCAStat) analyses of the upland soil data are presented in Appendix D.

Preliminary Groundwater Cleanup Levels. Concentrations of COPCs in groundwater at the Site were compared to both National Toxics Rule (NTR) criteria (40 CFR 131.36) for protection of human health from consumption of aquatic organisms and Washington Surface Water Quality Standards (WAC 173-201A) marine water quality chronic criteria for protection of aquatic organisms; the most restrictive criterion was applied. Since the NTR arsenic criterion for protection of human health from consumption of aquatic organisms (0.14 µg/L) is below the Washington natural background concentration (8 µg/L; PTI 1989), the preliminary MTCA groundwater arsenic cleanup level was based on the background concentration. If both NTR Criteria and Washington Surface Water Quality Standards were not available for a COPC, then MTCA Method A groundwater cleanup levels were applied. Preliminary groundwater cleanup levels for COPCs are summarized in Table 6-2.

7 SUPPLEMENTAL REMEDIAL INVESTIGATION RESULTS

This section summarizes the results of the supplemental investigations designed to address remaining RI data gaps identified at the Site. Each element of the investigation is discussed in the sections below.

7.1 Supplemental Upland Mercury and Cadmium Investigations

As discussed in Sections 5 and 6, since completion of the 2002 interim action, total mercury has been detected sporadically in groundwater samples from MW-7 at concentrations greater than the practical quantitation limit (PQL) of 0.2 µg/L for mercury. However, no trends are apparent in the total mercury data. Dissolved mercury has never been detected in samples from MW-7, indicating that the historical total mercury detections could be caused by mercury adsorbed to particulates in the total mercury samples.

Groundwater samples were collected in February, May, August, and November 2009 from existing well MW-7 and submitted for total and dissolved mercury as part of the RI data gaps investigation. Groundwater sampling for total and dissolved mercury in MW-7 followed the low flow purging and sampling procedures described in Section 7.1.2.5 of the RI/FS Work Plan (Anchor and EPI 2008). Samples were hand-delivered to CCI Analytical Laboratories for total and dissolved mercury analysis by U.S. Environmental Protection Agency (EPA) Method 7470. At Ecology's request, additional sampling of MW-7 was conducted in June and September 2010 (again using low flow purging and sampling procedures described in the RI/FS Work Plan) and submitted to ALS Environmental for total and dissolved mercury analysis by EPA Method 200.8.

Both total and dissolved mercury samples were not detected at the mercury reporting limit of 0.2 µg/L for all four 2009 quarterly monitoring events as shown in Table 7-2 and Figure 7-1. Similarly, cadmium was not detected during the 2010 monitoring events (at a reporting limit of 0.4 µg/L). These data confirm that Ecology's objective of four consecutive "clean" quarters has been achieved for both mercury and cadmium. Appendix E contains the laboratory data sheets for groundwater samples from MW-7. No further quarterly sampling for mercury and cadmium at MW-7 is planned.

7.2 Supplemental Upland Arsenic Investigations

The following sections describe the work that was performed to delineate and monitor arsenic concentrations in groundwater and soil near existing well MW-8. The arsenic investigation consisted of DPT soil and groundwater sampling, hand auger soil sampling, installation and development of monitoring wells MW-15 and MW-16, and sampling groundwater in wells MW-8, MW-15, and MW-16. These investigation elements are described in the following sections.

7.2.1 Direct-Push Technology Investigation

Fourteen DPT borings were installed to delineate the northern and eastern extent of arsenic at concentrations greater than its cleanup level in groundwater near MW-8. Figure 7-1 shows the locations of the DPT borings. DPT sampling for soil and groundwater was performed on January 14 and 15, 2009.

All DPT borings were advanced to approximately 12 feet bgs. Soil and groundwater samples were collected from each DPT location. All groundwater samples were analyzed for total and dissolved arsenic; soil samples were archived at the analytical laboratory pending an evaluation of the groundwater data. Soil samples collected at locations where arsenic was detected at concentrations greater than its cleanup level in groundwater were later analyzed for arsenic. Details of the DPT sampling procedures are discussed in the following paragraphs. Boring logs for the 14 DPT boring are included in Appendix A.

7.2.1.1 DPT Soil Sampling

Continuous soil samples were obtained during DPT drilling using a decontaminated core barrel with an acetate sleeve for geologic logging and analytical sampling. Soil samples were collected from 2.0 to 2.5 feet bgs, 5.5 to 6.0 feet bgs (or just above the water table), and 10.0 to 10.5 feet bgs. All soil samples were archived for arsenic analysis pending evaluation of the groundwater data. The 2.0 to 2.5 feet bgs and 10.0 to 10.5 feet bgs soil sampling intervals were selected to match previous DPT sampling for arsenic in soil performed in this area. The 5.5 to 6.0 feet bgs sample interval was added as requested by Ecology for additional vertical profiling detail.

Surface soil samples (0 to 0.5 feet bgs) were also obtained at five of the probe locations as part of the organochlorine pesticide investigation presented in Section 7.5. In addition to the pesticide analyses, the five surface samples were also analyzed for arsenic.

All soil samples were transferred to pre-labeled, laboratory-supplied sample jars using new, single-use stainless steel spoons. A description of the soil following the Unified Soil Classification System (USCS) visual-manual procedures (American Society for Testing and Materials [ASTM] 2488D) was recorded in the field notebook and is presented in the boring logs included in Appendix A. Analytical results for DPT soil samples are presented and summarized in Section 7.4.

7.2.1.2 DPT Groundwater Sampling

Groundwater samples were collected during DPT probing by setting temporary well screens in the target sample interval. All DPT probes were purged using low-flow purging techniques described in Section 7.1.2.5 of the RI/FS Work Plan prior to sampling to remove fine soil particles and to ensure that the sample was representative of groundwater quality. Turbidity was recorded during purging and again prior to sample collection to determine the potential impact of fine soil particles on total arsenic concentrations. In addition to turbidity, other field parameter measurements collected prior to sampling were temperature, dissolved oxygen (DO), specific conductivity, pH, and oxidation/reduction potential. Field parameter measurements are summarized in Table 7-3.

Samples were collected using a peristaltic pump and low-flow sampling techniques. Discharge tubing was new, single-use polyethylene tubing, which was changed between sampling locations. All samples were collected at a flow rate of less than approximately 100 milliliters per minute into laboratory-cleaned, pre-labeled sample bottles. Dissolved arsenic samples were field filtered prior to collection using single-use, disposable in-line 0.45-micron filters. Samples placed in iced coolers and were hand-delivered to CCI Analytical Laboratories for total and dissolved arsenic analyses. Analytical results for groundwater samples are presented and discussed in Section 7.4.

7.2.2 Hand Auger Soil Investigation

Two hand auger borings, SP-A-50 and SP-A-51, were completed on January 13, 2009 to delineate the western extent of the elevated arsenic concentrations in soil west of previous sampling locations SP-A-21 and SP-A-22. These locations are on a steep bluff making access by a DPT rig unsafe. Figure 7-2 shows the locations of the two hand auger samples.

Soil samples were collected from 1.5 to 2.0 feet bgs, 3.5 to 4.0 feet bgs, and 5.5 to 6.0 feet bgs at both hand auger locations. Sample intervals were selected to provide vertical profiling data for depth intervals that can realistically be achieved in on-site soils using a hand auger. All soil samples were directly transferred to laboratory-supplied jars using new, single-use stainless steel spoons. Samples were submitted to CCI Analytical Laboratories for arsenic analysis by EPA Method 7060. Analytical results for hand auger soil samples are presented and summarized in Section 7.4.

Soil was classified following the USCS visual-manual procedures (ASTM 2488D). Soil types and descriptions were recorded in the field notebook and are presented in the boring logs included in Appendix A.

7.2.3 Monitoring Well Installation, Development and Sampling

Two monitoring wells, MW-15 and MW-16, were installed on January 21, 2009 to the east and northeast of MW-8, where arsenic has been detected in groundwater at concentrations greater than the arsenic cleanup level for the Site. The two new wells were installed to monitor groundwater downgradient of MW-8 as it moves toward Port Gamble Bay. Figure 7-1 shows the monitoring well locations. Details of the well drilling, installation, development, and sampling are discussed in the following sections.

7.2.3.1 Monitoring Well Soil Sampling

Both wells were installed using a truck-mounted HSA drilling rig. A decontaminated split-barrel sampler was used to obtain soil samples for geologic logging and analytical sampling. Soil samples were collected at 2.0 to 2.5 feet bgs, 5.5 to 6.0 feet bgs (or just above the water table), and 10.0 to 10.5 feet bgs. Soil sampling intervals from 2.0 to 2.5 feet bgs and 10.0 to 10.5 feet bgs were selected to match previous DPT sampling intervals for arsenic in soil

performed in this area. The 5.5 to 6.0 feet bgs sample interval was added as requested by Ecology for additional vertical profiling detail.

Soil from the desired interval for analytical sampling was directly transferred to laboratory-supplied jars using disposable, single-use stainless steel spoons. A description of the soil following the USCS visual-manual procedures (ASTM 2488D) was recorded in the field notebook. Soil samples were labeled and placed in an iced cooler pending submittal to the analytical laboratory. All samples were handled and transported under standard chain-of-custody (COC) protocols. Soil samples were submitted to CCI Analytical Laboratories for arsenic analysis by EPA Method 7060.

7.2.3.2 Monitoring Well Installation

MW-15 and MW-16 were constructed of 2-inch diameter, flush-threaded, Schedule 40 polyvinyl chloride (PVC) well casing and screen following Ecology's construction standards for resource protection wells found in Minimum Standards for Construction and Maintenance of Wells in WAC 173-160.

Well screen assemblies consist of 15-foot lengths of 0.010 inch (10 slot), flush-threaded, machine-slotted, Schedule 40 PVC. Screened intervals were installed from approximately 4 to 19 feet bgs and set in 2/12 Monterey silica sand filter pack. The well design included a 0.5-foot-long, flush-threaded, Schedule 40 PVC sump with a flush-threaded end cap to a total depth of approximately 20 feet bgs. As-built construction diagrams for monitoring wells MW-15 and MW-16 are presented in Appendix A.

7.2.3.3 Monitoring Well Development

Monitoring wells were developed on January 27, 2009, by surging with single-use disposable bailers followed by continuous pumping at a steady rate using a peristaltic pump. Well development was terminated when the turbidity of the discharge water decreased to less than 10 nephelometric turbidity units (NTU). During well development, field parameters including pH, temperature, conductivity, and turbidity were measured and recorded. Color changes and appearance of purged groundwater before, during, and after development were observed and recorded. Well development data are presented in Appendix B. Development

water removed from wells was retained in 55-gallon drums labeled with well information and date for future disposal.

7.2.3.4 Monitoring Well Surveying

Monitoring wells and direct-push probe locations were surveyed for horizontal and vertical control using standard land surveying techniques. Surveying results are summarized in Table 7-7 and present monitoring well northings, eastings, rim elevations (top of protective casing), and measuring point elevations (top of PVC casing). The horizontal datum is North American Datum (NAD; 1983, 1991), North Zone. The vertical datum is National Geodetic Vertical Datum (1929), which is consistent with previous surveys at the Site.

7.2.3.5 Monitoring Well Sampling

Groundwater samples were collected from MW-8, MW-15, and MW-16 on February 4, May 14, August 5, and November 4, 2009. As discussed in Section 6.1, groundwater samples were initially analyzed for total and dissolved arsenic using ICP-MS. Following identification of a saline matrix interference affecting the results of the standard ICP-MS analytical method, Ecology approved use of the hydride method for subsequent dissolved and total arsenic monitoring. Groundwater data from these well sampling events are presented in Table 7-2. Groundwater arsenic results are discussed in Section 7.2.4.

Prior to groundwater sampling, the depth to groundwater (DTW) and total well depth were measured at all wells to the nearest 0.01-foot using an electronic water level indicator. Monitoring wells were then purged using a peristaltic pump equipped with new, single-use, disposable tubing. Low-flow purging was conducted in general accordance with procedures described in Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures (Puls and Barcelona 1996).

Temperature, pH, specific conductance, DO, oxidation-reduction potential (ORP), and turbidity were measured during purging and recorded approximately every 3 to 5 minutes. In addition, the field sampler took notes describing the appearance and odor of the water if notable. Purging was performed until field parameters stabilized as specified in the RI/FS Work Plan. Final field parameter stabilization data are summarized in Table 7-3. Appendix

B presents well development logs and field sampling logs that include the measured field parameters.

Following purging, a peristaltic pump was used to obtain groundwater samples following low-flow groundwater sampling procedures as referenced above. Groundwater samples were collected into laboratory-cleaned, pre-labeled sample bottles. Upon collection, samples were placed in an iced cooler and submitted to CCI Analytical Laboratories following standard COC protocols. Samples were analyzed for total and dissolved arsenic by EPA Method 7060.

7.2.4 Groundwater Arsenic Concentrations

Analytical results for total and dissolved arsenic in groundwater from direct-push probes and from monitoring wells are summarized in Table 7-1 and Table 7-2, respectively, and are presented graphically on Figure 7-1. Appendix E contains the laboratory data sheets associated with these data. Both total and dissolved arsenic were detected in groundwater samples from 11 of the 14 DPT probe locations and in samples from the three wells, MW-8, MW-15, and MW-16.

Arsenic was not detected at a reporting limit of 5 µg/L at three probe locations: SP-A-46, SP-A-48, and SP-A-49. All three locations where arsenic was not detected in groundwater are near the northwest corner of the sampling grid near the bluff.

As noted in previous upland reports and as discussed in Section 7.2.5 below, groundwater concentrations detected at the Site do not appear to be directly related to a source of elevated arsenic concentrations in the soil. Site historical assessments did not identify any previous operations or activities on the Site that used arsenic containing compounds (Parametrix 1999a). Elevated arsenic concentrations detected in groundwater (using ICP-MS or hydride methods) are likely naturally occurring, and result from geochemically reducing conditions at the Site.

In natural water, inorganic arsenic can occur in two common redox species: As(V) and As(III), with As(III) generally being the more soluble of these two species. If geochemical conditions in groundwater become reducing, the more mobile species As(III) forms, and

ferric iron, which limits the mobility of arsenic by sorption, reduces to more soluble and mobile ferrous iron (Krauskopf 1979). Therefore, reducing geochemical conditions in groundwater increases the mobility of arsenic, which results in increased concentrations of arsenic in groundwater.

The boring logs for wells MW-7, MW-8, and the DPT borings in the south end of the Site indicate that the soil in this area of the Site contains varying quantities of wood waste and other organic matter in the soil. Aerobic decomposition of these organic materials uses up the available DO in groundwater as they decay. This process can create the geochemically reducing conditions in groundwater, which increases the solubility of arsenic as described in the previous paragraph. In addition, the blue-gray to greenish gray color noted in some of the geologic materials logged at MW-7 and MW-8 indicates geochemically reducing conditions in the aquifer.

Based on the hydride analyses summarized in Table 7-2, total arsenic concentrations in MW-8, MW-15, and MW-16 ranged from 1 to 23 µg/L; dissolved arsenic in these same wells ranged from 0.1 to 14 µg/L. While arsenic concentrations in MW-8 and MW-16 were above the natural background concentration in Washington State of approximately 8 µg/L (PTI 1989), none of the groundwater samples collected from the Site exceeded the marine surface water chronic criterion of 36 µg/L.

7.2.5 Soil Arsenic Concentrations

All soil samples obtained for arsenic analysis, with the exceptions of SP-A-50 and SP-A-51, were initially archived pending evaluation of groundwater results from those locations. The samples from SP-A-50 and SP-A-51 were from the two hand auger locations, which could not be drilled deep enough by hand to encounter groundwater and, therefore, the soil samples were analyzed by default. The remaining soil samples were analyzed because groundwater results for arsenic at all but three probe locations had detections greater than the most conservative groundwater cleanup level of 0.14 µg/L.

Arsenic was detected in only three of the 59 soil samples analyzed for arsenic during the supplemental RI data gap investigation. All three detected arsenic concentrations in soil

samples were less than the MTCA Method A soil cleanup level of 20 mg/kg based on regional background concentrations. Analytical results for arsenic in soil are summarized in Table 7-4 and in Figure 7-2 for the 14 DTP probe locations, two well locations, and two hand auger locations. Appendix E contains the laboratory data sheets associated with these data.

The soil arsenic analytical results do not indicate a source of arsenic at the south end of the Site. The three soil arsenic detections are widely spaced and likely represent sporadic, localized pockets of slightly to moderately higher arsenic concentration that do not indicate a contiguous source of arsenic in soil. In addition, all three soil samples with detectable concentrations of arsenic are from sample depth intervals at or near the top of the water table, rather than from the uppermost sample interval, and two of the three detections are from soil in the deepest (10.0 to 10.5 feet bgs) sample interval. This vertical distribution of arsenic, with arsenic at detectable concentrations only in deeper soil intervals and non-detections in the overlying soil, along with the Site history assessment, indicate that there is no evidence of surface releases of arsenic-containing compounds that are acting as sources for arsenic in groundwater.

7.2.6 Terrestrial Ecological Evaluation and Soil Lead Concentrations

Under MTCA, the goal of the TEE is the protection of wildlife species. The upland areas of the Site are characterized by a contiguous open space bordered by water to the north and east and terrestrial vegetation and residential properties to the west and south. The majority (greater than 95 percent) of the uplands Site area is open space lacking constructed structures. The Site is well-graded and consists of fill material made up of sand and gravel with minor amounts of silt, clay, shell fragments, and debris including bricks and wood in limited areas. There is little to no vegetative cover on the Site because of human activity; plants and shrubs characteristic of disturbed habitats grow on the western and southern borders of the property. The existing and planned future uses of the Site are industrial and commercial. To support future redevelopment actions, the Site will receive additional sand fill.

A simplified TEE was performed to screen potential chemicals of ecological concern at the Site. Based on comparisons of soil concentration with cleanup levels based on a Simplified

TEE found in MTCA Table 749-2, there were two samples, both from the former fueling area, that exceeded the MTCA simplified TEE cleanup level for unrestricted land use for lead (220 mg/kg):

- Lead in boring sample PS-72B (270 mg/kg)
- Lead in boring sample PS-122B (230 mg/kg)

However, the detected lead concentrations were within the requirements for statistical compliance as allowed by Section 173-340-740(7) of the MTCA regulation. The dataset of the performance sampling results was analyzed using MTCAStat97 to determine compliance parameters based on the distribution of the data. The calculated true mean of the data is 73 mg/kg. Because the data were neither normally nor lognormally distributed, the Z-statistic was used to calculate the 95 percent upper confidence level (UCL 95). Using this method, the UCL 95 around the true mean is 98 mg/kg. This results in a UCL 95 that is less than the 220 mg/kg TEE cleanup level for lead in soil, which satisfies WAC 173-340-740 (7)(c)(iv)(A). The MTCAStat97 report is presented in Appendix D.

The performance sampling data set for the limits of the remedial excavation therefore comply with the terrestrial soil screening level for unrestricted land uses because:

1. No more than 10 percent of sample results exceed the cleanup level for lead
2. No single sample is more than twice the cleanup level
3. The UCL 95 around the true mean is less than the cleanup level

Based upon this analysis of the post-remediation sampling dataset, the remaining in-place soil at the Site is currently in compliance with the TEE soil cleanup level. Because individual samples exceeded TEE cleanup levels, Ecology required that a site-specific TEE problem formulation be prepared to evaluate exposure pathways.

Site-Specific TEE Results

To determine chemicals of ecological concern, soil concentrations considered protective of terrestrial ecological receptors (plants and animals) were developed using a site-specific TEE (WAC 173-340-7493). The majority of soil samples collected at the Site contained non-detectable levels of most of the hazardous substances listed in MTCA Table 749-3. All samples containing detected PAHs were below the MTCA Table 749-3 screening levels for

acenaphthene and benzo(a)pyrene, total gasoline range, and total diesel range organics. Because toxicity reference values for individual PAH compounds were not available for compounds other than acenaphthene and benzo(a)pyrene, it was assumed that benzo(a)pyrene and acenaphthene were representative of low- and high-molecular weight PAH screening levels for wildlife protection, respectively. Lead was the only hazardous substance that exceeded ecological indicator soil concentrations for protection of terrestrial plants and animals standards.

Consistent with Ecology guidance, risks to wildlife receptors were evaluated for the shrew (insectivorous mammal), American robin (insectivorous bird), and the vole (herbivorous mammal). Potential exposure pathways for the Site include:

- Plants exposed via uptake from soil and groundwater
- Soil biota (earthworm) exposed via dermal contact and soil ingestion
- Mammalian herbivores (vole) exposed via dermal contact from burrowing, incidental soil ingestion, and consumption of contaminated plant material
- Mammalian predator (shrew) exposed via dermal contact from burrowing, incidental soil ingestion, and consumption of contaminated soil biota
- Avian predator (robin) exposed via dermal contact from burrowing, incidental soil ingestion, and consumption of contaminated soil biota

Detected concentrations of lead that exceed ecological indicator soil cleanup levels are located between 2 and 5 feet bgs and will receive an additional currently unspecified thickness of cover material during redevelopment. The cover will act as an appropriate engineered control under WAC 173-340-440(1) and WAC 173-340-200. The cover will effectively make all exposure pathways incomplete by preventing the movement of, or the exposure to, the chemicals of ecological concern in the subsurface soil.

Given the incomplete exposure pathways for terrestrial plants and soil biota, it is unlikely that wildlife receptors will become exposed to hazardous substances through ingestion of contaminated prey/food. Furthermore, it is unlikely that dermal contact would be a complete contaminant exposure pathway for wildlife receptors because of the lack of suitable habitat. Human activity and the compacted nature of the soil are expected to prevent

wildlife from utilizing the Site while the depth of contamination and the addition of cap material are expected to prevent wildlife from utilizing any soil biota as food from the Site.

Based on the site-specific TEE exposure pathway information above, soils at the Site are unlikely to pose significant adverse effects to terrestrial ecological receptors. The FS evaluates the need for institutional controls to ensure the continued protection of human health and environment and the integrity of a cleanup action.

7.3 Supplemental Upland Dioxin and Furan Investigation

Ecology suspected that surface soil near the former refuse burner (also known as the former hog fuel burner) could have contained dioxins and furans resulting from burning wood waste from logs that were soaked in the seawater of Port Gamble Bay. Wood wastes (hog fuel) from these logs contained salts, which in some circumstances can lead to the formation of dioxins and furans when burned. Therefore, to address Ecology's concerns, a focused shallow soil investigation was conducted west and northwest of the former refuse burner area to determine the presence of dioxins and furans, if any, and their concentrations.

Five discrete surface soil samples (collected to 0 to 6 inches bgs) were obtained from the area west of the former refuse burner and five discrete surface soil samples were obtained from the area northwest of the former refuse burner, as shown in Figure 7-3. Sample locations were laid out in a grid pattern with approximately 100-foot spacing between points. Sample locations were selected to be downwind of and near the former refuse burner but not in areas that were previously excavated and backfilled or areas that were covered by former structures, which would have isolated the underlying soil from windborne emissions from the former refuse burner. Five of the ten discrete samples were selected for analysis based on a random selection of odd or even sample numbers; the remaining five samples were archived pending evaluation of the results of the initial five samples.

The five randomly selected samples were submitted to Test America's West Sacramento, California analytical laboratory for dioxin and furan analysis by EPA Method 1613B as noted in the RI/FS Work Plan. Dioxin/furan soil analytical results are presented in Table 7-5 and in Figure 7-3. Appendix E contains the laboratory data sheets for dioxin and furan analyses.

Individual dioxin and furan compounds were detected in four of the five soil samples analyzed. Data were evaluated by applying the appropriate MTCA TEF to detected individual dioxin and furan compounds to produce total toxicity equivalent concentrations (TEQs).

The cumulative TEQ concentrations for dioxin compounds ranged from 0.53 to 3.8 picograms per gram (pg/g), less than the TEE-based soil cleanup levels for total chlorinated dibenzo-p-dioxins of 5 pg/g, and also well below the Method B human health-based soil cleanup level of 11 pg/g. Similarly, the cumulative TEQs for furans ranged from 0.07 to 0.42 pg/g, and were well below the TEE-based soil cleanup level for total chlorinated dibenzofurans of 3 pg/g and the human health-based level of 11 pg/g. The data sheets presenting the total TEQ calculations are presented in Appendix E.

Sampling locations selected for analysis represent a conservative evaluation of dioxin and furan concentrations at the Site. The samples were all surface soil samples from the area of the Site located immediately downwind of the former refuse burner in soil that was not covered by buildings during the period that the former burner operated. Although the sampling program was conservatively designed to focus on the area of soil most likely impacted by dioxins and furans, none of the sample results exceeded the preliminary soil cleanup level. Thus, no additional sampling for dioxins and furans is needed for this RI.

7.4 Supplemental Upland Pesticide Investigation

Ecology was also concerned that shallow soil from across the Site may contain elevated concentrations of organochlorine pesticides. To address this concern, a focused shallow soil investigation was conducted to determine the presence of organochlorine pesticides, if any, and their concentrations. Five discrete surface soil samples were obtained from the southern part of the Site near the former log storage yard as shown in Figure 6-1. Ten discrete surface soil samples were obtained from the north area of the Site near the former refuse burner as shown in Figure 6-2. The ten north area sample locations were coincident with dioxin/furan sampling locations and the five south area sample locations were coincident with arsenic DPT probe sampling locations.

Soil samples were obtained from the 0 to 6 inch interval (surface) at the 15 sampling locations shown in Figures 6-1 and 6-2. A new, single-use stainless steel spoon was used to fill 4-ounce clear wide mouth glass sample jars with soil from each location. All fifteen discrete samples were submitted to CCI Analytical Laboratories for organochlorine pesticide analyses by EPA Method 8081, as noted in the RI/FS Work Plan Addendum.

Appendix E contains the laboratory data sheets for the organochlorine pesticide analyses. Analytical results are summarized in Table 7-6 and Figures 7-4 and 7-5. None of the organochlorine pesticide compounds were detected in any of the 15 samples analyzed. Thus, no additional sampling for pesticides is needed for this RI.

7.5 Upland Surveying

All DPT, monitoring well, surface soil, and hand auger soil sampling locations associated with this data gaps investigation were surveyed for horizontal and vertical coordinates. Ground surface elevations were surveyed to the nearest 0.01 foot with reference to mean lower low water (MLLW) elevation. Horizontal coordinates were surveyed to the nearest 0.1 foot and tied to the State Plane Coordinate System, NAD (1983, 1991). Upland surveying data are summarized in Table 7-7.

FEASIBILITY STUDY

8 CONCEPTUAL SITE MODEL

This section summarizes the CSM for the Site. The CSM includes a discussion of the contaminant exposure pathways and potential environmental risks posed by deleterious or hazardous substances that remain at the Site.

8.1 Soil Conceptual Site Model

The upland soil data support the following CSM summary:

- The Site is located at the foot of a steep bluff on a peninsula bounded by Hood Canal to the west and Port Gamble Bay to the east.
- The Site was expanded over time by the addition of fill material to the original tideflat along the shore of Port Gamble Bay. Fill material is generally 2 to 12 feet thick and is made up of mixtures of well graded to poorly graded sand and gravel with minor amounts of silt, clay, shell fragments, and debris including bricks and wood.
- Between 2002 and 2005, approximately 26,310 tons of contaminated soils were excavated from the Site uplands. These previous interim actions successfully reduced hazardous substance concentrations in soils to levels that are protective of human health throughout the Site.
- The upland areas of the Site are currently characterized by a contiguous open space bordered by water to the north and east and terrestrial vegetation and residential properties to the west and south. There is currently little to no vegetative cover on the Site because of human activity; plants and shrubs characteristic of disturbed habitats grow on the western and southern borders of the property. The planned future uses of the Site include a combination of mixed uses (e.g., residential, industrial, and commercial uses). To support future redevelopment actions, the Site may receive additional sand fill.
- Soil lead concentrations marginally exceeding conservative ecological screening criteria (but less than residential standards based on human health) remain in isolated areas of the Site near the former fueling area. Post-removal lead detections (boring samples PS-72B and PS-122B) were located in fill soils present between 2 and 5 feet bgs. However, surface soil lead concentrations are less than these screening criteria, and the detected subsurface lead concentrations are within the requirements for post-removal statistical compliance as allowed by Section 173-340-740(7) of the MTCA

regulation.

- A simplified site-specific TEE was performed to characterize the potential for wildlife to become exposed to these subsurface soils, consistent with MTCA requirements. Based on site-specific TEE exposure pathway information, soils at the Site are unlikely to pose significant adverse effects to terrestrial ecological receptors.
- This RI/FS addresses the need for institutional controls in these soil areas to ensure the continued protection of the environment, consistent with MTCA requirements.

8.2 Groundwater Conceptual Site Model

The upland groundwater data support the following CSM summary:

- Native shallow soils underlying the surface fill are gray, well graded to poorly graded sand deposits with gravel and shell fragments. A regionally extensive glacial lake deposit, the Kitsap Formation, consisting of clay and silt underlies the Site and separates near-surface aquifers from the regional Salmon Springs Aquifer.
- The fill material supported the formation of an unconfined shallow aquifer that is recharged by local precipitation along with overland and shallow flow from the bluffs to the west. Groundwater in the shallow aquifer is generally encountered at approximately 5 to 10 feet bgs.
- Slug test data indicate moderate but variable permeability of the shallow aquifer, characterized by hydraulic conductivity values ranging from 6.3×10^{-5} to 1.5×10^{-3} cm/sec. Groundwater flow directions in the shallow aquifer are generally toward the northeast in the northern half of the Site and toward the east in the southern half of the Site. Groundwater flow from the surrounding bluffs, along with tidal effects (see below) are the most significant influences on groundwater flow directions at the Site.
- The shallow aquifer is moderately tidally influenced and is subject to transient nearshore groundwater flow reversals during high tide events. The short-term groundwater flow reversals do not prevent the eventual discharge of groundwater to Port Gamble Bay. Tidal reversals are most pronounced in the near-surface permeable soils of the fill and shallow aquifer, and dissipate rapidly with distance from the shoreline, which is common for unconfined aquifers.
- Previous interim actions at the Site successfully reduced groundwater concentrations of total petroleum hydrocarbons, mercury, and other hazardous substances to levels

that are now protective of human health and the environment. As discussed previously, while current total arsenic concentrations in Site groundwater are up to 3 times greater than the natural background concentration, arsenic concentrations are less than the marine surface water chronic criterion. Groundwater arsenic concentrations remaining at the Site are a result of locally increased arsenic solubility caused by geochemically reducing conditions associated with varying quantities of wood and other organic matter present in the soil.

- This RI/FS addresses the need for institutional controls and two more rounds of groundwater monitoring (wells MW-8, MW-15, and MW-16) in areas with arsenic concentrations in groundwater that historically exceed natural background to ensure continued protection of the human health, consistent with MTCA requirements.
- Well MW-8 is located farther inland than conditional point of compliance wells MW-15 and MW-16, and arsenic in samples from well MW-8 do not have to be at concentrations at or less than natural background to demonstrate compliance. Arsenic concentrations in samples from well MW-8 are anticipated to remain at concentrations between the Marine Surface Water Chronic Criteria and natural background.

9 BASIS FOR CLEANUP ACTION

This section presents the basis for the Site cleanup action. There are two distinct elements that form the basis for the cleanup action: 1) the site-specific cleanup standards; and 2) the locations and media requiring cleanup action evaluation.

9.1 Cleanup Standards

Cleanup standards consist of: 1) cleanup levels that are protective of human health and the environment; and 2) the point of compliance at which the cleanup levels must be met.

9.1.1 Cleanup Levels

Site-specific cleanup levels for soil that are protective of human health and terrestrial ecological receptors, and cleanup levels for groundwater that are protective of marine surface water, were developed in accordance with MTCA requirements. To be consistent with MTCA requirements, preliminary soil cleanup levels are based on unrestricted land use, including the more stringent MTCA Method B cleanup levels that assume ground floor residential land use [WAC 173 340 740(3)]. Under MTCA Method B, soil cleanup levels must, at a minimum, be as stringent as:

- Concentrations established under applicable state and federal laws
- Concentrations protective of terrestrial ecological receptors
- Concentrations protective of direct human contact with soil
- Concentrations protective of groundwater.

Each of these criteria was considered during the development of soil cleanup levels. The proposed cleanup levels used in this RI/FS for constituents detected in Site soil are presented in Table 9-1.

Groundwater at the Site is not considered potable as defined under WAC 173-340-720(2) for the following reasons:

- Groundwater does not serve as a current source of drinking water (WAC 173-340-720(2)(a))
- Hazardous substances that may be present in groundwater are unlikely to be

transported to a current or potential future source of drinking water (WAC 173-340-720(2)(c))

- The Site's proximity to surface water that is not suitable as a domestic water supply (i.e., Port Gamble Bay) renders groundwater as non-potable because
  - There are known or projected points of entry of groundwater to surface water (WAC 173-340-720(2)(d)(ii)
  - Surface water is not classified as a suitable domestic water supply source (WAC 173-340-720(2)(d)(iii))
  - Groundwater is sufficiently hydraulically connected to the surface water that groundwater is not practicable to use as a drinking water source (WAC 173-340-720(2)(d)(iv))

Because Site groundwater is not a current or reasonably likely future source of drinking water, cleanup levels for Site soil need not be protective of groundwater as a potential source of drinking water. Additionally, the empirical demonstration described previously indicates that existing chemical concentrations in Site soil are protective of groundwater as marine surface water.

MTCA Method B cleanup levels protective of marine surface water were developed in accordance with WAC 173-340-730(3) for those constituents detected in groundwater. If necessary, preliminary groundwater cleanup levels were adjusted to be no less than the PQL or natural background concentration, in accordance with WAC 173-340-730(5)(c). The proposed cleanup levels used in this RI/FS for constituents detected in Site groundwater are presented in Table 9-2.

9.1.2 Points of Compliance

Under MTCA, the point of compliance is the point or location on a site where the cleanup levels must be attained. The points of compliance for affected media will be approved by Ecology and presented in a forthcoming CAP for the Site. However, it is necessary to identify proposed points of compliance in order to develop and evaluate cleanup action alternatives in the RI/FS. This section describes the proposed points of compliance for soil and groundwater.

The standard point of compliance for the soil cleanup levels shown in Table 9-1 will be throughout the soil column (from ground surface to 15 feet bgs), in accordance with WAC 173-340-740(6)(d) and WAC 173-340-7490(4)(b). For potential terrestrial ecological exposures, MTCA regulations allow a conditional point of compliance to be established from the ground surface to 6 feet bgs (the biologically active zone according to MTCA default assumptions), provided institutional controls are used to prevent excavation of deeper soil [WAC 173-340-7490(4)(a)]. Accordingly, in areas of the Site where potential ecological exposures are a concern, and where appropriate institutional controls can be implemented, a conditional point of compliance for soil concentrations protective of terrestrial ecological receptors may be proposed throughout the soil column from the ground surface to 6 feet bgs.

Because the groundwater cleanup levels (Table 9-2) are based on protection of marine surface water, and not protection of groundwater as drinking water, the proposed conditional point of compliance for groundwater cleanup levels is the point of groundwater discharge to Port Gamble Bay. Previous interim actions at the Site successfully reduced groundwater concentrations of total petroleum hydrocarbons, mercury, and other hazardous substances to levels that are now protective of human health and the environment. As previously discussed, while current total arsenic concentrations in Site groundwater are up to 3 times greater than the natural background concentration, arsenic concentrations are less than the marine surface water chronic criterion. Elevated arsenic concentrations remaining in groundwater at the Site are a result of locally increased solubility of arsenic caused by geochemically reducing conditions associated with varying quantities of wood and other organic matter present in the soil. Thus, it is not practicable to meet the natural background-based groundwater cleanup levels within a reasonable restoration timeframe (see WAC 173-340-720(8)(c) and WAC 173-340-360(2)). Existing shoreline wells including MW-8, MW-15, and MW-16 can be used to evaluate compliance.

9.2 Locations and Media Requiring Cleanup Action Evaluation

This section identifies the locations and environmental media (soil and groundwater) at the Site that require cleanup action evaluation.

9.2.1 Soil

As previously discussed, soils remaining at the Site following completion of interim actions from 2002 to 2005 are below soil cleanup levels that are protective of human health. While localized subsurface soils at the Site contain lead concentrations marginally above TEE-based cleanup levels, these same soils comply with MTCA post-removal compliance monitoring statistical requirements, and are unlikely to pose significant adverse effects to terrestrial ecological receptors. Thus, only institutional controls in these soil areas are needed to ensure the continued protection of the environment, consistent with MTCA requirements.

9.2.2 Groundwater

Similarly, previous interim actions at the Site successfully reduced groundwater concentrations to below cleanup levels based on the marine surface water chronic criterion; however, arsenic concentrations remain greater than natural background in samples from well MW-8. Elevated arsenic concentrations in groundwater remaining at the Site (in the well MW-8 area) are a result of geochemically reducing conditions due to varying quantities of wood and other organic matter present in the soil. Thus, institutional controls in areas with groundwater arsenic concentrations that exceed natural background concentrations are needed to ensure the continued protection of human health, potentially including formal restrictions precluding future drinking water wells on the Site. In addition, two more rounds of groundwater monitoring will be conducted to demonstrate that the arsenic concentrations in groundwater samples from shoreline wells MW-15 and MW-16 are at or less than the natural background concentration of 8.0 µg/L, for a total of four rounds of monitoring.

10 FRAMEWORK FOR CLEANUP ACTION DEVELOPMENT AND EVALUATION

This section presents cleanup action objectives, applicable regulatory requirements for the cleanup action, and a screening evaluation of general response actions and remediation technologies that are potentially applicable to the Site.

10.1 Cleanup Action Objectives

Cleanup action objectives consist of chemical- and medium-specific goals for protecting the environment. The cleanup action objectives specify the media and contaminants of interest, potential exposure routes and receptors, and proposed cleanup goals.

As discussed previously, soil and groundwater remaining at the Site following completion of interim actions from 2002 to 2005 are now generally below soil and groundwater cleanup levels. Groundwater with arsenic concentrations greater than natural background-based cleanup levels that remain at the Site are a result of locally elevated arsenic solubility caused by geochemically reducing conditions associated with varying quantities of wood and other organic matter present in the soil; it is not practicable to meet the natural background-based groundwater cleanup levels within a reasonable restoration timeframe. Thus, no further removal or containment remedial actions in upland areas of the Site are necessary to address MTCA requirements. Nevertheless, in order to ensure continued protection of human health and the environment, additional institutional controls are considered in this RI/FS, including measures to limit future contact by terrestrial wildlife and/or terrestrial plants and soil biota and/or food-web exposure to low-level hazardous substances in soil. Measures to continue to ensure that Site groundwater is not used as a future source of drinking water are also considered in this RI/FS. In addition, two more rounds of groundwater monitoring will be conducted to demonstrate that the arsenic concentrations in samples from shoreline wells MW-15 and MW-16 are at or less than the natural background of 8.0 µg/L, for a total of four rounds of monitoring.

10.2 Applicable Regulatory Requirements

In addition to the cleanup standards developed through the MTCA process, other regulatory requirements must be considered in the selection and implementation of a cleanup action. MTCA requires that cleanup standards to be "at least as stringent as all applicable state and

federal laws" [WAC 173-340-700(6)(a)]. Besides establishing minimum requirements for cleanup standards, applicable state and federal laws may also impose certain technical and procedural requirements for performing cleanup actions. These requirements are described in WAC 173-340-710. Applicable state and federal laws are discussed below.

While implementation plans are still under development, the cleanup action at the Site will likely be performed pursuant to MTCA under the terms of a Consent Decree between Ecology and one or more implementing parties. Accordingly, the anticipated cleanup action will likely meet the permit exemption provisions of MTCA, obviating the need to follow procedural requirements of the various local and state regulations that would otherwise apply to the action.

10.2.1 MTCA Requirements

The primary law that governs the cleanup of contaminated sites in the state of Washington is MTCA. The MTCA Cleanup Regulation (WAC 173-340) specifies criteria for the evaluation and conduct of a cleanup action, including criteria for developing cleanup standards for soil and groundwater. The MTCA regulations require that cleanup actions must protect human health and the environment, meet environmental standards in other applicable laws, and provide for monitoring to confirm compliance with cleanup levels.

MTCA places certain requirements on cleanup actions involving containment of hazardous substances that must be met for the cleanup action to be considered in compliance with soil cleanup standards. These requirements include implementing a compliance monitoring program that is designed to ensure the long-term integrity of the containment system and applying institutional controls where appropriate to the affected area (WAC 173-340-440). The key MTCA decision-making document for cleanup actions is the RI/FS. In the RI/FS, the nature and extent of contamination and the associated risks at a site are evaluated, and potential alternatives for conducting a site cleanup action are identified. The cleanup action alternatives are then evaluated against MTCA remedy selection criteria, and one or more preferred alternatives are selected. After reviewing the RI/FS, and after consideration of public comment, Ecology then selects a cleanup action for the site and documents the

selection in a CAP. Following public review of the CAP, the site cleanup process typically moves forward into design, permitting, construction, and long-term monitoring.

10.2.2 Solid and Hazardous Waste Management

The Washington Hazardous Waste Management Act (RCW 70.105) and the implementing regulations, the Dangerous Waste Regulations (Chapter 173-303 WAC), would apply if dangerous wastes are generated during the cleanup action. There is no indication of dangerous wastes being generated or disposed of at the Site. Related regulations include state and federal requirements for solid waste handling and disposal facilities (40 CFR 241, 257; Chapter 173-350 and -351 WAC) and land disposal restrictions (40 CFR 268; WAC 173-303-340).

10.2.3 State Environmental Policy Act

The State Environmental Policy Act (SEPA) (RCW 43.21C; WAC 197-11) and the SEPA procedures (WAC 173-802) are intended to ensure that state and local government officials consider environmental values when making decisions. The SEPA process begins when an application for a permit is submitted to an agency, or an agency proposes to take some official action such as implementing a MTCA CAP. Prior to taking any action on a proposal, agencies must follow specific procedures to ensure that appropriate consideration has been given to the environment. The severity of potential environmental impacts associated with a project determines whether an Environmental Impact Statement is required. A SEPA checklist would be required prior to initiating remedial construction activities. Because the Site cleanup action will be performed under a Consent Decree, SEPA and MTCA requirements will be coordinated, if possible.

10.2.4 Shoreline Management Act

The Shoreline Management Act (RCW 90.58) and its implementing regulations establish requirements for substantial developments occurring within water areas of the state or within 200 feet of the shoreline. Local shoreline management master programs are adopted under state regulations, creating an enforceable state law. Because the Site cleanup action will likely be performed under a Consent Decree, compliance with substantive requirements would be necessary, but a shoreline permit would not likely be required.

10.2.5 Construction Stormwater General Permit

Construction activities that disturb 1 acre or more of land need to comply with the provisions of construction stormwater regulations. Ecology has determined that a construction stormwater general permit is not covered under the permit exemption provisions of MTCA, and thus a project-specific construction stormwater permit would be required if land disturbance greater than 1 acre is necessary. It is anticipated that the NPDES permit would be obtained during the design phase and a Construction Quality Assurance Project Plan (CQAP) would also be prepared as part of the remedial design process, supplemented as appropriate by the remedial contractor.

10.2.6 Other Potentially Applicable Regulatory Requirements

The following is a list of other potentially applicable regulations for the cleanup action:

- **Grading** – Kitsap County, under Section 12.16 of the Kitsap County Code, holds the authority to issue grading permits. Any cleanup work that requires substantial grading is potentially subject to review and approval by the county through their grading permit process. The code specifies requirements for setbacks, drainage, and erosion control for both excavation and fill projects. Exemptions apply for specific activities that disturb less than one acre of land.
- **Archeological and Historical Preservation** – The Archeological and Historical Preservation Act (16 USCA 496a-1) would be applicable if any subject materials are discovered during Site grading and excavation activities.
- **Health and Safety** – Site cleanup-related construction activities would need to be performed in accordance with the requirements of the Washington Industrial Safety and Health Act (RCW 49.17) and the federal Occupational Safety and Health Act (29 CFR 1910, 1926). These applicable regulations include requirements that workers are to be protected from exposure to contaminants and that excavations are to be properly shored.

These requirements are not specifically addressed in the detailed analysis of cleanup action alternatives because they could be met by each of the alternatives.

11 DEVELOPMENT OF CLEANUP ACTION ALTERNATIVES

In this section, the options for cleanup are screened and developed to address the cleanup action objectives for impacted areas and media at the Site.

11.1 Screening of General Response Actions

This section presents a screening evaluation of potentially applicable general response actions and remediation technologies for the cleanup action. The screening evaluation is carried out for each of the environmental media (soil and groundwater) requiring cleanup action evaluation. Based on the screening evaluation, selected response actions and technologies are carried forward for use in the development of cleanup action alternatives.

11.1.1 No Action

Based on the results of the RI, the No Action alternative could potentially achieve the project objective of protecting human health and the environment and thus has been retained in this RI/FS for both soil and groundwater.

11.1.2 Institutional Controls

Additional institutional controls may be implemented as appropriate, depending on the preferred cleanup action alternative. Such additional controls could include environmental covenants for upland soils and groundwater.

Institutional controls include restrictive covenants (e.g., deed restrictions) to ensure the continued protectiveness of the extensive interim remedial actions completed at the Site from 2002 to 2005. In certain situations, restrictive covenants can be effective and implementable where the covenant requires maintenance of the protective barriers that keep ecological receptors from contacting potentially contaminated subsurface soil. Institutional controls would require long-term monitoring to ensure that the Site conditions remain as required to achieve cleanup action objectives.

The use of institutional controls has been retained as an appropriate action for soils and groundwater in this RI/FS.

11.1.3 Engineered Containment

Engineered containment is a technology used to physically separate impacted media from potential receptors. Because interim actions have successfully removed impacted upland soils and eliminated potential sources of exposure, consideration of containment as a response action is unnecessary. Engineered containment has been screened out from further consideration as a general response action for soils and groundwater.

11.1.4 Removal

Removal is a technology used to excavate and dispose of impacted media. Removal was a key component of the interim actions successfully completed at the Site. Because those interim actions have successfully removed impacted upland soils and eliminated potential sources of exposure, consideration of additional removal as a response action is unnecessary. Removal has been screened out from further consideration as a general response action for soils and groundwater.

11.1.5 Treatment

Treatment is a technology used to immobilize, stabilize, and/or destroy impacted media. Treatment is often used in combination with containment and/or removal response actions, but can be independently used depending on the nature of contamination. However, as previously discussed interim actions have successfully removed impacted upland soils and eliminated potential sources of exposure. Thus, consideration of treatment as a response action is unnecessary. Treatment has been screened out from further consideration as a general response action for soils and groundwater.

11.2 Soil and Groundwater Cleanup Alternative

As discussed previously, additional institutional controls could potentially be implemented to further ensure the continued protectiveness of the extensive interim remedial actions completed at the Site from 2002 to 2005. Such additional controls could include restrictive covenants for upland groundwater and/or soils. One of the key objectives of the completed interim actions and of the final remedy is to not significantly encumber land value, future use, future sale, and/or reasonable redevelopment options at the Site.

For the purpose of this RI/FS, all final cleanup alternatives were assumed to include restrictive covenants that would preclude future use of the shallow aquifer at the Site for future drinking water supply. In addition, all alternatives assume that the presence of soil covers to minimize the potential for future terrestrial wildlife impacts at the Site would also be documented in Kitsap County property records, to minimize the potential for future impacts resulting from disturbance of these areas using the existing Kitsap County permitting (e.g., grading permit) process. The specific scope and form of such institutional controls would be determined during development of the CAP.

12 RECOMMENDED CLEANUP ACTION ALTERNATIVE

Interim actions performed from 2002 to 2005 successfully removed soils exceeding cleanup levels from the Site. For the final remedy, restrictive covenants will be implemented to continue to preclude use of the shallow aquifer at the Site for future drinking water supply, given a conditional point of compliance for natural background-based groundwater arsenic cleanup levels at the Site shoreline. To ensure this, two more rounds of groundwater monitoring will be conducted to demonstrate that the arsenic concentrations in groundwater samples from wells MW-15 and MW-16 are at or less than natural background of 8.0 µg/L at the conditional point of compliance wells MW-15 and MW-16. In addition, the presence of soil covers minimizing the potential for future terrestrial wildlife impacts at the Site will also be documented in Kitsap County property records. Using Kitsap County's existing permitting (e.g., grading permit) process, such documentation will further control the potential for future disturbances and wildlife risks within these areas. The specific scope and form of such institutional controls will be determined during development of the CAP.

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TABLES

Table 3-1
Mill Site Upland Source Areas

Source Category	Description	General COPCs
Petroleum Hydrocarbons	Fuels, lubricants, and hydraulic fluids storage and use areas	Petroleum Hydrocarbons (TPH)
Wood Treatment Areas	Anti-Stain Wood Treatment and End Seal Areas	Pentachlorophenol (PCP) 2-Mercaptobenzothiazole (MBT) Didecyl Dimethyl Ammonium Chloride (DDAC) Mercury
Polychlorinated Biphenyls (PCBs)	Transformer Locations	PCBs TPH
Maintenance Areas (includes Power Plant and Wood Burner Area)	Fuels, lubricants, hydraulic fluids, metals, PCBs, solvents	TPH Volatile Organic Compounds (VOCs) PCBs Polycyclic Aromatic Hydrocarbons (PAHs) Metals

Table 3-2
Summary of Soil Sample Analyses
1999-2001 Investigations

Location	Depth (feet)	Date	TPH-Gx	TPH-Dx	EPH	VPH	PAHs	SVOCs	VOCs	PCBs	Wood Treatment	Metals
Potential Source Area 1 - Diesel Storage/Train House												
TP-1001D	6.5-8	2/10/1999		x	x		x					
TP-1001S	0.5-2	2/10/1999		x	x		x					
TP-1002D	4.5-6	2/10/1999		x								
TP-1002S	1.25-2.75	2/10/1999		x								
TP-1003D	5.5-7	2/10/1999		x				x	x	x		x
TP-1003D (DUP)	5.5-7	2/10/1999		x				x	x	x		x
TP-1003S	1.5-3	2/10/1999		x				x	x	x		x
TP-1004D	6-7.5	2/10/1999		x								
TP-1004S	0.5-2	2/10/1999		x								
TP-1005D	6-7.5	2/10/1999		x						x		
TP-1005S	0.5-2	2/10/1999		x						x		
TP-1006D	5.5-7	2/10/1999		x								
TP-1006S	0.5-2	2/10/1999		x								
MW-2D	5-6	6/17/1999		x								
MW-2S	0.5-1.5	6/17/1999		x								
TP-1001-TP1-S	2-3	7/20/2000		x			x					
TP-1001-TP1-D	6-7	7/20/2000		x			x					
TP-1001-TP2-S	0-1	7/20/2000		x			x					
TP-1001-TP2-D	6-7	7/20/2000		x			x					
TP-1001-TP3-S	2-3	7/20/2000		x			x					
TP-1001-TP3-D	5-6	7/20/2000		x			x					
TP-1001-TP4-S	1-2	7/20/2000		x			x					
TP-1001-TP4-D	5-6	7/20/2000		x			x					
TP-1001-TP5-S	0-1	7/20/2000		x								
EPI-SP-1007	2.0	6/7/2001										x
EPI-SP-1007	7.0	6/7/2001										x
EPI-SP-1008	2.0	6/7/2001										x
EPI-SP-1008	7.0	6/7/2001										x
EPI-TP-1009	2.0	6/13/2001					x					
EPI-TP-1010	5.0	6/13/2001					x					
EPI-TP-1011	2.0	6/14/2001					x					
EPI-TP-1012	2.0	6/13/2001					x					
EPI-TP-1013	2.0	6/13/2001					x					
Potential Source Area 2 - Fueling Area												
SP-2003D	5.5-7	2/15/1999		x	x	x	x		x1			
SP-2003S	1.5-3	2/15/1999		x	x	x	x		x1			
TP-2001D	5.5-7	2/11/1999		x								
TP-2001S	0.5-2	2/11/1999		x								
TP-2002S	0.5-2	2/11/1999		x								
MW-1D	5-6	6/17/1999		x								
MW-1S	0.5-1.5	6/17/1999		x								
Potential Source Area 3 - Wood Treatment												
TP-3001D	5.5-7	2/12/1999		x						x		
TP-3001S	0.5-2	2/12/1999		x						x		
TP-3002D	5.5-7	2/10/1999		x				x				

Table 3-2
Summary of Soil Sample Analyses
1999-2001 Investigations

Location	Depth (feet)	Date	TPH-Gx	TPH-Dx	EPH	VPH	PAHs	SVOCs	VOCs	PCBs	Wood Treatment	Metals
TP-3002S	0.5-2	2/10/1999		x				x				
TP-3003D	5.5-7	2/12/1999		x				x				
TP-3003S	0.5-2	2/12/1999		x	x		x	x				
TP-3004D	5.5-7	2/11/1999		x				x				
TP-3004D (DUP)	5.5-7	2/11/1999		x				x				
TP-3004S	0.5-2	2/11/1999		x				x				
EPI-SP-3005	2.0	6/8/2001		x			x	x				x
EPI-SP-3005	7.0	6/8/2001										x
EPI-SP-3006	2.0	6/8/2001					x	x				x
EPI-SP-3006	7.0	6/8/2001										x
EPI-SP-3007	2.0	6/8/2001					x	x				x
EPI-SP-3007	7.0	6/8/2001					x					x
Potential Source Area 4 - End Paint 1												
TP-4001D	6.5-8	2/10/1999		x				x	x	x	x	x
TP-4001S	0.5-2	2/10/1999		x				x	x	x	x	x
MW-4D	5-6	6/18/1999		x								
MW-4S	0.5-1.5	6/18/1999		x								
Potential Source Area 5 - Maintenance Area/Boiler/Sawmill												
SP-5008D	9.5-11	2/15/1999		x	x	x	x		x1			
SP-5008S	0.5-2	2/15/1999		x								
SP-5009D	6-7.5	2/15/1999		x								
SP-5009S	1-2.5	2/15/1999		x	x	x	x		x1			
SP-5010D	7.5-9	2/15/1999		x	x	x	x		x1			
SP-5010S	1-2.5	2/15/1999		x								
SP-5011D	5-6.5	2/15/1999		x								
SP-5011S	1-2.5	2/15/1999		x								
SP-5012D	5.5-7	2/15/1999		x								
SP-5012S	0.5-2	2/15/1999	x	x					x1			
SP-5015D	5.5-7	2/15/1999		x								
SP-5015D (DUP)	5.5-7	2/15/1999		x								
SP-5015S	0.5-2	2/15/1999		x								
TP-5001D	4.5-6	2/10/1999		x	x		x			x		
TP-5001S	0.5-2	2/10/1999		x						x		
TP-5002D	6.5-8	2/10/1999		x				x		x		
TP-5002S	0.5-2	2/10/1999		x	x		x	x		x		
TP-5003D	5.5-7	2/10/1999		x				x	x	x		x
TP-5003S	1.5-3	2/10/1999		x				x	x	x		x
TP-5004D	6-7.5	2/10/1999		x						x		
TP-5004S	0.5-2	2/10/1999		x						x		
TP-5005D	5.5-7	2/10/1999		x								
TP-5005S	1-2.5	2/10/1999		x								
TP-5006D	4.5-6	2/10/1999		x								
TP-5006S	0.5-2	2/10/1999		x	x		x					
TP-5007D	4.5-6	2/11/1999		x				x	x	x		x
TP-5007S	0.5-2	2/11/1999		x				x	x	x		x
TP-5013D	4.5-6	2/12/1999		x	x		x					

Table 3-2
Summary of Soil Sample Analyses
1999-2001 Investigations

Location	Depth (feet)	Date	TPH-Gx	TPH-Dx	EPH	VPH	PAHs	SVOCs	VOCs	PCBs	Wood Treatment	Metals
TP-5013S	1-2.5	2/12/1999		x								
TP-5014D	5.5-7	2/12/1999		x								
TP-5014S	0.5-2	2/12/1999		x								
TP-5016D	4.5-5.5	2/11/1999		x								
TP-5016S	0.5-1.5	2/11/1999		x	x	x	x		x1			
TP-5017D	6-7	2/11/1999		x				x	x	x		x
TP-5017S	0.5-1.5	2/11/1999		x				x	x	x		x
MW-5D	5-6	6/17/1999		x	x		x					
MW-5S	0.5-1.5	6/17/1999		x	x		x					
TP-5018D	6-7	7/14/1999		x				x		x		x
TP-5018S	1-2	7/14/1999		x	x		x	x		x		x
SP-5008-TP1-S	2-3	7/20/2000		x			x					
SP-5008-TP1-D	5.5-6.5	7/20/2000		x			x					
SP-5008-TP2-D	5-6	7/20/2000		x								
SP-5008-TP3-S	2-3	7/20/2000		x								
SP-5008-TP3-D	3.5-4.5	7/20/2000		x			x					
SP-5008-TP4-D	5.5-6.5	7/20/2000		x								
SP-5008-TP5-D	6-7	7/20/2000		x								
TP-5018-TP1-S	1-2	7/21/2000		x								
TP-5018-TP2-S	1-2	7/21/2000		x			x					
TP-5018-TP2-D	5-6	7/21/2000		x	x		x					
TP-5018-TP3-S	0.5-1.5	7/21/2000		x	x		x					
TP-5018-TP4-S	0-1	7/21/2000		x								
TP-5018-TP5-S	1-2	7/21/2000		x								
EPI-SP-5019	2.0	6/8/2001		x			x					
EPI-SP-5019	7.0	6/8/2001					x					
EPI-SP-5020	2.0	6/8/2001		x			x			x		
EPI-SP-5020	7.0	6/8/2001		x			x					
EPI-SP-5021	2.0	6/14/2001		x			x			x		x
EPI-SP-5021	7.0	6/14/2001		x			x					x
EPI-SP-5022	2.0	6/8/2001		x			x			x		
EPI-SP-5022	7.0	6/8/2001		x								
EPI-SP-5023	2.0	6/8/2001		x			x			x		
EPI-SP-5025	2.0	6/13/2001		x			x			x		x
EPI-SP-5025	7.0	6/13/2001								x		x
EPI-SP-5026	2.0	6/13/2001		x			x			x		x
EPI-SP-5026	7.0	6/13/2001										x
EPI-SP-5027	2.0	6/14/2001		x						x		
EPI-SP-5027	7.0	6/14/2001		x			x					
EPI-SP-5029	2.0	6/14/2001		x			x					x
EPI-SP-5030	2.0	6/14/2001		x			x			x		x
EPI-SP-5030	7.0	6/14/2001										x
EPI-SP-5031	2.0	6/14/2001		x			x					
EPI-SP-5031	7.0	6/14/2001					x					
EPI-SP-5032	2.0	6/14/2001		x			x			x		
EPI-SP-5033	2.0	6/14/2001		x			x					

Table 3-2
Summary of Soil Sample Analyses
1999-2001 Investigations

Location	Depth (feet)	Date	TPH-Gx	TPH-Dx	EPH	VPH	PAHs	SVOCs	VOCs	PCBs	Wood Treatment	Metals
EPI-SP-5034	2.0	6/14/2001		x			x			x		
EPI-SP-5035	2.0	6/14/2001		x						x		
EPI-SP-5035	7.0	6/14/2001		x			x					
EPI-SP-5036	2.0	6/14/2001		x						x		
EPI-SP-5037	2.0	6/15/2001		x						x		x
EPI-SP-5038	2.0	6/15/2001		x			x					x
EPI-SP-5039	2.0	6/15/2001		x			x					
EPI-SP-5040	2.0	6/15/2001		x			x					
EPI-SP-5041	2.0	6/15/2001		x			x			x		
EPI-SP-5041	7.0	6/15/2001										
EPI-SP-5042	2.0	6/15/2001		x			x					
Potential Source Area 6 - Bull Chain Area												
SP-6005D	7.5-8.5	2/15/1999		x	x	x	x		x1		x	
SP-6005S	0.5-1.5	2/15/1999		x	x	x	x		x1		x	
TP-6001D	4.5-5.5	2/12/1999		x				x	x	x		x
TP-6001S	0.5-1.5	2/12/1999		x	x	x	x	x	x1/x	x		x
TP-6002D	4.5-5.5	2/12/1999		x								
TP-6002S	0.5-1.5	2/12/1999		x	x		x					
TP-6003D	4.5-5.5	2/12/1999		x	x		x	x	x	x		x
TP-6003D (DUP)	4.5-5.5	2/12/1999		x				x	x	x		x
TP-6003S	0.5-1.5	2/12/1999		x	x		x	x	x	x		x
TP-6004D	4.5-5.5	2/12/1999		x	x		x			x		
TP-6004S	0.5-1.5	2/12/1999		x						x		
MW-6D	5-6	6/18/1999		x								
MW-6S	0.5-1.5	6/18/1999		x								
SP-6005-SP1-S	1-3	7/24/2000		x								
SP-6005-SP2-S	1-2	7/24/2000		x								
SP-6005-SP3-S	1-2	7/24/2000		x								
SP-6005-TP4-S	1-2.5	7/24/2000		x								
SP-6005-SP5-S	1-2	7/24/2000		x								
SP-6005-SP6-S	1-2	7/24/2000		x								
EPI-SP-6006	2.0	6/13/2001		x								
EPI-SP-6007	2.0	6/13/2001		x								
EPI-SP-6008	2.0	6/13/2001		x								
Potential Source Area 7 - Wood Treatment 2												
SP-7001D	6.5-7.5	2/15/1999		x				x				
SP-7001S	0.5-1.5	2/15/1999		x				x				
SP-7003D	6.5-7.5	2/15/1999		x				x				
SP-7003S	0.5-1.5	2/15/1999		x				x				
TP-7002D	4.5-5.5	2/11/1999		x	x		x	x	x	x		x
TP-7002S	0.5-1.5	2/11/1999		x				x	x	x		x
TP-7004D	4.5-5.5	2/11/1999		x				x		x		
TP-7004S	0.5-1.5	2/11/1999		x				x		x		
MW-7D	5-6	6/18/1999		x								
MW-7S	0.5-1.5	6/18/1999		x								
TP-7002-SP1-D	6-7	7/24/2000		x								

Table 3-2
Summary of Soil Sample Analyses
1999-2001 Investigations

Location	Depth (feet)	Date	TPH-Gx	TPH-Dx	EPH	VPH	PAHs	SVOCs	VOCs	PCBs	Wood Treatment	Metals
TP-7002-SP2-D	6-7	7/24/2000		x								
TP-7002-SP3-D	6-7	7/24/2000		x								
TP-7002-SP4-D	6-7	7/24/2000		x								
TP-7002-SP5-D	6-7	7/24/2000		x								
EPI-SP-7005	2.0	6/13/2001										x
EPI-SP-7006	2.0	6/13/2001					x	x				
EPI-SP-7007	2.0	6/13/2001					x	x				
EPI-SP-7008	2.0	6/14/2001					x					
Potential Source Area 8 - Wood Treatment 3												
TP-8001D	5.5-6.5	2/11/1999		x				x	x	x		x
TP-8001S	0.5-1.5	2/11/1999		x				x	x	x		x
EPI-SP-8002	2.0	6/13/2001					x	x				x
EPI-SP-8003	2.0	6/13/2001					x	x				x
Potential Source Area 9 - End Paint 2												
TP-9001D	7-8	2/11/1999		x				x	x	x		x
TP-9001S	0.5-1.5	2/11/1999		x	x		x	x	x	x		x
Potential Source Area 10 - Locomotive Shed												
TP-10001D	5.5-6.5	2/11/1999		x								
TP-10001S	0.5-1.5	2/11/1999		x								
TP-10002D	4.5-5.5	2/11/1999		x				x	x	x		x
TP-10002S	0.5-1.5	2/11/1999		x	x		x	x	x	x		x
TP-10003D	4.5-5.5	2/11/1999		x								
TP-10003S	0.5-1.5	2/11/1999		x	x		x					
MW-8D	0-1	6/18/1999		x								
MW-8S	5-6	6/18/1999		x								
Potentail Source Area 11 - Fuel Oil Storage												
MW-3D	5-6	6/17/1999		x	x		x					
MW-3S	0.5-1.5	6/17/1999		x	x		x					
MW-3-TP1-S	0-1.5	7/22/2000		x			x					
MW-3-TP1-D	6-6.5	7/22/2000		x								
MW-3-TP2-S	1-2	7/22/2000		x								
MW-3-TP3-S	1-2	7/22/2000		x								
MW-3-TP4-S	1-2	7/22/2000		x								
EPI-SP-11001	2.0	6/7/2001		x			x					
EPI-SP-11002	2.0	6/7/2001		x			x					
EPI-SP-11003	2.0	6/7/2001		x			x					

Note:

x1 – Indicates only BTEX was analyzed for this sample

Table 3-3
Petroleum Hydrocarbons in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Gasoline Range Petroleum Hydrocarbons (mg/kg)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Oil-Range Petroleum Hydrocarbons (mg/kg)
SP-2003D	5.5-7	2/15/1999	--	120	390
SP-2003S	1.5-3	2/15/1999	--	140	540
SP-5008D	9.5-11	2/15/1999	--	56	880
SP-5008S	0.5-2	2/15/1999	--	ND (<21)	ND (<43)
SP-5009D	6-7.5	2/15/1999	--	ND (<21)	ND (<43)
SP-5009S	1-2.5	2/15/1999	--	330	1,300
SP-5010D	7.5-9	2/15/1999	--	ND (<28)	380
SP-5010S	1-2.5	2/15/1999	--	ND (<20)	ND (<40)
SP-5011D	5-6.5	2/15/1999	--	ND (<21)	ND (<43)
SP-5011S	1-2.5	2/15/1999	--	ND (<20)	ND (<41)
SP-5012D	5.5-7	2/15/1999	--	ND (<22)	ND (<43)
SP-5012S	0.5-2	2/15/1999	ND (<4.8)	22 J	80
SP-5015D	5.5-7	2/15/1999	--	ND (<22)	ND (<43)
SP-5015D (DUP)	5.5-7	2/15/1999	--	ND (<21)	ND (<42)
SP-5015S	0.5-2	2/15/1999	--	31 J	110
SP-6005D	7.5-8.5	2/15/1999	--	980	***6,900***
SP-6005S	0.5-1.5	2/15/1999	--	***4,500***	***29,000***
SP-7001D	6.5-7.5	2/15/1999	--	ND (<25)	ND (<50)
SP-7001S	0.5-1.5	2/15/1999	--	22	65
SP-7003D	6.5-7.5	2/15/1999	--	ND (<21)	ND (<43)
SP-7003S	0.5-1.5	2/15/1999	--	ND (<21)	ND (<42)
TP-1001D	6.5-8	2/10/1999	--	75	480
TP-1001S	0.5-2	2/10/1999	--	130	740
TP-1002D	4.5-6	2/10/1999	--	ND (<21)	ND (<43)
TP-1002S	1.25-2.75	2/10/1999	--	ND (<30)	ND (<60)
TP-1003D	5.5-7	2/10/1999	--	ND (<20)	ND (<40)
TP-1003D (DUP)	5.5-7	2/10/1999	--	ND (<19)	ND (<38)
TP-1003S	1.5-3	2/10/1999	--	ND (<20)	ND (<40)
TP-1004D	6-7.5	2/10/1999	--	ND (<20)	ND (<40)
TP-1004S	0.5-2	2/10/1999	--	ND (<21)	ND (<43)
TP-1005D	6-7.5	2/10/1999	--	ND (<21)	ND (<41)
TP-1005S	0.5-2	2/10/1999	--	ND (<21)	ND (<41)
TP-1006D	5.5-7	2/10/1999	--	ND (<22)	ND (<44)
TP-1006S	0.5-2	2/10/1999	--	ND (<20)	ND (<40)
TP-2001D	5.5-7	2/11/1999	--	17 J	38 J
TP-2001S	0.5-2	2/11/1999	--	14 J	60
TP-2002S	0.5-2	2/11/1999	--	30	130
TP-3001D	5.5-7	2/12/1999	--	ND (<22)	ND (<44)
TP-3001S	0.5-2	2/12/1999	--	ND (<24)	ND (<47)
TP-3002D	5.5-7	2/10/1999	--	ND (<23)	ND (<45)
TP-3002S	0.5-2	2/10/1999	--	ND (<20)	ND (<41)
TP-3003D	5.5-7	2/12/1999	--	32 J	92
TP-3003S	0.5-2	2/12/1999	--	40	240

Table 3-3
Petroleum Hydrocarbons in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Gasoline Range Petroleum Hydrocarbons (mg/kg)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Oil-Range Petroleum Hydrocarbons (mg/kg)
TP-3004D	5.5-7	2/11/1999	--	ND (<24)	31 J
TP-3004D (DUP)	5.5-7	2/11/1999	--	ND (<23)	ND (<46)
TP-3004S	0.5-2	2/11/1999	--	ND (<24)	ND (<47)
TP-4001D	6.5-8	2/10/1999	--	ND (<20)	ND (<39)
TP-4001S	0.5-2	2/10/1999	--	ND (<19)	ND (<39)
TP-5001D	4.5-6	2/10/1999	--	26	200
TP-5001S	0.5-2	2/10/1999	--	ND (<20)	ND (<40)
TP-5002D	6.5-8	2/10/1999	--	13 J	43
TP-5002S	0.5-2	2/10/1999	--	43	250
TP-5003D	5.5-7	2/10/1999	--	20	110
TP-5003S	1.5-3	2/10/1999	--	ND (<21)	ND (<43)
TP-5004D	6-7.5	2/10/1999	--	23	140
TP-5004S	0.5-2	2/10/1999	--	ND (<22)	92
TP-5005D	5.5-7	2/10/1999	--	ND (<22)	ND (<45)
TP-5005S	1-2.5	2/10/1999	--	ND (<21)	ND (<42)
TP-5006D	4.5-6	2/10/1999	--	ND (<23)	33 J
TP-5006S	0.5-2	2/10/1999	--	32	300
TP-5007D	4.5-6	2/11/1999	--	ND (<21)	ND (<42)
TP-5007S	0.5-2	2/11/1999	--	ND (<19)	ND (<39)
TP-5013D	4.5-6	2/12/1999	--	37	260
TP-5013S	1-2.5	2/12/1999	--	ND (<21)	ND (<43)
TP-5014D	5.5-7	2/12/1999	--	ND (<22)	ND (<44)
TP-5014S	0.5-2	2/12/1999	--	ND (<20)	ND (<39)
TP-5016D	4.5-5.5	2/11/1999	--	ND (<21)	65
TP-5016S	0.5-1.5	2/11/1999	--	200	***3,000***
TP-5017D	6-7	2/11/1999	--	18 J	77
TP-5017S	0.5-1.5	2/11/1999	--	ND (<20)	45
TP-6001D	4.5-5.5	2/12/1999	--	ND (<22)	42 J
TP-6001S	0.5-1.5	2/12/1999	--	84	950
TP-6002D	4.5-5.5	2/12/1999	--	ND (<22)	ND (<44)
TP-6002S	0.5-1.5	2/12/1999	--	27	290
TP-6003D	4.5-5.5	2/12/1999	--	29	220
TP-6003D (DUP)	4.5-5.5	2/12/1999	--	ND (<21)	66
TP-6003S	0.5-1.5	2/12/1999	--	29	230
TP-6004D	4.5-5.5	2/12/1999	--	490	***4,200***
TP-6004S	0.5-1.5	2/12/1999	--	ND (<200)	1,100
TP-7002D	4.5-5.5	2/11/1999	--	83	590
TP-7002S	0.5-1.5	2/11/1999	--	28	190
TP-7004D	4.5-5.5	2/11/1999	--	20 J	100
TP-7004S	0.5-1.5	2/11/1999	--	ND (<20)	33 J
TP-8001D	5.5-6.5	2/11/1999	--	23	120
TP-8001S	0.5-1.5	2/11/1999	--	ND (<21)	ND (<42)
TP-9001D	7-8	2/11/1999	--	ND (<23)	ND (<45)

Table 3-3
Petroleum Hydrocarbons in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Gasoline Range Petroleum Hydrocarbons (mg/kg)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Oil-Range Petroleum Hydrocarbons (mg/kg)
TP-9001S	0.5-1.5	2/11/1999	--	140	620
TP-10001D	5.5-6.5	2/11/1999	--	ND (<23)	ND (<45)
TP-10001S	0.5-1.5	2/11/1999	--	ND (<21)	97
TP-10002D	4.5-5.5	2/11/1999	--	ND (<23)	ND (<45)
TP-10002S	0.5-1.5	2/11/1999	--	120	1,000
TP-10003D	4.5-5.5	2/11/1999	--	ND (<23)	ND (<47)
TP-10003S	0.5-1.5	2/11/1999	--	140	720
MW-1D	5-6	6/17/1999	--	ND (<20)	57
MW-1S	0.5-1.5	6/17/1999	--	ND (<20)	39 J
MW-2D	5-6	6/17/1999	--	ND (<23)	58
MW-2S	0.5-1.5	6/17/1999	--	17 J	130
MW-3D	5-6	6/17/1999	--	68 J	770
MW-3S	0.5-1.5	6/17/1999	--	170	1,000
MW-4D	5-6	6/18/1999	--	ND (<20)	43
MW-4S	0.5-1.5	6/18/1999	--	ND (<23)	ND (<46)
MW-5D	5-6	6/17/1999	--	410	***2,900***
MW-5S	0.5-1.5	6/17/1999	--	190	1,200
MW-6D	5-6	6/18/1999	--	ND (<26)	54
MW-6S	0.5-1.5	6/18/1999	--	13 J	93
MW-7D	5-6	6/18/1999	--	23	110
MW-7S	0.5-1.5	6/18/1999	--	24	130
MW-8D	0-1	6/18/1999	--	ND (<20)	46
MW-8S	5-6	6/18/1999	--	14 J	120
TP-5018D	6-7	7/14/1999	--	24 J	110
TP-5018S	1-2	7/14/1999	--	52	280
TP-1001-TP1-S	2-3	7/20/2000	--	48	280
TP-1001-TP1-D	6-7	7/20/2000	--	ND (<21)	ND (<41)
TP-1001-TP2-S	0-1	7/20/2000	--	81	430
TP-1001-TP2-D	6-7	7/20/2000	--	ND (<20)	27 J
TP-1001-TP3-S	2-3	7/20/2000	--	110	530
TP-1001-TP3-D	5-6	7/20/2000	--	ND (<20)	ND (<41)
TP-1001-TP4-S	1-2	7/20/2000	--	66	670
TP-1001-TP4-D	5-6	7/20/2000	--	91	380
TP-1001-TP5-S	0-1	7/20/2000	--	21 J	110
SP-5008-TP1-S	2-3	7/20/2000	--	35	310
SP-5008-TP1-D	5.5-6.5	7/20/2000	--	38	290
SP-5008-TP2-D	5-6	7/20/2000	--	22 J	67
SP-5008-TP3-S	2-3	7/20/2000	--	ND (<20)	50
SP-5008-TP3-D	3.5-4.5	7/20/2000	--	87	290
SP-5008-TP4-D	5.5-6.5	7/20/2000	--	ND (<20)	ND (<41)
SP-5008-TP5-D	6-7	7/20/2000	--	ND (<21)	140
TP-5018-TP1-S	1-2	7/21/2000	--	10 J	ND (<40)
TP-5018-TP2-S	1-2	7/21/2000	--	190	1,400

Table 3-3
Petroleum Hydrocarbons in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Gasoline Range Petroleum Hydrocarbons (mg/kg)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Oil-Range Petroleum Hydrocarbons (mg/kg)
TP-5018-TP2-D	5-6	7/21/2000	--	1,600	***8,900***
TP-5018-TP3-S	0.5-1.5	7/21/2000	--	190	***2,900***
TP-5018-TP4-S	0-1	7/21/2000	--	ND (<22)	47
TP-5018-TP5-S	1-2	7/21/2000	--	24	140
SP-6005-SP1-S	1-3	7/24/2000	--	11 J	40
SP-6005-SP2-S	1-2	7/24/2000	--	13 J	49
SP-6005-SP3-S	1-2	7/24/2000	--	ND (<19)	ND (<39)
SP-6005-TP4-S	1-2.5	7/24/2000	--	ND (<21)	ND (<42)
SP-6005-SP5-S	1-2	7/24/2000	--	ND (<21)	51
SP-6005-SP6-S	1-2	7/24/2000	--	ND (<20)	ND (<39)
TP-7002-SP1-D	6-7	7/24/2000	--	ND (<20)	39
TP-7002-SP2-D	6-7	7/24/2000	--	ND (<20)	ND (<41)
TP-7002-SP3-D	6-7	7/24/2000	--	47	38 J
TP-7002-SP4-D	6-7	7/24/2000	--	ND (<21)	ND (<41)
TP-7002-SP5-D	6-7	7/24/2000	--	ND (<20)	ND (<40)
MW-3-TP1-S	0-1.5	7/22/2000	--	60	290
MW-3-TP1-D	6-6.5	7/22/2000	--	ND (<32)	ND (<64)
MW-3-TP2-S	1-2	7/22/2000	--	ND (<20)	ND (<41)
MW-3-TP3-S	1-2	7/22/2000	--	ND (<20)	ND (<41)
MW-3-TP4-S	1-2	7/22/2000	--	ND (<20)	ND (<40)
EPI-SP-3005	2.0	6/8/2001	--	55	420
EPI-SP-5019	2.0	6/8/2001	--	110	
EPI-SP-5020	2.0	6/8/2001	--	1,200	
EPI-SP-5020	7.0	6/8/2001	--	110	
EPI-SP-5021	2.0	6/14/2001	--	***15,000***	
EPI-SP-5021	7.0	6/14/2001	--	ND(<50)	
EPI-SP-5022	2.0	6/8/2001	--	1,800	
EPI-SP-5022	7.0	6/8/2001	--	ND(<50)	
EPI-SP-5023	2.0	6/8/2001	--	ND(<50)	
EPI-SP-5025	2.0	6/13/2001	--	310	
EPI-SP-5026	2.0	6/13/2001	--	1,000	
EPI-SP-5027	2.0	6/14/2001	--	370	
EPI-SP-5027	7.0	6/14/2001	--	320	
EPI-SP-5029	2.0	6/14/2001	--	1,100	
EPI-SP-5030	2.0	6/14/2001	--	1,700	
EPI-SP-5031	2.0	6/14/2001	--	380	
EPI-SP-5032	2.0	6/14/2001	--	390	
EPI-SP-5033	2.0	6/14/2001	--	390	
EPI-SP-5034	2.0	6/14/2001	--	120	
EPI-SP-5035	2.0	6/14/2001	--	***2,500***	
EPI-SP-5035	7.0	6/14/2001	--	520	
EPI-SP-5036	2.0	6/14/2001	--	45	
EPI-SP-5037	2.0	6/15/2001	--	400	

Table 3-3
Petroleum Hydrocarbons in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Gasoline Range Petroleum Hydrocarbons (mg/kg)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Oil-Range Petroleum Hydrocarbons (mg/kg)
EPI-SP-5038	2.0	6/15/2001	--	ND(<50)	
EPI-SP-5039	2.0	6/15/2001	--	300	
EPI-SP-5040	2.0	6/15/2001	--	110	
EPI-SP-5041	2.0	6/15/2001	--	280	
EPI-SP-5042	2.0	6/15/2001	--	280	
EPI-SP-6006	2.0	6/13/2001	--	1,800	
EPI-SP-6007	2.0	6/13/2001	--	ND(<50)	
EPI-SP-6008	2.0	6/13/2001	--	ND(<50)	
EPI-SP-11001	2.0	6/7/2001	--	150	
EPI-SP-11002	2.0	6/7/2001	--	53	
EPI-SP-11003	2.0	6/7/2001	--	470	
MTCA Method A Soil Cleanup Level [(a)]			**100**	**2,000**	
MTCA Soil Cleanup Levels (Equation 747-1) [(b)]			**NV**	**NV**	

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

-- - Indicates the sample was not analyzed for this compound

J – Estimated concentration

mg/kg – milligrams/kilogram

Table 3-4
EPH in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	C8-C-10 Aliphatics (mg/kg)	C10-C-12 Aliphatics (mg/kg)	C12-C16 Aliphatics (mg/kg)	C16-C21 Aliphatics (mg/kg)	C21-C34 Aliphatics (mg/kg)	C10-C12 Aromatics (mg/kg)	C12-C16 Aromatics (mg/kg)	C16-C21 Aromatics (mg/kg)	C21-34 Aromatics (mg/kg)
SP-2003D	5.5-7	2/15/1999	ND(<3.7)	ND(<3.7)	ND(<3.7)	ND(<3.7)	15	ND(<3.7)	ND(<3.7)	8	20
SP-2003S	1.5-3	2/15/1999	ND(<2.5)	ND(<2.5)	5	19	120	ND(<2.5)	ND(<2.5)	16	83
SP-5008D	9.5-11	2/15/1999	ND(<4.7)	ND(<4.7)	ND(<4.7)	5.5	56	ND(<4.7)	ND(<4.7)	10	25
SP-5009S	1-2.5	2/15/1999	4	ND(<3.3)	ND(<3.3)	6.7	1,200	ND(<3.3)	ND(<3.3)	12	130
SP-5010D	7.5-9	2/15/1999	ND(<3.3)	ND(<3.3)	ND(<3.3)	ND(<3.3)	26	ND(<3.3)	ND(<3.3)	ND(<6.6)	41
SP-6005D	7.5-8.5	2/15/1999	ND(<2.3)	ND(<2.3)	ND(<2.3)	95	2,000	ND(<2.3)	4	21	270
SP-6005S	0.5-1.5	2/15/1999	ND(<2.4)	ND(<2.4)	5.9	350	8,800	ND(<2.4)	8.3	140	2,200
TP-1001D	6.5-8	2/10/1999	ND(<2.9)	ND(<2.9)	ND(<2.9)	12 J	240 J	ND(<2.9)	ND(<2.9)	ND(<5.7)	30 J
TP-1001S	0.5-2	2/10/1999	ND(<3.6)	ND(<3.6)	12	140	1,000	ND(<3.6)	4.9	85	590
TP-3003S	0.5-2	2/12/1999	ND(<2.4)	ND(<2.4)	ND(<2.4)	22	390	ND(<2.4)	ND(<2.4)	10	110
TP-5001D	4.5-6	2/10/1999	ND(<2.7)	ND(<2.7)	ND(<2.7)	5.1 J	73 J	ND(<2.7)	ND(<2.7)	ND(<5.4)	11 J
TP-5002S	0.5-2	2/10/1999	ND(<2.6)	ND(<2.6)	ND(<2.6)	9.2	130	ND(<2.6)	ND(<2.6)	ND(<5.1)	16
TP-5006S	0.5-2	2/10/1999	ND(<2.5)	ND(<2.5)	ND(<2.5)	5.9	130	ND(<2.5)	ND(<2.5)	ND(<5)	32
TP-5013D	4.5-6	2/12/1999	ND(<3.1)	ND(<3.1)	ND(<3.1)	7.4	28	ND(<3.1)	ND(<3.1)	ND(<6.3)	15
TP-5016S	0.5-1.5	2/11/1999	ND(<2.7)	ND(<2.7)	5.5	48	1,000	ND(<2.7)	ND(<2.7)	13	240
TP-6001S	0.5-1.5	2/12/1999	ND(<2.3)	ND(<2.3)	3.4	23	450	ND(<2.3)	ND(<2.3)	7.2	61
TP-6002S	0.5-1.5	2/12/1999	ND(<2.3)	ND(<2.3)	ND(<2.3)	2.3	51	ND(<2.3)	ND(<2.3)	ND(<4.6)	37
TP-6003D	4.5-5.5	2/12/1999	ND(<2.7)	ND(<2.7)	ND(<2.7)	5.9	230	ND(<2.7)	ND(<2.7)	ND(<5.3)	43
TP-6003S	0.5-1.5	2/12/1999	ND(<2.4)	ND(<2.4)	ND(<2.4)	2.5	73	ND(<2.4)	ND(<2.4)	ND(<4.8)	25
TP-6004D	4.5-5.5	2/12/1999	ND(<2.5)	ND(<2.5)	ND(<2.5)	79	2,300	ND(<2.5)	ND(<2.5)	13	260
TP-6004S	0.5-1.5	2/12/1999	ND(<2.4)	ND(<2.4)	ND(<2.4)	6.2	330	ND(<2.4)	ND(<2.4)	ND(<4.7)	23
TP-7002D	4.5-5.5	2/11/1999	ND(<2.4)	ND(<2.4)	ND(<2.4)	22	260	ND(<2.4)	ND(<2.4)	11	87
TP-9001S	0.5-1.5	2/11/1999	ND(<2.5)	ND(<2.5)	ND(<2.5)	6.5	140	ND(<2.5)	ND(<2.5)	ND(<5)	15
TP-10002S	0.5-1.5	2/11/1999	3	ND(<2.9)	3.5	15	270	ND(<2.9)	ND(<2.9)	ND(<5.9)	33
TP-10003S	0.5-1.5	2/11/1999	ND(<2.9)	ND(<2.9)	ND(<2.9)	6.8	97	ND(<2.9)	ND(<2.9)	ND(<5.7)	19
MW-3D	5-6	6/17/1999	ND(<4.8)	17	120	ND(<4.8)	ND(<4.8)	ND(<4.8)	ND(<4.8)	11	60
MW-3S	0.5-1.5	6/17/1999	ND(<5)	110	600	ND(<5)	ND(<5)	ND(<5)	ND(<5)	24	240
MW-5D	5-6	6/17/1999	ND(<8.8)	9.1	220	1,400	ND(<8.8)	ND(<8.8)	ND(<8.8)	89	990
MW-5S	0.5-1.5	6/17/1999	ND(<5)	ND(<5)	5.8	81	ND(<5)	ND(<2.5)	ND(<5)	41	460

Table 3-4
EPH in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	C8-C-10 Aliphatics (mg/kg)	C10-C-12 Aliphatics (mg/kg)	C12-C16 Aliphatics (mg/kg)	C16-C21 Aliphatics (mg/kg)	C21-C34 Aliphatics (mg/kg)	C10-C12 Aromatics (mg/kg)	C12-C16 Aromatics (mg/kg)	C16-C21 Aromatics (mg/kg)	C21-34 Aromatics (mg/kg)
TP-5018S	1-2	7/14/1999	ND(<2.5)	ND(<2.5)	5.8	81	ND(<2.5)	ND(<2.5)	ND(<2.5)	7.2	35
TP-5018-TP2-D	5-6	7/21/2000	ND(<6)	ND(<6)	6.7	260	2,400	ND(<6)	ND(<6)	190	1,800
TP-5018-TP3-S	0.5-1.5	7/21/2000	ND(<5.1)	ND(<5.1)	ND(<5.1)	36	1,100	ND(<5.1)	ND(<5.1)	19	450
MTCA Method A Soil Cleanup Level [a]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

NC – Indicates that cleanup levels were not calculated for this compound
ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample
J – Estimated concentration
mg/kg – milligrams/kilogram

Table 3-5
VPH in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	EC 5-6 Aliphatics (mg/kg)	EC >6-8 Aliphatics (mg/kg)	EC >8-10 Aliphatics (mg/kg)	EC >8-10 Aromatics (mg/kg)
SP-2003D	5.5-7	2/15/1999	ND(<2)	ND(<1.4)	ND(<4.1)	ND(<0.68)
SP-2003S	1.5-3	2/15/1999	ND(<1.3)	ND(<0.86)	ND(<2.6)	ND(0.43)
SP-5008D	9.5-11	2/15/1999	ND(<2.5)	ND(<1.7)	ND(<5)	ND(<0.83)
SP-5009S	1-2.5	2/15/1999	ND(<1.7)	ND(<1.1)	ND(<3.3)	ND(<0.56)
SP-5010D	7.5-9	2/15/1999	ND(<1.7)	ND(<1.1)	ND(<3.4)	ND(<5.7)
SP-6005D	7.5-8.5	2/15/1999	ND(<1.2)	ND(<0.8)	ND(<2.4)	ND(<0.4)
SP-6005S	0.5-1.5	2/15/1999	ND(<1.3)	ND(<0.9)	ND(<2.7)	ND(<0.45)
TP-5016S	0.5-1.5	2/11/1999	ND(<1.4)	ND(<0.95)	ND(<2.8)	ND(<0.47)
TP-6001S	0.5-1.5	2/12/1999	ND(<1.2)	ND(<0.8)	ND(<2.4)	ND(<0.4)
MTCA Method A Soil Cleanup Level [a]			**NC**	**NC**	**NC**	**NC**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**NC**	**NC**	**NC**	**NC**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

NC – Indicates that cleanup levels were not calculated for this compound

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

mg/kg - milligrams per kilogram

Table 3-6
PAHs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Non-Carcinogenic PAHs										Carcinogenic PAHs							
			Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naphthalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz (a, h) anthracene (mg/kg)	Indeno (1, 2, 3-cd) pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
SP-2003D	5.5-7	2/15/1999	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND(<0.03)	ND
SP-2003S	1.5-3	2/15/1999	ND(<0.02)	0.077	ND(<0.02)	ND(<0.02)	0.17	ND(<0.02)	ND(<0.02)	0.29	0.17	0.17	0.039	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.063	ND(<0.02)	ND(<0.02)	0.005
SP-5008D	9.5-11	2/15/1999	ND(<0.038)	ND(<0.038)	0.09	ND(<0.038)	0.48	ND(<0.038)	ND(<0.038)	ND(<0.038)	0.3	0.31	0.17	ND(<0.038)	ND(<0.038)	ND(<0.038)	0.086	ND(<0.038)	ND(<0.038)	0.018
SP-5009S	1-2.5	2/15/1999	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	0.15	ND(<0.026)	ND(<0.026)	0.087	0.11	0.13	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND
SP-5010D	7.5-9	2/15/1999	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	0.055	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND(<0.026)	ND
SP-6005D	7.5-8.5	2/15/1999	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND
SP-6005S	0.5-1.5	2/15/1999	ND(<0.019)	ND(<0.019)	0.086	ND(<0.019)	0.21	ND(<0.019)	ND(<0.019)	ND(<0.019)	0.051	0.21	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND
TP-1001D	6.5-8	2/10/1999	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	0.073	0.071	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND
TP-1001S	0.5-2	2/10/1999	0.17	0.32	0.52	ND(<0.029)	3.2	0.21	0.22	0.29	2.3	2.7	0.71	***0.46***	0.67	0.16	1.2	ND(<0.029)	ND(<0.029)	***0.626***
TP-3003S	0.5-2	2/12/1999	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND
TP-5001D	4.5-6	2/10/1999	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	0.049	0.064	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	0.055
TP-5002S	0.5-2	2/10/1999	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.065	0.063	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
TP-5006S	0.5-2	2/10/1999	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
TP-5013D	4.5-6	2/12/1999	ND(<0.025)	ND(<0.025)	ND(<0.025)	ND(<0.025)	0.17	ND(<0.025)	ND(<0.025)	0.29	0.29	0.13	ND(<0.025)	ND(<0.025)	ND(<0.025)	ND(<0.025)	ND(<0.025)	ND(<0.025)	ND(<0.025)	ND
TP-5016S	0.5-1.5	2/11/1999	ND(<0.022)	0.54	0.15	ND(<0.022)	ND(<0.022)	ND(<0.022)	ND(<0.022)	0.89	0.2	0.23	ND(<0.022)	ND(<0.022)	ND(<0.022)	ND(<0.022)	ND(<0.022)	ND(<0.022)	ND(<0.022)	ND
TP-6001S	0.5-1.5	2/12/1999	ND(<0.019)	0.11	0.069	ND(<0.019)	0.14	0.041	0.14	0.8	0.32	0.17	0.041	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	0.004
TP-6002S	0.5-1.5	2/12/1999	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND
TP-6003D	4.5-5.5	2/12/1999	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND(<0.021)	ND
TP-6003S	0.5-1.5	2/12/1999	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	0.048	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND
TP-6004D	4.5-5.5	2/12/1999	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
TP-6004S	0.5-1.5	2/12/1999	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND
TP-7002D	4.5-5.5	2/11/1999	ND(<0.019)	0.071	0.061	0.05	0.49	ND(<0.019)	ND(<0.019)	ND(<0.019)	0.51	0.46	0.16	***0.2***	0.2	0.063	0.22	ND(<0.019)	0.11	***0.256***
TP-9001S	0.5-1.5	2/11/1999	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
TP-10002S	0.5-1.5	2/11/1999	ND(<0.024)	ND(<0.024)	ND(<0.024)	ND(<0.024)	ND(<0.024)	ND(<0.024)	ND(<0.024)	0.073	0.068	0.054	ND(<0.024)	ND(<0.024)	ND(<0.024)	ND(<0.024)	ND(<0.024)	ND(<0.024)	ND(<0.024)	ND
TP-10003S	0.5-1.5	2/11/1999	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	0.096	ND(<0.023)	ND(<0.023)	0.048	0.082	0.091	ND(<0.023)	ND(<0.023)	0.048	ND(<0.023)	ND(<0.023)	ND(<0.023)	ND(<0.023)	0.005
SP-7001D	6.5-7.5	2/15/1999	ND(<0.0012)	ND(<0.0012)	ND(<0.0012)	ND(<0.0012)	0.0034	ND(<0.0012)	ND(<0.0012)	ND(<0.0012)	0.0029	0.0025	ND(<0.0012)	ND(<0.0012)	ND(<0.0012)	ND(<0.0012)	0.0014	ND(<0.0012)	ND(<0.0012)	0.00001
SP-7001S	0.5-1.5	2/15/1999	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND(<0.0011)	ND
SP-7003D	6.5-7.5	2/15/1999	ND(<0.00099)	ND(<0.00099)	ND(<0.00099)	0.0011	0.0026	ND(<0.00099)	ND(<0.00099)	0.0041	0.0028	0.0029	ND(<0.00099)	0.0011	ND(<0.00099)	0.0011	0.0011	ND(<0.00099)	ND(<0.00099)	0.001
SP-7003S	0.5-1.5	2/15/1999	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND
TP-1003D	5.5-7	2/10/1999	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND
TP-1003D (DUP)	5.5-7	2/10/1999	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND
TP-1003S	1.5-3	2/10/1999	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND
TP-3002D	5.5-7	2/10/1999	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	0.0043	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	0.0023	0.0042	0.0015	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	0.0019	ND(<0.00097)	ND(<0.00097)	0.0002
TP-3002S	0.5-2	2/10/1999	ND(<0.00088)	0.0013	ND(<0.00088)	ND(<0.00088)	0.0062	ND(<0.00088)	ND(<0.00088)	0.0016	0.0035	0.0069	0.0016	ND(<0.00088)	0.0039	ND(<0.00088)	0.0024	ND(<0.00088)	ND(<0.00088)	0.001
TP-3003D	5.5-7	2/12/1999	ND(<0.0015)	ND(<0.0015)	ND(<0.0015)	ND(<0.0015)	0.0042	ND(<0.0015)	ND(<0.0015)	0.0042	0.0036	0.0033	ND(<0.0015)	ND(<0.0015)	ND(<0.0015)	ND(<0.0015)	0.0022	ND(<0.0015)	ND(<0.0015)	0.00002
TP-3003S	0.5-2	2/12/1999	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	0.0024	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND
TP-3004D	5.5-7	2/11/1999	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND
TP-3004D (DUP)	5.5-7	2/11/1999	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	0.0021	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND
TP-3004S	0.5-2	2/11/1999	ND(<0.0011)	0.0023	0.0062	0.0059	0.0074	0.0013	ND(<0.0011)	0.0068	0.01	0.0073	0.0092	0.011	0.01	0.0091	0.021	ND(<0.0011)	0.0062	0.015
TP-4001D	6.5-8	2/10/1999	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	0.0025	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	ND(<0.00087)	0.001	0.0001
TP-4001S	0.5-2	2/10/1999	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND
TP-5002D	6.5-8	2/10/1999	0.0014	0.0022	0.01	ND(<0.00094)	0.051	0.0018	ND(<0.00094)	0.0016	0.037	0.052	0.029	0.033	0.04	0.012	0.03	ND(<0.00094)	0.015	0.043
TP-5002S	0.5-2	2/10/1999	0.0018	0.0053	0.0051	0.011	0.051	0.0021	0.0098	0.015	0.035	0.061	0.017	0.011	0.019	0.0075	0.024	ND(<0.0098)	0.0089	0.016
TP-5003D	5.5-7	2/10/1999	0.0022	0.0045	0.0043	0.013	0.027	0.0019	0.0018	0.012	0.025	0.027	0.014	0.02	0.022	0.004	0.015	ND(<0.0009)	ND(<0.0009)	0.024
TP-5003S	1.5-3	2/10/1999	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	0.0014	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	0.00097	0.0015	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	0.0011	ND(<0.00088)	ND(<0.00088)	0.00001
TP-5007D	4.5-6	2/10/1999	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	0.0011	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND
TP-5007S	0.5-2	2/11/1999	ND(<0.00086)	0.0011	ND(<0.00086)	ND(<0.00086)	0.0018	ND(<0.00086)	ND(<0.00086)	0.0041	0.0023	0.0022	ND(<0.00086)	ND(<0.00086)	ND(<0.00086)	ND(<0.00086)	ND(<0.00086)	ND(<0.00086)	ND(<0.00086)	ND
TP-5017D	6-7	2/11/1999	0.0016	0.01	0.0085	0.044	0.085	0.0024	ND(<0.0014)	0.0038	0.043	0.1	0.036	0.061	0.067	0.018	0.058	ND(<0.0014)	0.039	0.078
TP-5017S	0.5-1.5	2/11/1999	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	ND
TP-6001D	4.5-5.5	2/12/1999	ND(<0.001)	0.0027	ND(<0.001)	ND(<0.001)	0.0029	ND(<0.001)	0.003	0.0065	0.0046	0.0042	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND
TP-6001S	0.5-1.5	2/12/1999	0.015	0.074	0.032	ND(<0.00094)	0.066	0.022	0.15	0.21	0.14	0.095	ND(<0.00094)	ND(<0.00094)	ND(<0.00094)	ND(<0.00094)	ND(<0.00094)	ND(<0.00094)	ND(<0.00094)	ND
TP-6003D	4.5-5.5	2/12/1999	ND(<0.001)	0.0014	0.0011	ND(<0.001)	0.0076	ND(<0.001)	ND(<0.001)	ND(<0.001)	0.0039	0.0068	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND

Table 3-6
PAHs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Non-Carcinogenic PAHs										Carcinogenic PAHs							
			Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naphthalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz (a, h) anthracene (mg/kg)	Indeno (1, 2, 3-cd) pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
TP-6003D (DUP)	4.5-5.5	2/12/1999	ND(<0.00089)	0.0072	0.0038	0.0092	0.026	0.0019	0.0012	0.0029	0.019	0.026	0.0095	0.014	0.016	0.0018	0.013	ND(<0.00089)	0.0083	0.018
TP-6003S	0.5-1.5	2/12/1999	0.0018	0.0091	0.0097	ND(<0.00092)	0.023	0.0031	0.0042	0.01	0.012	0.019	0.0039	ND(<0.00092)	ND(<0.00092)	ND(<0.00092)	0.015	ND(<0.00092)	ND(<0.00092)	0.001
TP-7002D	4.5-5.5	2/11/1999	ND(<0.00092)	0.0062	0.0028	0.012	0.023	0.001	0.001	0.003	0.013	0.024	0.0082	0.019	0.019	0.0074	0.013	ND(<0.00092)	0.0089	0.023
TP-7002S	0.5-1.5	2/11/1999	ND(<0.00098)	0.0036	0.0033	0.0062	0.017	0.0014	0.0019	0.0053	0.019	0.015	0.0079	0.0083	ND(<0.00098)	ND(<0.00098)	0.0082	ND(<0.00098)	ND(<0.00098)	0.009
TP-7004D	4.5-5.5	2/11/1999	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	0.0026	ND(<0.00097)	ND(<0.00097)	0.002	0.0018	0.0022	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND(<0.00097)	ND
TP-7004S	0.5-1.5	2/11/1999	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND(<0.00088)	ND
TP-8001D	5.5-6.5	2/11/1999	ND(<0.00099)	0.0027	0.0022	0.0039	0.011	0.0013	0.0053	0.0069	0.01	0.01	0.0034	0.0058	0.0078	0.0011	0.0049	ND(<0.00099)	0.0036	0.007
TP-8001S	0.5-1.5	2/11/1999	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND(<0.0009)	ND
TP-9001D	7-8	2/11/1999	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND
TP-9001S	0.5-1.5	2/11/1999	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND(<0.00093)	ND
TP-10002D	4.5-5.5	2/11/1999	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND(<0.001)	ND
TP-10002S	0.5-1.5	2/11/1999	0.0046	0.009	0.01	ND(<0.0011)	0.03	0.0071	0.011	0.021	0.031	0.03	0.0091	ND(<0.0011)	0.008	0.0049	0.016	ND(<0.0011)	ND(<0.0011)	0.002
MW-3D	5-6	6/17/1999	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	0.052	ND(<0.019)	ND(<0.019)	ND(<0.019)	ND(<0.019)	0.081	ND(<0.019)	0.047	0.062	ND(<0.019)	0.076	ND(<0.019)	ND(<0.019)	0.054
MW-3S	0.5-1.5	6/17/1999	ND(<0.02)	0.12	0.18	0.21	0.14	0.056	ND(<0.02)	0.12	0.14	0.16	0.098	***0.21***	0.27	0.084	0.14	ND(<0.02)	0.16	***0.273***
MW-5D	5-6	6/17/1999	ND(<0.035)	ND(<0.035)	ND(<0.035)	ND(<0.035)	ND(<0.035)	ND(<0.035)	ND(<0.035)	0.12	0.22	0.15	ND(<0.035)	ND(<0.035)	ND(<0.035)	ND(<0.035)	ND(<0.035)	ND(<0.035)	ND(<0.035)	ND
MW-5S	0.5-1.5	6/17/1999	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.048	0.094	0.06	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
TP-5018S	1-2	7/14/1999	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.068	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.054	0.1	ND(<0.02)	ND(<0.02)	0.042	ND(<0.02)	0.048	ND(<0.02)	ND(<0.02)	0.005
TP-5018D	6-7	7/14/1999	0.021	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.021	0.02	ND(<0.02)	0.041	ND(<0.02)	0.021	ND(<0.02)	ND(<0.02)	0.006
TP-5018S	1-2	7/14/1999	ND(<0.022)	0.091	0.022	0.13	0.25	ND(<0.022)	ND(<0.022)	0.03	0.13	0.29	0.11	***0.19***	0.28	ND(<0.022)	0.14	ND(<0.022)	0.11	***0.241***
TP-1001-TP1-S	2-3	7/20/2000	ND(<0.021)	0.11	0.12	ND(<0.021)	0.89	0.036	0.023	0.072	0.29	0.65	0.17	***0.16***	0.24	0.094	0.29	ND(<0.021)	ND(<0.021)	***0.213***
TP-1001-TP1-D	6-7	7/20/2000	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND
TP-1001-TP2-S	0-1	7/20/2000	0.022	0.23	0.073	0.22	0.59	0.035	ND(<0.02)	0.1	0.19	0.34	0.12	***0.14***	0.2	0.092	0.19	ND(<0.02)	0.12	***0.195***
TP-1001-TP2-D	6-7	7/20/2000	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	0.036	ND(<0.016)	ND(<0.016)	0.016	0.026	0.023	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND
TP-1001-TP3-S	2-3	7/20/2000	0.11	0.58	0.5	0.39	5.7	0.22	0.074	0.25	2.1	3.9	1.4	***0.92***	1.1	0.43	1.5	0.098	0.31	***1.298***
TP-1001-TP3-D	5-6	7/20/2000	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND(<0.016)	ND
TP-1001-TP4-S	1-2	7/20/2000	0.027	0.14	0.12	0.1	0.7	0.051	0.076	0.2	0.51	0.59	0.13	***0.21***	0.28	0.055	0.21	ND(<0.02)	ND(<0.02)	***0.259***
TP-1001-TP4-D	5-6	7/20/2000	ND(<0.038)	0.2	0.1	0.31	0.96	0.034 J	ND(<0.038)	0.11	0.35	1	0.33	***0.44***	ND(<0.038)	0.38	0.37	ND(<0.038)	0.35	***0.550***
SP-5008-TP1-S	2-3	7/20/2000	ND(<0.018)	0.11	0.073	0.2	0.49	0.021	0.018	0.14	0.23	0.41	0.26	***0.31***	0.32	0.12	0.28	ND(<0.018)	0.21	***0.404***
SP-5008-TP1-D	5.5-6.5	7/20/2000	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND(<0.018)	ND
SP-5008-TP3-D	3.5-4.5	7/20/2000	0.029	0.023	0.094	ND(<0.019)	ND(<0.019)	0.044	ND(<0.019)	0.046	0.12	0.052	0.071	***0.11***	0.06	0.027	0.13	ND(<0.019)	ND(<0.019)	***0.127***
TP-5018-TP2-S	1-2	7/21/2000	ND(<0.02)	0.048	0.03	ND(<0.02)	0.17	ND(<0.02)	ND(<0.02)	0.062	0.084	0.17	0.096	***0.14***	0.24	0.056	0.12	ND(<0.02)	ND(<0.02)	***0.180***
TP-5018-TP2-D	5-6	7/21/2000	0.12	0.98	0.39	0.77	2.5	0.15	0.15	1.6	1.4	4.8	1.5	***1.8***	1	0.19	1.6	ND(<0.025)	0.54	***2.139***
TP-5018-TP3-S	0.5-1.5	7/21/2000	ND(<0.021)	0.12	0.055	ND(<0.021)	0.46	0.031	ND(<0.021)	ND(<0.021)	0.21	0.55	0.2	***0.18***	0.086	0.07	0.2	ND(<0.021)	ND(<0.021)	***0.218***
MW-3-TP1-S	0-1.5	7/22/2000	ND(<0.019)	0.023	ND(<0.019)	ND(<0.019)	0.15	ND(<0.019)	ND(<0.019)	0.031	0.069	0.084	0.021	0.032	0.029	ND(<0.019)	0.036	ND(<0.019)	ND(<0.019)	0.037
EPI-SP-1009	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.19	ND(<0.1)	--	ND(<0.1)	0.14	0.15	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-1010	5.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-1011	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.21	ND(<0.1)	--	ND(<0.1)	0.2	0.2	0.1	ND(<0.1)	0.12	ND(<0.1)	0.12	ND(<0.1)	ND(<0.1)	0.023
EPI-SP-1012	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-1013	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-3005	2.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-3006	2.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<100)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-3007	2.0	6/8/2001	0.12	ND(<0.1)	ND(<0.1)	0.26	0.37	ND(<0.1)	--	ND(<0.1)	0.31	0.48	0.15	***0.2***	0.22	ND(<0.1)	0.26	0.15	0.15	***0.315***
EPI-SP-3007	7.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5019	2.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.15	0.41	ND(<0.1)	--	ND(<0.1)	0.37	0.41	0.19	***0.22***	0.26	0.1	0.19	ND(<0.1)	0.14	***0.291***
EPI-SP-5019	7.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5020	2.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.11	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	0.14	0.11	***0.12***	0.14	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.145***
EPI-SP-5020	7.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5021	2.0	6/14/2001	ND(<0.1)	0.17	ND(<0.1)	0.15	0.13	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	0.3	0.17	***0.1***	0.2	0.15	ND(<0.1)	ND(<0.1)	0.12	***0.164***
EPI-SP-5021	7.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5022	2.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5023	2.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5025	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND

Table 3-6
PAHs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Non-Carcinogenic PAHs										Carcinogenic PAHs							
			Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naphthalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz (a, h) anthracene (mg/kg)	Indeno (1, 2, 3-cd) pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
EPI-SP-5026	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5027	7.0	6/14/2001	0.2	ND(<0.1)	0.15	0.36	0.82	ND(<0.1)	--	ND(<0.1)	0.63	0.88	0.48	***0.46***	0.56	0.15	0.45	ND(<0.1)	0.28	***0.612***
EPI-SP-5029	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.21	ND(<0.1)	--	ND(<0.1)	0.22	0.26	0.11	***0.11***	0.15	ND(<0.1)	0.12	ND(<0.1)	ND(<0.1)	***0.137***
EPI-SP-5030	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	0.1	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5031	2.0	6/14/2001	ND(<0.1)	0.27	0.2	0.68	1.4	ND(<0.1)	--	ND(<0.1)	1.4	1.9	.0.57	***0.68***	0.86	0.29	0.91	0.12	0.53	***0.962***
EPI-SP-5031	7.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5032	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5033	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5034	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5035	7.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5036	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5037	2.0	6/15/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.14	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	0.12	ND(<0.1)	ND(<0.1)	0.11	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.011
EPI-SP-5038	2.0	6/15/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5039	2.0	6/15/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5040	2.0	6/15/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5041	2.0	6/15/2001	ND(<0.1)	0.26	0.16	0.65	1.2	ND(<0.1)	--	ND(<0.1)	1.1	1.3	0.48	***0.62***	0.85	0.23	0.57	0.13	0.54	***0.888***
EPI-SP-5041	7.0	6/15/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-5042	2.0	6/15/2001	ND(<0.1)	0.12	0.14	0.26	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.18***	0.17	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.26	***0.223***
EPI-SP-7006	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-7007	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.13	ND(<0.1)	--	0.15	0.2	0.13	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-7008	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-8002	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-8003	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-11001	2.0	6/7/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-11002	2.0	6/7/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-11003	2.0	6/7/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
TEF[c]			0.001	0.001	0.01	0.01	0.001	NC	NC	0.001	0.001	0.001	0.1	1	0.1	0.1	0.01	0.4	0.1	NV
MTCA Method A Soil Cleanup Levels[a]			**NV**	**NV**	**NV**	**NV**	**NV**	**NC**	**NC**	**5**	**NV**	**NV**	**NV**	**0.1**	**NV**	**NV**	**NV**	**NV**	**NV**	**0.100**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**NV**	**NV**	**5,346,000**	**NV**	**365,000**	**NC**	**NC**	**NV**	**NV**	**15,026,000**	**2.2**	**0.6**	**7.6**	**8**	**25**	**2.78**	**21.5**	**NV**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

(c) Total cPAH concentrations modified using the protocol described in WAC 173-340-708(8)(e)(ii)

NV – Indicates that no value was available for this compound

NC – Indicates that cleanup levels were not calculated for this compound

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

TEF – Toxicity Equivalency Factor

mg/kg - milligrams per kilogram

Table 3-7
SVOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	1,2,4-Trichloro-benzene (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)	1,4-Dichloro-benzene (mg/kg)	2,3,4,6-Tetrachloro-phenol (mg/kg)	2,4,5-Trichloro-phenol (mg/kg)	2,4,6-Trichloro-phenol (mg/kg)	2,4-Dichloro-phenol (mg/kg)	2,4-Dimethyl-phenol (mg/kg)	2,4-Dinotro-phenol (mg/kg)	2,4-Dinitro-toluene (mg/kg)	2,6-Dichloro-phenol (mg/kg)	2,6-Dinitro-toluene (mg/kg)	2-Chloro-napththalene (mg/kg)	2-Chloro-phenol (mg/kg)
SP-7001D	6.5-7.5	2/15/1999	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	--	0.014	0.0042 J	ND(<0.0059)	ND(<0.0059)	--	ND(<0.0059)	--	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)
SP-7001S	0.5-1.5	2/15/1999	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	--	0.17	0.0044 J	ND(<0.0054)	ND(<0.0054)	--	ND(<0.0054)	--	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)
SP-7003D	6.5-7.5	2/15/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)
SP-7003S	0.5-1.5	2/15/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)
TP-1003D	5.5-7	2/10/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-1003D (DUP)	5.5-7	2/10/1999	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)
TP-1003S	1.5-3	2/10/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)
TP-3002D	5.5-7	2/10/1999	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	--	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	--	ND(<0.0048)	--	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)
TP-3002S	0.5-2	2/10/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)
TP-3003D	5.5-7	2/12/1999	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	--	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	--	ND(<0.0074)	--	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)
TP-3003S	0.5-2	2/12/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)
TP-3004D	5.5-7	2/11/1999	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)
TP-3004D (DUP)	5.5-7	2/11/1999	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)
TP-3004S	0.5-2	2/11/1999	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	--	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	--	ND(<0.0055)	--	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)
TP-4001D	6.5-8	2/10/1999	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)
TP-4001S	0.5-2	2/10/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-5002D	6.5-8	2/10/1999	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--	ND(<0.0047)	--	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)
TP-5002S	0.5-2	2/10/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)
TP-5003D	5.5-7	2/10/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	0.0012 J	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)
TP-5003S	1.5-3	2/10/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)
TP-5007D	4.5-6	2/10/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-5007S	0.5-2	2/11/1999	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)
TP-5017D	6-7	2/11/1999	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	--	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	--	ND(<0.0068)	--	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)
TP-5017S	0.5-1.5	2/11/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-6001D	4.5-5.5	2/12/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)
TP-6001S	0.5-1.5	2/12/1999	ND(<0.0047)	0.0015 J	ND(<0.0047)	ND(<0.0047)	--	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--	ND(<0.0047)	--	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)
TP-6003D	4.5-5.5	2/12/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)
TP-6003D (DUP)	4.5-5.5	2/12/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)
TP-6003S	0.5-1.5	2/12/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-7002D	4.5-5.5	2/11/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-7002S	0.5-1.5	2/11/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)
TP-7004D	4.5-5.5	2/11/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)
TP-7004S	0.5-1.5	2/11/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)
TP-8001D	5.5-6.5	2/11/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)

Table 3-7
SVOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	1,2,4-Trichloro-benzene (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)	1,4-Dichloro-benzene (mg/kg)	2,3,4,6-Tetrachloro-phenol (mg/kg)	2,4,5-Trichloro-phenol (mg/kg)	2,4,6-Trichloro-phenol (mg/kg)	2,4-Dichloro-phenol (mg/kg)	2,4-Dimethyl-phenol (mg/kg)	2,4-Dinotro-phenol (mg/kg)	2,4-Dinitro-toluene (mg/kg)	2,6-Dichloro-phenol (mg/kg)	2,6-Dinitro-toluene (mg/kg)	2-Chloro-napththalene (mg/kg)	2-Chloro-phenol (mg/kg)
TP-8001S	0.5-1.5	2/11/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)
TP-9001D	7-8	2/11/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)
TP-9001S	0.5-1.5	2/11/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-10002D	4.5-5.5	2/11/1999	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)
TP-10002S	0.5-1.5	2/11/1999	0.0013 J	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	--	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	--	ND(<0.0055)	--	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)
TP-5018D	6-7	7/14/1999	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	--	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	--	ND(<0.098)	--	ND(<0.098)	ND(<0.098)	ND(<0.098)
TP-5018S	1-2	7/14/1999	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	--	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	--	ND(<0.11)	--	ND(<0.11)	ND(<0.11)	ND(<0.11)
EPI-SP-3005	2	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(0.25)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.1)	ND(<0.1)
EPI-SP-3006	2	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(0.25)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.1)	ND(<0.1)
EPI-SP-3007	2	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(0.25)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.1)	ND(<0.1)
EPI-SP-7006	2	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(0.25)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.1)	ND(<0.1)
EPI-SP-7007	2	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(0.25)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.1)	ND(<0.1)
EPI-SP-8002	2	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(0.25)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.1)	ND(<0.1)
EPI-SP-8003	2	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(0.25)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.1)	ND(<0.1)
MTCA Method A Soil Cleanup Levels[a]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Table 3-7
SVOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	2-Methyl-phenol (mg/kg)	2-Nitroaniline (mg/kg)	2-Nitrophenol (mg/kg)	3,3'-Dichloro-benzidine (mg/kg)	3-Nitroaniline (mg/kg)	4,6-Dinitro-2-methyl-phenol (mg/kg)	4-Bromophenyl-phenylether (mg/kg)	4-Chloro-3-methylphenol (mg/kg)	4-Chloroaniline (mg/kg)	4-Chlorophenyl phenylether (mg/kg)	4-Methyl-phenol (mg/kg)	4-Nitroaniline (mg/kg)	4-Nitrophenol (mg/kg)	Aniline (mg/kg)	Azobenzene (mg/kg)
SP-7001D	6.5-7.5	2/15/1999	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	--	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	--	--
SP-7001S	0.5-1.5	2/15/1999	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	--	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	--	--
SP-7003D	6.5-7.5	2/15/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	--
SP-7003S	0.5-1.5	2/15/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	--
TP-1003D	5.5-7	2/10/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	--
TP-1003D (DUP)	5.5-7	2/10/1999	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	--
TP-1003S	1.5-3	2/10/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	0.0017 J	ND(<0.0044)	ND(<0.0044)	--	--
TP-3002D	5.5-7	2/10/1999	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	--	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	--	--
TP-3002S	0.5-2	2/10/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	--
TP-3003D	5.5-7	2/12/1999	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	--	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	--	--
TP-3003S	0.5-2	2/12/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	--
TP-3004D	5.5-7	2/11/1999	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	--
TP-3004D (DUP)	5.5-7	2/11/1999	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	--
TP-3004S	0.5-2	2/11/1999	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	--	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	0.0035 J	ND(<0.0055)	ND(<0.0055)	--	--
TP-4001D	6.5-8	2/10/1999	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	--
TP-4001S	0.5-2	2/10/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	--
TP-5002D	6.5-8	2/10/1999	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--	--
TP-5002S	0.5-2	2/10/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	--
TP-5003D	5.5-7	2/10/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	0.0017 J	ND(<0.0045)	ND(<0.0045)	--	--
TP-5003S	1.5-3	2/10/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	--
TP-5007D	4.5-6	2/10/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	--
TP-5007S	0.5-2	2/11/1999	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	--
TP-5017D	6-7	2/11/1999	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	--	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	0.0027 J	ND(<0.0068)	ND(<0.0068)	--	--
TP-5017S	0.5-1.5	2/11/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	--
TP-6001D	4.5-5.5	2/12/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	--
TP-6001S	0.5-1.5	2/12/1999	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--	--
TP-6003D	4.5-5.5	2/12/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	--
TP-6003D (DUP)	4.5-5.5	2/12/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	--
TP-6003S	0.5-1.5	2/12/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	--
TP-7002D	4.5-5.5	2/11/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	--
TP-7002S	0.5-1.5	2/11/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	--
TP-7004D	4.5-5.5	2/11/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	--
TP-7004S	0.5-1.5	2/11/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	--
TP-8001D	5.5-6.5	2/11/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	--

Table 3-7
SVOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	2-Methyl-phenol (mg/kg)	2-Nitroaniline (mg/kg)	2-Nitrophenol (mg/kg)	3,3'-Dichloro-benzidine (mg/kg)	3-Nitroaniline (mg/kg)	4,6-Dinitro-2-methyl-phenol (mg/kg)	4-Bromophenyl-phenylether (mg/kg)	4-Chloro-3-methylphenol (mg/kg)	4-Chloroaniline (mg/kg)	4-Chlorophenyl phenylether (mg/kg)	4-Methyl-phenol (mg/kg)	4-Nitroaniline (mg/kg)	4-Nitrophenol (mg/kg)	Aniline (mg/kg)	Azobenzene (mg/kg)
TP-8001S	0.5-1.5	2/11/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	--
TP-9001D	7-8	2/11/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	--
TP-9001S	0.5-1.5	2/11/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	--
TP-10002D	4.5-5.5	2/11/1999	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	--
TP-10002S	0.5-1.5	2/11/1999	0.0047 J	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	--	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	0.012	ND(<0.0055)	ND(<0.0055)	--	--
TP-5018D	6-7	7/14/1999	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	--	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	--	--
TP-5018S	1-2	7/14/1999	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	--	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	--	--
EPI-SP-3005	2	6/8/2001	ND(<0.1)	ND(<0.25)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-3006	2	6/8/2001	ND(<0.1)	ND(<0.25)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-3007	2	6/8/2001	ND(<0.1)	ND(<0.25)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-7006	2	6/13/2001	ND(<0.1)	ND(<0.25)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-7007	2	6/13/2001	ND(<0.1)	ND(<0.25)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-8002	2	6/13/2001	ND(<0.1)	ND(<0.25)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-8003	2	6/13/2001	ND(<0.1)	ND(<0.25)	ND(<0.25)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.25)	ND(<0.5)	ND(<0.1)	ND(<0.1)
MTCA Method A Soil Cleanup Levels[a]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Table 3-7
SVOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Benzoic Acid (mg/kg)	Benzl Alcohol (mg/kg)	Bis(2-chloro-ethloxy) methane (mg/kg)	Bis(2-chloroethyl) ether (mg/kg)	Bis(2-chloroiso-propyl)ether (mg/kg)	Bis(2-ethyl-hexyl) phthalate (mg/kg)	Butylbenzyl-phthalate (mg/kg)	Carbazole (mg/kg)	Dibezofuran (mg/kg)	Diethyl-phthalate (mg/kg)	Dimethyl-phthalate (mg/kg)	Di-n-Butylph-thalate (mg/kg)	Di-n-octylph-thalate (mg/kg)	Hexachloro-benzene (mg/kg)	Hexachloro-butadiene (mg/kg)
SP-7001D	6.5-7.5	2/15/1999	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	0.031	--	--	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	0.0022 J B1	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)
SP-7001S	0.5-1.5	2/15/1999	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	0.012	--	--	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	0.003 J B1	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)
SP-7003D	6.5-7.5	2/15/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	0.016	--	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	0.002 J B1	ND(<0.005)	ND(<0.005)	ND(<0.005)
SP-7003S	0.5-1.5	2/15/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	0.043	--	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	0.0027J B1	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)
TP-1003D	5.5-7	2/10/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	0.0037 J	--	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	0.0016 J B1	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-1003D (DUP)	5.5-7	2/10/1999	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	0.0016 J	--	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	0.0015 J B1	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)
TP-1003S	1.5-3	2/10/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	0.0015 J	--	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	0.0015 J B1	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)
TP-3002D	5.5-7	2/10/1999	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	0.0041 J B1	--	--	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	0.0041 J B1	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)
TP-3002S	0.5-2	2/10/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	0.0034 J B1	--	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	0.0033 J B1	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)
TP-3003D	5.5-7	2/12/1999	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	0.0048 J	--	--	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	0.0042 J B1	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)
TP-3003S	0.5-2	2/12/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	0.0032 J B1	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)
TP-3004D	5.5-7	2/11/1999	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	0.0016 J B1	--	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	0.0022 J B1	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)
TP-3004D (DUP)	5.5-7	2/11/1999	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	0.0025 J B1	--	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	0.0029 J B1	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)
TP-3004S	0.5-2	2/11/1999	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	0.0033 J B1	--	--	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	0.0032 J B1	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)
TP-4001D	6.5-8	2/10/1999	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	0.0025 J	--	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	0.0016 J B1	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)
TP-4001S	0.5-2	2/10/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	0.0026 J	--	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	0.002 J B1	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-5002D	6.5-8	2/10/1999	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--	--	0.0013 J	ND(<0.0047)	ND(<0.0047)	0.0036 J B1	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)
TP-5002S	0.5-2	2/10/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	0.01 B1	--	--	0.0025 J	ND(<0.0049)	ND(<0.0049)	0.0046 J B1	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)
TP-5003D	5.5-7	2/10/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	--	0.0031 J	ND(<0.0045)	ND(<0.0045)	0.0022 J B1	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)
TP-5003S	1.5-3	2/10/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	0.0025 J	--	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	0.0017 J B1	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)
TP-5007D	4.5-6	2/10/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	0.0032 J B1	--	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	0.0022 J B1	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-5007S	0.5-2	2/11/1999	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	0.0024 J B1	--	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	0.0028 J B1	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)
TP-5017D	6-7	2/11/1999	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	0.0075 B1	--	--	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	0.002 J B1	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)
TP-5017S	0.5-1.5	2/11/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	0.0029 J B1	--	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	0.002 J B1	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-6001D	4.5-5.5	2/12/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	0.0038 J	--	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	0.025	ND(<0.005)	ND(<0.005)	ND(<0.005)
TP-6001S	0.5-1.5	2/12/1999	ND(<0.0047)	ND(<0.0047)	0.0059	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--	--	0.047	ND(<0.0047)	ND(<0.0047)	0.0044 J B1	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)
TP-6003D	4.5-5.5	2/12/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	0.002 J B1	ND(<0.005)	ND(<0.005)	ND(<0.005)
TP-6003D (DUP)	4.5-5.5	2/12/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	0.0031 J	--	--	0.0012 J	ND(<0.0045)	ND(<0.0045)	0.0015 J B1	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)
TP-6003S	0.5-1.5	2/12/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	--	0.0043 J	ND(<0.0046)	ND(<0.0046)	0.0022 J B1	0.0013 J	ND(<0.0046)	ND(<0.0046)
TP-7002D	4.5-5.5	2/11/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	0.0017 J B1	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-7002S	0.5-1.5	2/11/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	0.0058	--	--	0.0015 J	ND(<0.0049)	ND(<0.0049)	0.002 J B1	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)
TP-7004D	4.5-5.5	2/11/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	0.0029 J B1	--	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	0.0022 J B1	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)
TP-7004S	0.5-1.5	2/11/1999	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	0.0027 J B1	--	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	0.0019 J B1	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)
TP-8001D	5.5-6.5	2/11/1999	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	0.0027 J B1	--	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	0.0019 J B1	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)

Table 3-7
SVOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Benzoic Acid (mg/kg)	Benzl Alcohol (mg/kg)	Bis(2-chloro-ethloxy) methane (mg/kg)	Bis(2-chloroethyl) ether (mg/kg)	Bis(2-chloroiso-propyl)ether (mg/kg)	Bis(2-ethyl-hexyl) phthalate (mg/kg)	Butylbenzyl-phthalate (mg/kg)	Carbazole (mg/kg)	Dibezofuran (mg/kg)	Diethyl-phthalate (mg/kg)	Dimethyl-phthalate (mg/kg)	Di-n-Butylph-thalate (mg/kg)	Di-n-octylph-thalate (mg/kg)	Hexachloro-benzene (mg/kg)	Hexachloro-butadiene (mg/kg)
TP-8001S	0.5-1.5	2/11/1999	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	0.0024 J B1	--	--	ND(<0.0045)	ND(<0.0045)	0.0019 J	0.0029 J B1	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)
TP-9001D	7-8	2/11/1999	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	0.0022 J B1	ND(<0.005)	ND(<0.005)	ND(<0.005)
TP-9001S	0.5-1.5	2/11/1999	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)
TP-10002D	4.5-5.5	2/11/1999	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	0.0024 J	--	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	0.002 J B1	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)
TP-10002S	0.5-1.5	2/11/1999	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	--	--	0.013	ND(<0.0055)	0.0013 J	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)
TP-5018D	6-7	7/14/1999	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	--	--	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)
TP-5018S	1-2	7/14/1999	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	--	--	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)
EPI-SP-3005	2	6/8/2001	ND(<1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-3006	2	6/8/2001	ND(<1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.15)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-3007	2	6/8/2001	ND(<1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-7006	2	6/13/2001	ND(<1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-7007	2	6/13/2001	ND(<1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-8002	2	6/13/2001	ND(<1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-8003	2	6/13/2001	ND(<1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.13)	ND(<0.1)	ND(<0.1)	ND(<0.1)
MTCA Method A Soil Cleanup Levels[a]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Table 3-7
SVOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Hexachloro-cyclo-pentadiene (mg/kg)	Hexachloro-ethane (mg/kg)	Isophrone (mg/kg)	Nitrobenzene (mg/kg)	N-Nitroso-di-n-propylamine (mg/kg)	N-Nitroso-dimethyl-amine (mg/kg)	N-Nitroso-diphenyl-amine (mg/kg)	Pentachloro-phenol (mg/kg)	Phenol (mg/kg)	Pyridine (mg/kg)
SP-7001D	6.5-7.5	2/15/1999	ND(<0.0059)	--	ND(<0.0059)	ND(<0.0059)	ND(<0.0059)	--	ND(<0.0059)	0.7	ND(<0.0059)	--
SP-7001S	0.5-1.5	2/15/1999	ND(<0.0054)	--	ND(<0.0054)	ND(<0.0054)	ND(<0.0054)	--	ND(<0.0054)	4.2	ND(<0.0054)	--
SP-7003D	6.5-7.5	2/15/1999	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	--
SP-7003S	0.5-1.5	2/15/1999	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--
TP-1003D	5.5-7	2/10/1999	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--
TP-1003D (DUP)	5.5-7	2/10/1999	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--
TP-1003S	1.5-3	2/10/1999	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--
TP-3002D	5.5-7	2/10/1999	ND(<0.0048)	--	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	--	ND(<0.0048)	ND(<0.0048)	ND(<0.0048)	--
TP-3002S	0.5-2	2/10/1999	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--
TP-3003D	5.5-7	2/12/1999	ND(<0.0074)	--	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	--	ND(<0.0074)	ND(<0.0074)	ND(<0.0074)	--
TP-3003S	0.5-2	2/12/1999	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--
TP-3004D	5.5-7	2/11/1999	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--
TP-3004D (DUP)	5.5-7	2/11/1999	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--
TP-3004S	0.5-2	2/11/1999	ND(<0.0055)	--	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	--	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	--
TP-4001D	6.5-8	2/10/1999	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--
TP-4001S	0.5-2	2/10/1999	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--
TP-5002D	6.5-8	2/10/1999	ND(<0.0047)	--	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--
TP-5002S	0.5-2	2/10/1999	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	0.013	ND(<0.0049)	--
TP-5003D	5.5-7	2/10/1999	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	0.0013 J	0.14	ND(<0.0045)	--
TP-5003S	1.5-3	2/10/1999	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--
TP-5007D	4.5-6	2/10/1999	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--
TP-5007S	0.5-2	2/11/1999	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--	ND(<0.0043)	ND(<0.0043)	ND(<0.0043)	--
TP-5017D	6-7	2/11/1999	ND(<0.0068)	--	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	--	ND(<0.0068)	ND(<0.0068)	ND(<0.0068)	--
TP-5017S	0.5-1.5	2/11/1999	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--
TP-6001D	4.5-5.5	2/12/1999	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	--
TP-6001S	0.5-1.5	2/12/1999	ND(<0.0047)	--	ND(<0.0047)	0.0038 J	ND(<0.0047)	--	ND(<0.0047)	ND(<0.0047)	ND(<0.0047)	--
TP-6003D	4.5-5.5	2/12/1999	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	--
TP-6003D (DUP)	4.5-5.5	2/12/1999	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--
TP-6003S	0.5-1.5	2/12/1999	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--
TP-7002D	4.5-5.5	2/11/1999	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	0.0088	ND(<0.0046)	--
TP-7002S	0.5-1.5	2/11/1999	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	0.027	ND(<0.0049)	--
TP-7004D	4.5-5.5	2/11/1999	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	0.23	ND(<0.0049)	--
TP-7004S	0.5-1.5	2/11/1999	ND(<0.0044)	--	ND(<0.0044)	ND(<0.0044)	ND(<0.0044)	--	ND(<0.0044)	0.054	ND(<0.0044)	--
TP-8001D	5.5-6.5	2/11/1999	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--	ND(<0.0049)	ND(<0.0049)	ND(<0.0049)	--

Table 3-7
SVOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Hexachloro-cyclo-pentadiene (mg/kg)	Hexachloro-ethane (mg/kg)	Isophrone (mg/kg)	Nitrobenzene (mg/kg)	N-Nitroso-di-n-propylamine (mg/kg)	N-Nitroso-dimethyl-amine (mg/kg)	N-Nitroso-diphenyl-amine (mg/kg)	Pentachloro-phenol (mg/kg)	Phenol (mg/kg)	Pyridine (mg/kg)
TP-8001S	0.5-1.5	2/11/1999	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--	ND(<0.0045)	ND(<0.0045)	ND(<0.0045)	--
TP-9001D	7-8	2/11/1999	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	--	ND(<0.005)	ND(<0.005)	ND(<0.005)	--
TP-9001S	0.5-1.5	2/11/1999	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--	ND(<0.0046)	ND(<0.0046)	ND(<0.0046)	--
TP-10002D	4.5-5.5	2/11/1999	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--	ND(<0.0051)	ND(<0.0051)	ND(<0.0051)	--
TP-10002S	0.5-1.5	2/11/1999	ND(<0.0055)	--	ND(<0.0055)	ND(<0.0055)	ND(<0.0055)	--	ND(<0.0055)	0.0091	0.0086	--
TP-5018D	6-7	7/14/1999	ND(<0.098)	--	ND(<0.098)	ND(<0.098)	ND(<0.098)	--	ND(<0.098)	ND(<0.098)	ND(<0.098)	--
TP-5018S	1-2	7/14/1999	ND(<0.11)	--	ND(<0.11)	ND(<0.11)	ND(<0.11)	--	ND(<0.11)	ND(<0.11)	ND(<0.11)	--
EPI-SP-3005	2	6/8/2001	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-3006	2	6/8/2001	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-3007	2	6/8/2001	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-7006	2	6/13/2001	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-7007	2	6/13/2001	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-8002	2	6/13/2001	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.1)	ND(<0.1)
EPI-SP-8003	2	6/13/2001	ND(<0.5)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.5)	ND(<0.1)	ND(<0.1)
MTCA Method A Soil Cleanup Levels[(a)]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**
MTCA Soil Cleanup Levels (Equation 747-1)[(b)]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

NC – Indicates that cleanup levels were not calculated for this compound

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

mg/kg - milligrams per kilogram

J – Estimated concentration

Table 3-8
VOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	1,1,1,2-Tetrachloro-ethane (µg/kg)	1,1,1-Trichloro-ethane (µg/kg)	1,1,2,2-Tetrachloro-ethane (µg/kg)	1,1,2-Trichloro-ethane (µg/kg)	1,1-Dichloro-ethane (µg/kg)	1,1-Dichloro-ethene (µg/kg)	1,2,3-Trichloro-propane (µg/kg)	1,2,4-Trichloro-benzene (µg/kg)	1,2-Dibromo-ethane (µg/kg)	1,2-Dichloro-benzene (µg/kg)	1,2-Dichloro-propane (µg/kg)	1,4-Dichloro-benzene (µg/kg)	2-Butanone (µg/kg)	2-Hexanone (µg/kg)	4-Methyl-2-pentanone (µg/kg)	Acetone (µg/kg)	Acrolein (µg/kg)
SP-2003D	5.5-7	2/15/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-2003S	1.5-3	2/15/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-5008D	9.5-11	2/15/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-5009S	1-2.5	2/15/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-5010D	7.5-9	2/15/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-5012S	0.5-2	2/15/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-6005D	7.5-8.5	2/15/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-6005S	0.5-1.5	2/15/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-1003D	5.5-7	2/10/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	ND(<50)
TP-1003D (DUP)	5.5-7	2/10/1999	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<48)	ND(<48)	ND(<48)	ND(<48)	ND(<48)
TP-1003S	1.5-3	2/10/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<51)	ND(<51)	ND(<51)	ND(<51)	ND(<51)
TP-4001D	6.5-8	2/10/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<51)	ND(<51)	ND(<51)	ND(<51)	ND(<51)
TP-4001S	0.5-2	2/10/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<51)	ND(<51)	ND(<51)	ND(<51)	ND(<51)
TP-5003D	5.5-7	2/10/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<55)	ND(<55)	ND(<55)	ND(<55)	ND(<55)
TP-5003S	1.5-3	2/10/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<51)	ND(<51)	ND(<51)	ND(<51)	ND(<51)
TP-5007D	4.5-6	2/11/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<50)	ND(<50)	ND(<50)	ND(<50)	ND(<50)
TP-5007S	0.5-2	2/11/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<51)	ND(<51)	ND(<51)	ND(<51)	ND(<51)
TP-5016S	0.5-1.5	2/11/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-5017D	6-7	2/11/1999	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<66)	ND(<66)	ND(<66)	7.7 J	ND(<66)
TP-5017S	0.5-1.5	2/11/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<52)	ND(<52)	ND(<52)	ND(<52)	ND(<52)
TP-6001D	4.5-5.5	2/12/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<54)	ND(<54)	ND(<54)	ND(<54)	ND(<54)
TP-6001S	0.5-1.5	2/12/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-6001S	0.5-1.5	2/12/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<51)	ND(<51)	ND(<51)	ND(<51)	ND(<51)
TP-6003D	4.5-5.5	2/12/1999	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<59)	ND(<59)	ND(<59)	ND(<59)	ND(<59)
TP-6003D (DUP)	4.5-5.5	2/12/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<55)	ND(<55)	ND(<55)	ND(<55)	ND(<55)
TP-6003S	0.5-1.5	2/12/1999	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<47)	ND(<47)	ND(<47)	ND(<47)	ND(<47)
TP-7002D	4.5-5.5	2/12/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<51)	ND(<51)	ND(<51)	ND(<51)	ND(<51)
TP-7002S	0.5-1.5	2/11/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<55)	ND(<55)	ND(<55)	ND(<55)	ND(<55)
TP-8001D	5.5-6.5	2/11/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<54)	ND(<54)	ND(<54)	ND(<54)	ND(<54)
TP-8001S	0.5-1.5	2/11/1999	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<48)	ND(<48)	ND(<48)	ND(<48)	ND(<48)
TP-9001D	7-8	2/11/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<55)	ND(<55)	ND(<55)	ND(<55)	ND(<55)
TP-9001S	0.5-1.5	2/11/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<51)	ND(<51)	ND(<51)	ND(<51)	ND(<51)
TP-10002D	4.5-5.5	2/11/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<57)	ND(<57)	ND(<57)	ND(<57)	ND(<57)
TP-10002S	0.5-1.5	2/11/1999	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<65)	ND(<65)	ND(<65)	ND(<65)	ND(<65)
MTCA Method A Soil Cleanup Levels[a]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Table 3-8
VOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Acrylonitrile (µg/kg)	Benzene (µg/kg)	Bromo-dichloro-methane (µg/kg)	Bromoform (µg/kg)	Bromo-methane (µg/kg)	Carbon Disulfide (µg/kg)	Carbon Tetra-chloride (µg/kg)	Chloro-benzene (µg/kg)	Chloro-ethane (µg/kg)	Chloroform (µg/kg)	Chloro-methane (µg/kg)	cis-1,2-Dichloro-ethene (µg/kg)	cis-1,2-Dichloro-propene (µg/kg)	Dibromo-chloro-methane (µg/kg)	Ethyl-benzene (µg/kg)	Hexachloro-butadiene (µg/kg)	m,p-Xylenes (µg/kg)
SP-2003D	5.5-7	2/15/1999	--	ND(<680)	--	--	--	--	--	--	--	--	--	--	--	--	ND(<680)	--	ND(<1,400)
SP-2003S	1.5-3	2/15/1999	--	ND(<430)	--	--	--	--	--	--	--	--	--	--	--	--	ND(<430)	--	ND(<860)
SP-5008D	9.5-11	2/15/1999	--	ND(<830)	--	--	--	--	--	--	--	--	--	--	--	--	ND(<830)	--	ND(<1,700)
SP-5009S	1-2.5	2/15/1999	--	ND(<560)	--	--	--	--	--	--	--	--	--	--	--	--	ND(<560)	--	ND(<1,100)
SP-5010D	7.5-9	2/15/1999	--	ND(<570)	--	--	--	--	--	--	--	--	--	--	--	--	ND(<570)	--	ND(<1,100)
SP-5012S	0.5-2	2/15/1999	--	ND(<48)	--	--	--	--	--	--	--	--	--	--	--	--	ND(<48)	--	3.4 J
SP-6005D	7.5-8.5	2/15/1999	--	ND(<400)	--	--	--	--	--	--	--	--	--	--	--	--	ND(<400)	--	ND(<800)
SP-6005S	0.5-1.5	2/15/1999	--	ND(<450)	--	--	--	--	--	--	--	--	--	--	--	--	ND(<450)	--	ND(<900)
TP-1003D	5.5-7	2/10/1999	ND(<50)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<20)
TP-1003D (DUP)	5.5-7	2/10/1999	ND(<48)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<19)
TP-1003S	1.5-3	2/10/1999	ND(<51)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<20)
TP-4001D	6.5-8	2/10/1999	ND(<51)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<20)
TP-4001S	0.5-2	2/10/1999	ND(<51)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<20)
TP-5003D	5.5-7	2/10/1999	ND(<55)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<22)
TP-5003S	1.5-3	2/10/1999	ND(<51)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<20)
TP-5007D	4.5-6	2/11/1999	ND(<50)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<20)
TP-5007S	0.5-2	2/11/1999	ND(<51)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<20)
TP-5016S	0.5-1.5	2/11/1999	--	ND(<470)	--	--	--	--	--	--	--	--	--	--	--	--	ND(<470)	--	ND(<950)
TP-5017D	6-7	2/11/1999	ND(<66)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<27)
TP-5017S	0.5-1.5	2/11/1999	ND(<52)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<21)
TP-6001D	4.5-5.5	2/12/1999	ND(<54)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<21)
TP-6001S	0.5-1.5	2/12/1999	--	ND(<400)	--	--	--	--	--	--	--	--	--	--	--	--	ND(<400)	--	ND(<800)
TP-6001S	0.5-1.5	2/12/1999	ND(<51)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<21)
TP-6003D	4.5-5.5	2/12/1999	ND(<59)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<24)
TP-6003D (DUP)	4.5-5.5	2/12/1999	ND(<55)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<22)
TP-6003S	0.5-1.5	2/12/1999	ND(<47)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<19)
TP-7002D	4.5-5.5	2/12/1999	ND(<51)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<20)
TP-7002S	0.5-1.5	2/11/1999	ND(<55)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<22)
TP-8001D	5.5-6.5	2/11/1999	ND(<54)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<22)
TP-8001S	0.5-1.5	2/11/1999	ND(<48)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<19)
TP-9001D	7-8	2/11/1999	ND(<55)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<22)
TP-9001S	0.5-1.5	2/11/1999	ND(<51)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<21)
TP-10002D	4.5-5.5	2/11/1999	ND(<57)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<23)
TP-10002S	0.5-1.5	2/11/1999	ND(<65)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<26)
MTCA Method A Soil Cleanup Levels[a]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Table 3-8
VOCs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Methylene Chloride (µg/kg)	Naph-thalene (µg/kg)	o-Xylene (µg/kg)	o-Chloro-toluene (µg/kg)	Styrene (µg/kg)	Tetrachloro-ethene (µg/kg)	Toluene (µg/kg)	trans-1,2-Dichloro-ethene (µg/kg)	trans-1,2-Dichloro-propene (µg/kg)	Trichloro-ethene (µg/kg)	Trichloro-fluoro-methane (µg/kg)	Vinyl Acetate (µg/kg)	Vinyl Chloride (µg/kg)
SP-2003D	5.5-7	2/15/1999	--	--	ND(<680)	--	--	--	ND(<680)	--	--	--	--	--	--
SP-2003S	1.5-3	2/15/1999	--	--	ND(<430)	--	--	--	ND(<430)	--	--	--	--	--	--
SP-5008D	9.5-11	2/15/1999	--	--	ND(<830)	--	--	--	ND(<830)	--	--	--	--	--	--
SP-5009S	1-2.5	2/15/1999	--	--	ND(<560)	--	--	--	ND(<560)	--	--	--	--	--	--
SP-5010D	7.5-9	2/15/1999	--	--	ND(<570)	--	--	--	ND(<570)	--	--	--	--	--	--
SP-5012S	0.5-2	2/15/1999	--	--	ND(<48)	--	--	--	ND(<48)	--	--	--	--	--	--
SP-6005D	7.5-8.5	2/15/1999	--	--	ND(<400)	--	--	--	ND(<400)	--	--	--	--	--	--
SP-6005S	0.5-1.5	2/15/1999	--	--	ND(<450)	--	--	--	ND(<450)	--	--	--	--	--	--
TP-1003D	5.5-7	2/10/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-1003D (DUP)	5.5-7	2/10/1999	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)
TP-1003S	1.5-3	2/10/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-4001D	6.5-8	2/10/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-4001S	0.5-2	2/10/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-5003D	5.5-7	2/10/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)
TP-5003S	1.5-3	2/10/1999	1.7 J	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-5007D	4.5-6	2/11/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-5007S	0.5-2	2/11/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-5016S	0.5-1.5	2/11/1999	--	--	ND(<470)	--	--	--	ND(<470)	--	--	--	--	--	--
TP-5017D	6-7	2/11/1999	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)
TP-5017S	0.5-1.5	2/11/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-6001D	4.5-5.5	2/12/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)
TP-6001S	0.5-1.5	2/12/1999	--	--	ND(<400)	--	--	--	ND(<400)	--	--	--	--	--	--
TP-6001S	0.5-1.5	2/12/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-6003D	4.5-5.5	2/12/1999	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)	ND(<12)
TP-6003D (DUP)	4.5-5.5	2/12/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)
TP-6003S	0.5-1.5	2/12/1999	N(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)	ND(<9.5)
TP-7002D	4.5-5.5	2/12/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-7002S	0.5-1.5	2/11/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)
TP-8001D	5.5-6.5	2/11/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)
TP-8001S	0.5-1.5	2/11/1999	1.6 J	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)	ND(<9.6)
TP-9001D	7-8	2/11/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)
TP-9001S	0.5-1.5	2/11/1999	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
TP-10002D	4.5-5.5	2/11/1999	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)	ND(<11)
TP-10002S	0.5-1.5	2/11/1999	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)	ND(<13)
MTCA Method A Soil Cleanup Levels[a]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Notes:
(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)
(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)
NC – Indicates that cleanup levels were not calculated for this compound
ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample
µg/kg – micrograms/kilogram
J – Estimated concentration

Table 3-9
PCBs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Aroclor 1016 (mg/kg)	Aroclor 1221 (mg/kg)	Aroclor 1232 (mg/kg)	Aroclor 1242 (mg/kg)	Aroclor 1248 (mg/kg)	Aroclor 1254 (mg/kg)	Aroclor 1260 (mg/kg)
TP-1003D	5.5-7	2/10/1999	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)
TP-1003D (DUP)	5.5-7	2/10/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-1003S	1.5-3	2/10/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-1005D	6-7.5	2/10/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-1005S	0.5-2	2/10/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-3001D	5.5-7	2/12/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-3001S	0.5-2	2/12/1999	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)
TP-4001D	6.5-8	2/10/1999	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)
TP-4001S	0.5-2	2/10/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-5001D	4.5-6	2/10/1999	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)
TP-5001S	0.5-2	2/10/1999	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)
TP-5002D	6.5-8	2/10/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-5002S	0.5-2	2/10/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)
TP-5003D	5.5-7	2/10/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-5003S	1.5-3	2/10/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-5004D	6-7.5	2/10/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)
TP-5004S	0.5-2	2/10/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)
TP-5007D	4.5-6	2/11/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-5007S	0.5-2	2/11/1999	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)	ND(<0.0099)
TP-5017D	6-7	2/11/1999	ND(<0.014)	ND(<0.014)	ND(<0.014)	ND(<0.014)	ND(<0.014)	ND(<0.014)	ND(<0.014)
TP-5017S	0.5-1.5	2/11/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-6001D	4.5-5.5	2/12/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)
TP-6001S	0.5-1.5	2/12/1999	ND(<0.0098)	ND(<0.0098)	ND(<0.0098)	ND(<0.0098)	ND(<0.0098)	ND(<0.0098)	***0.02***
TP-6003D	4.5-5.5	2/12/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)

Table 3-9
PCBs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Aroclor 1016 (mg/kg)	Aroclor 1221 (mg/kg)	Aroclor 1232 (mg/kg)	Aroclor 1242 (mg/kg)	Aroclor 1248 (mg/kg)	Aroclor 1254 (mg/kg)	Aroclor 1260 (mg/kg)
TP-6003D (DUP)	4.5-5.5	2/12/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-6003S	0.5-1.5	2/12/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-6004D	4.5-5.5	2/12/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-6004S	0.5-1.5	2/12/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-7002D	4.5-5.5	2/12/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)
TP-7002S	0.5-1.5	2/12/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-7004D	4.5-5.5	2/11/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)
TP-7004S	0.5-1.5	2/11/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-8001D	5.5-6.5	2/11/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)
TP-8001S	0.5-1.5	2/11/1999	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)	ND(<0.01)
TP-9001D	7-8	2/11/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)
TP-9001S	0.5-1.5	2/11/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)
TP-10002D	4.5-5.5	2/11/1999	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)	ND(<0.011)
TP-10002S	0.5-1.5	2/11/1999	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)	ND(<0.012)	***0.017***
TP-5018D	1-2	7/14/1999	ND(<0.13)	ND(<0.13)	ND(<0.13)	ND(<0.13)	ND(<0.13)	ND(<0.13)	ND(<0.13)
TP-5018S	6-7	7/14/1999	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)	ND(<0.11)
EPI-SP-5020	2.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5021	2.0	6/14/2001	ND(<0.1)	ND<(0.2)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5022	2.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5023	2.0	6/8/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5025	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5025	7.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5026	2.0	6/13/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5027	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)

Table 3-9
PCBs in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Aroclor 1016 (mg/kg)	Aroclor 1221 (mg/kg)	Aroclor 1232 (mg/kg)	Aroclor 1242 (mg/kg)	Aroclor 1248 (mg/kg)	Aroclor 1254 (mg/kg)	Aroclor 1260 (mg/kg)
EPI-SP-5030	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5032	2.0	6/14/2001	ND(<0.1)	ND(<0.3)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5034	2.0	6/14/2001	ND(<0.1)	ND(<0.4)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5035	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5036	2.0	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5037	2.0	6/15/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5041	2.0	6/15/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
MTCA Method A Soil Cleanup Levels[a]			**1[c]**	**1[c]**	**1[c]**	**1[c]**	**1[c]**	**1[c]**	**1[c]**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**0.0028[c]**	**0.0028[c]**	**0.0028[c]**	**0.0028[c]**	**0.0028[c]**	**0.0028[c]**	**0.0028[c]**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

(c) Allowable concentrations for total PCBs in a mixture

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

mg/kg – milligrams/kilogram

Table 3-10
Metals in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Antimony (mg/kg)	Arsenic (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Zinc (mg/kg)
TP-1003D	5.5-7	2/10/1999	ND(<0.59)	0.81	0.083 J	0.08 J	11	12	1.8	ND(<0.088)	16	ND(<0.59)	ND(<0.098)	ND(<0.2)	20
TP-1003D (DUP)	5.5-7	2/10/1999	ND(<0.53)	1.1	0.58 J	0.12 J	14	15	2	ND(<0.078)	18	ND(<0.53)	ND(<0.089)	ND(<0.18)	20
TP-1003S	1.5-3	2/10/1999	ND(<0.59)	1.2	0.098 J	0.08 J	16	17	2	ND(<0.089)	20	ND(<0.59)	ND(<0.098)	ND(<0.2)	23
TP-4001D	6.5-8	2/10/1999	ND(<0.57)	1.7	0.085 J	ND(<0.19)	15	7.9	3.1	ND(<0.085)	34	ND(<0.57)	ND(<0.095)	ND(<0.19)	28
TP-4001S	0.5-2	2/10/1999	ND(<0.6)	1.2	0.13 J	ND(<0.2)	17	14	3.3	ND(<0.09)	30	ND(<0.6)	ND(<0.1)	ND(<0.2)	24
TP-5003D	5.5-7	2/10/1999	ND(<0.59)	1.2	0.1 J	ND(<0.2)	15	11	6.9	***0.56***	30	0.35 J	ND(<0.098)	ND(<0.2)	19
TP-5003S	1.5-3	2/10/1999	ND(<0.56)	0.85	0.15 J	ND(<0.19)	17	15	2.3	0.068	27	ND(<0.56)	ND(<0.093)	ND(<0.19)	22
TP-5007D	4.5-6	2/11/1999	0.36 J	1.5	0.15	ND(<0.2)	***20***	19	2.8	ND(<0.082)	39	0.61	ND(<0.1)	ND(<0.1)	23
TP-5007S	0.5-2	2/11/1999	0.18 J	1.1	0.11	ND(<0.19)	15	9.2	2.4	ND(<0.097)	28	ND(<0.56)	ND(<0.094)	ND(<0.094)	18
TP-5017D	6-7	2/11/1999	5.3	4.3	0.14	0.17 J	***25***	110	110	ND(<0.11)	35	ND(<0.8)	0.3	ND(<0.13)	100
TP-5017S	0.5-1.5	2/11/1999	0.81	2.9	0.32	0.095 J	***31***	24	8.4	ND(<0.096)	84	ND(<0.55)	0.089 J	ND(<0.091)	33
TP-6001D	4.5-5.5	2/12/1999	0.11	0.79	0.1	0.095	15	11	7.1	ND(<0.038)	18	ND(<0.6)	ND(<0.1)	0.081	26
TP-6001S	0.5-1.5	2/12/1999	0.47	1.2	0.086	0.35	15	37	36	0.15	21	ND(<0.55)	ND(<0.091)	ND(<0.091)	44
TP-6003D	4.5-5.5	2/12/1999	0.29	1.4	0.1	0.093	17	17	9.6	0.067	22	ND(<0.63)	ND(<0.11)	ND(<0.11)	43
TP-6003D (DUP)	4.5-5.5	2/12/1999	0.37	1.3	0.089	0.084	16	15	12	0.058	20	ND(<0.56)	ND(<0.094)	ND(<0.094)	45
TP-6003S	0.5-1.5	2/12/1999	0.23	1.9	0.1	0.31	16	19	24	0.14	20	ND(<0.59)	ND(<0.098)	0.069	440
TP-7002D	4.5-5.5	2/12/1999	0.27	1.3	0.084	0.19	17	11	3.8	***0.17***	17	ND(<0.57)	ND(<0.095)	0.18	24
TP-7002S	0.5-1.5	2/12/1999	0.14	1.4	0.1	0.23	14	12	5.7	***0.79***	15	ND(<0.55)	ND(<0.091)	0.15	21
TP-8001D	5.5-6.5	2/11/1999	ND(<0.42)	2.3	ND(<0.1)	0.33	14	7.8	2.3	ND(<0.076)	14	ND(<0.62)	ND(<0.1)	0.22	18
TP-8001S	0.5-1.5	2/11/1999	0.25 J	1	0.12	ND(<0.2)	15	8.6	1.7	ND(<0.083)	29	ND(<0.59)	ND(<0.099)	ND(<0.099)	18
TP-9001D	7-8	2/11/1999	0.2 J	1.5	0.051 J	0.14 J	15	7.4	1.7	ND(<0.091)	17	ND(<0.59)	ND(<0.099)	ND(<0.099)	20
TP-9001S	0.5-1.5	2/11/1999	0.19 J	2	0.061 J	0.2	15	9.9	3.1	***0.17***	16	0.23 J	ND(<0.098)	ND(<0.098)	23
TP-10002D	4.5-5.5	2/11/1999	0.2	1.3	0.12	0.12	15	10	2.7	ND(<0.047)	16	ND(<0.59)	ND(<0.098)	0.16	23
TP-10002S	0.5-1.5	2/11/1999	2.6	1.9	0.14	0.3	***23***	38	74	***0.32***	23	ND(<0.66)	0.096	0.074	100
TP-5018D	6-7	7/14/1999	ND(<1.3)	5.7	ND(<0.63)	ND(<1.3)	***35***	35	72	***0.21***	57	ND(<3.8)	ND(<0.63)	ND(<0.63)	170
TP-5018S	1-2	7/14/1999	ND(<0.96)	3.8	ND(<0.48)	ND(<0.96)	***20***	46	32	***0.18***	34	ND(<2.9)	ND(<0.48)	ND(<0.48)	160
EPI-SP-1007	2.0	6/7/2001	ND(<18)	***22***	ND(<0.8)	ND(<2)	***28***	22	ND(<15)	ND(<0.02)	36	ND(<13)	ND(<2)	ND(<50)	41
EPI-SP-1007	7.0	6/7/2001	--	11	--	--	***30***	--	ND(<8)	--	--	--	--	--	--
EPI-SP-1008	2.0	6/7/2001	ND(<14)	***21***	ND(<0.6)	ND(<1)	***20***	44	140	ND(<.02)	24	ND(<10)	ND(<2)	ND(<40)	96
EPI-SP-1008	7.0	6/7/2001	--	14	--	--	***32***	--	12	--	--	--	--	--	--
EPI-SP-3005	2.0	6/8/2001	ND(<59)	ND(<26)	ND(<3)	ND(<5)	12	150	***870***	ND(<0.02)	ND(<17)	ND(<42)	ND(<6)	ND(<170)	140
EPI-SP-3005	7.0	6/8/2001	--	ND(<8)	--	--	***28***	--	27	--	--	--	--	--	--
EPI-SP-3006	2.0	6/8/2001	ND(<110)	ND(45)	ND(<5)	ND(<8)	ND(<15)	250	***360***	0.03	ND(<30)	ND(<74)	ND(<11)	ND(<300)	170
EPI-SP-3006	7.0	6/8/2001	--	5.9	--	--	4.9	--	42	--	--	--	--	--	--
EPI-SP-3007	2.0	6/8/2001	ND(<16)	***25***	ND(<0.7)	ND(<1)	***51***	47	ND(<13)	ND(<0.02)	76	ND(<11)	ND(<2)	ND(<43)	86
EPI-SP-3007	7.0	6/8/2001	--	ND(<46)	--	--	ND(<15)	--	120	--	--	--	--	--	--
EPI-SP-5021	2.0	6/14/2001	ND(<14)	ND(<6)	ND(<0.6)	ND(<1)	***31***	260	***1,700***	***0.57***	35	ND(<10)	ND(<2)	ND(<40)	330
EPI-SP-5021	7.0	6/14/2001	--	ND(<8)	--	--	***26***	--	ND(<16)	--	--	--	--	--	--
EPI-SP-5025	2.0	6/13/2001	ND(<16)	ND(<7)	ND(0.7)	ND(<1)	***23***	12	ND(<14)	0.02	44	ND(<11)	ND(<2)	ND(<45)	38
EPI-SP-5025	7.0	6/13/2001	--	ND(<8)	--	--	16	--	30	--	--	--	--	--	--
EPI-SP-5026	2.0	6/13/2001	ND(<7)	5.5	ND(<0.3)	ND(<0.5)	***25***	29	ND(<6)	0.02	40	ND(<5)	ND(<0.7)	ND(<20)	38

Table 3-10
Metals in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	Antimony (mg/kg)	Arsenic (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Zinc (mg/kg)
EPI-SP-5026	7.0	6/13/2001	--	13	--	--	***46***	--	33	--	--	--	--	--	--
EPI-SP-5029	2.0	6/14/2001	ND(<18)	ND(<8)	ND(<0.8)	ND(<2)	***38***	94	84	0.04	56	ND(<13)	ND(<2)	ND(<50)	130
EPI-SP-5030	2.0	6/14/2001	ND(<17)	ND(<7)	ND(<0.7)	ND(<2)	***23***	74	43	0.02	44	ND(<12)	ND(<2)	ND(<47)	730
EPI-SP-5030	7.0	6/14/2001	--	ND(<9)	--	--	17	--	46	--	--	--	--	--	--
EPI-SP-5037	2.0	6/15/2007	ND(<18)	18	ND(<0.8)	ND(<2)	18	20	ND(<16)	0.02	30	ND(<13)	MD(<2)	ND(<51)	190
EPI-SP-5038	2.0	6/15/2007	ND(<9)	10	ND(<0.4)	ND(<0.7)	***26***	20	35	0.05	44	ND(<7)	ND(<0.9)	ND(<26)	63
EPI-SP-7005	2.0	6/13/2007	ND(<8)	5	ND(<0.3)	ND(<0.6)	11	ND(<0.7)	ND(<7)	***0.61***	12	ND(<6)	ND(<0.8)	ND(<21)	31
EPI-SP-8002	2.0	6/13/2007	ND(<8)	5.1	ND(<0.3)	ND(<0.5)	14	ND(<0.7)	ND(<7)	ND(<0.02)	17	ND(<6)	ND(<8)	ND(<21)	27
EPI-SP-8003	2.0	6/13/2007	ND(<7)	7.1	ND(<0.3)	ND(<0.5)	17	1.2	ND(<6)	ND(<0.02)	20	ND(<5)	ND(<0.7)	ND(<19)	27
MTCA Method A Soil Cleanup Level[a]			**NV**	**20**	**NV**	**2**	**19[c]**	**NV**	**250**	**2**	**NV**	**NV**	**NV**	**NV**	**NV**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**25.8**	**21**	**NV**	**NV**	**NV**	**NV**	**NV**	**0.16**	**6,008**	**NV**	**NV**	**9**	**NV**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

(c) Chromium VI value, Chromium III value is 2,000 mg/kg

NV – Indicates that no value was available for this compound

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

mg/kg – milligrams/kilogram

J – Estimated concentration

Table 3-11
Wood Treatment Compounds in Soil
1999-2001 Investigations

Location	Depth (feet)	Date	2-Mercapto-benzothiazole (mg/kg)	Dicecyldimethyl ammonium chloride (mg/kg)
SP-6005D	7.5-8.5	2/15/1999	ND(<0.2)	--
SP-6005S	0.5-1.5	2/15/1999	0.16 J	--
TP-4001D	6.5-8	2/10/1999	ND(<0.21)	--
TP-4001S	0.5-2	2/10/1999	ND(<0.21)	--
TP-8001D	5.5-6.5	2/11/1999	--	ND(<0.28)
TP-8001S	0.5-1.5	2/11/1999	--	ND(<0.27)
TP-9001D	7-8	2/11/1999	ND(<0.21)	--
TP-9001S	0.5-1.5	2/11/1999	ND(<0.2)	--
MTCA Method A Soil Cleanup Level[a]			**NC**	**NC**
MTCA Soil Cleanup Levels (Equation 747-1)[b]			**NC**	**NC**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

NC – Indicates that cleanup levels were not calculated for this compound

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

mg/kg – milligrams/kilogram

J – Estimated concentration

Table 3-12
Summary of Groundwater Sample Analyses
1999-2001 Investigations

Location	Date	TPH-Gx	TPH-Dx	VOCs	SVOCs	PAHs	PCBs	Metals - Total	Metals-Dissolved	Wood Treatment
Potential Source Area 1 - Diesel Storage/Train House										
MW-2	07/15/99		x	x	x		x		x	x
MW-2 DUP	07/15/99		x	x	x		x		x	x
MW-2	11/16/99								x2	
MW-2	06/15/01								x	
Potential Source Area 2 - Fueling Area										
EPI-SP-2004	6/7/2001		x			x				
Potential Source Area 3 - Wood Treatment										
EPI-SP-3006	6/8/2001		x		x	x		x		
Potential Source Area 5 - Maintenance Area/Boiler/Sawmill										
MW-4	07/15/99		x	x	x		x		x	x
MW-4	11/16/99								x2	
MW-4	06/15/01								x	
MW-5	07/15/99		x	x	x		x		x	x
MW-5	11/16/99									
MW-5	06/14/01								x	
EPI-SP-5020	6/8/2001		x			x	x	x		
EPI-SP-5021	6/14/2001		x				x	x		
EPI-SP-5025	6/13/2001		x			x			x	
EPI-SP-5030	6/14/2001							x		
EPI-SP-5039	6/15/2001		x			x			x	
Potential Source Area 6 - Bull Chain Area										
MW-6	07/15/99		x	x	x		x		x	x
MW-6	11/17/99								x2	
MW-6	06/14/01								x	
Potential Source Area 7 - Wood Treatment 2										
MW-7	07/15/99		x	x	x		x		x	x
MW-7	11/17/99									
MW-7	06/15/01								x	
Potential Source Area 8 - Wood Treatment 3										
EPI-SP-8002	6/13/2001				x	x			x	
Potential Source Area 10 - Locomotive Shed										
MW-8	07/15/99		x	x	x		x		x	x
MW-8	11/17/99									
MW-8	37057								x	
Potential Source Area 11 - Fuel Oil Storage										
MW-3	36356		x	x	x		x		x	x
MW-3	36480								x2	
MW-3	37056								x	
EPI-SP-11001	37049		x			x		x		
Northern Portion of Site										
MW-1	36356		x	x	x		x		x	x
MW-1	36480									
MW-1	37057								x	

Notes:

x2 – Indicates only arsenic was analyzed for this sample

Table 3-13
Petroleum Hydrocarbons in Groundwater
1999-2001 Investigations

Location	Date	Diesel-Range Petroleum Hydrocarbons (µg/L)	Oil-Range Petroleum Hydrocarbons (µg/L)
MW-1	07/15/99	150 J	360 J
MW-2	07/15/99	ND(<250)	270 J
MW-2 DUP	07/15/99	ND(<250)	ND(<490)
MW-3	07/15/99	140 J	370 J
MW-4	07/15/99	220 J	370 J
MW-5	07/15/99	280 J	270 J
MW-6	07/15/99	ND(<250)	360 J
MW-7	07/15/99	120 J	280 J
MW-8	07/15/99	ND(<250)	310 J
EPI-SP-2004	6/11/2001	ND(<500)	
EPI-SP-3006	6/11/2001	ND(<500)	
EPI-SP-5020	6/11/2001	ND(<500)	
EPI-SP-5021	6/14/2001	ND(<500)	
EPI-SP-5025	6/11/2001	ND(<500)	
EPI-SP-5039	6/15/2001	ND(<500)	
EPI-SP-11001	6/11/2001	ND(<500)	
MTCA Method A Ground Water Cleanup Level[(a)]		**500**	**500**
MTCA Marine Water Chronic Criteria[(b)]		**NV**	**NV**
EPA Surface Water Cleanup Levels[(c)]		**NV**	**NV**

Notes:

(a) MTCA Method A Ground Water Cleanup Level (WAC 173-340-900, Table 720-1)

(b) Washington Marine Water Chronic Criteria; WAC 173-201A-040, based on protection of aquatic

(c) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of

NV – Indicates that no value was available for this compound

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

µg/L – micrograms/liter

J – Estimated concentration

Table 3-14
PAHs in Groundwater
1999-2001 Investigations

Location	Date	Non-Carcinogenic PAHs										Carcinogenic PAHs							
		Acenaph-thene (µg/L)	Acenaph-thylene (µg/L)	Anthracene (µg/L)	Benzo(g,h,i)-perylene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	2-methyl-naphthalene (µg/L)	Napthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)	Benzo(a) anthracene (µg/L)	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenz(a, h) anthracene (µg/L)	Indeno(1, 2, 3-cd)pyrene (µg/L)	Total cPAHs (TEF Modified) (µg/L)
MW-1	07/15/99	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
MW-2	07/15/99	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
MW-2 DUP	07/15/99	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND
MW-3	07/15/99	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND(<0.099)	ND
MW-4	07/15/99	0.35	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	0.17	0.42	0.18	0.11	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND
MW-5	07/15/99	2.8	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	0.46	1.2	13	0.23	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND(<0.097)	ND
MW-6	07/15/99	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND
MW-7	07/15/99	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND
MW-8	07/15/99	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
EPI-SP-2004	6/11/2001	0.1	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	--	0.02****	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
EPI-SP-3006	6/11/2001	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND
EPI-SP-5020	6/11/2001	0.04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	--	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
EPI-SP-5025	6/11/2001	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	--	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
EPI-SP-5039	6/15/2001	0.08	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	--	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
EPI-SP-8002	6/11/2001	0.13	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	--	ND(<0.02)	ND(<0.02)	0.04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
EPI-SP-11001	6/11/2001	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	--	ND(<0.02)	ND(<0.02)	0.13	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
TEF[(a)]		0.001	0.001	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.001	0.1	1	0.1	0.1	0.01	0.4	0.1	NV
EPA Surface Water Cleanup Levels[(b)]		**NV**	**NV**	**110,000**	**NV**	**370**	**14,000**	**NV**	**NV**	**NV**	**11,000**	**0.031**	**0.031**	**0.031**	**0.031**	**0.031**	**0.031**	**0.031**	**NV**

Notes:
(a) Total cPAH concentrations modified using the protocol described in WAC 173-340-708(8)(e)(ii)
(b) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of aquatic organisms
NV – Indicates that no value was available for this compound
ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample
TEF – Toxicity Equivalency Factor
µg/L – micrograms/Liter

Table 3-15
SVOCs in Groundwater
1999-2001 Investigations

Location	Date	1,2,4-Trichloro-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	2,4,5-Trichloro-phenol (µg/L)	2,4,6-Trichloro-phenol (µg/L)	2,4-Dichloro-phenol (µg/L)	2,4-Dimethyl-phenol (µg/L)	2,4-Dinitrophenol (µg/L)	2,4-Dinitro-toluene (µg/L)	2,6-Dinitro-toluene (µg/L)	2-Chloro-napththalene (µg/L)	2-Chlorophenol (µg/L)	2-Methyl-phenol (µg/L)
MW-1	07/15/99	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.2)	ND(<0.5)	ND(<0.5)
MW-2	07/15/99	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.2)	ND(<0.51)	ND(<0.51)
MW-2 DUP	07/15/99	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.2)	ND(<0.49)	ND(<0.49)
MW-3	07/15/99	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.2)	ND(<0.5)	ND(<0.5)
MW-4	07/15/99	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)
MW-5	07/15/99	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	0.17 J	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)
MW-6	07/15/99	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)
MW-7	07/15/99	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)
MW-8	07/15/99	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
EPI-SP-3006	6/11/2001	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<10)	ND(<5)	ND(<5)	ND(<2)	ND(<2)	ND(<2)
EPI-SP-8002	6/11/2001	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<10)	ND(<5)	ND(<5)	ND(<2)	ND(<2)	ND(<2)
EPA Surface Water Cleanup Levels[a]		**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Table 3-15
SVOCs in Groundwater
1999-2001 Investigations

Location	Date	2-Nitroaniline (µg/L)	2-Nitrophenol (µg/L)	3-Nitroaniline (µg/L)	4,6-Dinitro-2-methylphenol (µg/L)	4-Bromophenyl phenylether (µg/L)	4-Chloro-3-methylphenol (µg/L)	4-Chlorophenyl phenylether (µg/L)	4-Chloroaniline (µg/L)	4-Nitroaniline (µg/L)	4-Nitrophenol (µg/L)	Bis(2-chloro-ethoxy) methane (µg/L)	Bis(2-chloroethyl) ether (µg/L)	Bis(2-chloroisopropyl) ether (µg/L)	Bis(2-ethylhexyl) phthalate (µg/L)
MW-1	07/15/99	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1)
MW-2	07/15/99	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<1)
MW-2 DUP	07/15/99	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.98)
MW-3	07/15/99	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.99)
MW-4	07/15/99	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.97)
MW-5	07/15/99	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.97)
MW-6	07/15/99	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.96)
MW-7	07/15/99	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.96)
MW-8	07/15/99	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1)
EPI-SP-3006	6/11/2001	ND(<5)	ND(<5)	ND(<5)	ND(<10)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<5)	ND(<10)	ND(<2)	ND(<2)	ND(<2)	4****
EPI-SP-8002	6/11/2001	ND(<5)	ND(<5)	ND(<5)	ND(<10)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<5)	ND(<10)	ND(<2)	ND(<2)	ND(<2)	3****
EPA Surface Water Cleanup Levels[(a)]		**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NV**

Table 3-15
SVOCs in Groundwater
1999-2001 Investigations

Location	Date	Buytl benzyl phthalate (µg/L)	Di-n-butylph-thalate (µg/L)	Di-n-octylph-thalate (µg/L)	Dibenzo-furan (µg/L)	Diethylph-thalate (µg/L)	Dimethyl-phthalate (µg/L)	Hexachloro-benzene (µg/L)	Hexachloro-butadiene (µg/L)	Hexachloro-cyclopen-tadiene (µg/L)	Hexachloro-ethane (µg/L)	Isophorone (µg/L)	N-Nitroso-diphenyl-amine (µg/L)	Nitrobenzene (µg/L)	Pentachloro-phenol (µg/L)	Phenol (µg/L)
MW-1	07/15/99	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
MW-2	07/15/99	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)	ND(<0.51)
MW-2 DUP	07/15/99	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)
MW-3	07/15/99	ND(<0.5)	0.17 J	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
MW-4	07/15/99	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)
MW-5	07/15/99	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)	ND(<0.49)
MW-6	07/15/99	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)
MW-7	07/15/99	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)	ND(<0.48)
MW-8	07/15/99	ND(<0.5)	ND(<5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
EPI-SP-3006	6/11/2001	ND(<2)	6****	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<10)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<10)	ND(<2)
EPI-SP-8002	6/11/2001	ND(<2)	5****	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<10)	ND(<2)	ND(<2)	ND(<2)	ND(<2)	ND(<10)	ND(<2)
EPA Surface Water Cleanup Levels[(a)]		**NC**	**NV**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Notes:
(a) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of aquatic organisms
NC – Indicates that cleanup levels were not calculated for this compound
ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample
NV – Indicates that no value was available for this compound
µg/L – micrograms/Liter
**** – Result may be due to laboratory contamination
J – Estimated concentration

Table 3-16
VOCs in Groundwater
1999-2001 Investigations

Location	Date	1,1,1-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1-Dichloro-ethane (µg/L)	1,2,3-Trichloro-propane (µg/L)	1,2,4-Trichloro-benzene (µg/L)	1,2-Dibromo-ethane (µg/L)
MW-1	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-2	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-2 DUP	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-3	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-4	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-5	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	0.095 J	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-6	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-7	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-8	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
EPA Surface Water Cleanup Levels[(a)]		**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Table 3-16
VOCs in Groundwater
1999-2001 Investigations

Location	Date	1,2-Dichloro-benzene (µg/L)	1,2-Dichloro-ethane (total) (µg/L)	1,2-Dichloro-propane (µg/L)	1,4-Dichloro-benzene (µg/L)	Benzene (µg/L)	Bromo-dichloro-methane (µg/L)	Bromoform (µg/L)
MW-1	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-2	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-2 DUP	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-3	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-4	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-5	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-6	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-7	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-8	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
EPA Surface Water Cleanup Levels[(a)]		**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Table 3-16
VOCs in Groundwater
1999-2001 Investigations

Location	Date	Bromo-methane (µg/L)	Carbon Tetra-chloride (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloroform (µg/L)	Chloro-methane (µg/L)	cis-1,2-Dichloro-ethene (µg/L)
MW-1	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	0.068 J	ND(<0.4)	ND(<0.4)
MW-2	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-2 DUP	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-3	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-4	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-5	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-6	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-7	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-8	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
EPA Surface Water Cleanup Levels[a]		**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Table 3-16
VOCs in Groundwater
1999-2001 Investigations

Location	Date	cis-1,3-Dichloro-propene (µg/L)	Dibromo-chloro-methane (µg/L)	Ethylbenzene (µg/L)	Hexachloro-butadiene (µg/L)	m,p-Xylenes (µg/L)	Methylene Chloride (µg/L)	Naphthalene (µg/L)
MW-1	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-2	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-2 DUP	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-3	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-4	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	0.14 J
MW-5	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	8.4 D
MW-6	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-7	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-8	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
EPA Surface Water Cleanup Levels[a]		**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NV**

Table 3-16
VOCs in Groundwater
1999-2001 Investigations

Location	Date	o-Xylene (µg/L)	Styrene (µg/L)	Toluene (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	trans-1,3-Dichloro-propene (µg/L)	Trichloro-fluoro-methane (µg/L)	Vinyl Chloride (µg/L)
MW-1	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-2	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-2 DUP	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-3	07/15/99	ND(<0.4)	ND(<0.4)	0.11 J	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-4	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-5	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-6	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-7	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
MW-8	07/15/99	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)	ND(<0.4)
EPA Surface Water Cleanup Levels[(a)]		**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Notes:

(a) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of aquatic organisms

NC – Indicates that cleanup levels were not calculated for this compound

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

µg/L – micrograms/Liter

Table 3-17
PCBs in Groundwater
1999-2001 Investigations

Location	Date	Aroclor 1016 (µg/L)	Aroclor 1221 (µg/L)	Arochlor 1232 (µg/L)	Arochlor 1242 (µg/L)	Arochlor 1248 (µg/L)	Arochlor 1254 (µg/L)	Arochlor 1260 (µg/L)
MW-1	07/15/99	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)
MW-2	07/15/99	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
MW-2 DUP	07/15/99	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)
MW-3	07/15/99	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
MW-4	07/15/99	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)
MW-5	07/15/99	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
MW-6	07/15/99	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)	ND(<0.098)
MW-7	07/15/99	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)	ND(<0.096)
MW-8	07/15/99	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5020	6/11/2001	ND(<0.1)	ND<1	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
EPI-SP-5021	6/14/2001	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)
MTCA Method A Ground Water Cleanup Levels[(b)]		**1[(a)]**	**1[(a)]**	**1[(a)]**	**1[(a)]**	**1[(a)]**	**1[(a)]**	**1[(a)]**
MTCA Marine Water Chronic Criteria[(c)]		**0.03[(a)]**	**0.03[(a)]**	**0.03[(a)]**	**0.03[(a)]**	**0.03[(a)]**	**0.03[(a)]**	**0.03[(a)]**
EPA Surface Water Cleanup Levels[(d)]		**0.00017[(a)]**	**0.00017[(a)]**	**0.00017[(a)]**	**0.00017[(a)]**	**0.00017[(a)]**	**0.00017[(a)]**	**0.00017[(a)]**

Notes:

(a) Allowable concentrations for total PCBs in a mixture

(b) MTCA Method A Ground Water Cleanup Level (WAC 173-340-900, Table 720-1)

(c) Washington Marine Water Chronic Criteria; WAC 173-201A-040, based on protection of aquatic organisms

(d) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of aquatic organisms

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

µg/L – micrograms/Liter

Table 3-18
Metals in Groundwater
1999-2001 Investigations

Location	Date	Antimony		Arsenic		Beryllium		Cadmium		Chromium		Copper		Lead	
		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
MW-1	07/15/99	--	ND(<1)	--	ND(<1)	--	ND(<0.5)	--	ND(<1)	--	ND(<1)	--	ND(<1)	--	ND(<1)
	06/15/01	--	ND(<70)	--	ND(<5)	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)
MW-2	07/15/99	--	ND(<1)	--	***87***	--	ND(<0.5)	--	ND(<1)	--	27	--	***5.1***	--	ND(<1)
	11/16/99	--	--	--	***31***	--	--	--	--	--	--	--	--	--	--
	06/15/01	--	ND(<140)	--	ND(<5)	--	ND(<6)	--	ND(<10)	--	ND(<20)	--	ND(<12)	--	ND(<4)
MW-2 DUP	07/15/99	--	ND(<1)	--	***92***	--	ND(<0.5)	--	ND(<1)	--	22	--	***5.5***	--	ND(<1)
	11/16/99	--	--	--	***39***	--	--	--	--	--	--	--	--	--	--
MW-3	07/15/99	--	ND(<1)	--	***3.3***	--	ND(<0.5)	--	ND(<1)	--	ND(<1)	--	ND(<1)	--	ND(<1)
	11/16/99	--	--	--	***3.24***	--	--	--	--	--	--	--	--	--	--
	06/14/01	--	ND(<70)	--	ND(<5)	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)
MW-4	07/15/99	--	ND(<1)	--	***1.6***	--	ND(<0.5)	--	ND(<1)	--	12	--	ND(<1)	--	ND(<1)
	11/16/99	--	--	--	***0.977***	--	--	--	--	--	--	--	--	--	--
	06/15/01	--	ND(<70)	--	ND(<5)	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)
MW-5	07/15/99	--	ND(<1)	--	***1.4***	--	ND(<0.5)	--	ND(<1)	--	8.4	--	ND(<1)	--	ND(<1)
	06/14/01	--	ND(<70)	--	ND(<5)	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)
MW-6	07/15/99	--	ND(<1)	--	***5.6***	--	ND(<0.5)	--	ND(<1)	--	ND(<1)	--	ND(<1)	--	ND(<1)
	11/17/99	--	--	--	***5.74***	--	--	--	--	--	--	--	--	--	--
	06/14/01	--	ND(<70)	--	***5***	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)
MW-7	07/15/99	--	ND(<1)	--	***1.1***	--	ND(<0.5)	--	ND(<1)	--	ND(<1)	--	ND(<1)	--	ND(<1)
	06/15/01	--	ND(<70)	--	***13***	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)
MW-8	07/15/99	--	ND(<1)	--	***6.9***	--	ND(<0.5)	--	ND(<1)	--	ND(<1)	--	ND(<1)	--	ND(<1)
	06/15/01	--	ND(<70)	--	***16***	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)
EPI-SP-3006	6/11/2001	ND(<60)	--	***21***	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)	--
EPI-SP-5020	6/11/2001	ND(<60)	--	***6***	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)	--
EPI-SP-5021	6/14/2001	ND(<70)	--	***14***	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)	--
EPI-SP-5025	6/11/2001	ND(<140)	--	ND(<5)	--	ND(<6)	--	ND(<10)	--	30	--	ND(<12)	--	ND(<4)	--
EPI-SP-5030	6/14/2001	ND(<70)	--	***23***	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)	--
EPI-SP-5039	6/15/2001	ND(<70)	--	***21***	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)	--
EPI-SP-8002	6/11/2001	ND(<70)	--	***10***	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)	--
EPI-SP-11001	6/11/2001	ND(<60)	--	ND(<5)	--	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<4)	--
MTCA Marine Water Chronic Criteria[a]		**NV**		**36**		**NV**		**9.3**		**50**		**3.1**		**8.1**	
EPA Surface Water Cleanup Levels[b]		**4,300**		**0.14**		**NV**		**NV**		**NV**		**NV**		**NV**	

Table 3-18
Metals in Groundwater
1999-2001 Investigations

Location	Date	Mercury		Nickel		Selenium		Silver		Thallium		Zinc	
		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
MW-1	07/15/99	--	ND(<0.2)	--	2.2	--	ND(<10)	--	ND(<0.5)	--	ND(<0.5)	--	40
	06/15/01	--	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	ND(<7)
MW-2	07/15/99	--	ND(<0.2)	--	***23***	--	ND(<10)	--	ND(<0.5)	--	ND(<0.5)	--	22
	11/16/99	--	--	--	--	--	--	--	--	--	--	--	--
	06/15/01	--	ND(<0.2)	--	ND(<40)	--	ND(<100)	--	ND(<14)	--	ND(<5)	--	ND(<14)
MW-2 DUP	07/15/99	--	ND(<0.2)	--	***24***	--	ND(<10)	--	ND(<0.5)	--	ND(<0.5)	--	20
	11/16/99	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	07/15/99	--	ND(<0.2)	--	4.7	--	ND(<10)	--	ND(<0.5)	--	ND(<0.5)	--	26
	11/16/99	--	--	--	--	--	--	--	--	--	--	--	--
	06/14/01	--	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	ND(<7)
MW-4	07/15/99	--	ND(<0.2)	--	6.1	--	ND(<10)	--	ND(<0.5)	--	ND(<0.5)	--	4.6
	11/16/99	--	--	--	--	--	--	--	--	--	--	--	--
	06/15/01	--	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	ND(<7)
MW-5	07/15/99	--	***5.3***	--	5.3	--	ND(<10)	--	ND(<0.5)	--	ND(<0.5)	--	6.2
	06/14/01	--	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	ND(<7)
MW-6	07/15/99	--	ND(<0.2)	--	4.6	--	ND(<10)	--	ND(<0.5)	--	ND(<0.5)	--	18
	11/17/99	--	--	--	--	--	--	--	--	--	--	--	--
	06/14/01	--	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	ND(<7)
MW-7	07/15/99	--	ND(<0.2)	--	6.5	--	ND(<10)	--	ND(<0.5)	--	ND(<0.5)	--	14
	06/15/01	--	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	ND(<7)
MW-8	07/15/99	--	ND(<0.2)	--	2.2	--	ND(<10)	--	ND(<0.5)	--	ND(<0.5)	--	13
	06/15/01	--	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	ND(<7)
EPI-SP-3006	6/11/2001	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	ND(<7)	--
EPI-SP-5020	6/11/2001	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	ND(<7)	--
EPI-SP-5021	6/14/2001	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	16	--
EPI-SP-5025	6/11/2001	ND(<0.2)	--	ND(<40)	--	ND(<100)	--	ND(<14)	--	ND(<5)	--	ND(<14)	--
EPI-SP-5030	6/14/2001	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	14	--
EPI-SP-5039	6/15/2001	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	81	--
EPI-SP-8002	6/11/2001	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	ND(<7)	--
EPI-SP-11001	6/11/2001	ND(<0.2)	--	ND(<20)	--	ND(<50)	--	ND(<7)	--	ND(<5)	--	70	--
MTCA Marine Water Chronic Criteria[a]		**0.025**		**8.2**		**71**		**1.9**		**NV**		**81**	
EPA Surface Water Cleanup Levels[b]		**0.15**		**4,600**		**NV**		**NV**		**6.3**		**NV**	

Notes:
(a) Washington Marine Water Chronic Criteria; WAC 173-201A-040, based on protection of aquatic organisms
(b) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of aquatic organisms
NV – Indicates that no value was available for this compound
ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample
Bold and Highlighted - Indicates detected concentration exceeds a MTCA soil cleanup level

Table 3-19
Wood Treatment Compounds in Groundwater
1999-2001 Investigations

Location	Date	2-Mercapto-benzothiazole (µg/L)	Didecyl dimethyl ammonium chloride (µg/L)
MW-1	07/15/99	ND(<1.6)	ND(<4)
MW-2	07/15/99	ND(<1.6)	ND(<4)
MW-2 DUP	07/15/99	ND(<1.6)	ND(<4)
MW-3	07/15/99	ND(<1.6)	ND(<4)
MW-4	07/15/99	ND(<1.6)	ND(<4)
MW-5	07/15/99	ND(<1.6)	ND(<4)
MW-6	07/15/99	ND(<1.6)	ND(<4)
MW-7	07/15/99	ND(<1.6)	ND(<4)
MW-8	07/15/99	ND(<1.6)	ND(<4)
EPA Surface Water Cleanup Levels[(a)]		**NC**	**NC**

Notes:

(a) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of aquatic organisms

NC – Indicates that cleanup levels were not calculated for this compound

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

µg/L – micrograms/liter

Table 4-1
Petroleum Hydrocarbons in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
CL-1S	2.0	ND(<20)	ND(<40)
CL-2S	2.0	ND(<20)	ND(<40)
CL-3S	2.0	ND(<20)	ND(<40)
CL-4B	4.0	ND(<20)	ND(<40)
CL-5B	4.0	ND(<20)	100
CL-6B	4.0	ND(<20)	***3,100***
CL-7S	2.0	ND(<20)	ND(<40)
CL-8B	4.0	ND(<20)	ND(<40)
CL-9S	2.0	ND(<20)	ND(<40)
CL-10B	4.0	ND(<20)	ND(<40)
CL-11B	7.5	ND(<20)	***2,300***
CL-12B	6.0	ND(<20)	***3,200***
CL-13B	7.5	ND(<20)	1,700
CL-14S	3.0	ND(<20)	650
CL-15S	2.0	ND(<20)	ND(<40)
CL-16B	6.0	ND(<20)	ND(<40)
CL-17S	2.0	ND(<20)	ND(<40)
CL-18S	2.0	ND(<20)	ND(<40)
CL-19B	4.0	ND(<20)	ND(<40)
CL-20S	2.0	ND(<20)	ND(<40)
CL-21S	2.0	ND(<20)	390
CL-22B	4.0	ND(<20)	ND(<40)
CL-23S	2.0	ND(<20)	660
CL-24S	2.0	ND(<20)	280
CL-25S	2.0	ND(<20)	ND(<40)
CL-26B	4.0	ND(<20)	ND(<40)
CL-27S	2.0	ND(<20)	ND(<40)
CL-28B	4.0	ND(<20)	ND(<40)
CL-29S	2.0	ND(<20)	ND(<40)
CL-30B	4.0	ND(<20)	ND(<40)
CL-31S	2.0	ND(<20)	58
CL-32B	5.0	ND(<20)	ND(<40)
CL-33S	2.0	ND(<20)	ND(<40)
CL-34B	5.0	ND(<20)	ND(<40)
CL-35S	2.0	ND(<20)	ND(<40)
CL-36B	5.0	ND(<20)	ND(<40)
CL-37S	2.0	ND(<20)	140
CL-38B	5.0	ND(<20)	ND(<40)
CL-39S	2.0	ND(<20)	ND(<40)
CL-40B	5.0	ND(<20)	ND(<40)
CL-41S	2.0	ND(<20)	ND(<40)
CL-42B	5.0	ND(<20)	ND(<40)
CL-43S	2.0	ND(<20)	ND(<40)
CL-44B	5.0	ND(<20)	ND(<40)

Table 4-1
Petroleum Hydrocarbons in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
CL-45S	2.0	ND(<20)	ND(<40)
CL-46B	5.0	ND(<20)	ND(<40)
CL-47S	2.0	ND(<20)	ND(<40)
CL-48B	5.0	ND(<20)	ND(<40)
CL-49S	2.0	ND(<20)	380
CL-50S	2.0	470	510
CL-51S	2.0	ND(<20)	ND(<40)
CL-52B	5.0	ND(<20)	ND(<40)
CL-53B	6.0	ND(<20)	ND(<40)
CL-54S	2.0	ND(<20)	***2,200***
CL-55B	5.0	ND(<20)	380
CL-56S	2.0	ND(<20)	ND(<40)
CL-57B	5.0	ND(<20)	***2,800***
CL-58S	2.0	ND(<20)	ND(<40)
CL-59B	5.0	ND(<20)	ND(<40)
CL-60S	2.0	ND(<20)	ND(<40)
CL-61B	5.0	ND(<20)	ND(<40)
CL-62S	2.0	ND(<20)	ND(<40)
CL-63B	5.0	ND(<20)	ND(<40)
CL-64S	2.0	ND(<20)	ND(<40)
CL-65B	5.0	ND(<20)	ND(<40)
CL-66S	2.0	ND(<20)	250
CL-67S	2.0	ND(<20)	ND(<40)
CL-68B	5.0	250	160
CL-69S	2.0	ND(<20)	ND(<40)
CL-70B	5.0	ND(<20)	580
CL-71S	2.0	ND(<20)	ND(<40)
CL-72B	5.0	ND(<20)	ND(<40)
CL-73S	2.0	ND(<20)	ND(<40)
CL-74B	5.0	ND(<20)	ND(<40)
CL-75S	2.0	ND(<20)	ND(<40)
CL-76B	5.0	ND(<20)	ND(<40)
CL-77S	2.0	ND(<20)	110
CL-78B	5.0	ND(<20)	ND(<40)
CL-79S	2.0	ND(<20)	ND(<40)
CL-80B	5.0	ND(<20)	***5,900***
CL-81S	2.0	ND(<20)	170
CL-82B	5.0	ND(<20)	***7,100***
CL-83S	2.0	ND(<20)	ND(<40)
CL-84B	5.0	ND(<20)	ND(<40)
CL-85S	2.0	ND(<20)	ND(<40)
CL-86B	5.0	ND(<20)	920
CL-87S	2.0	ND(<20)	ND(<40)
CL-88B	5.0	ND(<20)	***5,400***

Table 4-1
Petroleum Hydrocarbons in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
CL-89S	2.0	ND(<20)	ND(<40)
CL-90B	5.0	ND(<20)	280
CL-91S	3.0	ND(<20)	ND(<40)
CL-92B	6.0	***150,000***	
CL-93S	3.0	ND(<20)	ND(<40)
CL-94B	8.0	ND(<20)	ND(<40)
CL-95S	3.0	ND(<20)	ND(<40)
CL-96B	8.0	ND(<20)	ND(<40)
CL-97S	3.0	ND(<20)	ND(<40)
CL-98B	8.0	ND(<20)	ND(<40)
CL-99S	3.0	ND(<20)	ND(<40)
CL-100B	8.0	ND(<20)	ND(<40)
CL-101S	3.0	ND(<20)	230
CL-102B	8.0	ND(<20)	ND(<40)
CL-103S	3.0	ND(<20)	ND(<40)
CL-104B	8.0	ND(<20)	ND(<40)
CL-105S	3.0	ND(<20)	ND(<40)
CL-106B	8.0	ND(<20)	ND(<40)
CL-107S	3.0	ND(<20)	ND(<40)
CL-108B	8.0	ND(<20)	ND(<40)
CL-109S	3.0	ND(<20)	1,300
CL-110B	8.0	ND(<20)	ND(<40)
CL-111S	3.0	ND(<20)	ND(<40)
CL-112B	8.0	ND(<20)	ND(<40)
CL-114S	8.0	ND(<20)	ND(<40)
CL-115S	3.0	ND(<20)	ND(<40)
CL-115B	5.0	ND(<20)	62
CL-115B	8.0	ND(<20)	ND(<40)
CL-115B DUP	8.0	ND(<20)	ND(<40)
CL-116S	3.0	ND(<20)	380
CL-116B	5.0	ND(<20)	61
CL-116B	8.0	ND(<20)	ND(<40)
CL-117S	3.0	ND(<20)	ND(<40)
CL-117B	5.0	***2,500***	1,600
CL-117B	8.0	1,400	***6,200***
CL-118S	3.0	ND(<20)	ND(<40)
CL-118B	5.0	ND(<20)	ND(<40)
CL-118B	8.0	ND(<20)	ND(<40)
CL-119S	3.0	ND(<20)	ND(<40)
CL-119B	5.0	ND(<20)	ND(<40)
CL-119B	8.0	ND(<20)	ND(<40)
CL-120S	3.0	ND(<20)	ND(<40)
CL-121S	3.0	ND(<20)	510
CL-122S	3.0	ND(<20)	ND(<40)

Table 4-1
Petroleum Hydrocarbons in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
CL-123S	3.0	ND(<20)	ND(<40)
CL-124B	5.0	ND(<20)	48
CL-124B	7.0	ND(<20)	ND(<40)
CL-125S	3.0	ND(<20)	ND(<40)
CL-126B	8.0	ND(<20)	150
CL-127S	3.0	ND(<20)	ND(<40)
CL-128S	3.0	ND(<20)	ND(<40)
CL-129B	6.0	ND(<20)	***2,100***
CL-130S	3.0	ND(<20)	ND(<40)
CL-131B	8.0	ND(<20)	66
CL-132S	3.0	ND(<20)	ND(<40)
CL-133B	6.0	ND(<20)	ND(<40)
CL-134S	3.0	ND(<20)	ND(<40)
CL-135B	6.0	ND(<20)	ND(<40)
CL-136S	3.0	ND(<20)	ND(<40)
CL-137B	6.0	ND(<20)	ND(<40)
CL-138S	3.0	ND(<20)	ND(<40)
CL-139B	6.0	ND(<20)	ND(<40)
CL-140S	3.0	ND(<20)	ND(<40)
CL-140S DUP	3.0	ND(<20)	ND(<40)
CL-141B	6.0	ND(<20)	ND(<40)
CL-142S	3.0	ND(<20)	ND(<40)
CL-143B	8.0	ND(<20)	ND(<40)
CL-142B DUP	8.0	ND(<20)	ND(<40)
CL-144S	3.0	ND(<20)	ND(<40)
CL-145B	6.0	ND(<20)	350
CL-146S	3.0	ND(<20)	340
CL-147B	6.0	ND(<20)	ND(<40)
CL-148S	3.0	ND(<20)	ND(<40)
CL-149B	6.0	ND(<20)	ND(<40)
CL-149B DUP	6.0	ND(<20)	ND(<40)
CL-150S	3.0	ND(<20)	470
CL-151B	6.0	ND(<20)	ND(<40)
CL-152S	3.0	ND(<20)	***2,900***
CL-153B	6.0	ND(<20)	ND(<40)
CL-154S	3.0	ND(<20)	ND(<40)
CL-155B	6.0	ND(<20)	ND(<40)
CL-155B DUP	6.0	ND(<20)	ND(<40)
CL-156B	8.0	ND(<20)	***35,000***
CL-157S	3.0	ND(<20)	ND(<40)
CL-158B	8.0	ND(<20)	ND(<40)
CL-159S	3.0	ND(<20)	88
CL-160B	8.0	ND(<20)	ND(<40)
CL-161S	3.0	ND(<20)	ND(<40)

Table 4-1
Petroleum Hydrocarbons in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
CL-161S DUP	3.0	ND(<20)	ND(<40)
CL-162B	8.0	ND(<20)	ND(<40)
CL-163S	3.0	ND(<20)	ND(<40)
CL-163S DUP	3.0	ND(<20)	ND(<40)
CL-164B	8.0	ND(<20)	ND(<40)
CL-165S	3.0	ND(<20)	ND(<40)
CL-166B	8.0	ND(<20)	ND(<40)
CL-167S	3.0	ND(<20)	ND(<40)
CL-168B	8.0	ND(<20)	ND(<40)
CL-169S	3.0	ND(<20)	510
CL-170B	8.0	ND(<20)	ND(<40)
CL-170B DUP	8.0	ND(<20)	ND(<40)
CL-171S	3.0	ND(<20)	ND(<40)
CL-172B	8.0	ND(<20)	ND(<40)
CL-173S	3.0	ND(<20)	ND(<40)
CL-174B	8.0	ND(<20)	ND(<40)
CL-174B DUP	8.0	ND(<20)	ND(<40)
CL-175S	3.0	ND(<20)	210
CL-176B	8.0	ND(<20)	ND(<40)
CL-177S	3.0	ND(<20)	50
CL-178B	8.0	ND(<20)	ND(<40)
CL-179S	3.0	ND(<20)	230
CL-179S DUP	3.0	ND(<20)	230
CL-180B	8.0	ND(<20)	ND(<40)
CL-181S	3.0	***2,700***	***2,400***
CL-182B	8.0	ND(<20)	ND(<40)
CL-183S	3.0	ND(<20)	200
CL-184B	8.0	ND(<20)	ND(<40)
CL-184B DUP	8.0	ND(<20)	ND(<40)
CL-185S	3.0	ND(<20)	200
CL-186B	8.0	ND(<20)	ND(<40)
CL-187B	7.0	ND(<20)	ND(<40)
CL-188B	7.0	ND(<20)	260
CL-189S	5.0	ND(<20)	450
CL-190S	5.0	ND(<20)	490
CL-191S	5.0	ND(<20)	ND(<40)
CL-192S	5.0	ND(<20)	100
CL-193S	5.0	ND(<20)	ND(<40)
CL-194S	5.0	ND(<20)	ND(<40)
CL-195S	3.0	ND(<20)	ND(<40)
CL-196B	7.0	ND(<20)	ND(<40)
CL-197S	3.0	ND(<20)	ND(<40)
CL-198B	7.0	ND(<20)	ND(<40)
CL-199S	3.0	ND(<20)	ND(<40)

Table 4-1
Petroleum Hydrocarbons in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
CL-200B	8.0	ND(<20)	ND(<40)
CL-205S	3.0	ND(<20)	320
CL-206B	8.0	ND(<20)	ND(<40)
CL-207S	3.0	ND(<20)	ND(<40)
CL-207S DUP	3.0	ND(<20)	ND(<40)
CL-208B	8.0	ND(<20)	ND(<40)
CL-209S	3.0	ND(<20)	***8,000***
CL-210B	8.0	ND(<20)	ND(<40)
CL-211S	3.0	ND(<20)	***2,500***
CL-212B	8.0	ND(<20)	ND(<40)
CL-213S	3.0	ND(<20)	ND(<40)
CL-214B	8.0	ND(<20)	ND(<40)
CL-217S	3.0	ND(<20)	ND(<40)
CL-218B	8.0	ND(<20)	ND(<40)
CL-219S	3.0	ND(<20)	ND(<40)
CL-220B	8.0	ND(<20)	ND(<40)
CL-220B DUP	8.0	ND(<20)	ND(<40)
CL-221S	3.0	ND(<20)	ND(<40)
CL-222B	8.0	ND(<20)	ND(<40)
CL-223S	3.0	ND(<20)	140
CL-224B	8.0	ND(<20)	ND(<40)
CL-225S	3.0	ND(<20)	ND(<40)
CL-226B	8.0	ND(<20)	ND(<40)
CL-227S	3.0	ND(<20)	ND(<40)
CL-228B	8.0	ND(<20)	ND(<40)
CL-228B DUP	8.0	ND(<20)	ND(<40)
PS-229S	2.0	ND(<20)	ND(<50)
PS-230B	5.0	ND(<20)	ND(<50)
PS-231S	2.0	ND(<20)	ND(<50)
PS-232B	5.0	ND(<20)	ND(<50)
PS-233S	2.0	ND(<20)	ND(<50)
PS-234B	5.0	ND(<20)	ND(<50)
MTCA Method A Soil Cleanup Level[(a)]		**2,000**	**2,000**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

mg/kg – milligrams/kilogram

Table 4-2
PAHs in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Non-Carcinogenic PAHs by EPA Method 8100											Carcinogenic PAHs by EPA Method 8100							
		Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i)perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
CL-1S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.48	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-2S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-3S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-4B	4.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-5B	4.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.09	0.09	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.02
CL-6B	4.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.46	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	0.2	1.6	ND(<0.1)	1.4	1.4	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.44***
CL-7S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-8B	4.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-9S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-10B	4.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-11B	7.5	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.16	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***3.6***	0.09	0.09	ND(<0.1)	0.06	ND(<0.1)	***3.64***
CL-12B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	1.3	ND(<0.1)	***0.14***	1.1	1.1	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.36***
CL-13B	7.5	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.1	ND(<0.1)	0.255	0.255	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.06
CL-14S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-15S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-16B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-17S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-18S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-19B	4.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-20S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-21S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.3	***0.7***	0.1	0.1	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.75***
CL-22B	4.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-23S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***1.3***	0.37	0.37	ND(<0.1)	ND(<0.1)	ND(<0.1)	***1.37***
CL-24S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	0.22	ND(<0.1)	ND(<0.1)	0.15	0.15	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.03
CL-25S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-26B	4.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-27S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-28B	4.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-29S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	N <0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-30B	4.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-31S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-32B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-33S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-34B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-35S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-36B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-37S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-38B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-39S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-40B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-41S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-42B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-43S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-44B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-45S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-46B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-47S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND

Table 4-2
PAHs in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Non-Carcinogenic PAHs by EPA Method 8100											Carcinogenic PAHs by EPA Method 8100							
		Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i)p erylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
CL-48B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-49S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.195	0.195	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.04
CL-50S	2.0	ND(<0.1)	0.62	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	0.1	ND(<0.1)	ND(<0.1)	0.16	ND(<0.1)	0.085	0.085	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.03
CL-51S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-52B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-53B	6.0	0.23	ND(<0.1)	0.62	ND(<0.1)	0.21	ND(<0.1)	--	--	ND(<0.1)	0.12	0.35	2.1	***6***	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***6.21***
CL-54S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-55B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	3	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	3.6	***3.9***	***3.6***	1.8	1.8	ND(<0.1)	ND(<0.1)	ND(<0.1)	***4.35***
CL-56S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-57B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.15	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	0.35	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-58S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-59B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-60S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-61B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-62S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-63B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-64S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-65B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-66S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.14	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-67S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-68B	5.0	ND(<0.1)	ND(<0.1)	0.9	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	1.1	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-69S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-70B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.53	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.05
CL-71S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-72B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	0.61	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-73S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-74B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-75S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-76B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.37	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	0.35	0.43	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.04
CL-77S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-78B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-79S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-80B	5.0	ND(<0.1)	ND(<0.1)	2.9	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	0.13	0.81	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.08
CL-81S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-82B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.395	0.395	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.08
CL-83S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-84B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-85S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-86B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-87S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-88B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.91	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***1.9***	0.85	0.85	ND(<0.1)	1.8	ND(<0.1)	***2.79***
CL-89S	2.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-90B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-91S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-92S	6.0	5	ND(<2.3)	7.5	ND(<2.3)	ND(<2.3)	11	81	140	***26***	41	11	***2.5***	ND(<2.3)	ND(<2.3)	ND(<2.3)	6.9	ND(<2.3)	ND(<2.3)	***0.32***
CL-93S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-94B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND

Table 4-2
PAHs in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Non-Carcinogenic PAHs by EPA Method 8100											Carcinogenic PAHs by EPA Method 8100							
		Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i)perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
CL-95S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-96B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-97S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-98B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-99S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-100B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-101S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-102B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-103S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-104B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-105S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-106B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-107S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-108B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-109S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.23	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***1.06***	0.22	0.22	ND(<0.1)	ND(<0.1)	ND(<0.1)	***1.10***
CL-110B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-111S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-112B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-114S	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-115S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-115B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-116S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	0.21	ND(<0.1)	ND(<0.1)	***0.28***	0.105	0.105	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.30***
CL-116B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-116B	8.0	ND(<0.1)	0.61	0.58	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-117S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-117B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	7.8	--	--	***7.2***	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	1.6	1.6	0.73	ND(<0.1)	ND(<0.1)	***0.33***
CL-117B	8.0	ND(<0.1)	10	20	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	***8***	ND(<0.1)	ND(<0.1)	ND(<0.1)	***1.2***	ND(<0.1)	ND(<0.1)	4.7	ND(<0.1)	ND(<0.1)	***1.25***
CL-118S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-118B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-118B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-119S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-119B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-119B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-120S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-121S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.1	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-122S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-123S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-124B	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.17***	0.26	0.26	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.22***
CL-124B	7.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-125S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-126B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-127S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-128S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-129B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.75	0.75	ND(<0.1)	1.7	ND(<0.1)	***0.83***
CL-130S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	1	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-131B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-132S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND

Table 4-2
PAHs in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Non-Carcinogenic PAHs by EPA Method 8100											Carcinogenic PAHs by EPA Method 8100							
		Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i)perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
CL-133B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-134S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-135B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-136S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-137B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-138S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-139B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-140S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-140S DUP	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-141B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-142S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-143B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-144S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-145B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***2***	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***2.00***
CL-146S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.21***	0.1	0.1	ND(<0.1)	0.73	ND(<0.1)	***0.52***
CL-147B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-148S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-149B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-149B DUP	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-150S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.48	0.48	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.10***
CL-151B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-152S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.45	0.45	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.09
CL-153B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-154S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-155B	6.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-156B[j]	8.0	0.13	0.05	0.4	0.49	0.83	0.14	0.02	ND(<0.02)	0.03	0.36	2.3	0.7	***0.62***	0.97	0.33	1.1	0.14	0.44	***0.93***
CL-157S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-158B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-159S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-160B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-161S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-162B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-163S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-163S DUP	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-164B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-165S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-166B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-167S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-168B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-169S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.16	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.185	0.185	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.04
CL-170B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-171S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-172B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-173S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-174B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-175S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.11	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***1***	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***1.00***
CL-176B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND

Table 4-2
PAHs in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Non-Carcinogenic PAHs by EPA Method 8100											Carcinogenic PAHs by EPA Method 8100							
		Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i)perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
CL-177S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-178B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-179S	3.0	ND(<0.1)	ND(<0.1)	0.3	ND(<0.1)	0.15	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.12	***0.2***	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.21***
CL-180B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-181S	3.0	82	3.7	ND(<0.1)	ND(<0.1)	ND(<0.1)	84	--	--	***110***	ND(<0.1)	ND(<0.1)	ND(<0.1)	***4***	1.25	1.25	ND(<0.1)	ND(<0.1)	ND(<0.1)	***4.25***
CL-182B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.22***	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.22***
CL-183S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	0.1	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-184B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-184B DUP	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-185S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.3***	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	***0.30***
CL-186B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-187B	7.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-188B	7.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.145	0.145	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.03
CL-189S	5.0	ND(<0.1)	0.98	1.5	1.6	13	0.16	--	--	ND(<0.1)	0.53	14	***9***	***1.4***	1.9	1.9	1.3	2.2	ND(<0.1)	***3.57***
CL-190S	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	2.1	0.21	--	--	ND(<0.1)	1.4	1.9	ND(<0.1)	ND(<0.1)	0.44	0.44	0.25	0.19	ND(<0.1)	***0.17***
CL-191S	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-192S	5.0	ND(<0.1)	ND(<0.1)	0.11	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-193S	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-194S	5.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-195S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-196B	7.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-197S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-198B	7.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.08	0.08	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.02
CL-199S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-200B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-205S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	0.5	0.19	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-206B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.13	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.06	0.06	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.01
CL-207S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-207S DUP	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-208B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-209S	3.0	9.7	14	ND(<0.1)	16	ND(<0.1)	ND(<0.1)	--	--	3.1	11	ND(<0.1)	***26***	ND(<0.1)	***10.5***	***10.5***	ND(<0.1)	ND(<0.1)	ND(<0.1)	***4.70***
CL-210B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	2.7	ND(<0.1)	ND
CL-211S	3.0	0.55	0.18	ND(<0.1)	0.35	1	ND(<0.1)	--	--	ND(<0.1)	1.8	ND(<0.1)	***2.9***	***0.26***	0.6	0.6	ND(<0.1)	0.1	ND(<0.1)	***0.71***
CL-212B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.1	0.1	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.02
CL-213S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-214B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-217S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-218B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-219S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-220B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-220B DUP	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-221S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-222B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-223S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-224B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-225S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-226B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND

Table 4-2
PAHs in Soil
2002 IRM Characterization Sampling

Location	Depth (feet)	Non-Carcinogenic PAHs by EPA Method 8100											Carcinogenic PAHs by EPA Method 8100							
		Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i)perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
CL-227S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-228B	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-228B DUP	8.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
PS-229S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	--	--	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-230B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	--	--	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-231S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	--	--	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-232B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	--	--	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-233S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	--	--	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-234B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	--	--	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
TEF[c]		-	-	-	-	-	-	-	-	-	-	-	0.1	1	0.1	0.1	0.01	0.4	0.1	NV
MTCA Method A Soil Cleanup Levels[a]		**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**5**	**NV**	**NV**	**NV**	**0.1**	**NV**	**NV**	**NV**	**NV**	**NV**	**0.1**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**NV**	**NV**	**53,460**	**NV**	**365**	**NV**	**NV**	**NV**	**NV**	**NV**	**15,026**	**2.2**	**0.6**	**7.6**	**8**	**25**	**2.78**	**21.5**	**NV**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

(c) Total cPAH concentrations modified using the protocol described in WAC 173-340-708(8)(e)(ii)

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

TEF – Toxicity Equivalency Factor

Table 4-3
Petroleum Hydrocarbons in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
PS-1S	3.0	ND(<20)	ND(<40)
PS-2S	3.0	ND(<20)	ND(<40)
PS-3S	3.0	ND(<20)	ND(<40)
PS-4S	3.0	ND(<20)	ND(<40)
PS-5S	3.0	ND(<20)	ND(<40)
PS-6B	6.0	ND(<20)	120
PS-7B	6.0	45	90
PS-8B	6.0	ND(<20)	ND(<40)
PS-9B	6.0	ND(<20)	ND(<40)
PS-11S	3.0	ND(<20)	ND(<40)
PS-12S	3.0	ND(<20)	ND(<40)
PS-13B	6.0	ND(<20)	ND(<40)
PS-14B	6.0	ND(<20)	ND(<40)
PS-15S	3.0	ND(<20)	1,800
PS-16S	3.0	ND(<20)	ND(<40)
PS-17B	6.0	ND(<20)	ND(<40)
PS-18B	6.0	ND(<20)	ND(<40)
PS-19B	6.0	ND(<20)	ND(<40)
PS-20S	3.0	ND(<20)	ND(<40)
PS-21S	3.0	ND(<20)	ND(<40)
PS-22S	3.0	ND(<20)	ND(<40)
PS-23B	6.0	ND(<20)	110
PS-24S	3.0	ND(<20)	ND(<40)
PS-25S	3.0	ND(<20)	ND(<40)
PS-26B	8.0	ND(<20)	120
PS-27S	3.0	ND(<20)	ND(<40)
PS-43S	3.0	ND(<20)	ND(<40)
PS-44B	8.0	ND(<20)	ND(<40)
PS-45S	3.0	ND(<20)	ND(<40)
PS-46B	8.0	ND(<20)	ND(<40)
PS-47S	3.0	ND(<20)	ND(<40)
PS-48B	8.0	ND(<20)	ND(<40)
PS-49S	3.0	ND(<20)	290
PS-50B	8.0	ND(<20)	ND(<40)
PS-51S	3.0	ND(<20)	ND(<40)
PS-52B	8.0	ND(<20)	ND(<40)
PS-53S	3.0	ND(<20)	ND(<40)
PS-54B	8.0	ND(<20)	ND(<40)
PS-55S	3.0	ND(<20)	44
PS-56B	8.0	ND(<20)	480
PS-57S	3.0	ND(<20)	ND(<40)
PS-58B	8.0	ND(<20)	ND(<40)
PS-59S	3.0	ND(<20)	ND(<40)

Table 4-3
Petroleum Hydrocarbons in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
PS-60B	8.0	ND(<20)	140
PS-61S	3.0	ND(<20)	ND(<40)
PS-62B	8.0	ND(<20)	100
PS-63S	3.0	ND(<20)	ND(<40)
PS-64B	8.0	ND(<20)	ND(<40)
PS-65S	3.0	ND(<20)	ND(<40)
PS-66B	8.0	ND(<20)	ND(<40)
PS-67B	8.0	ND(<20)	ND(<40)
PS-68B	8.0	ND(<20)	ND(<40)
PS-69B	8.0	ND(<20)	ND(<40)
PS-70B	8.0	ND(<20)	ND(<40)
PS-71B	8.0	ND(<20)	ND(<40)
PS-90S	3.0	ND(<20)	ND(<40)
PS-91B	8.0	ND(<20)	ND(<40)
PS-92S	3.0	ND(<20)	ND(<40)
PS-93B	8.0	ND(<20)	ND(<40)
PS-94S	3.0	ND(<20)	ND(<40)
PS-95B	8.0	ND(<20)	ND(<40)
PS-96S	3.0	ND(<20)	ND(<40)
PS-97B	8.0	ND(<20)	ND(<40)
PS-98S	3.0	ND(<20)	ND(<40)
PS-99B	8.0	ND(<20)	ND(<40)
PS-100B	8.0	ND(<20)	ND(<40)
PS-101B	8.0	ND(<20)	ND(<40)
PS-102B	8.0	ND(<20)	ND(<40)
PS-103B	8.0	ND(<20)	ND(<40)
PS-104B	8.0	ND(<20)	ND(<40)
PS-105B	8.0	ND(<20)	ND(<40)
PS-106B	8.0	ND(<20)	ND(<40)
PS-107B	8.0	ND(<20)	ND(<40)
PS-107B DUP	8.0	ND(<20)	ND(<40)
PS-115B	8.0	ND(<20)	ND(<40)
PS-116B	8.0	ND(<20)	ND(<40)
PS-117B	8.0	ND(<20)	ND(<40)
PS-118B	8.0	ND(<20)	ND(<40)
PS-119B	8.0	ND(<20)	ND(<40)
PS-120B	8.0	ND(<20)	ND(<40)
PS-121B	8.0	ND(<20)	ND(<40)
PS-135S	3.0	ND(<20)	ND(<40)
PS-136B	8.0	ND(<20)	ND(<40)
PS-141B	8.0	ND(<20)	ND(<40)
PS-142B	8.0	ND(<20)	ND(<40)
PS-143B	8.0	ND(<20)	ND(<40)

Table 4-3
Petroleum Hydrocarbons in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
PS-150S	3.0	ND(<20)	ND(<40)
PS-151S	3.0	ND(<20)	ND(<40)
PS-152S	3.0	ND(<20)	ND(<40)
PS-153B	8.0	ND(<20)	ND(<40)
PS-154S	3.0	ND(<20)	ND(<40)
PS-154S DUP	3.0	ND(<20)	ND(<40)
PS-155B	8.0	ND(<20)	ND(<40)
PS-168B	5.0	ND(<20)	ND(<40)
PS-169B	5.0	ND(<20)	ND(<40)
PS-169B DUP	5.0	ND(<20)	ND(<40)
PS-170B	9.0	ND(<20)	ND(<40)
PS-171S	3.0	ND(<20)	ND(<40)
PS-172S	3.0	ND(<20)	ND(<40)
PS-172S DUP	3.0	ND(<20)	ND(<40)
PS-173S	3.0	ND(<20)	ND(<40)
PS-174S	3.0	ND(<20)	ND(<40)
PS-175S	3.0	ND(<20)	ND(<40)
PS-176S	3.0	ND(<20)	ND(<40)
PS-177S	3.0	ND(<20)	ND(<40)
PS-178S	3.0	ND(<20)	ND(<40)
PS-181S	3.0	ND(<20)	ND(<40)
PS-182S	3.0	ND(<20)	ND(<40)
PS-183S	3.0	ND(<20)	ND(<40)
PS-184S	3.0	ND(<20)	ND(<40)
PS-184S DUP	3.0	ND(<20)	ND(<40)
PS-185S	3.0	ND(<20)	ND(<40)
PS-186S	3.0	ND(<20)	ND(<40)
PS-187S	3.0	ND(<20)	ND(<40)
PS-188S	4.0	ND(<20)	ND(<40)
PS-189S	4.0	ND(<20)	ND(<40)
PS-190B	4.0	ND(<20)	ND(<40)
PS-190B DUP	4.0	ND(<20)	ND(<40)
PS-213B	8.0	ND(<20)	ND(<40)
Soil Cleanup Level [(1)]		**2,000**	**2,000**

Notes:

(1) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

mg/kg – milligrams/kilogram

ND – Indicates that the compound was not detected at a concentration greater than the detection limit

Table 4-4
Non-Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i) perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)
PS-1S	3.0	ND(<0.05)	0.4	0.19	0.07	0.92	ND(<0.05)	0.06	0.09	0.5	1	0.71
PS-2S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-3S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-4S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.06	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.04	0.05	0.05
PS-5S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.07	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	0.05	0.05
PS-6B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-7B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.04	0.07	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.06
PS-8B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-9B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-11S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-12S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-13B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-14B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-15S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-17B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-18B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.03	0.03
PS-19B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-20S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-21S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.04	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	0.03	0.04
PS-22S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.07	0.14	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.08	0.16
PS-23B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-24S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	0.02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02
PS-25S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-26B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-27S	3.0	ND(<0.02)	0.02	ND(<0.02)	0.08	0.2	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.05	0.14	0.24
PS-43S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-44B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-45S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-46B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-47S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)

Table 4-4
Non-Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i) perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)
PS-48B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.05
PS-49S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-50B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-51S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-52B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-53S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-54B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-55S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-56B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-57S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-58B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-59S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-60B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-61S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-62B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.03	0.04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.03	0.05
PS-63S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-64B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.03	ND(<0.02)	ND(<0.02)
PS-65S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.08	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.03	0.04	0.11	0.14
PS-67B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-68B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-69B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-70B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-71B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-90S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-91B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-92S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-93B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-94S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-95B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-96S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)

Table 4-4
Non-Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i) perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)
PS-97B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-98S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-99B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-100B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-101B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-102B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-103B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-104B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-105B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-106B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-107B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-107B LAB DUP	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-115B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-116B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-117B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-118B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-119B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
CL-120S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)
CL-121S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	0.1	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)
CL-122S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)
CL-123S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)
CL-124B	7.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	--	--	ND(<0.1)	ND(<0.1)	ND(<0.1)
PS-120B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-121B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-124S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-125S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-126S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-127S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-128B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-129S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)

Table 4-4
Non-Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i) perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)
PS-130S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-131S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-132S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-133B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-134B	8.0	ND(<0.02)	ND(<0.02)	0.03	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	ND(<0.02)	ND(<0.02)	0.04	0.04
PS-135S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-136B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.03
PS-137S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-138B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-139S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-140B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-141B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-142B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-143B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-145B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-146S	5.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-147S	5.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-148B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-149S	5.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-150S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-151S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-152S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-153B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-154S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-155B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-156S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-157S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-158S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-159S	3.0	ND(<0.05)	ND(<0.05)	0.11	ND(<0.05)	0.27	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.35
PS-160S	3.0	ND(<0.05)	ND(<0.05)	0.06	ND(<0.05)	0.31	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.33	0.29

Table 4-4
Non-Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i) perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)
PS-161S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-162S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.07	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.2
PS-165B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-166B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-167S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-168B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-169B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-170B	9.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-171S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-172S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-173S	3.0	ND(<0.05)	ND(<0.05)	0.09	ND(<0.05)	0.08	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.11
PS-174S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-175S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-176S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-177S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-178S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-179S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-180S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.07	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.19
PS-181S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-182S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-183S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-184S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-185S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-186S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-187S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-188B	4.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.12	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.15	0.08
PS-189B	4.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-190B	4.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-207B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-208B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)

Table 4-4
Non-Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i) perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)
PS-209B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-210S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-211S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-212S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-213B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-214S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
Soil Cleanup Levels [1]		**NV**	**NV**	**51,040**	**NV**	**364**	**2,212**	**NV**	**NV**	**5 [2]**	**NV**	**15,004**

Notes:

(1) All soil cleanup levels based on MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36) unless noted.

(2) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

mg/kg – milligrams/kilogram

ND – Indicates that the compound was not detected at a concentration greater the detection limit

NV – Indicates that no value was available for this compound

-- - Indicates the sample was not analyzed for this compound

Table 4-5
Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs[3] (TEF Modified) (mg/kg)
PS-1S	3.0	0.09	0.06	0.15	ND(<0.05)	0.16	<0.05	ND(<0.05)	0.086
PS-2S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-3S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-4S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-5S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-6B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-7B	6.0	0.05	0.04	0.06	0.03	0.05	ND(<0.02)	0.03	0.058
PS-8B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-9B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-11S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-12S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-13B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-14B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-15S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-17B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-18B	6.0	ND(<0.02)	ND(<0.02)	0.03	0.03	0.02	ND(<0.02)	ND(<0.02)	0.006
PS-19B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-20S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-21S	3.0	ND(<0.02)	ND(<0.02)	0.02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.002
PS-22S	3.0	0.05	0.07	0.1	0.05	0.07	ND(<0.02)	0.05	0.096
PS-23B	6.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-24S	3.0	ND(<0.02)	ND(<0.02)	0.03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.003
PS-25S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-26B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-27S	3.0	0.05	0.07	0.09	0.04	0.08	ND(<0.02)	0.05	0.094
PS-43S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-44B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-45S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-46B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND

Table 4-5
Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs[3] (TEF Modified) (mg/kg)
PS-47S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-48B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.07	0.007
PS-49S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-50B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-51S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-52B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-53S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-54B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-55S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-56B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-57S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-58B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-59S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-60B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-61S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-62B	8.0	ND(<0.02)	0.02	0.03	ND(<0.02)	0.03	ND(<0.02)	0.02	0.025
PS-63S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-64B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-65S	3.0	0.05	0.07	0.08	0.04	0.07	ND(<0.02)	0.06	0.094
PS-67B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-68B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-69B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-70B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-71B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-90S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-91B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-92S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-93B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-94S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND

Table 4-5
Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs[3] (TEF Modified) (mg/kg)
PS-95B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-96S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-97B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-98S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-99B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-100B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-101B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-102B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-103B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-104B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-105B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-106B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-107B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
S-107B LAB DU	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-115B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-116B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-117B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-118B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-119B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
CL-120S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-121S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-122S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-123S	3.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
CL-124B	7.0	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND(<0.1)	ND
PS-120B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-121B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-124S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-125S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-126S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND

Table 4-5
Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs[3] (TEF Modified) (mg/kg)
PS-127S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-128B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-129S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-130S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-131S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-132S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-133B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-134B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.03	ND(<0.02)	ND(<0.02)	0.000
PS-135S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-136B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-137S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-138B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-139S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-140B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-141B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-142B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-143B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-145B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-146S	5.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-147S	5.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-148B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-149S	5.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-150S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-151S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-152S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-153B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-154S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-155B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-156S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND

Table 4-5
Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs[3] (TEF Modified) (mg/kg)
PS-157S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-158S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-159S	3.0	0.2	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.2	ND(<0.05)	ND(<0.05)	0.022
PS-160S	3.0	0.12	0.08	ND(<0.05)	ND(<0.05)	0.22	ND(<0.05)	ND(<0.05)	0.094
PS-161S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-162S	3.0	0.08	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.18	ND(<0.05)	0.11	0.021
PS-165B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-166B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-167S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-168B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-169B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-170B	9.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-171S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-172S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-173S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-174S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-175S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-176S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-177S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-178S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-179S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-180S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-181S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-182S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-183S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-184S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-185S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-186S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-187S	3.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND

Table 4-5
Carcinogenic PAHs in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs[3] (TEF Modified) (mg/kg)
PS-188B	4.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-189B	4.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-190B	4.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-207B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-208B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-209B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-210S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-211S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-212S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-213B	8.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-214S	3.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
Soil Cleanup Level [1]		**0.22**	**0.1[2]**	**0.74**	**0.74**	**0.25**	**1.1**	**2.2**	**0.1[2]**

Notes:

(1) All soil cleanup levels based on MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36) unless noted.

(2) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(3) Total cPAH concentrations modified using the protocol described in WAC 173-340-708(8)(e)(ii)

mg/kg – milligrams/kilogram

ND – Indicates that the compound was not detected at a concentration greater than the detection limit

NV – Indicates that no value was available for this compound

TEF – Toxicity Equivalency Factor

Table 4-6
Hexavalent Chromium, Lead, and Mercury in Soil - Area 1
2002 IRM Performance Sampling

Location	Depth (feet)	Hexavalent Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)
PS-43S	3.0	--	ND(<5)	ND(<0.5)
PS-49S	3.0	--	96	ND(<0.5)
PS-51S	3.0	--	ND(<5)	ND(<0.5)
PS-92S	3.0	--	ND(<5)	ND(<0.5)
PS-96S	3.0	--	14	ND(<0.5)
PS-98S	3.0	--	ND(<5)	ND(<0.5)
PS-98S DUP	3.0	--	ND(<5)	--
PS-116B	8.0	--	--	ND(<0.5)
PS-262S	2.0	ND(<5)	--	--
PS-263S	2.0	ND(<5)	--	--
PS-264S	2.0	ND(<5)	--	--
Soil Cleanup Level [1]		**19**	**220 [2]**	**0.16**

Notes:

(1) All soil cleanup levels based on MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36) unless noted.

(2) MTCA Simplified Terrestrial Ecological Evaluation Cleanup Level for Unrestricted Land Use (WAC 173-340-900, Table 749-2)

mg/kg – milligrams/kilogram

-- - Indicates the sample was not analyzed for this compound

ND – Indicates that the compound was not detected at a concentration greater than the detection limit

Table 4-7
Lead in Soil - Area 2
2002 IRM Final Performance Sampling

Location	Depth (feet)	Lead (mg/kg)
PS-31S	2.0	73
PS-33B	5.0	22
PS-35S	2.0	220
PS-36S	2.0	78
PS-37S	2.0	ND(<5.8)
PS-38B	5.0	130
PS-42S	2.0	ND(<37)
PS-72B	5.0	***270***
PS-73S	2.0	35
PS-74S	2.0	ND(<5)
PS-75S	2.0	160
PS-76S	2.0	ND(<5)
PS-78S	2.0	220
PS-79B	5.0	190
PS-80S	2.0	11
PS-81S	2.0	ND(<5)
PS-83S	2.0	ND(<5)
PS-84B	5.0	ND(<5)
PS-85S	2.0	180
PS-86B	5.0	37
PS-87B	5.0	25
PS-89B	5.0	74
PS-108B	7.0	ND(<5)
PS-109S	5.0	150
PS-111S	5.0	28
PS-112S	5.0	ND(<5)
PS-113B	7.0	ND(<5)
PS-114S	5.0	66
PS-122S	5.0	***230***
PS-123B	7.0	15
PS-334S	5.0	ND(<5.6)
Soil Cleanup Level[(1)]		**220**

Notes:

(1) MTCA Simplified Terrestrial Ecological Evaluation Cleanup Level for Unrestricted Land Use (WAC 173-340-900, Table 749-2)

Bold and Highlighted – Indicates detected concentration exceeds the soil cleanup level

mg/kg – milligrams/kilogram

ND – Indicates that the compound was not detected at a concentration greater than the detection limit

Table 4-8
PAHs in Soil - Area 3
2002 IRM Final Performance Sampling

Location	Depth (feet)	Non-Carcinogenic PAHs											Carcinogenic PAHs							
		Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i) perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
PS-195S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-196S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-197S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-198S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-199S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.05	0.05	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.06	ND(<0.05)	ND(<0.05)	0.01
PS-200S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-201S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-202S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-203B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-204B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-205B	5.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-206S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
TEF[c]		-	-	-	-	-	-	-	-	-	-	-	0.1	1	0.1	0.1	0.01	0.4	0.1	NV
MTCA Method A Soil Cleanup Levels[a]		**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**5**	**NV**	**NV**	**NV**	**0.1**	**NV**	**NV**	**NV**	**NV**	**NV**	**0.1**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**NV**	**NV**	**53,460**	**NV**	**365**	**NV**	**NV**	**NV**	**NV**	**NV**	**15,026**	**2.2**	**0.6**	**7.6**	**8**	**25**	**2.78**	**21.5**	**NV**

Notes:
(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)
(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)
(c) Total cPAH concentrations modified using the protocol described in WAC 173-340-708(8)(e)(ii)
ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample
NV – Indicates that no value was available for this compound
TEF – Toxicity Equivalency Factor

Table 4-9
Arsenic in Soil - Area 3
2002 IRM Final Performance Sampling

Location	Depth (feet)	Arsenic (mg/kg)
PS-191S	2.0	ND(<5)
PS-192S	2.0	ND(<5)
PS-193S	2.0	ND(<5)
PS-194B	4.0	ND(<5)
PS-194B LAB DUP	4.0	ND(<5)
MTCA Method A Soil Cleanup Level[(a)]		**20**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

mg/kg – milligrams/kilogram

Table 4-10
PAHs in Soil - Area 4
2002 IRM Final Performance Sampling

		Non-Carcinogenic PAHs											Carcinogenic PAHs							
Location	Depth (feet)	Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i)perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
PS-215B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-216B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-217B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-218B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-219S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.06	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.06	ND(<0.05)	0.06	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.05	0.07
PS-220S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-221S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-222S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-223S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-224S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-225S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	0.06	0.01
PS-226B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-227S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-228S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
TEF[c]		-	-	-	-	-	-	-	-	-	-	-	0.1	1	0.1	0.1	0.01	0.4	0.1	NV
MTCA Method A Soil Cleanup Levels[a]		**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**5**	**NV**	**NV**	**NV**	**0.1**	**NV**	**NV**	**NV**	**NV**	**NV**	**0.1**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**NV**	**NV**	**53,460**	**NV**	**365**	**NV**	**NV**	**NV**	**NV**	**NV**	**15,026**	**2.2**	**0.6**	**7.6**	**8**	**25**	**2.78**	**21.5**	**NV**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

(c) Total cPAH concentrations modified using the protocol described in WAC 173-340-708(8)(e)(ii)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

TEF – Toxicity Equivalency Factor

Table 4-11
Petroleum Hydrocarbons in Soil - Area 5
2002 IRM Performance Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
PS-236B	9.0	ND(<20)	ND(<50)
PS-237S	3.0	ND(<20)	ND(<50)
PS-238B	9.0	ND(<20)	ND(<50)
PS-239S	3.0	ND(<20)	ND(<50)
PS-240B	9.0	ND(<20)	ND(<50)
PS-241S	3.0	ND(<20)	ND(<50)
PS-242B	9.0	ND(<20)	ND(<50)
PS-243S	3.0	ND(<20)	ND(<50)
PS-244B	9.0	ND(<20)	ND(<50)
PS-245S	3.0	ND(<20)	ND(<50)
PS-246B	9.0	ND(<20)	ND(<50)
PS-247S	3.0	ND(<20)	ND(<50)
PS-248B	9.0	ND(<20)	ND(<50)
PS-249S	3.0	ND(<20)	ND(<50)
PS-250B	9.0	ND(<20)	ND(<50)
PS-250B DUP	9.0	ND(<20)	ND(<50)
PS-251S	3.0	ND(<20)	ND(<50)
PS-252B	9.0	ND(<20)	ND(<50)
PS-253S	3.0	ND(<20)	1,800
PS-254B	9.0	ND(<20)	ND(<50)
PS-265B	4.0	200	
PS-266S	3.0	ND(<25)	ND(<50)
PS-267S	3.0	ND(<25)	ND(<50)
PS-268S	3.0	ND(<25)	ND(<50)
MTCA Method A Soil Cleanup Level [a]		**2,000**	**2,000**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

Table 4-12
PAHs in Soil - Area 6
2002 IRM Final Performance Sampling

Location	Depth (feet)	Non-Carcinogenic PAHs										
		Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i)perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)
PS-255S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-256S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-257S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-258S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-259B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
PS-260B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)
TEF[c]		-	-	-	-	-	-	-	-	-	-	-
MTCA Method A Soil Cleanup Levels[a]		**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**5**	**NV**	**NV**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**NV**	**NV**	**53,460**	**NV**	**365**	**NV**	**NV**	**NV**	**NV**	**NV**	**15,026**

Table 4-12
PAHs in Soil - Area 6
2002 IRM Final Performance Sampling

Location	Depth (feet)	Carcinogenic PAHs							
		Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
PS-255S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-256S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-257S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-258S	2.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-259B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
PS-260B	4.0	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND(<0.05)	ND
TEF[c]		0.1	1	0.1	0.1	0.01	0.4	0.1	NV
MTCA Method A Soil Cleanup Levels[a]		**NV**	**0.1**	**NV**	**NV**	**NV**	**NV**	**NV**	**0.1**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**2.2**	**0.6**	**7.6**	**8**	**25**	**2.78**	**21.5**	**NV**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

(c) Total cPAH concentrations modified using the protocol described in WAC 173-340-708(8)(e)(ii)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

TEF – Toxicity Equivalency Factor

mg/kg – milligrams/kilogram

Table 4-13
PAHs in Soil - Area 7
2002 IRM Final Performance Sampling

Location	Depth (feet)	Non-Carcinogenic PAHs										
		Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i) perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)
PS-277S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-279S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.05	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.05	0.03
PS-281S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-283S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-285S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.14	0.13	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.09	0.12
PS-287S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-288S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-289B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-290B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-291B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-292B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
PS-293B	8.0	ND(<0.02)	ND(<0.02)	0.02	ND(<0.02)	0.04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.06	0.06
PS-294S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	0.04	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.09	0.05	0.08
TEF[c]		-	-	-	-	-	-	-	-	-	-	-
MTCA Method A Soil Cleanup Levels[a]		**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**5**	**NV**	**NV**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**NV**	**NV**	**53,460**	**NV**	**365**	**NV**	**NV**	**NV**	**NV**	**NV**	**15,026**

Table 4-13
PAHs in Soil - Area 7
2002 IRM Final Performance Sampling

Location	Depth (feet)	Carcinogenic PAHs							
		Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
PS-277S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-279S	7.0	ND(<0.02)	ND(<0.02)	0.03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.003
PS-281S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-283S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-285S	7.0	0.04	***0.12***	0.14	0.06	0.06	0.02	0.1	***0.16***
PS-287S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-288S	7.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-289B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-290B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-291B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-292B	8.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
PS-293B	8.0	0.03	0.04	0.03	ND(<0.02)	0.03	ND(<0.02)	ND(<0.02)	0.05
PS-294S	7.0	ND(<0.02)	ND(<0.02)	0.03	ND(<0.02)	0.03	ND(<0.02)	ND(<0.02)	0.003
TEF[c]		0.1	1	0.1	0.1	0.01	0.4	0.1	NV
MTCA Method A Soil Cleanup Levels[a]		**NV**	**0.1**	**NV**	**NV**	**NV**	**NV**	**NV**	**0.1**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**2.2**	**0.6**	**7.6**	**8**	**25**	**2.78**	**21.5**	**NV**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

(c) Total cPAH concentrations modified using the protocol described in WAC 173-340-708(8)(e)(ii)

Bold and Highlighted – Indicates detected concentration exceeds MTCA soil cleanup level

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for

NV – Indicates that no value was available for this compound

TEF – Toxicity Equivalency Factor

mg/kg – milligrams/kilogram

Table 4-14
Mercury in Soil - Area 7
2002 IRM Final Performance Sampling

Location	Depth (feet)	Mercury (mg/kg)
PS-269S	2.0	ND(<0.02)
PS-270S	2.0	ND(<0.02)
PS-271S	2.0	0.05
PS-272S	2.0	0.04
PS-273S	2.0	ND(<0.02)
PS-274B	4.0	0.03
PS-275B	4.0	0.04
PS-276S	2.0	ND(<0.02)
PS-277S	7.0	ND(<0.02)
PS-278S	2.0	ND(<0.02)
PS-279S	7.0	ND(<0.02)
PS-280S	2.0	ND(<0.02)
PS-281S	7.0	ND(<0.02)
PS-282S	2.0	ND(<0.02)
PS-283S	7.0	0.03
PS-284S	2.0	ND(<0.02)
PS-285S	7.0	0.03
PS-286S	2.0	ND(<0.02)
PS-287S	7.0	ND(<0.02)
PS-288S	7.0	ND(<0.02)
PS-289B	8.0	0.03
PS-290B	8.0	0.04
PS-291B	8.0	0.07
PS-292B	8.0	0.04
PS-293B	8.0	0.08
PS-294S	7.0	0.03
MTCA Method A Soil Cleanup Level [a]		**2**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**0.16**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

mg/kg – milligrams/kilogram

Table 4-15
Hexavalent Chromium and Mercury in Soil - Area 8
2002 IRM Final Performance Sampling

Location	Depth (feet)	Hexavalent Chromium (mg/kg)	Mercury (mg/kg)
PS-295S	2.0	--	0.03
PS-296S	2.0	--	0.07
PS-297S	2.0	--	0.11
PS-298S	2.0	--	0.02
PS-300S	2.0	--	0.08
PS-301B	4.0	--	ND(<0.02)
PS-302B	4.0	--	0.02
PS-321S	2.0	ND(<5)	--
PS-328S	2.0	--	ND(<0.02)
PS-329S	2.0	--	ND(<0.02)
PS-330S	2.0	--	ND(<0.02)
PS-331S	2.0	--	ND(<0.02)
PS-332B	4.0	--	0.03
PS-333B	4.0	--	ND(<0.02)
MTCA Method A Soil Cleanup Level[a]		**19**	**2**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**NV**	**0.16**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

mg/kg – milligrams/kilogram

Table 4-16
Mercury in Soil - Area 9
2002 IRM Final Performance Sampling

Location	Depth (feet)	Mercury (mg/kg)
PS-304S	2.0	ND(<0.02)
PS-305S	2.0	0.10
PS-306S	2.0	ND(<0.02)
PS-307S	2.0	ND(<0.02)
PS-308S	2.0	ND(<0.02)
PS-309B	4.0	0.04
PS-310B	4.0	0.05
PS-322S	2.0	ND(<0.02)
PS-323S	2.0	ND(<0.02)
PS-324S	2.0	ND(<0.02)
PS-325B	4.0	ND(<0.02)
MTCA Method A Soil Cleanup Level[(a)]		**2**
MTCA Soil Cleanup Levels (Equation 747-1)[(b)]		**0.16**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

Table 4-17
Hexavalent Chromium and Mercury in Soil - Area 10
2002 IRM

Location	Depth (feet)	Hexavalent Chromium (mg/kg)	Mercury (mg/kg)
PS-311S	2.0	NA	ND(<0.02)
PS-312S	2.0	NA	ND(<0.02)
PS-313S	2.0	NA	0.03
PS-314S	2.0	NA	0.06
PS-315S	2.0	NA	0.02
PS-316S	2.0	NA	ND(<0.02)
PS-317B	4.0	NA	ND(<0.02)
PS-318B	4.0	NA	0.03
PS-319S	2.0	NA	ND(<0.02)
PS-320S	2.0	ND(<5)	NA
MTCA Method A Soil Cleanup Level[(a)]		**19**	**2**
MTCA Soil Cleanup Levels (Equation 747-1)[(b)]		**NV**	**0.16**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

NA – Not Appicable

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

Table 4-18
Petroleum Hydrocarbons in Groundwater
Performance Monitoring

Location	Date	Diesel-Range Petroleum Hydrocarbons (µg/L)	Oil-Range Petroleum Hydrocarbons (µg/L)
MW-1	09/30/02	--	--
	01/28/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/30/03	ND(<130)	ND(<250)
	02/18/04	ND(<130)	ND(<250)
	06/02/04	--	--
MW-2	09/30/02	ND(<130)	ND(<250)
	01/28/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/30/03	ND(<130)	ND(<250)
	02/18/04	--	--
	06/02/04	--	--
MW-4	09/30/02	ND(<130)	ND(<250)
	01/27/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/29/03	190	
	02/18/04	--	--
	06/02/04	--	--
MW-6	09/30/02	ND(<130)	ND(<250)
	01/28/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/29/03	140	
	02/18/04	--	--
	06/01/04	--	--
MW-7	09/30/02	ND(<130)	ND(<250)
	01/27/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/29/03	ND(<130)	ND(<250)
	02/18/04	--	--
	06/02/04	--	--
MW-8	09/30/02	ND(<130)	ND(<250)
	01/27/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/29/03	ND(<130)	ND(<250)
	02/18/04	--	--
	06/02/04	--	--
MW-9	09/30/02	ND(<130)	ND(<250)
	01/27/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/29/03	ND(<130)	ND(<250)
	02/18/04	--	--
	06/02/04	--	--

Table 4-18
Petroleum Hydrocarbons in Groundwater
Performance Monitoring

Location	Date	Diesel-Range Petroleum Hydrocarbons (µg/L)	Oil-Range Petroleum Hydrocarbons (µg/L)
MW-10	09/30/02	280	
	01/27/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/29/03	ND(<130)	ND(<250)
	02/18/04	--	--
	06/02/04	--	--
MW-11	09/30/02	ND(<130)	ND(<250)
	01/28/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/30/03	ND(<130)	ND(<250)
	02/18/04	--	--
	06/02/04	--	--
MW-12	09/30/02	ND(<130)	ND(<250)
	01/27/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/30/03	ND(<130)	ND(<250)
	02/18/04	--	--
	06/02/04	--	--
MW-13	09/30/02	ND(<130)	ND(<250)
	01/27/03	ND(<130)	ND(<250)
	04/30/03	ND(<130)	ND(<250)
	07/30/03	ND(<130)	ND(<250)
	02/18/04	--	--
	06/02/04	--	--
MTCA Method A Ground Water Cleanup Level[(a)]		**500**	**500**

Notes:

(a) MTCA Method A Ground Water Cleanup Level (WAC 173-340-900, Table 720-1)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

µg/L – micrograms/liter

Table 4-19
PAHs in Groundwater
Performance Monitoring

Location	Date	Non-Carcinogenic PAHs										
		Acenaph-thene (µg/L)	Acenaph-thylene (µg/L)	Anthracene (µg/L)	Benzo(g,h,I) perylene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	1-methyl-naphthalene (µg/L)	2-methyl-naphthalene (µg/L)	Napthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)
MW-1	09/30/02	--	--	--	--	--	--	--	--	--	--	--
	01/28/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/30/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	02/18/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.03	ND(<0.02)	ND(<0.02)
MW-2	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	01/28/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/30/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	02/18/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	0.04	ND(<0.02)	ND(<0.02)
MW-4	09/30/02	0.18	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.06	ND(<0.02)	0.05	0.04	ND(<0.02)	ND(<0.02)	ND(<0.02)
	01/27/03	0.31	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.11	0.17	0.03	ND(<0.02)	ND(<0.02)	ND(<0.02)
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/29/03	0.24	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.09	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	02/19/04	0.44	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.2	0.13	0.04	0.03	ND(<0.02)	ND(<0.02)
MW-6	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	01/28/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/29/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
MW-7	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	01/27/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/29/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.11	ND(<0.02)	ND(<0.02)
MW-8	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	01/27/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/29/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
MW-9	09/30/02	0.07	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	01/27/03	0.08	ND(<0.02)	ND(<0.02)	0.05	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/29/03	0.05	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)

Table 4-19
PAHs in Groundwater
Performance Monitoring

Location	Date	Non-Carcinogenic PAHs										
		Acenaph-thene (µg/L)	Acenaph-thylene (µg/L)	Anthracene (µg/L)	Benzo(g,h,i) perylene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	1-methyl-naphthalene (µg/L)	2-methyl-naphthalene (µg/L)	Napthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)
MW-10	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	01/27/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/29/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.06	ND(<0.02)	ND(<0.02)
MW-11	09/30/02	2.3	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.29	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	ND(<0.02)
	01/28/03	3.2	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.53	ND(<0.02)	ND(<0.02)	0.02	0.03	ND(<0.02)
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/30/03	5.1	0.04	ND(<0.02)	ND(<0.02)	ND(<0.02)	1	ND(<0.02)	ND(<0.02)	0.06	0.07	ND(<0.02)
	02/18/04	5.9	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	1.4	ND(<0.02)	0.02	0.09	0.1	ND(<0.02)
MW-12	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	01/27/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/30/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	02/18/04	--	--	--	--	--	--	--	--	--	--	--
	06/02/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
MW-13	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	01/27/03	--	--	--	--	--	--	--	--	--	--	--
	04/30/03	--	--	--	--	--	--	--	--	--	--	--
	07/30/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)
	02/18/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.02	ND(<0.02)	ND(<0.02)
TEF[(a)]		0.001	0.001	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.001	0.001
EPA Surface Water Cleanup Levels[(b)]		**NV**	**NV**	**110,000**	**NV**	**370**	**14,000**	**NV**	**NV**	**NV**	**NV**	**11,000**

Table 4-19
PAHs in Groundwater
Performance Monitoring

Location	Date	Carcinogenic PAHs							
		Benzo(a) anthracene (µg/L)	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenz(a, h) anthracene (µg/L)	Indeno(1, 2, 3-cd)pyrene (µg/L)	Total cPAHs (TEF Modified) (µg/L)
MW-1	09/30/02	--	--	--	--	--	--	--	--
	01/28/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	04/30/03	--	--	--	--	--	--	--	--
	07/30/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/18/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
MW-2	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	01/28/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	04/30/03	--	--	--	--	--	--	--	--
	07/30/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/18/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
MW-4	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	01/27/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	04/30/03	--	--	--	--	--	--	--	--
	07/29/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
MW-6	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	01/28/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	04/30/03	--	--	--	--	--	--	--	--
	07/29/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
MW-7	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	01/27/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	04/30/03	--	--	--	--	--	--	--	--
	07/29/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
MW-8	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	01/27/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	04/30/03	--	--	--	--	--	--	--	--
	07/29/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
MW-9	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	01/27/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	04/30/03	--	--	--	--	--	--	--	--
	07/29/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND

Table 4-19
PAHs in Groundwater
Performance Monitoring

Location	Date	Carcinogenic PAHs							
		Benzo(a) anthracene (µg/L)	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenz(a, h) anthracene (µg/L)	Indeno(1, 2, 3-cd)pyrene (µg/L)	Total cPAHs (TEF Modified) (µg/L)
MW-10	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	01/27/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	04/30/03	--	--	--	--	--	--	--	--
	07/29/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/19/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
MW-11	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	01/28/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	04/30/03	--	--	--	--	--	--	--	--
	07/30/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/18/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
MW-12	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	01/27/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	04/30/03	--	--	--	--	--	--	--	--
	07/30/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/18/04	--	--	--	--	--	--	--	--
	06/02/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
MW-13	09/30/02	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	01/27/03	--	--	--	--	--	--	--	--
	04/30/03	--	--	--	--	--	--	--	--
	07/30/03	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
	02/18/04	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND(<0.02)	ND
TEF[a]		0.1	1	0.1	0.1	0.01	0.4	0.1	NV
EPA Surface Water Cleanup Levels[b]		**0.031**	**0.031**	**0.031**	**0.031**	**0.031**	**0.031**	**0.031**	**NV**

Notes:

(a) Total cPAH concentrations modified using the protocol described in WAC 173-340-708(8)(e)(ii)

(b) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of aquatic organisms

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

µg/L – micrograms/Liter

Table 4-20
Metals in Groundwater
Performance Monitoring

Location	Date	Antimony		Arsenic		Beryllium		Cadmium		Chromium		Copper		Lead		Mercury		Nickel	
		Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)
MW-1	09/30/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/28/03	ND(<560)	ND(<560)	ND(<5)	ND(<5)	ND(<240)	ND(<240)	ND(<40)	ND(<40)	ND(<80)	ND(<80)	ND(<48)	ND(<48)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<160)	ND(<160)
	04/30/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	07/30/03	ND(<70)	ND(<70)	ND(<4)	ND(<4)	ND(<5)	ND(<5)	ND(<5)	ND(<5)	12	15	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	02/18/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
MW-2	09/30/02	ND(<1,700)	--	ND(<5)	ND(<5)	ND(<72)	--	ND(<120)	--	ND(<240)	--	ND(<140)	--	8	6	ND(<0.2)	ND(<2)	ND(<480)	--
	01/28/03	ND(<560)	ND(<560)	ND(<5)	ND(<5)	ND(<240)	ND(<240)	ND(<40)	ND(<40)	ND(<80)	ND(<80)	ND(<48)	ND(<48)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<160)	ND(<160)
	04/30/03	ND(<280)	ND(<280)	ND(<5)	ND(<5)	ND(<12)	ND(<12)	ND(<20)	ND(<20)	ND(<40)	ND(<40)	ND(<240)	ND(<240)	5	5	ND(<0.2)	ND(<0.2)	ND(<80)	ND(<80)
	07/30/03	ND(<160)	ND(<160)	ND(<4)	ND(<4)	ND(<40)	ND(<40)	ND(<40)	ND(<40)	***100***	ND(<56)	ND(<40)	ND(<40)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<160)	ND(<160)
	02/18/04	ND(<80)	--	ND(<5)	--	ND(<20)	--	ND(<20)	--	ND(<28)	--	ND(<20)	--	ND(<3)	--	ND(<0.2)	--	ND(<60)	--
	06/02/04	ND(<160)	--	ND(<5)	--	ND(<40)	--	ND(<40)	--	ND(<56)	--	ND(<40)	--	ND(<3)	--	ND(<0.2)	--	ND(<160)	--
	09/22/04	ND(<80)	--	ND(<5)	--	ND(<20)	--	ND(<20)	--	ND(<28)	--	ND(<20)	--	ND(<3)	--	ND(<0.2)	--	***120***	--
	02/22/05	--	--	--	--	--	--	--	--	***88***	--	--	--	--	--	--	--	ND(<160)	--
	06/08/05	--	--	--	--	--	--	--	--	ND(<28)	--	--	--	--	--	--	--	***240***	--
	10/21/05	--	--	--	--	--	--	--	--	***56***	--	--	--	--	--	--	--	ND(<160)	--
	02/13/06	--	--	--	--	--	--	--	--	28	--	--	--	--	--	--	--	***190***	--
	06/12/06	--	--	--	--	--	--	--	--	ND(<7)	--	--	--	--	--	--	--	ND(<20)	--
	09/05/06	--	--	--	--	--	--	--	--	ND(<7)	--	--	--	--	--	--	--	ND(<20)	--
	12/19/06	--	--	--	--	--	--	--	--	39	--	--	--	--	--	--	--	ND(<20)	--
	03/20/07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<20)	--
MW-4	09/30/02	ND(<70)	--	ND(<5)	ND(<5)	ND(<3)	--	ND(<5)	--	ND(<10)	--	**7**	--	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	--
	01/27/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	04/30/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	07/29/03	ND(<70)	ND(<70)	ND(<4)	ND(<4)	ND(<5)	ND(<5)	ND(<5)	ND(<5)	13	19	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	02/19/04	50	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	14	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
	06/02/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
	09/22/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	02/22/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	06/08/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	10/21/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***0.5***	--	--	--
	02/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***3***	--	--	--
	06/12/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	09/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	12/19/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	03/20/07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
MW-6	09/30/02	ND(<70)	--	ND(<5)	ND(<5)	ND(<3)	--	ND(<5)	--	ND(<10)	--	**7**	--	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	--
	01/28/03	ND(<560)	ND(<560)	***5***	ND(<5)	ND(<240)	ND(<240)	ND(<40)	ND(<40)	ND(<80)	ND(<80)	ND(<48)	ND(<48)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<160)	ND(<160)
	04/30/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<5)	ND(<5)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	07/29/03	ND(<70)	ND(<70)	ND(<4)	ND(<4)	ND(<5)	ND(<5)	ND(<5)	ND(<5)	15	12	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	02/19/04	40	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	10	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
	06/01/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
MW-7	09/30/02	ND(<70)	--	ND(<5)	ND(<5)	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	--
	01/27/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	***0.4***	ND(<0.2)	ND(<20)	ND(<20)
	04/30/03		ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	07/29/03	ND(<70)	ND(<70)	ND(<4)	ND(<4)	ND(<5)	ND(<5)	ND(<5)	ND(<5)	11	14	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	02/19/04	100	--	ND(<5)	--	ND(<10)	--	24	--	ND(<14)	--	ND(<10)	--	ND(<3)	--	***0.4***	--	ND(<40)	--
	06/01/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
	09/22/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--

Table 4-20
Metals in Groundwater
Performance Monitoring

Location	Date	Antimony		Arsenic		Beryllium		Cadmium		Chromium		Copper		Lead		Mercury		Nickel	
		Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)
MW-7	02/21/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	06/08/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***0.4***	--	--	--
	10/21/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***1.7***	--	--	--
	02/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***0.4***	--	--	--
	06/12/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	09/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	12/19/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***0.2***	--	--	--
	03/20/07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	09/30/02	ND(<70)	--	ND(<5)	ND(<5)	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	--
	01/27/03	ND(<70)	ND(<70)	***15***	***13***	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	***0.8***	ND(<0.2)	ND(<20)	ND(<20)
	04/30/03	ND(<70)	ND(<70)	***20***	***17***	ND(<3)	ND(<3)	ND(<5)	ND(<5)	10	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	07/29/03	ND(<70)	ND(<70)	***9***	***7***	ND(<5)	ND(<5)	ND(<5)	ND(<5)	ND(<7)	ND(<7)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	02/19/04	ND(<20)	--	***20***	--	ND(<5)	--	ND(<5)	--	9	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
	06/01/04	ND(<20)	--	***16***	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
	09/22/04	ND(<20)	--	***8***	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	***22***	--	ND(<0.2)	--	ND(<20)	--
	02/21/05	--	--	***18***	--	--	--	--	--	--	--	--	--	ND(<3)	--	--	--	--	--
	06/08/05	--	--	***17***	--	--	--	--	--	--	--	--	--	ND(<3)	--	--	--	--	--
	10/21/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/13/06	--	--	ND(<5)	--	--	--	--	--	--	--	--	--	ND(<3)	--	--	--	--	--
	06/12/06	--	--	***28***	--	--	--	--	--	--	--	--	--	ND(<3)	--	--	--	--	--
	10/23/06	--	--	***12***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/19/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/20/07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	09/30/02	ND(<70)	--	ND(<5)	ND(<5)	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	--
	01/27/03	ND(<70)	ND(<70)	***10***	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	04/30/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	07/29/03	ND(<70)	ND(<70)	ND(<4)	ND(<4)	ND(<5)	ND(<5)	ND(<5)	ND(<5)	ND(<7)	ND(<7)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	02/19/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	***0.3***	--	ND(<20)	--
	06/01/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
	09/22/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
	02/21/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	06/08/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***0.5***	--	--	--
	10/21/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***0.3***	--	--	--
	02/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***0.8***	--	--	--
	06/12/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	09/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	12/19/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	03/20/07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
MW-10/10R	09/30/02	ND(<56)	--	ND(<5)	ND(<5)	ND(<24)	--	ND(<40)	--	ND(<80)	--	ND(<48)	--	4	ND(<3)	***0.2***	***0.2***	ND(<160)	--
	01/27/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	***0.2***	ND(<0.2)	ND(<20)	ND(<20)
	04/30/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	10	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	07/29/03	ND(<160)	ND(<160)	ND(<4)	ND(<4)	ND(<40)	ND(<40)	ND(<40)	ND(<40)	ND(<56)	ND(<56)	ND(<40)	ND(<40)	ND(<3)	ND(<3)	***0.4***	ND(<0.2)	ND(<160)	ND(<160)
	02/19/04	ND(<40)	--	ND(<5)	--	ND(<10)	--	ND(<10)	--	ND(<14)	--	ND(<10)	--	ND(<3)	--	***0.6***	--	***70***	--
	06/02/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	11	--	ND(<5)	--	ND(<3)	--	***1.4***	--	ND(<20)	--
	09/22/04	ND(<80)	--	ND(<5)	--	ND(<5)	--	ND(<20)	--	ND(<28)	--	ND(<20)	--	5	--	ND(<0.2)	--	***140***	--
	02/21/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	ND(<20)	--
	06/08/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***0.3***	--	ND(<20)	--

Table 4-20
Metals in Groundwater
Performance Monitoring

Location	Date	Antimony		Arsenic		Beryllium		Cadmium		Chromium		Copper		Lead		Mercury		Nickel	
		Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)
	10/21/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***0.4***	--	ND(<20)	--
MW-10/10R	02/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	***0.6***	--	ND(<20)	--
	06/12/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	09/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	12/19/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
	03/20/07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	--	--
MW-11	09/30/02	ND(<70)	--	ND(<5)	ND(<5)	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	--
	01/28/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	04/30/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	07/30/03	ND(<70)	ND(<70)	ND(<4)	ND(<4)	ND(<5)	ND(<5)	ND(<5)	ND(<5)	ND(<7)	ND(<7)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	02/18/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/02/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
MW-12	09/30/02	ND(<70)	--	ND(<5)	ND(<5)	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	--
	01/27/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	04/30/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	07/30/03	ND(<70)	ND(<70)	ND(<4)	ND(<4)	ND(<5)	ND(<5)	ND(<5)	ND(<5)	13	ND(<7)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	02/18/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/02/04	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	ND(<3)	--	ND(<0.2)	--	ND(<20)	--
MW-13	09/30/02	ND(<70)	--	ND(<5)	ND(<5)	ND(<3)	--	ND(<5)	--	ND(<10)	--	ND(<6)	--	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	--
	01/27/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	04/30/03	ND(<70)	ND(<70)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<5)	ND(<5)	ND(<10)	ND(<10)	ND(<6)	ND(<6)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
	07/30/03	ND(<70)	ND(<70)	ND(<4)	ND(<4)	ND(<5)	ND(<5)	ND(<5)	ND(<5)	ND(<7)	ND(<7)	ND(<5)	ND(<5)	ND(<3)	ND(<3)	ND(<0.2)	ND(<0.2)	ND(<20)	ND(<20)
MW-14	02/21/05	ND(<160)	--	ND(<5)	--	ND(<40)	--	ND(<40)	--	ND(<56)	--	ND(<40)	--	7	--	ND(<0.2)	--	ND(<160)	--
	06/08/05	ND(<160)	--	ND(<5)	--	ND(<40)	--	ND(<40)	--	ND(<56)	--	ND(<40)	--	7	--	ND(<0.2)	--	ND(<160)	--
	10/21/05	ND(<20)	--	ND(<5)	--	ND(<5)	--	ND(<5)	--	ND(<7)	--	ND(<5)	--	8	--	***0.4***	--	***30***	--
	02/13/06	ND(<80)	--	ND(<5)	--	ND(<20)	--	ND(<20)	--	36	--	ND(<20)	--	4	--	***0.6***	--	***130***	--
	06/12/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	ND(<20)	--
	09/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	ND(<20)	--
	12/19/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	ND(<20)	--
	03/20/07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(<0.2)	--	ND(<20)	--
MTCA Marine Water Chronic Criteria[a]		**NV**		**36**		**NV**		**9.3**		**50**		**3.1**		**8.1**		**0.025**		**8.2**	
EPA Surface Water Cleanup Levels[b]		**4,300**		**0.14**		**NV**		**NV**		**NV**		**NV**		**NV**		**0.15**		**4,600**	

Table 4-20
Metals in Groundwater
Performance Monitoring

Location	Date	Selenium		Silver		Thallium		Zinc		Turbidity (NTU)
		Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	
MW-1	09/30/02	--	--	--	--	--	--	--	--	--
	01/28/03	ND(<400)	ND(<400)	ND(<56)	ND(<56)	ND(<2)	ND(<2)	100	ND(<56)	9.1
	04/30/03	ND(<50)	ND<(50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	5.8
	07/30/03	ND(<40)	ND<(40)	ND(<30)	ND(<30)	ND(<2)	ND(<2)	30	20	4
	02/18/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--
MW-2	09/30/02	ND(<1,200)	--	ND(<170)	--	ND(<2)	ND(<2)	ND(<170)	--	2.4
	01/28/03	ND(<400)	ND(<400)	ND(<56)	ND(<56)	ND(<2)	ND(<2)	ND(<56)	ND(<56)	0.83
	04/30/03	ND(<200)	ND(<200)	ND(<28)	ND(<28)	2	ND(<2)	ND(<28)	ND(<28)	0.8
	07/30/03	ND(<320)	ND(<320)	ND(<240)	ND(<240)	ND(<2)	ND(<2)	ND(<80)	ND(<80)	2.1
	02/18/04	ND(<160)	--	ND(<120)	--	ND(<2)	--	ND(<40)	--	--
	06/02/04	ND(<320)	--	ND(<240)	--	ND(<2)	--	ND(<80)	--	--
	09/22/04	ND(<160)	--	ND(<120)	--	ND(<2)	--	ND(<40)	--	--
	02/22/05	--	--	--	--	--	--	--	--	--
	06/08/05	--	--	--	--	--	--	--	--	--
	10/21/05	--	--	--	--	--	--	--	--	2.1
	02/13/06	--	--	--	--	--	--	--	--	0.57
	06/12/06	--	--	--	--	--	--	--	--	3.74
	09/05/06	--	--	--	--	--	--	--	--	1.03
	12/19/06	--	--	--	--	--	--	--	--	3.01
	03/20/07	--	--	--	--	--	--	--	--	1.94
MW-4	09/30/02	ND(<50)	--	ND(<7)	--	ND(<2)	ND(<2)	ND(<7)	--	8.5
	01/27/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	16
	04/30/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	16
	07/29/03	ND(<40)	ND(<40)	ND(<30)	ND(<30)	ND(<2)	ND(<2)	ND(<10)	ND(<10)	1
	02/19/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	20	--	--
	06/02/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--
	09/22/04	--	--	--	--	--	--	--	--	--
	02/22/05	--	--	--	--	--	--	--	--	--
	06/08/05	--	--	--	--	--	--	--	--	--
	10/21/05	--	--	--	--	--	--	--	--	1.95
	02/13/06	--	--	--	--	--	--	--	--	4.54
	06/12/06	--	--	--	--	--	--	--	--	0.54
	09/05/06	--	--	--	--	--	--	--	--	0.97
	12/19/06	--	--	--	--	--	--	--	--	2.17
	03/20/07	--	--	--	--	--	--	--	--	1.04
MW-6	09/30/02	ND(<50)	--	ND(<7)	--	ND(<2)	ND(<2)	ND(<7)	--	40
	01/28/03	ND(<400)	ND(<400)	ND(<56)	ND(<56)	ND(<2)	ND(<2)	ND(<56)	ND(<56)	11
	04/30/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	14
	07/29/03	ND(<40)	ND(<40)	ND(<30)	ND(<30)	ND(<2)	ND(<2)	ND(<10)	ND(<10)	33
	02/19/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	20	--	--
	06/01/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--
MW-7	09/30/02	ND(<50)	--	ND(<7)	--	ND(<2)	ND(<2)	ND(<7)	--	4.2
	01/27/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	0.57
	04/30/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	0.2
	07/29/03	ND(<40)	ND(<40)	ND(<30)	ND(<30)	ND(<2)	ND(<2)	ND(<10)	ND(<10)	1.4
	02/19/04	ND(<80)	--	ND(<60)	--	ND(<2)	--	ND(<20)	--	--
	06/01/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--
	09/22/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--

Table 4-20
Metals in Groundwater
Performance Monitoring

Location	Date	Selenium		Silver		Thallium		Zinc		Turbidity (NTU)
		Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	
MW-7	02/21/05	--	--	--	--	--	--	--	--	--
	06/08/05	--	--	--	--	--	--	--	--	--
	10/21/05	--	--	--	--	--	--	--	--	1.89
	02/13/06	--	--	--	--	--	--	--	--	0.32
	06/12/06	--	--	--	--	--	--	--	--	0.43
	09/05/06	--	--	--	--	--	--	--	--	0.53
	12/19/06	--	--	--	--	--	--	--	--	1.9
	03/20/07	--	--	--	--	--	--	--	--	--
MW-8	09/30/02	ND(<50)	--	ND(<7)	--	ND(<2)	ND(<2)	ND(<7)	--	13
	01/27/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	28
	04/30/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	15
	07/29/03	ND(<40)	ND(<40)	ND(<30)	ND(<30)	ND(<2)	ND(<2)	ND(<10)	ND(<10)	7.6
	02/19/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	20	--	--
	06/01/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--
	09/22/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	20	--	--
	02/21/05	--	--	--	--	--	--	--	--	--
	06/08/05	--	--	--	--	--	--	--	--	--
	10/21/05	--	--	--	--	--	--	--	--	--
	02/13/06	--	--	--	--	--	--	--	--	0.37
	06/12/06	--	--	--	--	--	--	--	--	0.36
	10/23/06	--	--	--	--	--	--	--	--	0
	12/19/06	--	--	--	--	--	--	--	--	--
	03/20/07	--	--	--	--	--	--	--	--	--
MW-9	09/30/02	ND(<50)	--	ND(<7)	--	ND(<2)	ND(<2)	ND(<7)	--	50
	01/27/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	110
	04/30/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	22
	07/29/03	ND(<40)	ND(<40)	ND(<30)	ND(<30)	ND(<2)	ND(<2)	ND(<10)	ND(<10)	33
	02/19/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--
	06/01/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--
	09/22/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	20	--	--
	02/21/05	--	--	--	--	--	--	--	--	--
	06/08/05	--	--	--	--	--	--	--	--	--
	10/21/05	--	--	--	--	--	--	--	--	1.5
	02/13/06	--	--	--	--	--	--	--	--	17.5
	06/12/06	--	--	--	--	--	--	--	--	1.13
	09/05/06	--	--	--	--	--	--	--	--	2.54
	12/19/06	--	--	--	--	--	--	--	--	19.1
	03/20/07	--	--	--	--	--	--	--	--	4.41
MW-10/10R	09/30/02	ND(<400)	--	ND(<56)	--	ND(<2)	ND(<2)	ND(<56)	--	18
	01/27/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	8.8
	04/30/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	8.7
	07/29/03	ND(<320)	ND(<320)	ND(<240)	ND(<240)	ND(<2)	ND(<2)	ND(<8)	ND(<8)	1.2
	02/19/04	ND(<80)	--	ND(<60)	--	ND(<2)	--	ND(<20)	--	--
	06/02/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--
	09/22/04	ND(<160)	--	ND(<120)	--	2	--	ND(<40)	--	--
	02/21/05	--	--	--	--	--	--	--	--	--
	06/08/05	--	--	--	--	--	--	--	--	--

Table 4-20
Metals in Groundwater
Performance Monitoring

Location	Date	Selenium		Silver		Thallium		Zinc		Turbidity (NTU)
		Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	Total (µg/L)	Dissolved (µg/L)	
	10/21/05	--	--	--	--	--	--	--	--	1.2
MW-10/10R	02/13/06	--	--	--	--	--	--	--	--	0.16
	06/12/06	--	--	--	--	--	--	--	--	1.62
	09/05/06	--	--	--	--	--	--	--	--	0.88
	12/19/06	--	--	--	--	--	--	--	--	1.06
	03/20/07	--	--	--	--	--	--	--	--	0.8
MW-11	09/30/02	ND(<50)	--	ND(<7)	--	ND(<2)	ND(<2)	ND(<7)	--	11
	01/28/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	9.4
	04/30/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	11
	07/30/03	ND(<40)	ND(<40)	ND(<30)	ND(<30)	ND(<2)	ND(<2)	ND(<10)	ND(<10)	11
	02/18/04	--	--	--	--	--	--	--	--	--
	06/02/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--
MW-12	09/30/02	ND(<50)	--	ND(<7)	--	ND(<2)	ND(<2)	ND(<7)	--	24
	01/27/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	17
	04/30/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	36
	07/30/03	ND(<40)	ND(<40)	ND(<30)	ND(<30)	ND(<2)	ND(<2)	ND(<10)	ND(<10)	38
	02/18/04	--	--	--	--	--	--	--	--	--
	06/02/04	ND(<40)	--	ND(<30)	--	ND(<2)	--	ND(<10)	--	--
MW-13	09/30/02	ND(<50)	--	ND(<7)	--	ND(<2)	ND(<2)	ND(<7)	--	12
	01/27/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	ND(<7)	ND(<7)	1.4
	04/30/03	ND(<50)	ND(<50)	ND(<7)	ND(<7)	ND(<2)	ND(<2)	22	ND(<7)	36
	07/30/03	ND(<40)	ND(<40)	ND(<30)	ND(<30)	ND(<2)	ND(<2)	ND(<10)	ND(<10)	3.2
MW-14	02/21/05	ND(<320)	--	ND(<240)	--	ND(<2)	--	ND(<80)	--	--
	06/08/05	ND(<320)	--	ND(<240)	--	ND(<2)	--	ND(<80)	--	--
	10/21/05	ND(<40)	--	ND(<30)	--	4	--	ND(<10)	--	1.41
	02/13/06	ND(<160)	--	ND(<30)	--	***8***	--	ND(<40)	--	0
	06/12/06	--	--	--	--	ND(<2)	--	--	--	3.27
	09/05/06	--	--	--	--	ND(<2)	--	--	--	12.8
	12/19/06	--	--	--	--	ND(<2)	--	--	--	2.69
	03/20/07	--	--	--	--	ND(<2)	--	--	--	0.32
MTCA Marine Water Chronic Criteria[(a)]		**71**		**1.9**		**NV**		**81**		**NV**
EPA Surface Water Cleanup Levels[(b)]		**NV**		**NV**		**6.3**		**NV**		**NV**

Notes:

(a) Washington Marine Water Chronic Criteria; WAC 173-201A-040, based on protection of aquatic organisms

(b) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of aquatic organisms

Bold and Highlighted - Indicates detected concentration exceeds a MTCA soil cleanup level

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

Table 4-21
Groundwater Field Parameters
Performance Monitoring

Location	Date	pH	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Temperature (°C)
MW-1	1/27/1999	7.40	540	1.2	--	--	12.8
	4/29/1999	6.21	679	0.4	--	--	14.4
	7/29/1999	6.08	702	0.7	--	--	18.5
	2/17/2000	6.32	411	5.3	--	--	13.8
	6/1/2000	6.60	746	2.5	--	--	16.7
	2/21/2001	5.98	701	1.4	--	--	12.1
	6/11/2002	5.53	746	0	-137	5.9	13.6
MW-2	9/29/1998	7.01	>3,999	1.5	--	--	16.1
	1/27/1999	7.00	>3,999	0	--	--	11.9
	4/29/1999	6.77	>3,999	0.3	--	--	13.4
	7/29/1999	6.72	>3,999	0.2	--	--	19.1
	2/17/2000	6.69	>20,000	2.8	--	--	14.8
	6/1/2000	6.96	>19,000	1	--	--	14.5
	9/21/2000	6.97	>19,000	1.4	--	--	17.5
	2/21/2001	6.68	>20,000	0	--	--	12.2
	6/7/2001	6.93	>3,999	--	--	--	13.3
	10/20/2001	6.84	43,500	0.39	-310	4.96	15.2
	2/12/2002	7.25	36,100	1.92	-365	0.57	11.9
	6/11/2002	6.53	38,700	0	-269	3.74	12.4
	9/4/2002	6.96	39,800	2.29	-335	1.03	15.5
	12/18/2002	7.11	29,500	1.9	-360	3.01	13.0
	3/19/2003	7.11	38,100	0.96	-334	1.94	10.7
MW-4	9/29/1998	7.19	1,215	2.6	--	--	15.9
	1/27/1999	7.12	1,416	0.7	--	--	12.5
	4/29/1999	6.87	1,715	0.2	--	--	12.3
	7/29/1999	6.80	1,407	0.5	--	--	19.3
	2/17/2000	6.65	1,055	4.6	--	--	10.6
	6/1/2000	6.90	1,650	2.2	--	--	14.1
	2/21/2001	6.77	1,280	1.4	--	--	11.8
	6/7/2001	6.93	>3,999	--	--	--	13.8
	10/20/2001	6.72	7,010	0.43	-310	0.44	16.2
	2/12/2002	7.12	4,510	1.08	-290	4.54	11.1
	6/11/2002	5.93	5,040	0	-49	0.54	13.8
	9/4/2002	6.44	4,510	3.46	-335	0.97	18.8
	12/18/2002	6.73	4,220	2.08	-86	2.17	13.5
	3/19/2003	6.76	4,480	1.27	-236	1.04	10.9
MW-6	9/29/1998	6.90	790	2.8	--	--	16.2
	1/27/1999	7.11	1,470	1.9	--	--	10.5
	4/29/1999	6.93	1,230	0.7	--	--	12.0
	7/29/1999	6.91	1,128	0.4	--	--	18.1
	2/17/2000	6.73	790	1.3	--	--	10.8
	6/1/2000	6.74	1,320	2.5	--	--	15.7
	6/11/2002	6.01	1,330	0	-7	2.77	12.4

Table 4-21
Groundwater Field Parameters
Performance Monitoring

Location	Date	pH	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Temperature (°C)
MW-7	9/29/1998	7.26	790	2.5	--	--	12.7
	1/27/1999	6.92	506	1.2	--	--	10.4
	4/29/1999	7.07	972	0.8	--	--	10.7
	7/29/1999	7.15	1,088	0.6	--	--	17.7
	2/17/2000	6.86	921	2.4	--	--	10.6
MW-7	5/31/2000	6.98	1,420	1	--	--	16.6
	9/21/2000	7.75	948	1.7	--	--	15.3
	2/21/2001	6.93	785	3.7	--	--	14.5
	6/7/2001	6.82	683	--	--	--	12.4
	10/20/2001	6.84	1,130	0.49	-75	0.64	13.0
	2/12/2002	6.58	1,160	1.11	-119	0.32	10.3
	6/11/2002	6.12	1,150	0	4	0.43	12.0
	9/4/2002	6.53	1,050	2.97	89	0.53	13.6
	12/18/2002	6.55	1,250	2.4	105	1.9	10.7
MW-8	9/29/1998	7.27	373	2.8	--	--	16.0
	1/27/1999	7.16	420	1.3	--	--	10.0
	4/29/1999	7.19	555	0.8	--	--	10.6
	7/29/1999	7.00	620	0.3	--	--	18.7
	2/17/2000	6.91	389	3.3	--	--	10.4
	5/31/2000	6.95	668	2.1	--	--	11.6
	9/21/2000	6.98	572	1.8	--	--	17.4
	2/20/2001	6.93	665	2.1	--	--	12.3
	6/7/2001	6.66	887	--	--	--	12.8
	2/12/2002	6.57	732	1.09	-113	0.37	8.9
	6/11/2002	6.04	689	0	-15	0.36	11.9
	10/22/2002	6.40	719	5.07	-98	0	15.4
MW-9	9/29/1998	6.79	>3,999	2.6	--	--	14.4
	1/27/1999	6.98	1,130	--	--	--	13.6
	4/29/1999	6.91	1,366	1	--	--	12.8
	7/29/1999	6.82	1,779	0.5	--	--	18.1
	2/17/2000	6.72	472	2.4	--	--	10.6
	5/31/2000	6.85	1,710	1.4	--	--	14.3
	9/21/2000	7.64	1,190	1.8	--	--	14.8
	2/21/2001	6.27	10,930	8.5	--	--	10.6
	6/7/2001	6.56	>3,999	--	--	--	12.2
	10/20/2001	6.83	11,200	0.47	-138	1.67	14.1
	2/12/2002	7.29	2,880	1.11	-193	17.5	11.1
	6/11/2002	6.19	4,200	0	-36	1.13	12.7
	9/4/2002	6.49	3,940	3.82	7	2.54	14.5
	12/18/2002	6.90	1,740	2.5	43	19.1	12.0
	3/19/2003	6.91	2,200	1.84	-127	4.41	11.0

Table 4-21
Groundwater Field Parameters
Performance Monitoring

Location	Date	pH	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Temperature (°C)
MW-10	9/29/1998	6.70	>3,999	2.3	--	--	16.0
	1/27/1999	7.22	>3,999	0.3	--	--	15.2
	4/29/1999	7.19	3,984	0.2	--	--	14.6
	7/29/1999	6.81	>3,999	0.4	--	--	18.8
	2/17/2000	6.70	14,660	13.7	--	--	11.5
	6/1/2000	6.98	18,600	0.9	--	--	13.4
	9/21/2000	6.50	>19,999	1.1	--	--	15.8
MW-10R	2/20/2001	7.27	3,680	3.2	--	--	10.7
	6/7/2001	6.93	1,817	--	--	--	12.5
	10/20/2001	7.15	4,310	0.46	-284	0	14.9
	2/12/2002	7.21	1,980	1.12	-259	0.16	11.5
	6/11/2002	6.11	1,610	0	-36	1.62	12.9
MW-10R	9/4/2002	6.34	1,780	3.9	32	0.88	15.7
	12/18/2002	6.77	1,010	2.64	-44	1.06	12.9
	3/19/2003	6.80	1,210	2.06	-169	0.8	11.0
MW-11	9/29/1998	7.16	951	1.7	--	--	15.2
	1/26/1999	7.11	811	0.9	--	--	11.5
	4/29/1999	7.17	1,113	0.4	--	--	12.5
	7/29/1999	7.11	1,118	0.9	--	--	15.7
	2/17/2000	6.88	870	1.9	--	--	12.2
	6/1/2000	7.05	1,350	1.6	--	--	13.7
MW-12	9/29/1998	7.35	495	2.3	--	--	14.8
	1/27/1999	7.30	487	1.1	--	--	11.9
	4/29/1999	7.27	685	0.5	--	--	13.6
	7/29/1999	7.22	877	0.5	--	--	18.2
	6/1/2000	6.92	757	1.9	--	--	15.0
	9/21/2000	7.62	610	1.8	--	--	16.2
	2/21/2001	6.95	634	1.5	--	--	10.6
	6/11/2002	5.94	814	0	-52	0.25	13.5
MW-13	9/29/1998	7.53	553	4.1	--	--	14.6
	1/27/1999	7.34	382	0.8	--	--	10.3
	4/29/1999	7.05	469	0.7	--	--	13.3
	7/29/1999	7.10	553	0.8	--	--	16.7
	2/17/2000	6.55	358	5.3	--	--	13.8
	5/31/2000	6.84	670	1.8	--	--	14.2
	9/21/2000	7.52	486	1.1	--	--	15.6
	2/21/2001	6.53	379	1.1	--	--	11.4
	6/11/2002	5.80	672	0	-48	1.42	12.0

Table 4-21
Groundwater Field Parameters
Performance Monitoring

Location	Date	pH	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Temperature (°C)
MW-14	2/20/2001	7.17	>20,000	9.1	--	--	8.9
	6/7/2001	6.82	>3,999	--	--	--	13.9
	10/20/2001	7.51	49,900	4.89	-184	0.64	13.5
	2/12/2002	7.90	48,700	7.75	-224	0	8.6
	6/11/2002	6.49	45,300	0.27	-23	3.27	14.4
	9/4/2002	6.94	45,500	4.14	38	12.8	17.3
	12/18/2002	7.31	44,700	7.39	82	2.69	9.0
	3/19/2003	7.33	4,740	8.47	65	0.32	9.0

Table 4-22
Petroleum Hydrocarbons in Soil
2004 Investigations

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
EPI-SP-38	2.0	360	410
	6.0	54	770
	10.0	ND(<25)	ND(<50)
EPI-SP-43	5.5-6.0	ND(<25)	61
EPI-SP-44	5.5-6.0	ND(<25)	ND(<50)
EPI-SP-45	5.5-6.0	110	680
EPI-SP-46	5.5-6.0	ND(<25)	ND(<50)
EPI-SP-47	5.5-6.0	ND(<25)	ND(<50)
EPI-SP-48	5.5-6.0	390	1,300
EPI-SP-49	5.5-6.0	ND(<25)	68
EPI-SP-50	5.5-6.0	ND(<25)	ND(<50)
EPI-SP-51	5.0-5.5	ND(<25)	51
EPI-SP-52	5.0-5.5	ND(<25)	ND(<50)
EPI-SP-53	5.5-6.0	39	59
EPI-SP-54	5.5-6.0	ND(<25)	ND(<50)
EPI-SP-55	4.5-5.0	ND(<25)	ND(<50)
EPI-SP-56	5.0-5.5	55	ND(<54)
EPI-SP-57	5.0-5.5	***2,700***	ND(<100)
EPI-SP-58	5.5-6.0	80	480
EPI-SP-59	5.5-6.0	100	320
EPI-SP-60	5.5-6.0	ND(<25)	ND(<50)
EPI-SP-61	6.5-7.0	ND(<25)	ND(<50)
EPI-SP-62	6.5-7.0	ND(<25)	ND(<50)
MTCA Method A Soil Cleanup Level [(a)]		**2,000**	
MTCA Soil Cleanup Levels (Equation 747-1)[(b)]		**NV**	

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

mg/kg – milligrams/kilogram

Table 4-23
PAHs in Soil
2004 Investigations

Location	Depth (feet)	Non-Carcinogenic PAHs											Carcinogenic PAHs							
		Acenaph-thene (mg/kg)	Acenaph-thylene (mg/kg)	Anthracene (mg/kg)	Benzo(g,h,i)perylene (mg/kg)	Fluoran-thene (mg/kg)	Fluorene (mg/kg)	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naph-thalene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz(a, h) anthracene (mg/kg)	Indeno(1, 2, 3-cd)pyrene (mg/kg)	Total cPAHs (TEF Modified) (mg/kg)
EPI-SP-38	2.0	54	1.2	34	ND(<0.02)	72	54	16	31	***98***	150	34	***9***	***2.9***	3.6	4.6	10	ND(<0.02)	0.23	***3.84***
	6.0	0.18	ND(<0.02)	0.05	0.04	0.21	0.13	0.04	0.1	0.27	0.44	0.1	0.02	0.04	0.03	0.09	0.07	ND(<0.02)	0.02	0.05
	10.0	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.04	0.1	ND(<0.02)	ND(<0.02)	ND(<0.02)	0.03	0.09	0.09	0.03	0.04	0.03	0.06	0.07	ND(<0.02)	0.03	0.05
TEF[c]		-	-	-	-	-	-	-	-	-	-	-	0.1	1	0.1	0.1	0.01	0.4	0.1	NV
MTCA Method A Soil Cleanup Levels[a]		**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**NV**	**5**	**NV**	**NV**	**NV**	**0.1**	**NV**	**NV**	**NV**	**NV**	**NV**	**0.1**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**NV**	**NV**	**53,460**	**NV**	**365**	**NV**	**NV**	**NV**	**NV**	**NV**	**15,026**	**2.2**	**0.6**	**7.6**	**8**	**25**	**2.78**	**21.5**	**NV**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR

(c) Total cPAH concentrations modified using the protocol described in WAC 173-340-708(8)(e)(ii)

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

TEF – Toxicity Equivalency Factor

mg/kg – milligrams/kilogram

Table 4-24
PCBs in Soil
2004 Investigations

Location	Depth (feet)	Aroclor 1016 (mg/kg)	Aroclor 1221 (mg/kg)	Aroclor 1232 (mg/kg)	Aroclor 1242 (mg/kg)	Aroclor 1248 (mg/kg)	Aroclor 1254 (mg/kg)	Aroclor 1260 (mg/kg)
EPI-SP-38	2.0	ND(<1)	ND(<1)	ND(<1)	ND(<1)	ND(<1)	ND(<1)	ND(<1)
MTCA Method A Soil Cleanup Levels[a]		**1[c]**	**1[c]**	**1[c]**	**1[c]**	**1[c]**	**1[c]**	**1(c)**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**0.0028[c]**	**0.0028[c]**	**0.0028[c]**	**0.0028[c]**	**0.0028[c]**	**0.0028[c]**	**0.0028[c]**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

(c) Allowable concentrations for total PCBs in a mixture

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

mg/kg – milligrams/kilogram

Table 4-25
Arsenic in Soil
2004 Investigations

Location	Depth (feet)	Arsenic (mg/kg)
EPI-SP-43	5.5-6.0	ND(<3.6)
EPI-SP-44	5.5-6.0	ND(<3.5)
EPI-SP-45	5.5-6.0	ND(<3.8)
EPI-SP-46	5.5-6.0	ND(<3.7)
EPI-SP-47	5.5-6.0	ND(<3.7)
EPI-SP-48	5.5-6.0	ND(<5.2)
EPI-SP-49	5.5-6.0	ND(<3.3)
EPI-SP-50	5.5-6.0	ND(<3.1)
EPI-SP-51	5.0-5.5	ND(<3.3)
EPI-SP-52	5.0-5.5	ND(<3.1)
EPI-SP-53	5.5-6.0	ND(<6.3)
EPI-SP-54	5.5-6.0	ND(<4.7)
EPI-SP-55	4.5-5.0	ND(<4.4)
EPI-SP-56	5.0-5.5	ND(<7.2)
EPI-SP-57	5.0-5.5	ND(<4.3)
EPI-SP-58	5.5-6.0	ND(<5.0)
EPI-SP-59	5.5-6.0	ND(<5.1)
EPI-SP-60	5.5-6.0	ND(<4.2)
EPI-SP-61	6.5-7.0	5.5
EPI-SP-62	6.5-7.0	ND(<3.7)
MTCA Method A Soil Cleanup Level[a]		**20**
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**21**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

mg/kg – milligrams/kilogram

Table 4-26
Mercury in Soil
2004 Investigations

Location	Depth (feet)	Mercury (mg/kg)
EPI-SP-1	2.0	ND(<0.02)
	6.0	0.04
	10.0	ND(<0.02)
EPI-SP-2	2.0	ND(<0.02)
	6.0	0.02
	10.0	***0.54***
	11.0	***0.52***
	16.0	0.05
	17.0	0.06
	18.0	***0.17***
	19.0	0.02
	20.0	ND(<0.02)
EPI-SP-3	2.0	ND(<0.02)
	6.0	0.02
	10.0	0.09
EPI-SP-4	2.0	ND(<0.02)
	6.0	ND(<0.02)
	10.0	***6.0***
	14.0	ND(<0.02)
	15.0	ND(<0.02)
	16.0	ND(<0.02)
	17.0	ND(<0.02)
	18.0	ND(<0.02)
	19.0	ND(<0.02)
	20.0	ND(<0.02)
EPI-SP-5	2.0	ND(<0.02)
	6.0	ND(<0.02)
	10.0	0.15
EPI-SP-6	2.0	ND(<0.02)
	6.0	ND(<0.02)
	10.0	ND(<0.02)
EPI-SP-7	2.0	ND(<0.02)
	4.0	ND(<0.02)
	6.0	***1.7***
	8.0	***0.93***
	10.0	0.16
EPI-SP-8	2.0	ND(<0.02)
	6.0	0.03
	8.0	***0.33***
	10.0	***0.57***
	12.0	***0.42***
	14.0	0.12

Table 4-26
Mercury in Soil
2004 Investigations

Location	Depth (feet)	Mercury (mg/kg)
EPI-SP-9	2.0	ND(<0.02)
	4.5	***1.6***
	8.0	***3.3***
	9.0	***0.3***
	12.0	***5.5***
	14.0	0.04
EPI-SP-10	2.0	ND(<0.02)
	6.0	0.02
	8.0	***17***
	10.0	***0.18***
	12.0	0.03
	14.0	ND(<0.02)
EPI-SP-11	2.0	NA
	6.0	0.1
	10.0	ND(<0.02)
EPI-SP-12	2.0	ND(<0.02)
	6.0	0.03
	10.0	0.03
EPI-SP-13	2.0	ND(<0.02)
	6.0	0.06
	8.0	0.06
	10.0	0.14
	12.0	0.05
	14.0	0.03
EPI-SP-14	2.0	ND(<0.02)
	4.0	ND(<0.02)
	6.0	***0.44***
	8.0	***0.18***
	10.0	0.06
EPI-SP-15	2.0	0.06
	6.0	0.04
	8.0	ND(<0.02)
	10.0	***0.8***
	12.0	***0.22***
	14.0	ND(<0.02)
EPI-SP-16	2.0	0.15
	6.0	0.03
	8.0	***9.1***
	10.0	***3.9***
	12.0	ND(<0.02)
	14.0	ND(<0.02)

Table 4-26
Mercury in Soil
2004 Investigations

Location	Depth (feet)	Mercury (mg/kg)
EPI-SP-17	2.0	0.03
	4.0	ND(<0.02)
	6.0	***0.94***
	8.0	0.03
	10.0	0.03
EPI-SP-18	2.0	ND(<0.02)
	6.0	0.02
	10.0	ND(<0.02)
EPI-SP-19	2.0	ND(<0.02)
	6.0	0.06
	10.0	0.09
EPI-SP-20	2.0	***0.19***
	4.0	0.05
	6.0	0.05
	9.0	0.07
	10.0	***0.17***
	11.0	0.08
EPI-SP-21	2.0	ND(<0.02)
	6.0	0.03
	10.0	0.13
EPI-SP-22	2.0	ND(<0.02)
	6.0	0.03
	8.0	ND(<0.02)
	10.0	***0.33***
	12.0	ND(<0.02)
	13.0	ND(<0.02)
	14.0	ND(<0.02)
	20.0	ND(<0.02)
EPI-SP-23	2.0	ND(<0.02)
	6.0	0.02
	10.0	0.04
EPI-SP-24	2.0	0.03
	6.0	0.04
	10.0	0.1
EPI-SP-25	2.0	0.03
	6.0	0.03
	10.0	0.02
EPI-SP-26	2.0	ND(<0.02)
	6.0	0.03
	10.0	ND(<0.02)

Table 4-26
Mercury in Soil
2004 Investigations

Location	Depth (feet)	Mercury (mg/kg)
EPI-SP-27	2.0	0.02
	6.0	ND(<0.02)
	10.0	NS
EPI-SP-28	2.0	ND(<0.02)
	6.0	ND(<0.02)
	10.0	ND(<0.02)
EPI-SP-29	2.0	ND(<0.02)
	6.0	0.02
	10.0	0.03
EPI-SP-30	2.0	ND(<0.02)
	6.0	0.04
	10.0	ND(<0.02)
EPI-SP-31	2.0	ND(<0.02)
	6.0	0.02
	10.0	0.03
EPI-SP-32	2.0	ND(<0.02)
	6.0	ND(<0.02)
	10.0	0.02
EPI-SP-33	2.0	ND(<0.02)
	6.0	0.05
	10.0	0.02
EPI-SP-34	2.0	ND(<0.02)
	6.0	ND(<0.02)
	10.0	ND(<0.02)
EPI-SP-35	2.0	ND(<0.02)
	6.0	ND(<0.02)
	9.5	ND(<0.02)
EPI-SP-36	2.0	ND(<0.02)
	6.0	0.03
	10.0	ND(<0.02)
EPI-SP-37	2.0	ND(<0.02)
EPI-SP-38	2.0	ND(<0.02)
	4.0	ND(<0.02)
	6.0	***0.3***
	8.0	0.05
	10.0	0.08
EPI-SP-39	2.0	ND(<0.02)
	6.0	0.03
	8.0	0.02
	10.0	***0.18***
	12.0	0.04
	14.0	ND(<0.02)

Table 4-26
Mercury in Soil
2004 Investigations

Location	Depth (feet)	Mercury (mg/kg)
EPI-SP-40	2.0	ND(<0.02)
	6.0	ND(<0.02)
	10.0	0.02
EPI-SP-41	2.0	NA
	6.0	ND(<0.02)
	10.0	ND(<0.02)
EPI-SP-63	2.0	0.15
	6.0	ND(<0.02)
	10.0	0.05
	14.0	0.03
	18.0	ND(<0.02)
EPI-SP-64	2.0	0.13
	6.0	0.14
	10.0	0.1
	14.0	0.1
EPI-SP-65	2.0	ND(<0.02)
	6.0	ND(<0.02)
	8.0	***0.42***
	10.0	***1.0***
	12.0	0.06
EPI-SP-66	2.0	ND(<0.02)
	6.0	***0.37***
	8.0	0.13
	10.0	0.08
	12.0	***0.17***
	14.0	***0.2***
EPI-SP-67	2.0	ND(<0.02)
	6.0	0.12
	10.0	0.05
	14.0	0.02
EPI-SP-68	2.0	ND(<0.02)
	6.0	ND(<0.02)
	8.0	0.04
	10.0	***0.17***
	12.0	0.16
	16.0	ND(<0.02)
EPI-SP-69	2.0	ND(<0.02)
	6.0	0.07
	8.0	ND(<0.02)
	10.0	***0.23***
	12.0	***0.3***
	18.0	ND(<0.02)

Table 4-26
Mercury in Soil
2004 Investigations

Location	Depth (feet)	Mercury (mg/kg)
EPI-SP-73	2.0	ND(<0.02)
	6.0	ND(<0.02)
	10.0	ND(<0.02)
	12.0	ND(<0.02)
MTCA Method A Soil Cleanup Level[(a)]		**2**
MTCA Soil Cleanup Levels (Equation 747-1)[(b)]		**0.16**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

mg/kg – milligrams/kilogram

Table 4-27
Petroleum Hydrocarbons in Soil
2004/2005 IRM Final Performance Sampling

Location	Depth (feet)	Diesel-Range Petroleum Hydrocarbons (mg/kg)	Higher-Range Petroleum Hydrocarbons (mg/kg)
PS-01S-04	5.0	57	ND(<54)
PS-02B-04	7.0	ND(<25)	ND(<50)
PS-03B-04	7.0	ND(<25)	ND(<50)
PS-04B-04	7.0	ND(<25)	ND(<50)
PS-05S-04	5.0	28	ND(<50)
PS-06S-04	5.0	ND(<26)	ND(<51)
PS-07S-04	5.0	590	ND(<50)
PS-08S-04	5.0	ND(<25)	ND(<50)
PS-09S-04	5.0	ND(<26)	ND(<53)
MTCA Method A Soil Cleanup Level [a]		**2,000**	
MTCA Soil Cleanup Levels (Equation 747-1)[b]		**NV**	

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NV – Indicates that no value was available for this compound

mg/kg – milligrams/kilogram

Table 4-28
Mercury in Soil
2004/2005 IRM Final Performance Sampling

Location	Depth (feet)	Mercury (mg/kg)
PS-10S-04	1.5	0.03
PS-11S-04	1.5	0.04
	10.0	0.06
PS-12S-04	1.5	0.05
	10.0	0.11
PS-13S-04	1.5	ND(<0.02)
	10.0	0.02
PS-14S-04	10.0	ND(<0.02)
PS-16B-04	12.0	ND(<0.02)
PS-17B-04	12.0	ND(<0.02)
PS-18S-04	7.0	0.05
PS-19B-04	9.0	0.04
PS-22S-04	10.0	0.08
PS-23S-04	10.0	ND(<0.02)
PS-24S-04	10.0	ND(<0.02)
PS-25B-04	11.0	ND(<0.02)
PS-26B-04	11.0	ND(<0.02)
PS-29B-04	11.0	0.05
PS-30B-04	12.0	ND(<0.02)
PS-31S-04	10.0	ND(<0.02)
PS-32B-04	11.0	0.08
PS-33S-04	9.0	ND(<0.02)
PS-34S-04	9.0	ND(<0.02)
PS-35S-04	10.0	ND(<0.02)
PS-36S-04	6.0	0.03
PS-37S-04	6.0	0.03
PS-38S-04	6.0	ND(<0.02)
PS-39B-04	7.0	0.13
PS-40S-04	9.0	ND(<0.02)
PS-41B-04	11.0	ND(<0.02)
PS-42B-04	11.0	0.03
PS-43S-04	9.0	0.05
PS-44B-04	14.0	ND(<0.02)
PS-45B-04	13.0	ND(<0.02)
PS-46B-04	11.0	0.08
PS-47B-04	14.0	***0.21***
PS-48B-04	14.0	***0.22***
PS-50S-04	9.5	0.15
PS-52S-04	9.5	ND(<0.02)
PS-53B-04	12.0	ND(<0.02)
PS-54B-04	12.0	ND(<0.02)
PS-56S-04	8.0	0.05
PS-57S-04	10.0	0.15
PS-59S-04	10.0	0.13
PS-61B-04	12.0	0.08

Table 4-28
Mercury in Soil
2004/2005 IRM Final Performance Sampling

Location	Depth (feet)	Mercury (mg/kg)
PS-62B-04	12.0	0.06
PS-63B-04	10.0	0.02
PS-64B-04	12.0	0.06
PS-66S-04	7.5	ND(<0.02)
PS-67S-04	7.5	0.15
PS-68B-04	8.0	ND(<0.02)
PS-69B-04	8.0	ND(<0.02)
PS-70S-04	6.0	ND(<0.02)
PS-71S-04	6.0	ND(<0.02)
PS-72S-04	6.0	ND(<0.02)
PS-73S-04	6.0	0.02
PS-74B-04	13.0	ND(<0.02)
PS-75B-04	13.0	ND(<0.02)
PS-76S-04	2.0	0.03
	10.0	0.14
PS-77S-04	2.0	0.13
	10.0	0.11
PS-78S-04	2.0	0.04
	10.0	0.11
PS-79S-04	2.0	ND(<0.02)
PS-82S-04	10.0	0.08
PS-83S-04	10.0	0.03
PS-84B-04	8.0	0.04
PS-85B-04	11.0	0.12
PS-86B-04	11.0	0.08
PS-87S-04	9.5	0.06
PS-88S-04	9.5	0.06
PS-90S-04	9.5	0.02
PS-91S-04	7.5	0.16
PS-92B-04	14.0	ND(<0.02)
PS-93B-04	13.0	ND(<0.02)
PS-94B-04	13.0	ND(<0.02)
PS-96S-04	9.5	ND(<0.02)
PS-97S-04	11.0	ND(<0.02)
PS-98S-04	9.0	ND(<0.02)
PS-99B-04	14.0	0.09
PS-100B-04	14.0	0.12
PS-102S-04	11.0	0.06
PS-103S-04	11.0	0.05
PS-104S-04	11.0	0.03
PS-105S-04	11.0	ND(<0.02)
PS-106S-04	11.0	0.04
PS-107B-04	14.0	0.02
PS-108B-04	14.0	0.06
PS-109B-04	16.0	ND(<0.02)

Table 4-28
Mercury in Soil
2004/2005 IRM Final Performance Sampling

Location	Depth (feet)	Mercury (mg/kg)
PS-110B-04	16.0	ND(<0.02)
PS-111S-04	6.0	0.06
	14.0	ND(<0.02)
PS-112S-04	6.0	0.15
	14.0	ND(<0.02)
PS-113S-04	6.0	ND(<0.02)
	14.0	ND(<0.02)
PS-114S-04	14.0	ND(<0.02)
PS-115B-04	14.0	ND(<0.02)
PS-116S-04	9.5	0.03
PS-117B-04	11.0	0.02
PS-118B-04	11.0	0.03
PS-119S-04	10.0	0.02
PS-120S-04	10.0	ND(<0.02)
PS-121S-04	10.0	ND(<0.02)
PS-122S-04	10.0	ND(<0.02)
PS-123B-04	12.0	ND(<0.02)
PS-124B-04	12.0	ND(<0.02)
PS-125S-04	10.0	ND(<0.02)
PS-126S-04	10.0	ND(<0.02)
PS-127S-04	10.0	ND(<0.02)
PS-128S-04	10.0	ND(<0.02)
PS-129S-04	10.0	0.15
PS-130B-04	14.0	ND(<0.02)
PS-131B-04	14.0	ND(<0.02)
PS-132S-04	9.5	ND(<0.02)
PS-133S-04	9.5	ND(<0.02)
PS-134S-04	9.5	ND(<0.02)
PS-135S-04	9.5	ND(<0.02)
MTCA Method A Soil Cleanup Level[(a)]		**2**
MTCA Soil Cleanup Levels (Equation 747-1)[(b)]		**0.16**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

mg/kg – milligrams/kilogram

Table 4-29
Arsenic in Groundwater
2005/2006 Investigations

Sample	Date	Total Arsenic (µg/L)	Dissolved Arsenic (µg/L)	Turbidity (NTU)
EPI-A-1	12/14/2005	ND (<5)	ND (<5)	54.9
EPI-A-2	12/14/2005	ND (<5)	ND (<5)	41.4
EPI-A-3	12/14/2005	ND (<5)	ND (<5)	0
EPI-A-4	12/14/2005	***11***	***9***	45.4
EPI-A-5	12/14/2005	***10***	***7***	48.3
EPI-A-6	12/14/2005	ND (<5)	ND (<5)	69.7
EPI-A-7	12/14/2005	ND (<5)	ND (<5)	28.7
EPI-A-8	12/14/2005	ND (<5)	ND (<5)	21.1
EPI-A-9	12/14/2005	***11***	***7***	33.7
EPI-A-10	12/14/2005	ND (<5)	ND (<5)	42.9
EPI-A-11	12/15/2005	ND (<5)	ND (<5)	293
EPI-A-12	12/15/2005	ND (<5)	ND (<5)	49.5
EPI-A-13	12/15/2005	ND (<5)	ND (<5)	49.6
EPI-A-14	12/15/2005	***8***	ND (<5)	144
EPI-A-15	12/15/2005	ND (<5)	ND (<5)	NA
EPI-A-16	12/15/2005	ND (<5)	ND (<5)	76.1
EPI-A-17	12/15/2005	***18***	***15***	64.9
EPI-A-18	12/15/2005	***26***	***14***	45.1
EPI-A-19	12/15/2005	***22***	***13***	17
EPI-A-20	12/15/2005	***7***	***6***	47.5
EPI-A-21	10/23/2006	***6***	ND(<5)	318
EPI-A-22	10/23/2006	***14***	ND(<5)	439
EPI-A-23	10/23/2006	ND (<5)	ND(<5)	109
EPI-A-24	10/23/2006	***7***	ND(<5)	66.5
EPI-A-25	10/23/2006	ND (<5)	ND(<5)	31
EPI-A-26	10/23/2006	ND (<5)	ND(<5)	35
EPI-A-27	10/23/2006	ND (<5)	ND(<5)	129
EPI-A-28	10/24/2006	***28***	***25***	21.1
EPI-A-29	10/23/2006	***17***	NA	33
EPI-A-30	10/24/2006	***13***	ND (<5)	71.9
EPI-A-31	10/23/2006	ND (<5)	ND (<5)	20.1
EPI-A-32	10/23/2006	***7***	***8***	30
EPI-A-33	10/24/2006	ND (<5)	ND (<5)	33.1
EPI-A-34	10/24/2006	***25***	***18***	150
EPI-A-35	10/24/2006	***7***	ND (<5)	28.9
MTCA Marine Water Chronic Criteria[(a)]		**36**		**NA**
EPA Surface Water Cleanup Levels[(b)]		**0.14**		**NA**

Notes:

(a) Washington Marine Water Chronic Criteria; WAC 173-201A-040, based on protection of aquatic organisms

(b) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of aquatic organisms

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NTU - nephelometric turbidity unit

µg/L – micrograms/liter

Table 4-30
Arsenic in Soil
2005/2006 Investigations

Sample	Depth (feet)	Arsenic (mg/kg)
SP-A-4	2-2.5	ND(<6)
SP-A-4	10-10.5	ND(<6)
SP-A-5	2-2.5	ND(<6)
SP-A-5	10-10.5	ND(<6)
SP-A-9	2-2.5	ND(<6)
SP-A-9	10-10.5	ND(<6)
SP-A-14	2-2.5	ND(<6)
SP-A-14	10-10.5	ND(<6)
SP-A-17	2-2.5	ND(<6)
SP-A-17	10-10.5	ND(<6)
SP-A-18	2-2.5	ND(<6)
SP-A-18	10-10.5	ND(<6)
SP-A-19	2-2.5	ND(<6)
SP-A-19	10-10.5	ND(<6)
SP-A-20	2-2.5	ND(<6)
SP-A-20	10-10.5	ND(<6)
SP-A-21	2-2.5	12
SP-A-21	5.5-6	18
SP-A-21	10-10.5	***30***
SP-A-22	2-2.5	12
SP-A-22	5.5-6	ND(<5)
SP-A-22	10-10.5	***40***
SP-A-24	2-2.5	ND(<5)
SP-A-24	5.5-6	ND(<5)
SP-A-24	10-10.5	11
SP-A-28	5.5-6	ND(<5)
SP-A-28	5.5-6	ND(<5)
SP-A-28	10-10.5	ND(<5)
SP-A-29	2-2.5	ND(<5)
SP-A-29	5.5-6	ND(<5)
SP-A-29	10-10.5	ND(<5)
SP-A-30	2-2.5	ND(<5)
SP-A-30	5.5-6	5.6
SP-A-30	10-10.5	ND(<5)
SP-A-32	2-2.5	ND(<5)
SP-A-32	5.5-6	ND(<5)
SP-A-32	10-10.5	ND(<5)
SP-A-34	2-2.5	ND(<5)
SP-A-34	5.5-6	ND(<5)
SP-A-34	10-10.5	ND(<5)
SP-A-35	2-2.5	ND(<5)
SP-A-35	5.5-6	15
SP-A-35	10-10.5	ND(<5)
MTCA Method A Soil Cleanup Level[(a)]		**20**
MTCA Soil Cleanup Levels (Equation 747-1)[(b)]		**21**

Notes:

(a) MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

(b) MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36)

Bold and Highlighted – Indicates detected concentration exceeds a MTCA soil cleanup level

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

mg/kg – milligrams/kilogram

Table 4-31
Permatox Formulations
2006 Investigations

Name	Pentachlorophenol	Tetrachlorophenol	Trichlorophenol	Phenylmercuric Acid	Phenylmercuric Lactate	Tributyltin Oxide	3-iodo-2-propynyl butyl carbamate
Chapman Permatox 100		x		x	x		
Chapman Permatox 180	x	x					
Permatox 182	x	x					
Permatox 102	x	x		x			
Permatox 101	x			x			
Permatox 110a fungicide		x	x				
Permatox penta	x						
Permatox 10-s	x						
Permatox 10-s plus bazide	x						
Permatox dp-2	x						
Permatox sn-8ec						x	
Permatox sn-1 wood preservative						x	
Permatox ipb							x

Table 4-32
Tri-n-butyltin and Carbamates in Groundwater
2006 Investigations

Location	Date	Tri-n-butyltin (µg/L)	Carbamates									
			3-Hydroxy-carbo-furan (µg/L)	Aldicarb (µg/L)	Aldicarb Sulfone (µg/L)	Aldicarb Sulfoxide (µg/L)	Carbaryl (µg/L)	Carbo-furan (µg/L)	Methio-carb (µg/L)	Methomyl (µg/L)	Oxamyl (µg/L)	Propoxur (µg/L)
MW-1	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MW-2	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MW-4	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MW-6	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MW-7	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MW-8	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MW-9	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MW-10	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MW-12	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MW-13	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MW-14	6/12/2007	ND (<0.02)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
MTCA Marine Water Chronic Criteria[(a)]		**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**
EPA Surface Water Cleanup Levels[(b)]		**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**	**NC**

Notes:

(a) Washington Marine Water Chronic Criteria; WAC 173-201A-040, based on protection of aquatic organisms

(b) National Toxics Rule (40 CFR 131.36), based on protection of human health for consumption of aquatic organisms

ND – Indicates that the compound was not detected at a concentration above the detection limit of the method used for the sample

NC – Indicates that cleanup levels were not calculated for this compound

µg/L – micrograms/liter

Table 6-1
Soil Cleanup Levels

Analyte	Unit	Simplified TEE Cleanup Levels	MTCA Method A or B Soil Cleanup Level	Selected Soil Cleanup Level	Basis
TPH Diesel Range Organics	mg/kg	15,000	2,000	460	MTCA Method A
Benzo(a)anthracene	mg/kg	No Value Available	0.22	0.22	Modified MTCA Method B
Benzo(b)pyrene	mg/kg	No Value Available	0.1	0.1	MTCA Method A
Benzo(b)fluoranthene	mg/kg	No Value Available	0.74	0.74	Modified MTCA Method B
Benzo(k)fluoranthene	mg/kg	No Value Available	0.74	0.74	Modified MTCA Method B
Chrysene	mg/kg	No Value Available	0.25	0.25	Modified MTCA Method B
Dibenz(a,h)anthracene	mg/kg	No Value Available	1.1	1.1	Modified MTCA Method B
Indeno(1,2,3-cd)pyrene	mg/kg	No Value Available	2.2	2.2	Modified MTCA Method B
Total cPAHs [a]	mg/kg	No Value Available	0.1 [a]	0.1 [a]	MTCA Method A
Chlorinated dibenzofurans (total)	mg/kg	3×10^{-6}	160	3×10^{-6}	Simplified TEE
Chlorinated dibenzo-p-dioxins (total)	mg/kg	5×10^{-6}	1.1×10^{-5} [b]	5×10^{-6}	Simplified TEE
Arsenic	mg/kg	20[c]	20	20	MTCA Method A
Chromium	mg/kg	135[d]	19 [f]	19 [f]	MTCA Method A
Lead	mg/kg	220	250	220	Simplified TEE
Mercury	mg/kg	0.7[e]	0.16	0.16	Modified MTCA Method B

Notes:

a The total cPAHs concentration for each sample was calculated using the Method B toxicity equivalency factor (TEF) methodology described in WAC 173-340-708(8)(e)(ii)

b Based on 2,3,7,8 tetrachlorodibenzo-p-dioxin

c Cleanup level for arsenic (III). Arsenic V cleanup level is 260 mg/kg.

d Cleanup level for total chromium

e Cleanup level for organic mercury. Inorganic mercury cleanup level is 9 mg/kg.

f Assumes all chromium is present as chromium VI, cleanup level for chromium III is 2,000 mg/kg

Simplified Terrestrial Ecological Evaluation Soil Cleanup Levels for Industrial or Commercial Sites (WAC 173-340-900, Table 749-2)

MTCA Method A – based on MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

Modified MTCA Method B - based on MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36).

Table 6-2
Groundwater Cleanup Levels

Analyte	Units	Groundwater Cleanup Level	Basis
TPH Diesel Range Organics	µg/L	500	MTCA Method A
Benzo(a)anthracene	µg/L	0.031	NTR Criteria
Benzo(b)pyrene	µg/L	0.031	NTR Criteria
Benzo(b)fluoranthene	µg/L	0.031	NTR Criteria
Benzo(k)fluoranthene	µg/L	0.031	NTR Criteria
Chrysene	µg/L	0.031	NTR Criteria
Dibenzo(a,h)anthracene	µg/L	0.031	NTR Criteria
Indeno(1,2,3-cd)pyrene	µg/L	0.031	NTR Criteria
Total cPAHs [(a)]	µg/L	0.1	MTCA Method A
Antimony	µg/L	4,300	NTR Criteria
Arsenic	µg/L	8	Natural Background
Beryllium	µg/L	No Value Available	
Cadmium	µg/L	9.3	WA Surface Water Quality
Chromium	µg/L	50	WA Surface Water Quality
Copper	µg/L	3.1	WA Surface Water Quality
Lead	µg/L	8.1	WA Surface Water Quality
Mercury	µg/L	0.025	WA Surface Water Quality
Nickel	µg/L	8.2	WA Surface Water Quality
Selenium	µg/L	71	WA Surface Water Quality
Silver	µg/L	1.9	WA Surface Water Quality
Thallium	µg/L	6.3	NTR Criteria
Zinc	µg/L	81	WA Surface Water Quality

Notes:

a The total cPAHs concentration for each sample was calculated using the TEF methodology described in WAC 173-340-708(8)(e)(ii)

MTCA Method A – MTCA Method A Cleanup Levels for Groundwater (WAC 173-340-900, Table 720-1)
NTR Criteria - National Toxics Rule (40 CFR 131.36), protection of human health for consumption of aquatic organisms
WA Surface Water Quality - Washington Marine Water Chronic Criteria; WAC 173-201A-040, based on protection of aquatic organisms

Table 7-1
Direct-Push Probe Arsenic Analytical Results - Groundwater

Sample Location	Screened Interval (ft. bgs)	Total Arsenic (µg/L)	Dissolved Arsenic (µg/L)
Probes			
SP-A-36	8-12	**6**	**5**
SP-A-37	8-12	**37**	**35**
SP-A-38	8-12	**11**	**10**
SP-A-39	8-12	**33**	**33**
SP-A-40	8-12	**6**	**6**
SP-A-41	8-12	**13**	**12**
SP-A-42	8-12	**17**	**15**
SP-A-43	8-12	**6**	**6**
SP-A-44	8-12	**17**	**15**
SP-A-45	8-12	**35**	**39**
SP-A-46	8-12	ND (<5)	ND (<5)
SP-A-47	8-12	**30**	**32**
SP-A-48	8-12	ND (<5)	ND (<5)
SP-A-49	8-12	ND (<5)	ND (<5)
MTCA Marine Water Chronic Criteria[1]		**36**	
National Toxics Rule Criteria[2]		**0.14**	

Notes:

1 - MTCA Marine Water Chronic Criteria; WAC 173-201A-040, based on protection of aquatic organisms.

2 - National Toxics Rule Criteria (40 CFR 131.36) protection of human health for consumption of aquatic organisms.

NA = not analyzed

ND = not detected at the value indicated

µg/L = micrograms per liter

Bold values indicate a detection

Yellow shaded values indicate a regulatory exceedence

Table 7-2
Monitoring Well Mercury, Cadmium, and Arsenic Analytical Results - Groundwater

Sample Location	Sample Date	Total Mercury (µg/L)	Dissolved Mercury (µg/L)	Total Cadmium (µg/L)
MW-7	02/04/09	ND (<0.2)	ND (<0.2)	NA
	05/14/09	ND (<0.2)	ND (<0.2)	NA
	08/05/09	ND (<0.2)	ND (<0.2)	NA
	11/04/09	ND (<0.2)	ND (<0.2)	NA
	06/16/10	NA	NA	ND (<0.4)
	09/15/10	NA	NA	ND (<0.4)
Marine Surface Water Criteria[1]		**0.025**		**9.3**

Sample Location	Sample Date	Total Arsenic by ICP/MS (µg/L)	Dissolved Arsenic by ICP/MS (µg/L)	Total Arsenic by Hydride (µg/L)	Dissolved Arsenic by Hydride (µg/L)
MW-8	02/04/09	**11**	**12**	NA	NA
	05/14/09	**10**	**15**	NA	**14**
	08/05/09	NA	NA	**14**	**11**
	11/04/09	NA	NA	**14**	**14**
MW-15	02/04/09	**32**	**26**	NA	NA
	05/05/09	**11**	**7.0**	NA	**0.2**
	08/05/09	NA	NA	**1.1**	**0.4**
	11/04/09	NA	NA	**1.4**	**0.1**
MW-16	02/04/09	**17**	**13**	NA	NA
	05/05/09	**48**	**32**	NA	**14**
	08/05/09	NA	NA	**23**	**4.9**
	11/04/09	NA	NA	**18**	**2.3**
Natural Background[2]		**8**			
Marine Surface Water Criteria[1]		**36**			

Notes:

[1]Ambient water quality criteria for protection of aquatic life (WAC 173-201A-040 and 40 C.F.R. Part 131)
[2]Natural background groundwater concentration in Washington State (from PTI 1989)
All wells are screened from 4 to 19 ft. bgs
NA = not analyzed
ND = not detected at the value indicated
µg/L = micrograms per liter
Bold values indicate a detection
Yellow shaded values indicate exceedence of marine surface water chronic criteria

Table 7-3
Summary of Final Groundwater Field Parameters

Probe or Well Identification Number	Date	Time Collected	Total Gallons Purged	pH	Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mv)	Temperature (°C)
SP-A-36	1/15/2009	12:50 PM	1.1	7.80	3,254	9.97	0.34	-140.9	11.17
SP-A-37	1/15/2009	12:00 PM	1.2	8.18	5,637	5.18	0.50	-100.2	10.76
SP-A-38	1/15/2009	10:30 AM	1.1	8.15	6,310	5.18	0.37	-153.9	11.19
SP-A-39	1/15/2009	11:20 AM	1.4	8.22	8,085	9.92	0.35	-134.1	11.33
SP-A-40	1/15/2009	9:45 AM	1.2	8.61	3,780	5.85	0.46	-121.0	11.14
SP-A-41	1/14/2009	1:30 PM	1.6	7.33	8,641	8.78	0.35	-115.5	10.90
SP-A-42	1/14/2009	12:45 PM	1.3	8.04	5,429	5.24	0.56	-123.9	10.94
SP-A-43	1/14/2009	2:15 PM	1.5	7.77	3,200	9.36	0.41	-137.9	11.29
SP-A-44	1/14/2009	3:10 PM	3.1	7.17	5,570	9.01	0.47	-160.0	10.74
SP-A-45	1/14/2009	12:00 PM	1.2	7.61	2,588	8.81	0.45	-143.6	10.34
SP-A-46	1/15/2009	9:00 AM	1.0	8.64	1,056	7.71	0.91	-142.2	11.32
SP-A-47	1/14/2009	10:15 AM	1.2	8.06	4,533	7.61	0.46	-126.1	10.24
SP-A-48	1/14/2009	11:10 AM	1.3	7.38	5,111	9.60	0.40	-109.1	10.82
SP-A-49	1/14/2009	9:20 AM	2.0	7.77	7,812	9.46	0.45	-110.1	10.50
MW-7	2/4/2009	12:30 PM	2.5	7.33	2,286	6.96	0.43	-142.6	11.42
MW-8	2/4/2009	11:00 AM	2.0	7.66	2,365	4.93	0.39	-164.3	9.26
MW-15	2/4/2009	8:40 AM	1.8	7.63	31,510	3.79	1.24	-65.9	10.72
MW-16	2/4/2009	9:45 AM	2.0	7.39	8,466	5.09	0.57	-171.0	11.51
MW-7	5/5/2009	11:46 AM	2.0	6.74	2.175	2.94	0.70	-120.8	10.74
MW-7 (resample)*	5/14/2009	12:02 AM	2.6	6.83	2.304	1.82	0.55	-51.4	10.53
MW-8	5/5/2009	10:12 AM	2.0	6.96	1	2.41	0.77	-139.1	10.15
MW-15	5/5/2009	9:25 AM	2.5	6.91	9	7.87	1.01	-121.7	11.10
MW-16	5/5/2009	10:59 AM	2.0	6.51	6	8.00	1.04	-163.6	11.06
MW-7	8/5/2009	7:05 PM	1.8	7.77	2	3.25	0.19	-50.5	12.59
MW-8	8/5/2009	5:40 PM	1.8	7.8	2	3.06	0.19	-55.3	15.96
MW-15	8/5/2009	4:45 PM	2.1	7.71	9	5.91	0.42	-96.1	14.98
MW-16	8/5/2009	6:25 PM	2.2	7.78	6	8.37	0.15	-77.1	15.00

Table 7-3
Summary of Final Groundwater Field Parameters

Probe or Well Identification Number	Date	Time Collected	Total Gallons Purged	pH	Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mv)	Temperature (°C)
MW-7	11/4/2009	1:20 PM	2.0	6.95	1.833	0.16	1.09	-101.1	12.88
MW-8	11/4/2009	11:20 AM	1.8	7.47	1.453	0.36	1.09	-162.2	14.23
MW-15	11/4/2009	10:00 AM	2.0	7.11	22.530	2.50	0.88	-144.2	14.90
MW-16	11/4/2009	12:15 PM	2.0	6.93	6.739	2.26	1.17	-97.8	14.86

* May 2009 MW-7 was resampled due to visually high turbidity noted in the original sample container.

Table 7-4
Arsenic Analytical Results - Soil

Sample Location	Soil Interval (ft. bgs)	Arsenic (mg/kg)
Probes		
SP-A-36	0.0 to 0.5	ND (<5.0)
SP-A-36	2.0 to 2.5	ND (<5.0)
SP-A-36	5.5 to 6.0	ND (<5.0)
SP-A-36	10.0 to 10.5	ND (<5.0)
SP-A-37	2.0 to 2.5	ND (<5.0)
SP-A-37	5.5 to 6.0	ND (<5.0)
SP-A-37	10.0 to 10.5	ND (<5.0)
SP-A-38	0.0 to 0.5	ND (<5.0)
SP-A-38	2.0 to 2.5	ND (<5.0)
SP-A-38	5.5 to 6.0	ND (<5.0)
SP-A-38	10.0 to 10.5	ND (<5.0)
SP-A-39	2.0 to 2.5	ND (<5.0)
SP-A-39	5.5 to 6.0	ND (<5.0)
SP-A-39	10.0 to 10.5	ND (<5.0)
SP-A-40	2.0 to 2.5	ND (<5.0)
SP-A-40	5.5 to 6.0	ND (<5.0)
SP-A-40	10.0 to 10.5	**12**
SP-A-41	0.0 to 0.5	ND (<5.0)
SP-A-41	2.0 to 2.5	ND (<5.0)
SP-A-41	5.5 to 6.0	ND (<5.0)
SP-A-41	10.0 to 10.5	ND (<5.0)
SP-A-42	2.0 to 2.5	ND (<5.0)
SP-A-42	5.5 to 6.0	ND (<5.0)
SP-A-42	10.0 to 10.5	ND (<5.0)
SP-A-43	2.0 to 2.5	ND (<5.0)
SP-A-43	5.5 to 6.0	ND (<5.0)
SP-A-43	10.0 to 10.5	ND (<5.0)
SP-A-44	0.0 to 0.5	ND (<5.0)
SP-A-44	2.0 to 2.5	ND (<5.0)
SP-A-44	5.5 to 6.0	ND (<5.0)
SP-A-44	10.0 to 10.5	ND (<5.0)
SP-A-45	2.0 to 2.5	ND (<5.0)
SP-A-45	5.5 to 6.0	ND (<5.0)
SP-A-45	10.0 to 10.5	ND (<5.0)
SP-A-46	2.0 to 2.5	ND (<5.0)
SP-A-46	5.5 to 6.0	ND (<5.0)
SP-A-46	10.0 to 10.5	ND (<5.0)
SP-A-47	0.0 to 0.5	ND (<5.0)
SP-A-47	2.0 to 2.5	ND (<5.0)
SP-A-47	5.5 to 6.0	ND (<5.0)
SP-A-47	10.0 to 10.5	**5.5**
SP-A-48	2.0 to 2.5	ND (<5.0)
SP-A-48	5.5 to 6.0	ND (<5.0)
SP-A-48	10.0 to 10.5	ND (<5.0)
SP-A-49	2.0 to 2.5	ND (<5.0)
SP-A-49	5.5 to 6.0	ND (<5.0)
SP-A-49	10.0 to 10.5	ND (<5.0)

Table 7-4
Arsenic Analytical Results - Soil

Sample Location	Soil Interval (ft. bgs)	Arsenic (mg/kg)
Hand Auger		
SP-A-50	1.5 to 2.0	ND (<5.0)
SP-A-50	3.5 to 4.0	ND (<5.0)
SP-A-50	5.5 to 6.0	ND (<5.0)
SP-A-51	1.5 to 2.0	ND (<5.0)
SP-A-51	3.5 to 4.0	ND (<5.0)
SP-A-51	5.5 to 6.0	ND (<5.0)
Borings		
MW-15	2.0 to 2.5	ND (<5.0)
MW-15	5.5 to 6.0	**5.7**
MW-15	10.0 to 10.5	ND (<5.0)
MW-16	2.0 to 2.5	ND (<5.0)
MW-16	5.5 to 6.0	ND (<5.0)
MW-16	10.0 to 10.5	ND (<5.0)
MTCA Method A Cleanup Level		**20**

Notes:

Analytical Method: EPA 6010

ND = not detected at the value indicated

ft. bgs = feet below ground surface

mg/kg = milligrams per kilograms

Bold values indicate a detection

MTCA Method A Cleanup Level - MTCA Method A Soil Cleanup Level for Unrestricted Land Use (WAC 173-340-900, Table 740-1).

Results are in milligrams per kilogram (mg/kg)

Table 7-5
Dioxins and Furans in Surface Soils Analytical Results

Analyte	TEF Factor	Sample Locations and Identification Numbers				
		D-02 PG-D-02-S	D-04 PG-D-04-S	D-06 PG-D-06-S	D-08 PG-D-08-S	D-10 PG-D-10-S
2,3,7,8-TCDD	1	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)
1,2,3,7,8-PeCDD	1	ND (<5.4)	ND (<5.4)	ND (<5.6)	ND (<5.6)	ND (<5.7)
1,2,3,4,7,8-HxCDD	0.1	ND (<5.4)	ND (<5.4)	ND (<5.6)	ND (<5.6)	ND (<5.7)
1,2,3,6,7,8-HxCDD	0.1	**7.3**	ND (<5.4)	ND (<5.6)	**10**	ND (<5.7)
1,2,3,7,8,9-HxCDD	0.1	ND (<5.4)	ND (<5.4)	ND (<5.6)	ND (<5.6)	ND (<5.7)
1,2,3,4,6,7,8-HpCDD	0.01	**130**	ND (<5.4)	**63**	**220**	**43**
OCDD	0.0003	**1400**	ND (<11)	**580**	**1900**	**350**
2,3,7,8-TCDF	0.1	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)	ND (<1.1)
1,2,3,7,8-PeCDF	0.03	ND (<5.4)	ND (<5.4)	ND (<5.6)	ND (<5.6)	ND (<5.7)
2,3,4,7,8-PeCDF	0.3	ND (<5.4)	ND (<5.4)	ND (<5.6)	ND (<5.6)	ND (<5.7)
1,2,3,4,7,8-HxCDF	0.1	ND (<5.4)	ND (<5.4)	ND (<5.6)	ND (<5.6)	ND (<5.7)
1,2,3,6,7,8-HxCDF	0.1	ND (<5.4)	ND (<5.4)	ND (<5.6)	ND (<5.6)	ND (<5.7)
2,3,4,6,7,8-HxCDF	0.1	ND (<5.4)	ND (<5.4)	ND (<5.6)	ND (<5.6)	ND (<5.7)
1,2,3,7,8,9-HxCDF	0.1	ND (<5.4)	ND (<5.4)	ND (<5.6)	ND (<5.6)	ND (<5.7)
1,2,3,4,6,7,8-HpCDF	0.01	**40**	ND (<5.4)	**9.6**	**37**	**6.3**
1,2,3,4,7,8,9-HpCDF	0.01	ND (<5.4)	ND (<5.4)	ND (<5.6)	ND (<5.6)	ND (<5.7)
OCDF	0.0003	**64**	ND (<11)	**26**	**86**	**13**
Total TEQ Concentration (dioxins)		**2.45**	**0**	**0.80**	**3.77**	**0.53**
Total TEQ Concentration (furans)		**0.42**	**0**	**0.10**	**0.40**	**0.07**
Simplified TEE (dioxins)		**5.0**				
Simplified TEE (furans)		**3.0**				

Notes:

Analytical Method: EPA 1613B

ND = not detected at the value indicated

TEF = Toxicity Equivalency Factor

TEQ = Toxicity Equivalent Concentration

Bold values indicate a detection

Simplified TEE - Simplified Terrestrial Ecological Evaluation Soil Cleanup Level for Industrial or Commercial Sites (WAC 173-340-900, Table 749-2)

Results are in picograms per gram (pg/g)

Table 7-6
Pesticides Analytical Results - Soil

Analyte	CAS #	Sample Locations and Identification Numbers								Sample Locations and Identification Numbers						
		D-01 PG-D-01-S	D-02 PG-D-02-S	D-03 PG-D-03-S	D-04 PG-D-04-S	D-05 PG-D-05-S	D-06 PG-D-06-S	D-07 PG-D-07-S	D-08 PG-D-08-S	D-09 PG-D-09-S	D-10 PG-D-10-S	SP-A-36	SP-A-38	SP-A-41	SP-A-44	SP-A-47
A-BHC	319-84-6	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
G-BHC	58-89-9	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
B-BHC	319-85-7	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Heptachlor	76-44-8	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
D-BHC	319-86-8	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Aldrin	309-00-2	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Heptachlor Epoxide	1024-57-3	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Chlordane	57-74-9	ND (<0.02)	ND (<0.04)	ND (<0.04)	ND (<0.04)	ND (<0.04)	ND (<0.04)	ND (<0.04)	ND (<0.04)	ND (<0.04)	ND (<0.04)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)
Endosulfan I	959-98-8	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
4,4'-DDE	72-55-9	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Dieldrin	60-57-1	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Endrin	72-20-8	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
4,4'-DDD	72-54-8	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Endosulfan II	33213-65-9	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
4,4'-DDT	50-29-3	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Endrin Aldehyde	7421-93-4	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Endosulfan Sulfate	1031-07-8	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Methoxychlor	72-43-5	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.02)	ND (<0.02)	ND (<0.02)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)	ND (<0.01)
Toxaphene	8001-35-2	ND (<0.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)

Notes:
Analytical Method: EPA 8081
ND = not detected at the concentation indicated
CAS # - Chemical Abstract Service number
Results are in milligrams per kilogram (mg/kg)

Table 7-7
Summary of Final Survey Data

Location	Northing	Easting	Soil Sample Elevation	Well Rim Elevation	Top of 2-inch PVC Elevation
Refuse Burner Surface Soil Sampling Locations					
D1	317142.855	1211243.426	8.43	NA	NA
D2	317042.217	1211250.200	8.71	NA	NA
D3	317086.656	1211187.397	7.81	NA	NA
D4	317148.190	1211128.196	8.84	NA	NA
D5	317044.125	1211140.229	8.27	NA	NA
D6	316945.720	1211256.684	9.69	NA	NA
D7	316844.016	1211259.714	9.61	NA	NA
D8	316890.919	1211216.293	9.75	NA	NA
D9	316942.212	1211147.393	9.54	NA	NA
D10	316842.264	1211158.468	9.83	NA	NA
Sparge Pile Soil Sampling Locations					
L1	315668.896	1210794.862	8.97	NA	NA
L2	315639.774	1210805.468	9.08	NA	NA
L3	315611.584	1210791.077	9.08	NA	NA
L4	315581.440	1210813.670	10.22	NA	NA
L5	315551.321	1210794.257	10.71	NA	NA
L5A	315548.373	1210784.041	10.66	NA	NA
L5B	315552.067	1210811.141	10.53	NA	NA
DPT Sampling Locations					
SP-A-36	315803.219	1211048.532	11.32	NA	NA
SP-A-37	315909.186	1211056.975	10.57	NA	NA
SP-A-38	315977.390	1211045.376	10.65	NA	NA
SP-A-39	315936.495	1211024.969	10.65	NA	NA
SP-A-40	316035.707	1211019.028	10.53	NA	NA
SP-A-41	315987.196	1210977.544	10.44	NA	NA
SP-A-42	315939.910	1210959.213	10.66	NA	NA
SP-A-43	316038.487	1210965.685	10.40	NA	NA
SP-A-44	315988.628	1210926.637	11.48	NA	NA
SP-A-45	315937.284	1210890.329	11.43	NA	NA
SP-A-46	316036.960	1210893.327	10.69	NA	NA
SP-A-47	315989.413	1210847.214	10.87	NA	NA
SP-A-48	315946.000	1210810.575	10.58	NA	NA
SP-A-49	316039.379	1210811.189	10.61	NA	NA
SP-A-50	315726.340	1210768.147	9.46	NA	NA
SP-A-51	315654.659	1210754.704	9.28	NA	NA
Monitoring Well Locations					
MW-7	316155.748	1211039.360	NA	10.81	10.16
MW-8	315716.616	1210882.273	NA	9.69	9.16
MW-15	315745.611	1211041.138	NA	10.80	10.24
MW-16	315869.241	1211042.228	NA	10.98	10.23

Note
Horizontal Datum: NAD 83(91), North Zone, US FEET.
Vertical Datum: NGVD 29, US FEET.

Table 9-1
Soil Cleanup Levels

Analyte	Unit	Simplified TEE Cleanup Levels	MTCA Method A or B Soil Cleanup Level	Selected Soil Cleanup Level	Basis
TPH Diesel Range Organics	mg/kg	15,000	2,000	460	MTCA Method A
Benzo(a)anthracene	mg/kg	No Value Available	0.22	0.22	Modified MTCA Method B
Benzo(b)pyrene	mg/kg	No Value Available	0.1	0.1	MTCA Method A
Benzo(b)fluoranthene	mg/kg	No Value Available	0.74	0.74	Modified MTCA Method B
Benzo(k)fluoranthene	mg/kg	No Value Available	0.74	0.74	Modified MTCA Method B
Chrysene	mg/kg	No Value Available	0.25	0.25	Modified MTCA Method B
Dibenz(a,h)anthracene	mg/kg	No Value Available	1.1	1.1	Modified MTCA Method B
Indeno(1,2,3-cd)pyrene	mg/kg	No Value Available	2.2	2.2	Modified MTCA Method B
Total cPAHs [(a)]	mg/kg	No Value Available	0.1 [(a)]	0.1 [(a)]	MTCA Method A
Chlorinated dibenzofurans (total)	mg/kg	3×10^{-6}	160	3×10^{-6}	Simplified TEE
Chlorinated dibenzo-p-dioxins (total)	mg/kg	5×10^{-6}	1.1×10^{-5} [(b)]	5×10^{-6}	Simplified TEE
Arsenic	mg/kg	20[(c)]	20	20	MTCA Method A
Chromium	mg/kg	135[(d)]	19 [(f)]	19 [(f)]	MTCA Method A
Lead	mg/kg	220	250	220	Simplified TEE
Mercury	mg/kg	0.7[(e)]	0.16	0.16	Modified MTCA Method B

Notes:

a The total cPAHs concentration for each sample was calculated using the Method B toxicity equivalency factor (TEF) methodology described in WAC 173-340-708(8)(e)(ii)

b Based on 2,3,7,8 tetrachlorodibenzo-p-dioxin

c Cleanup level for arsenic (III). Arsenic V cleanup level is 260 mg/kg.

d Cleanup level for total chromium

e Cleanup level for organic mercury. Inorganic mercury cleanup level is 9 mg/kg.

f Assumes all chromium is present as chromium VI, cleanup level for chromium III is 2,000 mg/kg

Simplified Terrestrial Ecological Evaluation Soil Cleanup Levels for Industrial or Commercial Sites (WAC 173-340-900, Table 749-2)

MTCA Method A – based on MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1)

Modified MTCA Method B - based on MTCA Equation 747-1 Values, Soil Cleanup Level based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule (40 CFR 131.36).

Table 9-2
Groundwater Cleanup Levels

Analyte	Units	Groundwater Cleanup Level	Basis
TPH Diesel Range Organics	µg/L	500	MTCA Method A
Benzo(a)anthracene	µg/L	0.031	NTR Criteria
Benzo(b)pyrene	µg/L	0.031	NTR Criteria
Benzo(b)fluoranthene	µg/L	0.031	NTR Criteria
Benzo(k)fluoranthene	µg/L	0.031	NTR Criteria
Chrysene	µg/L	0.031	NTR Criteria
Dibenzo(a,h)anthracene	µg/L	0.031	NTR Criteria
Indeno(1,2,3-cd)pyrene	µg/L	0.031	NTR Criteria
Total cPAHs [(a)]	µg/L	0.1	MTCA Method A
Antimony	µg/L	4,300	NTR Criteria
Arsenic	µg/L	8	Natural Background
Beryllium	µg/L	No Value Available	
Cadmium	µg/L	9.3	WA Surface Water Quality
Chromium	µg/L	50	WA Surface Water Quality
Copper	µg/L	3.1	WA Surface Water Quality
Lead	µg/L	8.1	WA Surface Water Quality
Mercury	µg/L	0.025	WA Surface Water Quality
Nickel	µg/L	8.2	WA Surface Water Quality
Selenium	µg/L	71	WA Surface Water Quality
Silver	µg/L	1.9	WA Surface Water Quality
Thallium	µg/L	6.3	NTR Criteria
Zinc	µg/L	81	WA Surface Water Quality

Notes:

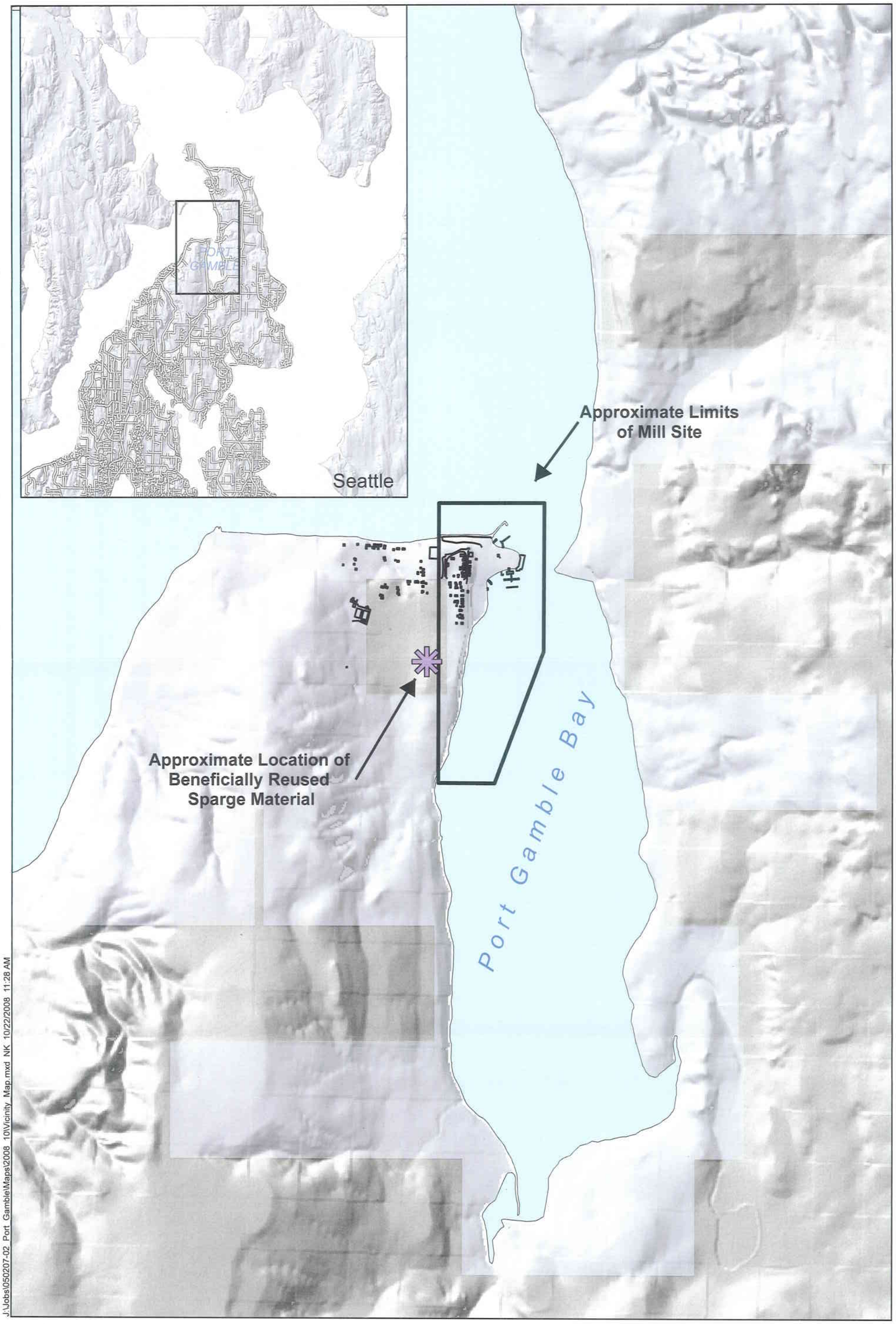
a The total cPAHs concentration for each sample was calculated using the TEF methodology described in WAC 173-340-708(8)(e)(ii)

MTCA Method A – MTCA Method A Cleanup Levels for Groundwater (WAC 173-340-900, Table 720-1)

NTR Criteria - National Toxics Rule (40 CFR 131.36), protection of human health for consumption of aquatic organisms

WA Surface Water Quality - Washington Marine Water Chronic Criteria; WAC 173-201A-040, based on protection of aquatic organisms

FIGURES



ANCHOR ENVIRONMENTAL, L.L.C.

0 990 1,980

Scale in Feet

Figure 2-1
Site Vicinity Map
Port Gamble, Washington

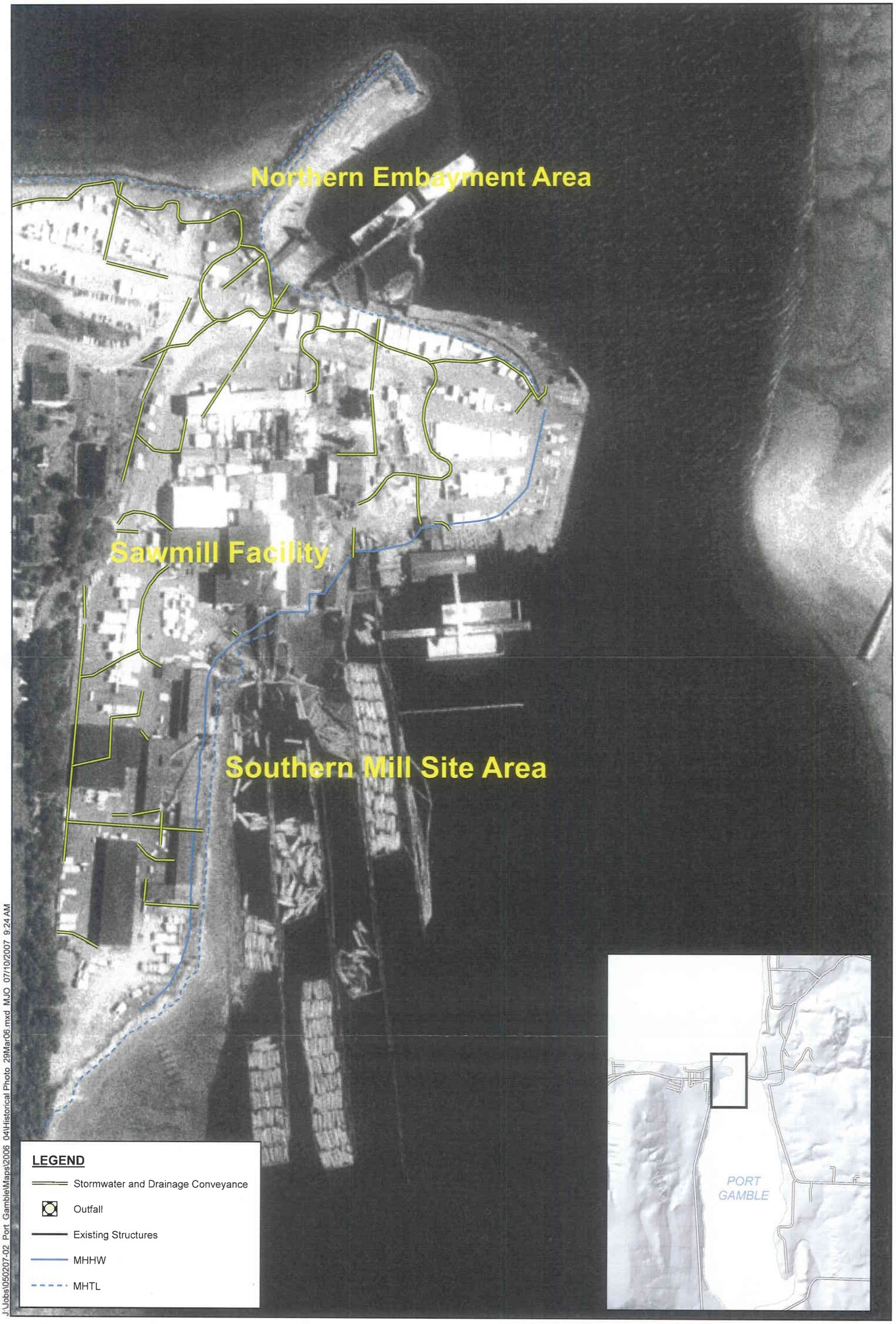
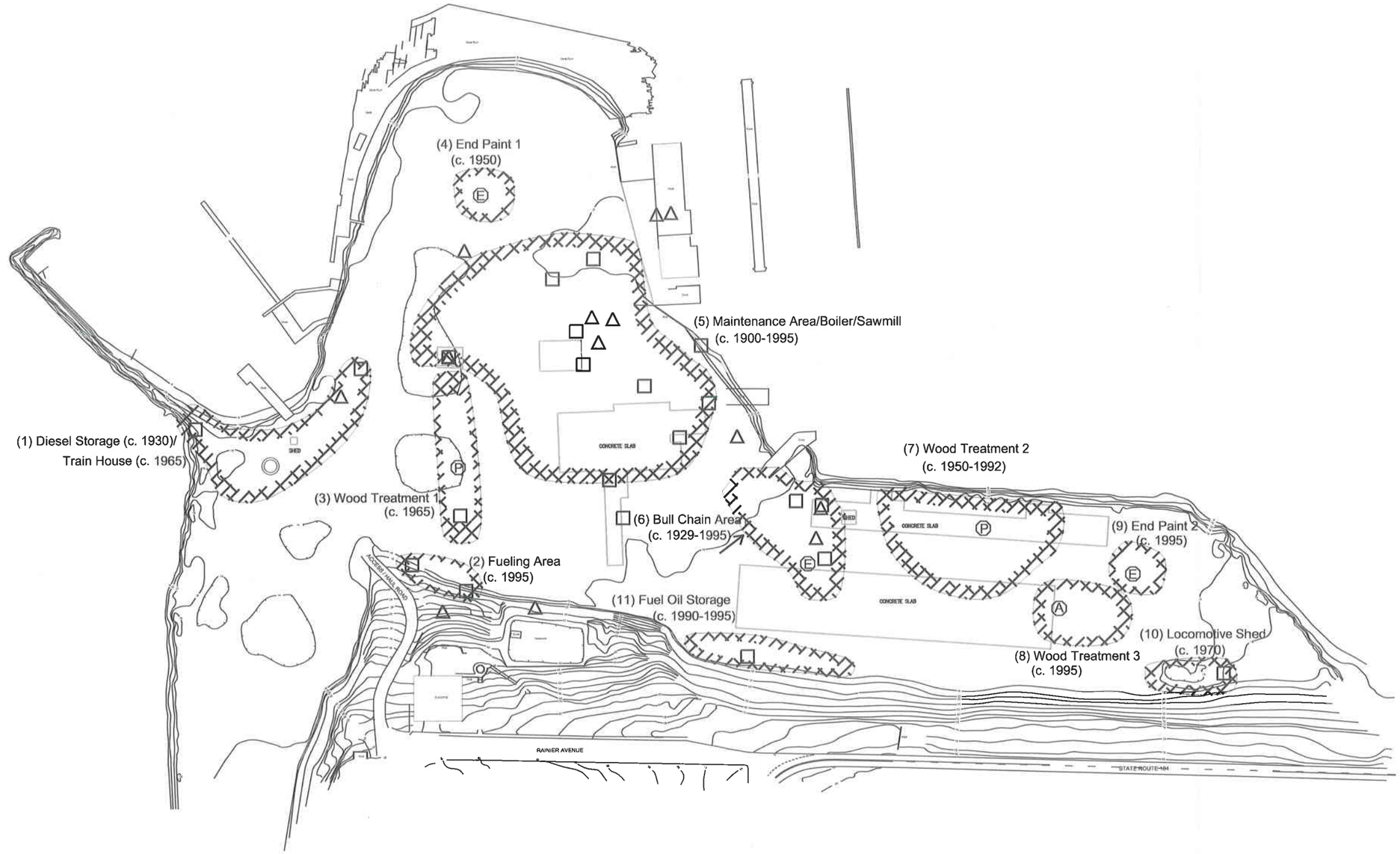


Figure 2-2
Historical Site Operations (date unknown)
Port Gamble, Washington



KEY:

APPROXIMATE POTENTIAL SOURCE AREAS ADDED BY EPI
POTENTIAL SOURCE AREAS BASED ON INFORMATION PROVIDED BY PARAMETRIX AND POPE & TALBOT, INC.
BASE SURVEY MAP PREPARED BY PARAMETRIX

SOURCE AREA OPERATIONS

- PETROLEUM PRODUCT STORAGE AREA
- FORMER PCB TRANSFORMER LOCATION
- WOOD TREATMENT / END PAINT AREA
  - P = PCP BASED WOODTREATMENT
  - A = OTHER WOOD TREATMENT
  - E = END SEAL
- DRUM STORAGE AREA

FORMER BUILDINGS

APPROXIMATE POTENTIAL SOURCE AREAS

0 100 200

SCALE: 1" = 200'

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FIGURE 3-1

SOURCE AREAS

PROJECT	17008.2
PREPARED FOR	POPE RESOURCES
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON

SHEET	DRAWN BY	REVIEWED BY	DATE
1 of 1	MMH	SLG	04/25/07

KEY:

- MONITORING WELL LOCATION (PARAMETRIX)
- SOIL PROBE LOCATION (PARAMETRIX / FOSTER WHEELER)
- TEST PIT LOCATION (PARAMETRIX / FOSTER WHEELER)
- EPI SAMPLING LOCATION

BASE SURVEY MAP PREPARED BY PARAMETRIX

0 75 150

SCALE: 1" = 150'

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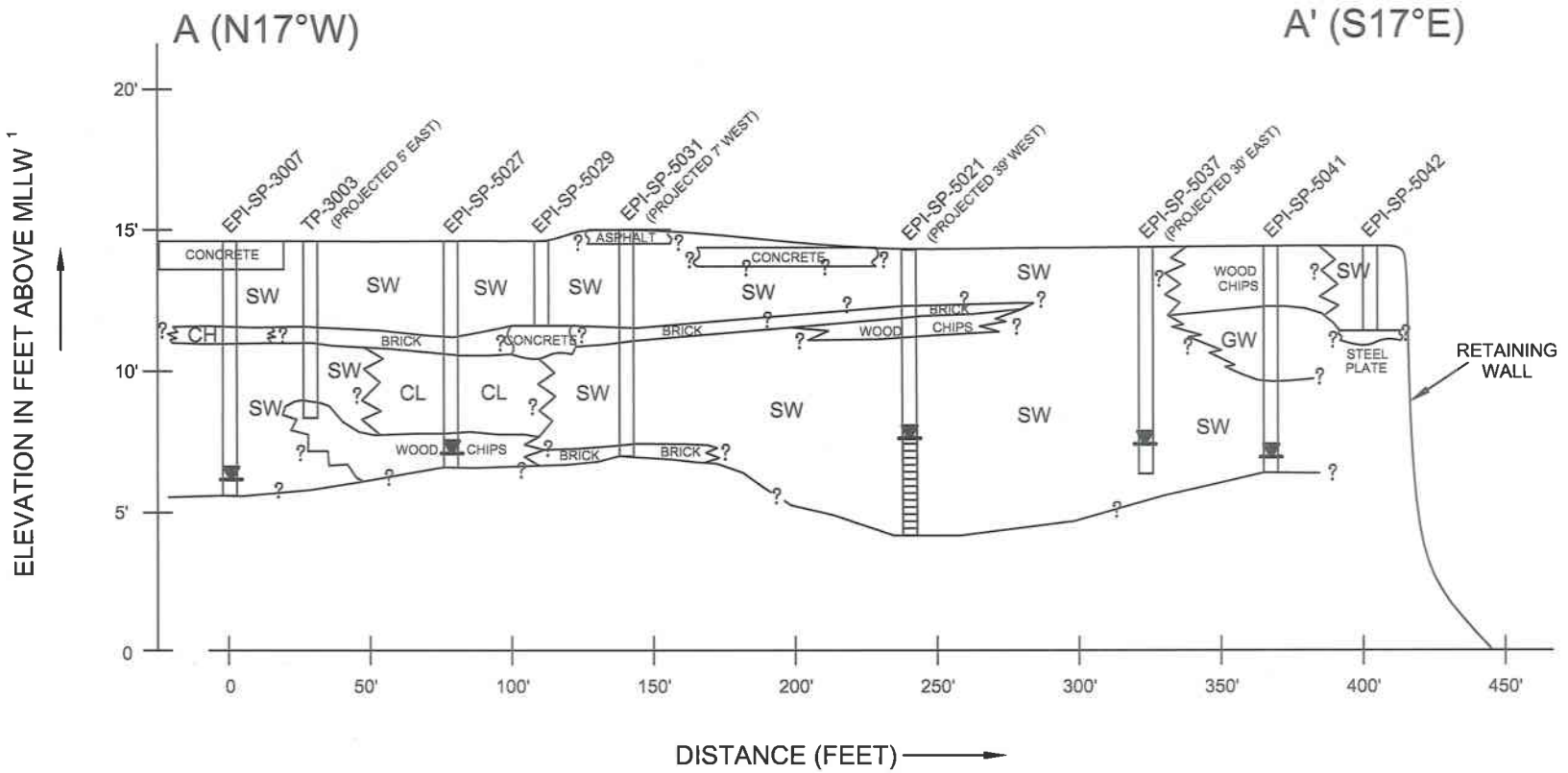
FIGURE 3-2

CROSS-SECTION LOCATION MAP

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY MMH	REVIEWED BY SLG	DATE 10/10/07



SOURCE: REVISED REMEDIAL INVESTIGATION REPORT, FORMER POPE & TALBOT SAWMILL PROPERTY (MILL SITE), PORT GAMBLE, WASHINGTON. (SEPTEMBER 13, 2002; EPI 2002a)

KEY:

SW USCS SOIL TYPE CLASSIFICATION

INFERRED GRADATIONAL CONTACT

LITHOLOGIC FACIES CHANGE (ASSUMED. LOCATION APPROXIMATE)

EPI-SP-3007 SOIL PROBE

[1] BASED ON ELEVATIONS FOR NEARBY SAMPLING LOCATIONS PERFORMED BY PARAMETRIX

LITHOLOGIC CONTACT (DASHED WHERE INFERRED, QUERIED WHERE UNCERTAIN)

TEMPORARY SCREENED INTERVAL

WATER LEVEL ELEVATION AT TIME OF PROBING

SCALE: 10X HORIZONTAL EXAGGERATION

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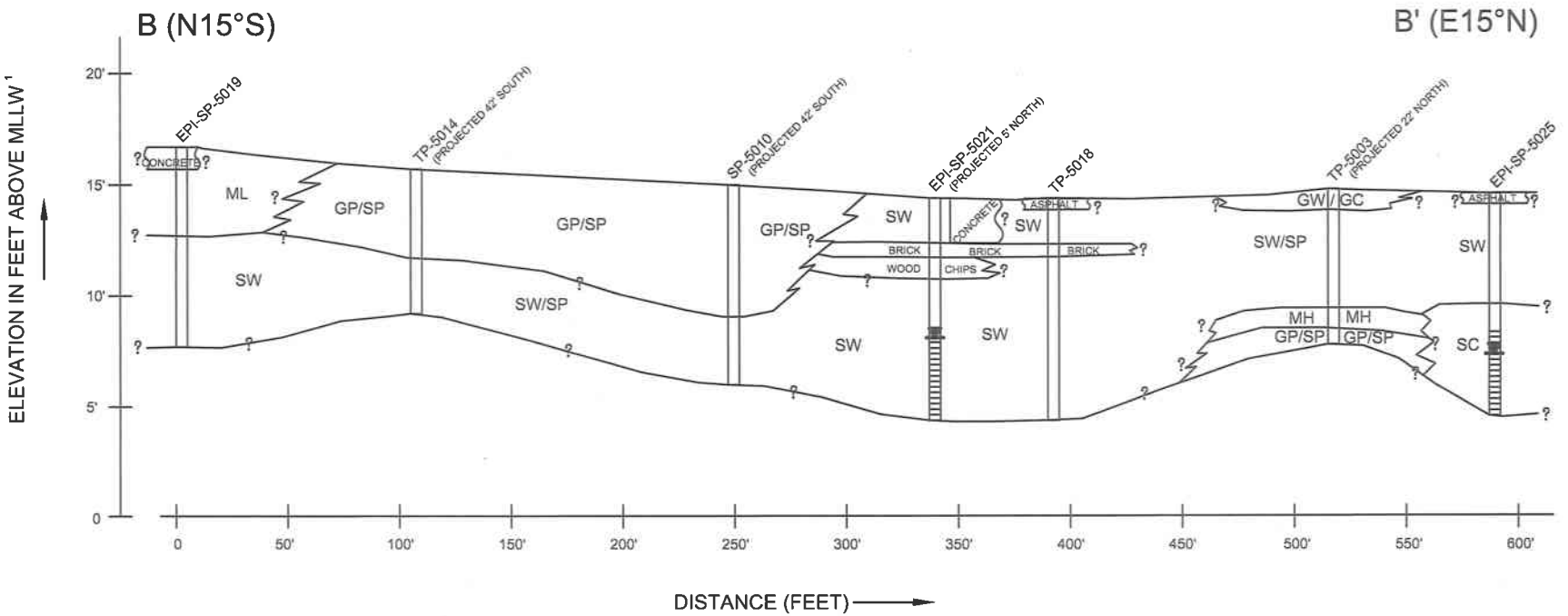
FIGURE 3-3

CROSS SECTION A-A'

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY MMH	REVIEWED BY SLG	DATE 10/11/07



SOURCE: REVISED REMEDIAL INVESTIGATION REPORT, FORMER POPE & TALBOT SAWMILL PROPERTY (MILL SITE), PORT GAMBLE, WASHINGTON. (SEPTEMBER 13, 2002; EPI 2002a)

KEY:

SW USCS SOIL TYPE CLASSIFICATION

INFERRED GRADATIONAL CONTACT

LITHOLOGIC FACIES CHANGE (ASSUMED, LOCATION APPROXIMATE)

EPI-SP-3007

SOIL PROBE

[1] BASED ON ELEVATIONS FOR NEARBY SAMPLING LOCATIONS PERFORMED BY PARAMETRIX

LITHOLOGIC CONTACT (DASHED WHERE INFERRED, QUERIED WHERE UNCERTAIN)

TEMPORARY SCREENED INTERVAL

WATER LEVEL ELEVATION AT TIME OF PROBING

SCALE: 10X HORIZONTAL EXAGGERATION

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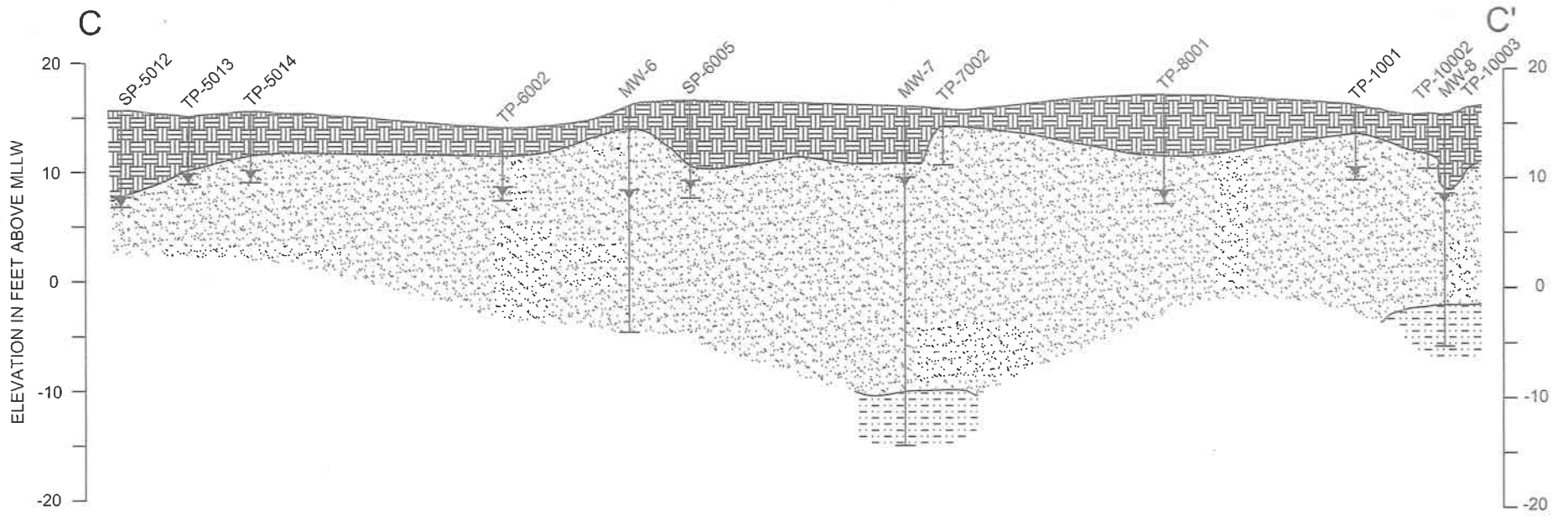
FIGURE 3-4

CROSS SECTION B-B'

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY MMH	REVIEWED BY SLG	DATE 10/11/07



SOURCE: INTERIM REPORT NO.2 - POPE & TALBOT, INC. PORT GAMBLE MILL SITE, RESULTS OF PHASE I GROUNDWATER AND SURFACE WATER INVESTIGATION (OCTOBER 10, 1990; PARAMETRIX 199d)

KEY:

- FILL
- SAND, NATIVE MATERIAL
- SILTY SAND OR CLAYEY SILT, NATIVE MATERIAL
- BOTTOM OF BORING
- WATER LEVEL AT TIME EXECUTION OR DRILLING

0 75 150

SCALE: 1" = 150'

NOTES:
-WATER LEVELS FOR TP-7002, TP-10002, AND TP-10003 ARE NOT RELIABLE
-BASE DRAWING BY PARAMETRIX
-SCALE: 10 HORIZONTAL EXAGGERATION

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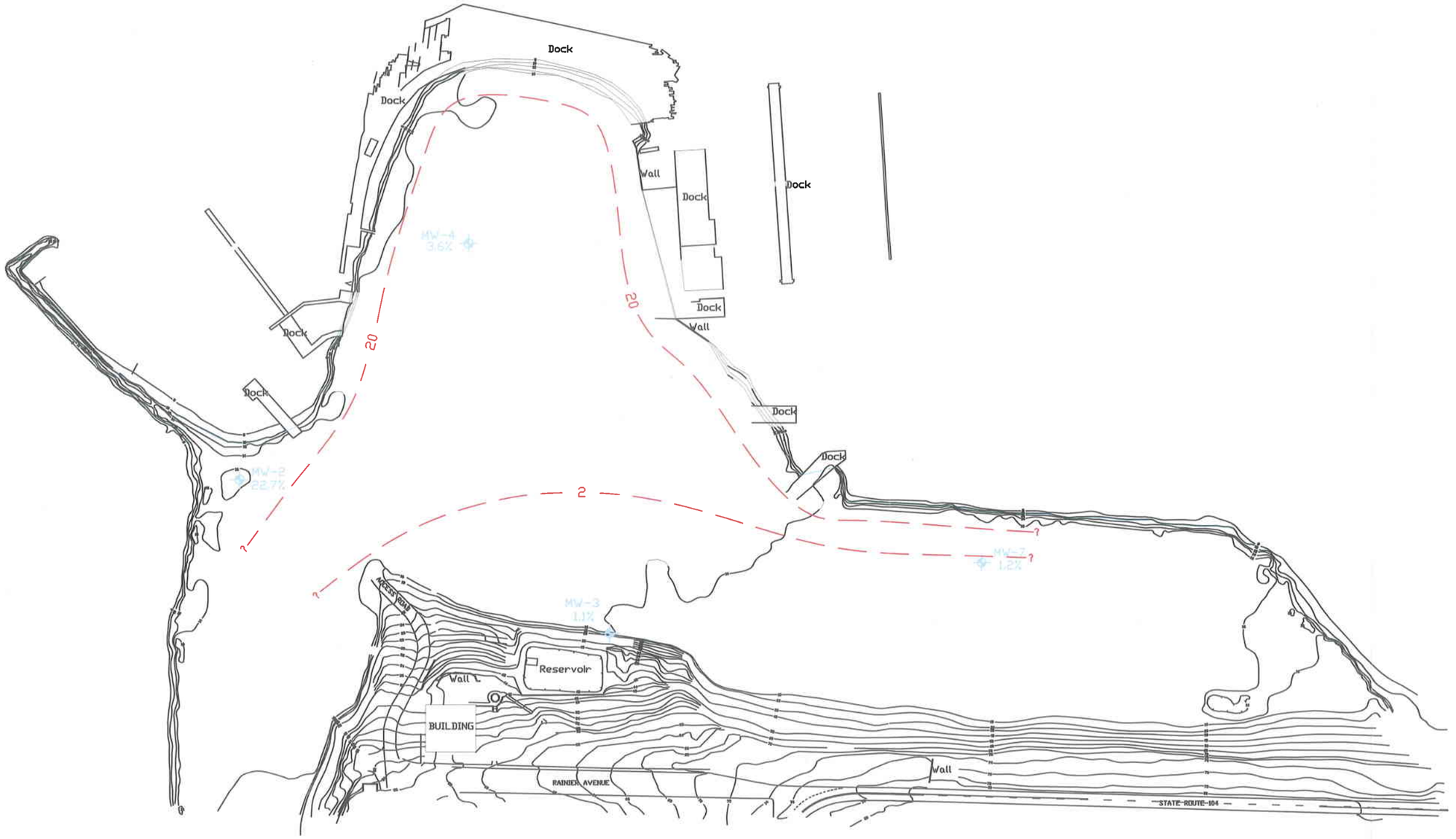
FIGURE 3-5

CROSS SECTION C-C'

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY MMH	REVIEWED BY SLG	DATE 10/10/07



KEY:

MW-2 22.7% Monitoring Well Location Included in Tidal Study and Tidal Effiency.
(Due to limited historical data, the tidal efficiency was calculated using the highest and lowest observed water levels.)

Tidal Efficiency Contour Interval
Dashed Where Inferred,
Queried Where Uncertain

0 100 200
APPROXIMATE SCALE: 1" = 200'

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FIGURE 3-6

TIDAL EFFICIENCY

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY SLG	REVIEWED BY DK	DATE 10/8/07

KEY:

0 100 200

SCALE: 1" = 200'

APPROXIMATE POTENTIAL SOURCE AREAS ADDED BY EPI
POTENTIAL SOURCE AREAS BASED ON INFORMATION PROVIDED BY PARAMETRIX AND POPE & TALBOT, INC.
BASE SURVEY MAP PREPARED BY PARAMETRIX

APPROXIMATE POTENTIAL SOURCE AREAS

MONITORING WELL LOCATION (PARAMETRIX)
SOIL PROBE LOCATION (PARAMETRIX / FOSTER WHEELER)
TEST PIT LOCATION (PARAMETRIX / FOSTER WHEELER)
EPI SAMPLING LOCATION

FORMER BUILDINGS

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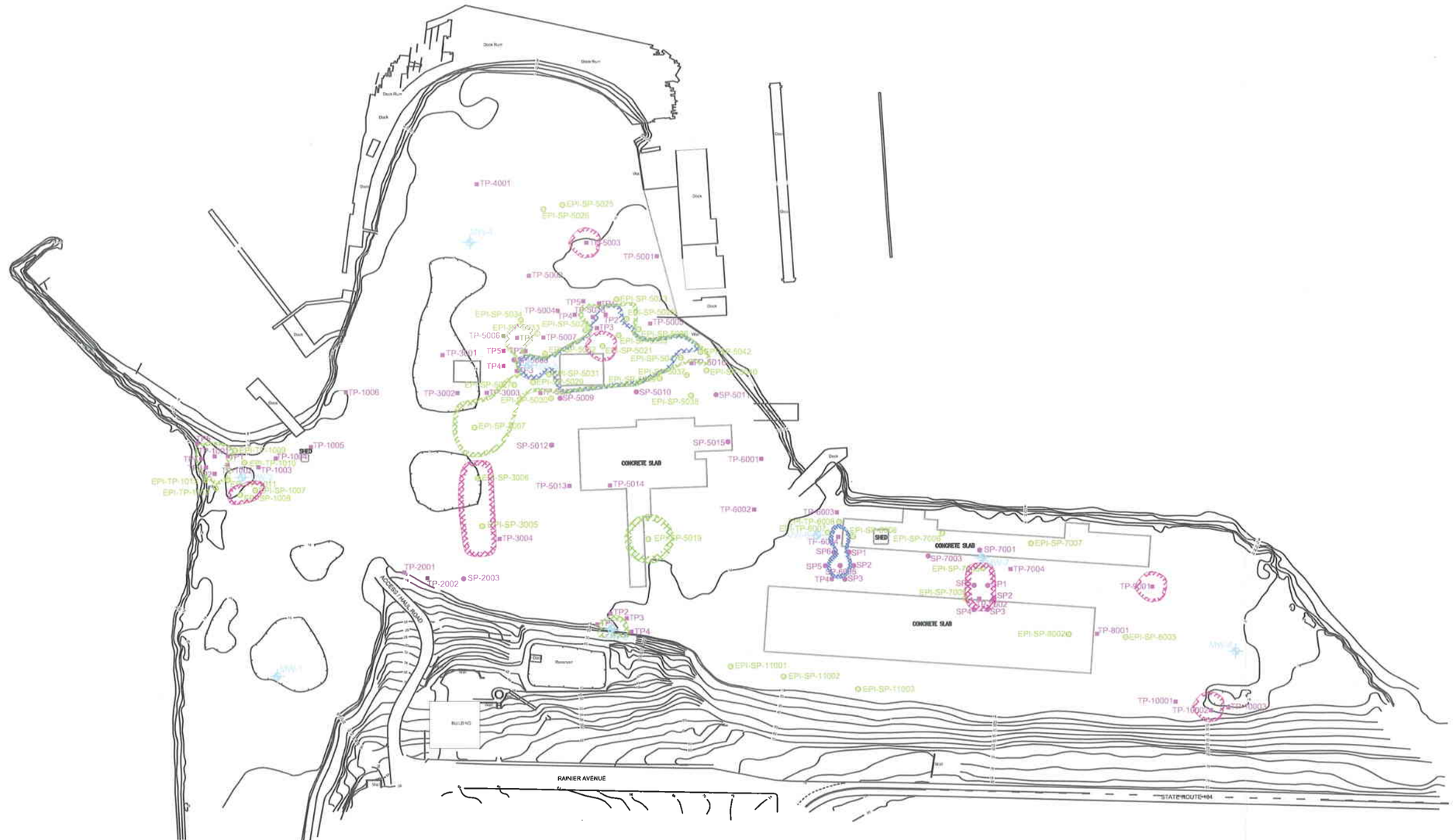
FIGURE 3-7

SOIL SAMPLING LOCATIONS
1999-2001 INVESTIGATIONS

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY MMH	REVIEWED BY SLG	DATE 10/16/07



Estimated Extent of Soil for Excavation and Off-Site Disposal based on MTCA Method A Cleanup Level for Unrestricted Land Use and Calculated Soil Cleanup Levels based on Protection of Human Health for Consumption of Aquatic Organisms, National Toxics Rule, for Metals

Estimated Extent of Soil for Excavation and Off-Site Disposal based on MTCA Method A Cleanup Level for Unrestricted Land Use for Semivolatile-Range Petroleum Hydrocarbons

Estimated Extent of Soil for Excavation and Off-Site Disposal based on MTCA Method A Cleanup Levels for Unrestricted Land Use for Total Carcinogenic PAHs

KEY:

0 100 200

SCALE: 1" = 200'

APPROXIMATE POTENTIAL SOURCE AREAS ADDED BY EPI
POTENTIAL SOURCE AREAS BASED ON INFORMATION PROVIDED BY PARAMETRIX AND POPE & TALBOT, INC.
BASE SURVEY MAP PREPARED BY PARAMETRIX

MONITORING WELL LOCATION (PARAMETRIX)
SOIL PROBE LOCATION (PARAMETRIX / FOSTER WHEELER)
TEST PIT LOCATION (PARAMETRIX / FOSTER WHEELER)
EPI SAMPLING LOCATION

FORMER BUILDINGS

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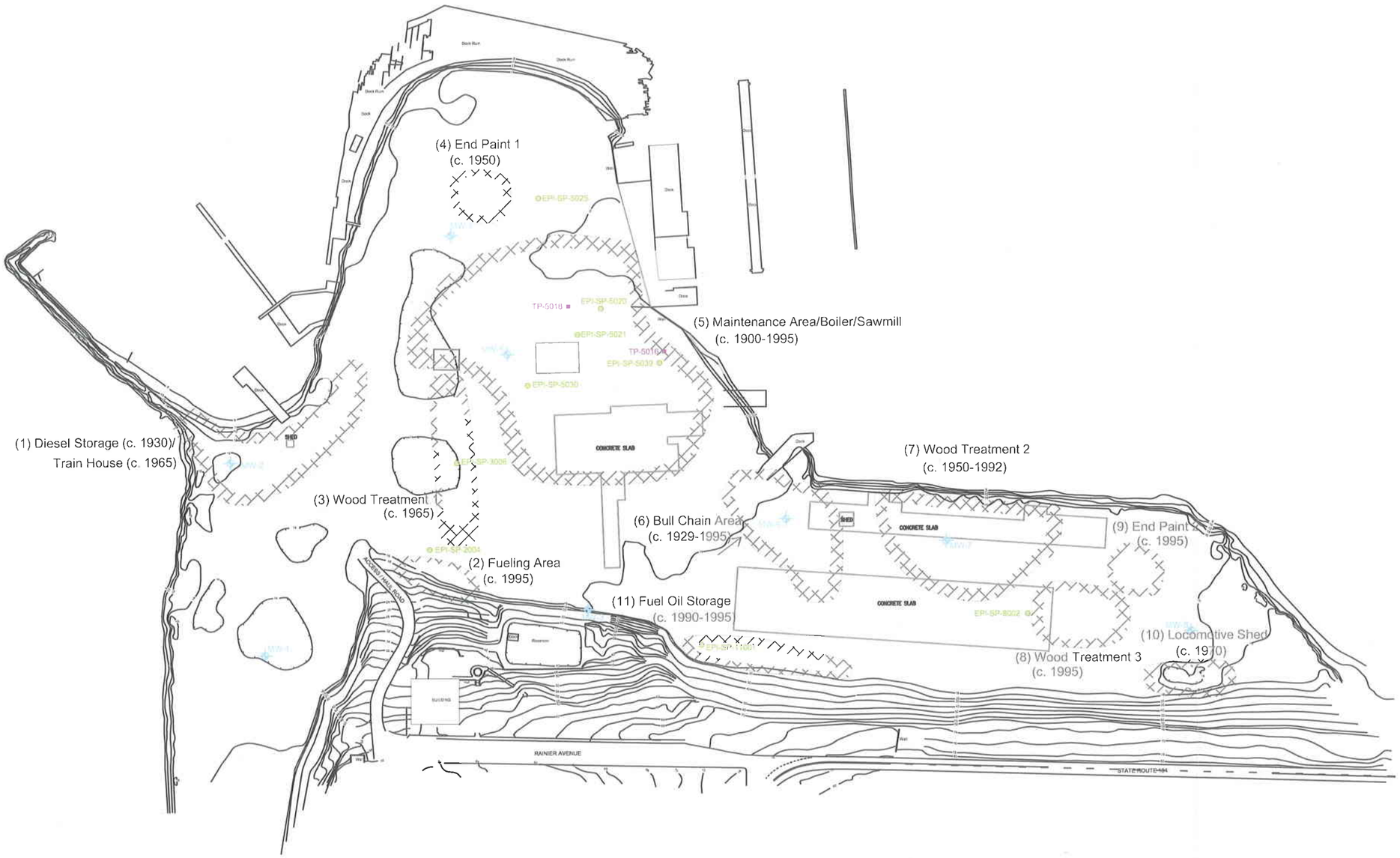
FIGURE 3-8

ESTIMATED EXTENT OF TPH, cPAHs AND METALS CONTAMINATION IN SOIL
1999 - 2001 INVESTIGATIONS

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON		
SHEET	DRAWN BY	REVIEWED BY	DATE
1 of 1	MMH	SLG	10/16/07



KEY:

APPROXIMATE POTENTIAL SOURCE AREAS ADDED BY EPI
POTENTIAL SOURCE AREAS BASED ON INFORMATION PROVIDED BY PARAMETRIX AND POPE & TALBOT, INC.
BASE SURVEY MAP PREPARED BY PARAMETRIX

MONITORING WELL LOCATION (PARAMETRIX)
TEST PIT LOCATION (PARAMETRIX / FOSTER WHEELER)
EPI SAMPLING LOCATION
APPROXIMATE POTENTIAL SOURCE AREAS
FORMER BUILDINGS

0 100 200
SCALE: 1" = 200'

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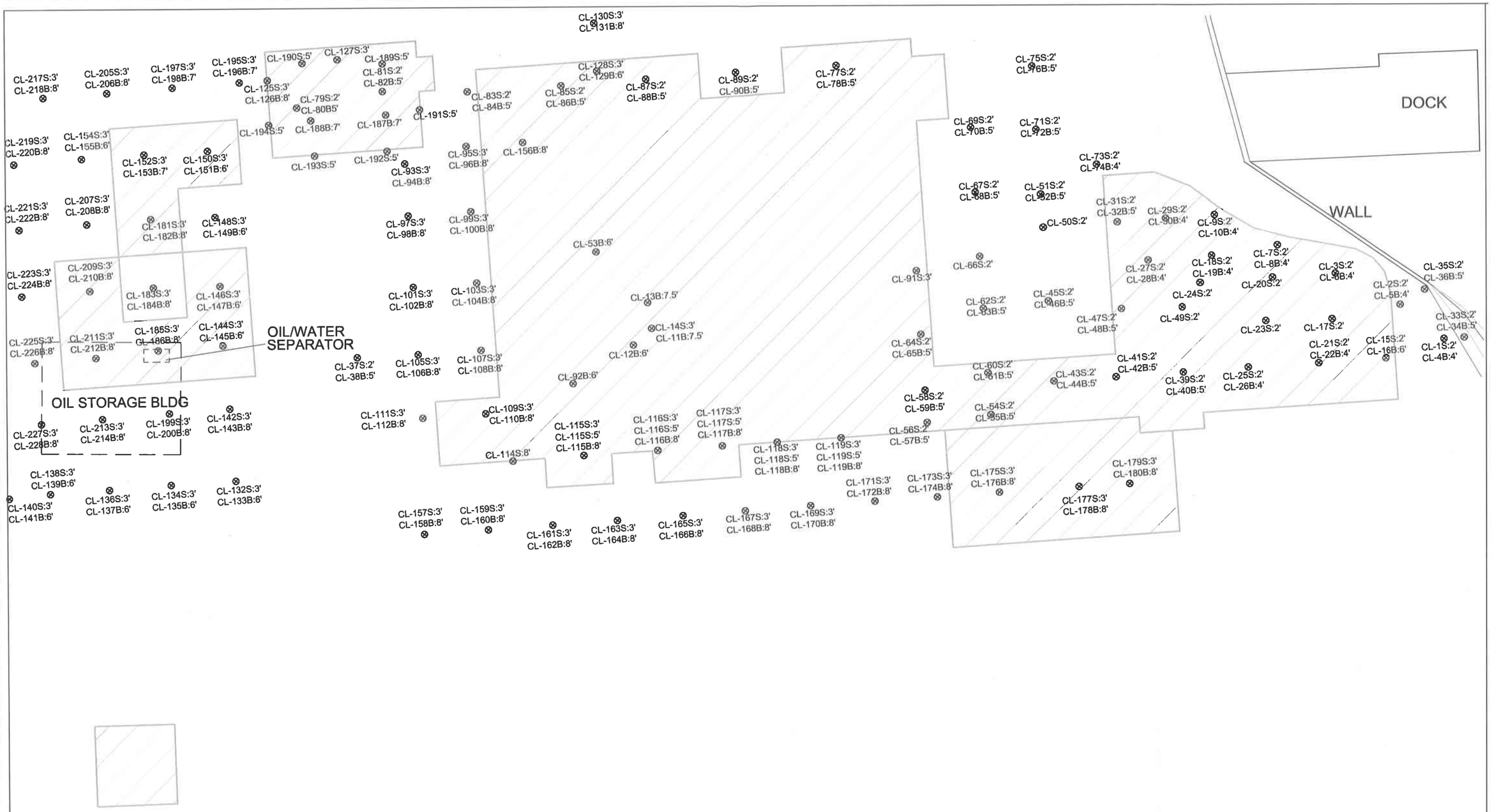
FIGURE 3-9
GROUND WATER SAMPLING LOCATIONS
1999 - 2001 INVESTIGATIONS

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY MMH	REVIEWED BY SLG	DATE 10/16/07



KEY:

CL-20S:2' ⊗ CHARACTERIZATION SAMPLES

FINAL EXCAVATION LIMITS

LOCATION OF FORMER OIL STORAGE BUILDING (REMOVED)

0 15 30

APPROXIMATE SCALE: 1" = 30'

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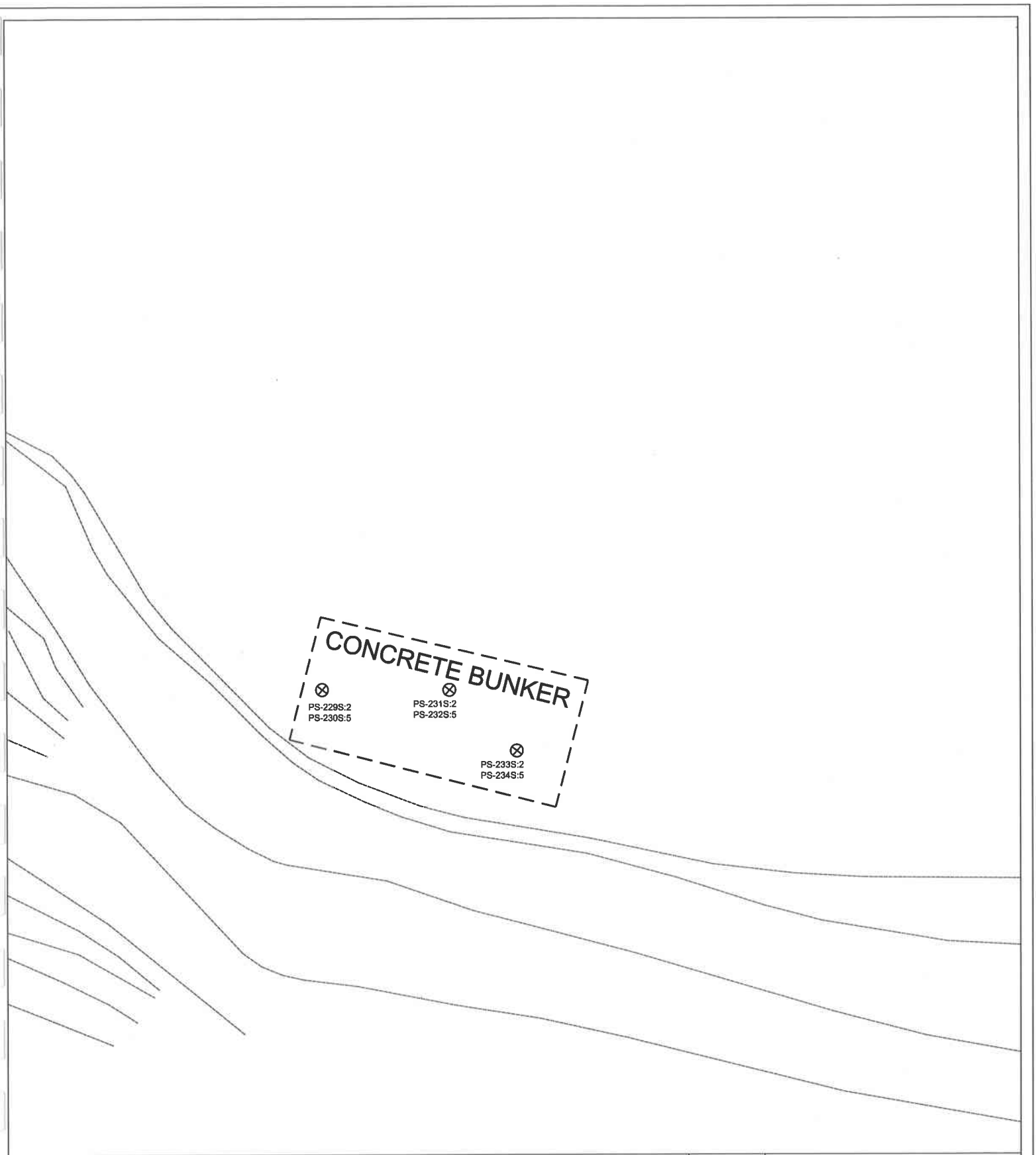
FIGURE 4-1

CHARACTERIZATION SOIL SAMPLING LOCATIONS
AREA 1 AND FORMER OIL STORAGE BUILDING
2002 IRM

PROJECT	17008.2
PREPARED FOR	POPE RESOURCES
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON

SHEET	DRAWN BY	REVIEWED BY	DATE
1 of 1	MMH	SLG	04/26/07



KEY:

PS-229S ⊗ CHARACTERIZATION SAMPLES

LOCATION OF FORMER CONCRETE BUNKER (REMOVED)

0 5 10 20

SCALE: 1" = 20'

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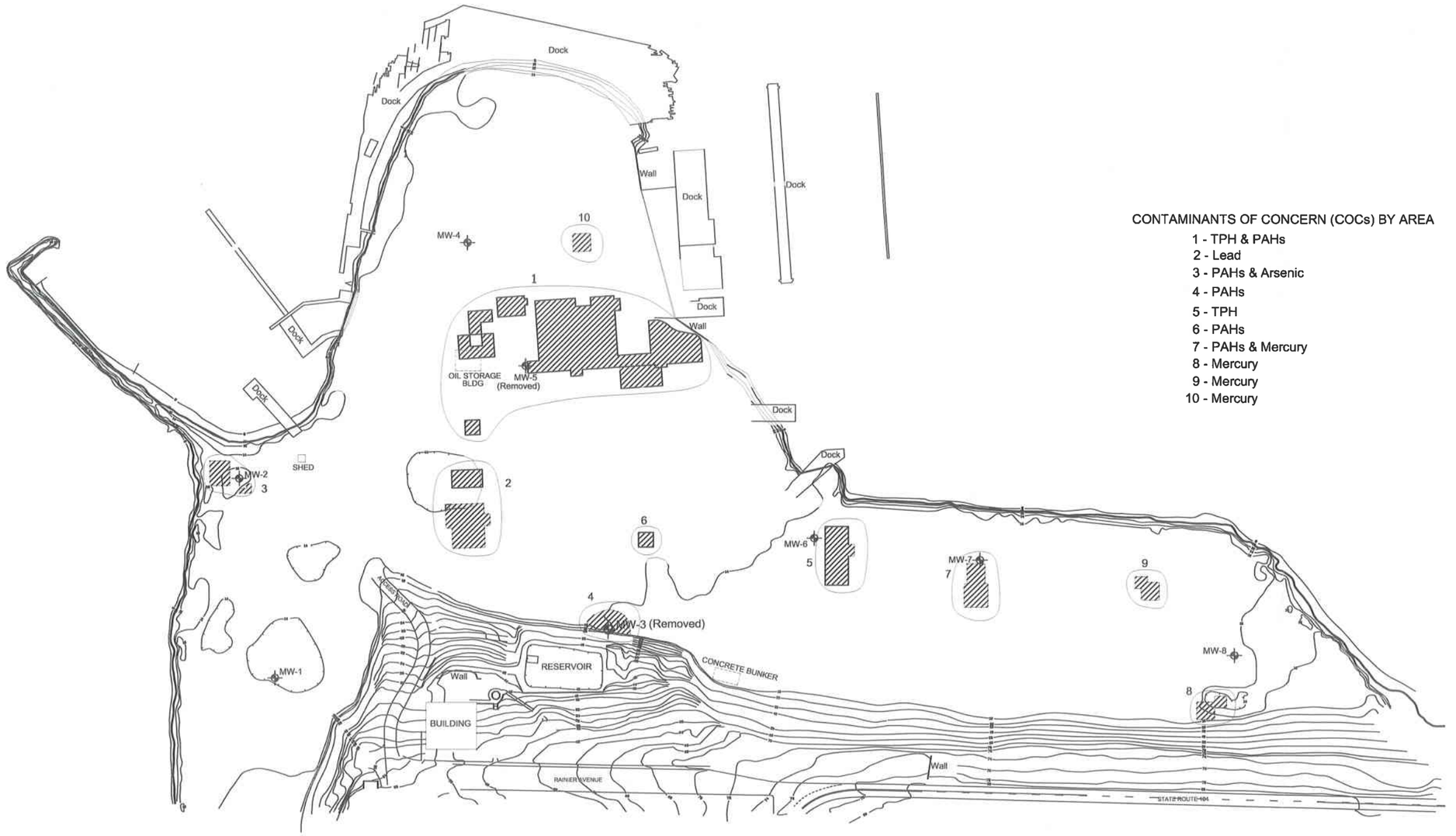
FIGURE 4-2

CHARACTERIZATION SOIL SAMPLING LOCATIONS
CONCRETE BUNKER
2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET *1 of 1*	***DRAWN BY*** *MMH*	***REVIEWED BY*** *SLG*	***DATE*** *04/26/07*



CONTAMINANTS OF CONCERN (COCs) BY AREA

1 - TPH & PAHs
2 - Lead
3 - PAHs & Arsenic
4 - PAHs
5 - TPH
6 - PAHs
7 - PAHs & Mercury
8 - Mercury
9 - Mercury
10 - Mercury

KEY:

MW-1 — EXISTING MONITORING WELL LOCATION

72 — ELEVATION CONTOUR (FEET ABOVE MEAN SEA LEVEL)

7 — AREA DESIGNATIONS WITH APPROXIMATE FINAL EXCAVATION LIMITS

0 100 200

APPROXIMATE SCALE: 1" = 200'

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Issaquah, Washington 98027

FIGURE 4-3

SITE REPRESENTATION AND REMEDIAL EXCAVATION AREAS 2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET	DRAWN BY	REVIEWED BY	DATE
1 of 1	MMH	SLG	04/26/07

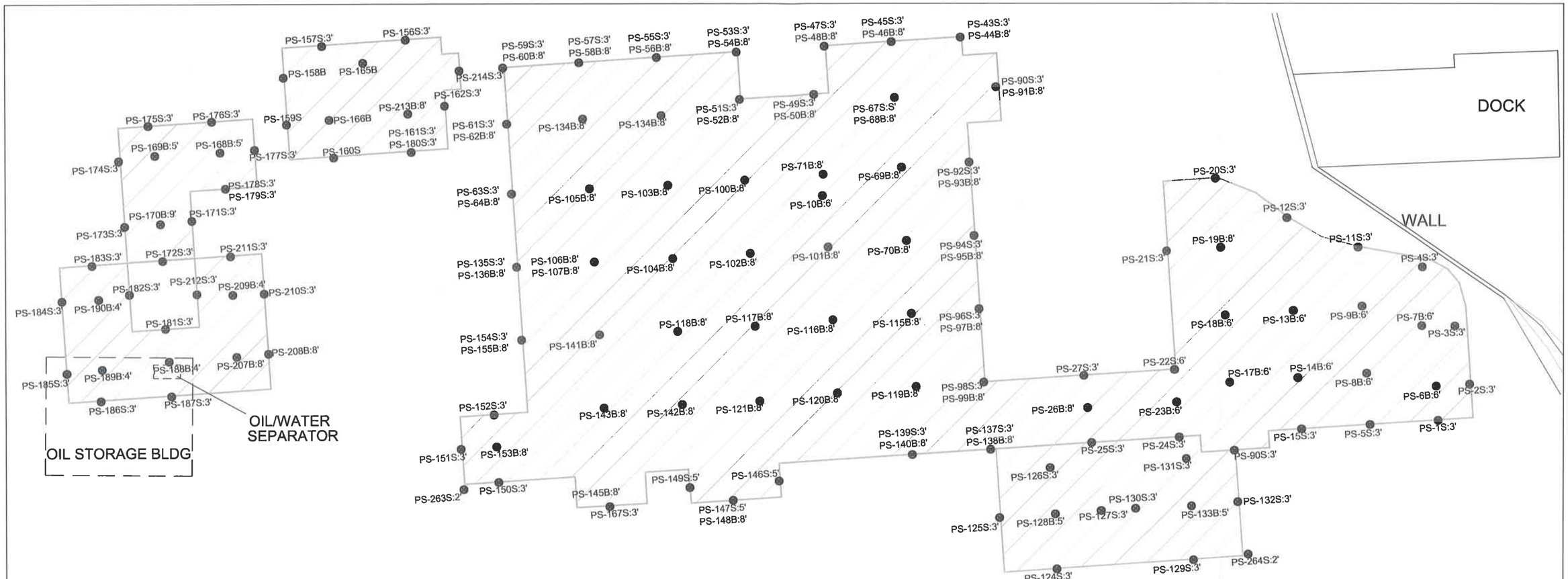

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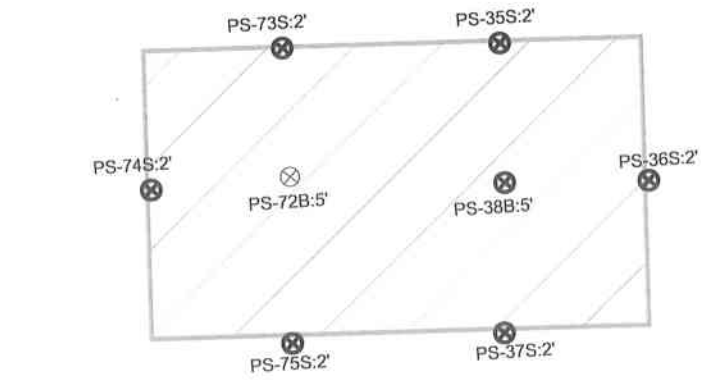
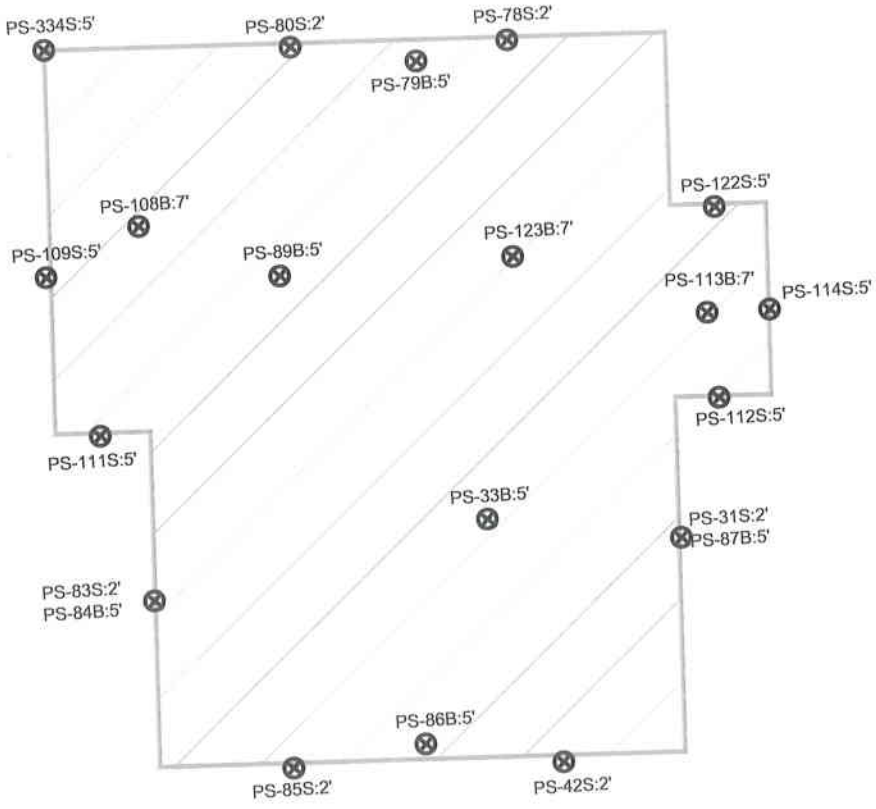
FIGURE 4-4

EXTENT OF EXCAVATION AND FINAL PERFORMANCE SOIL SAMPLING LOCATIONS - AREA 1 2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET	DRAWN BY	REVIEWED BY	DATE
1 of 1	MMH	SLG	04/26/07





KEY:

PS-72B:5' ⊗ FINAL PERFORMANCESAMPLE (EXCEEDS MTCA METHOD A SOIL CLEANUP LEVEL FOR UNRESTRICTED LAND USE)

PS-9B:6' ⊗ FINAL PERFORMANCE SAMPLES

FINAL EXCAVATION LIMITS

0 5 10 20

SCALE: 1" = 20'

X:\Office Info\Graphics\Logos\EPI - New Logos\EPI Logo.jpg

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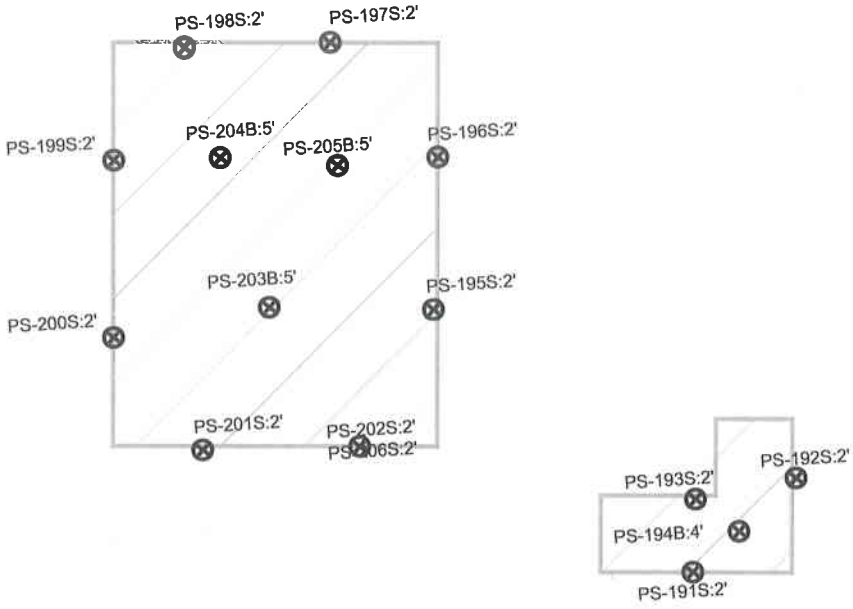
FIGURE 4-5

EXTENT OF EXCAVATION AND FINAL PERFORMANCE SOIL SAMPLING LOCATIONS - AREA 2 2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET *1 of 1*	***DRAWN BY*** *MMH*	***REVIEWED BY*** *SLG*	***DATE*** *04/26/07*



KEY:

PS-193S:2' ⊗ FINAL PERFORMANCE SAMPLES

☐ FINAL EXCAVATION LIMITS

0 5 10 20

SCALE: 1" = 20'

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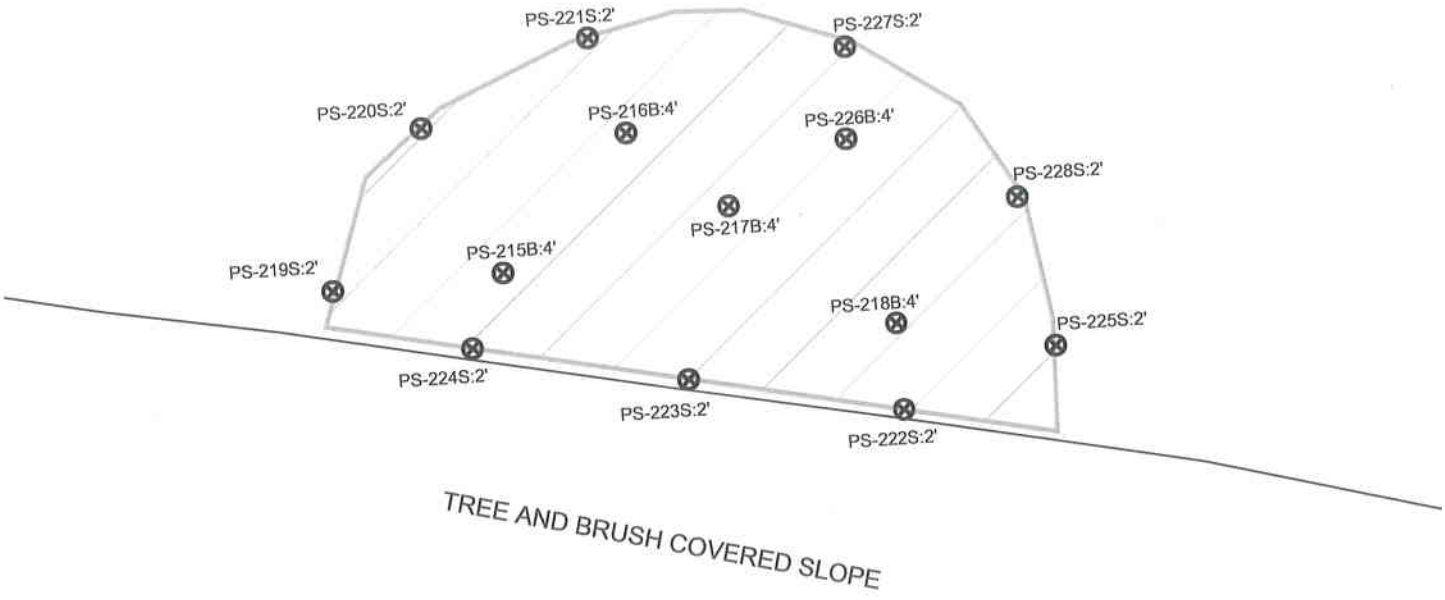
FIGURE 4-6

EXTENT OF EXCAVATION AND
FINAL PERFORMANCE SOIL SAMPLING
LOCATIONS - AREA 3
2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET *1 of 1*	***DRAWN BY*** *MMH*	***REVIEWED BY*** *SLG*	***DATE*** *04/26/07*



KEY:

PS-9B:6' ⊗ FINAL PERFORMANCE SAMPLES

FINAL EXCAVATION LIMITS

0 5 10 20

SCALE: 1" = 20'

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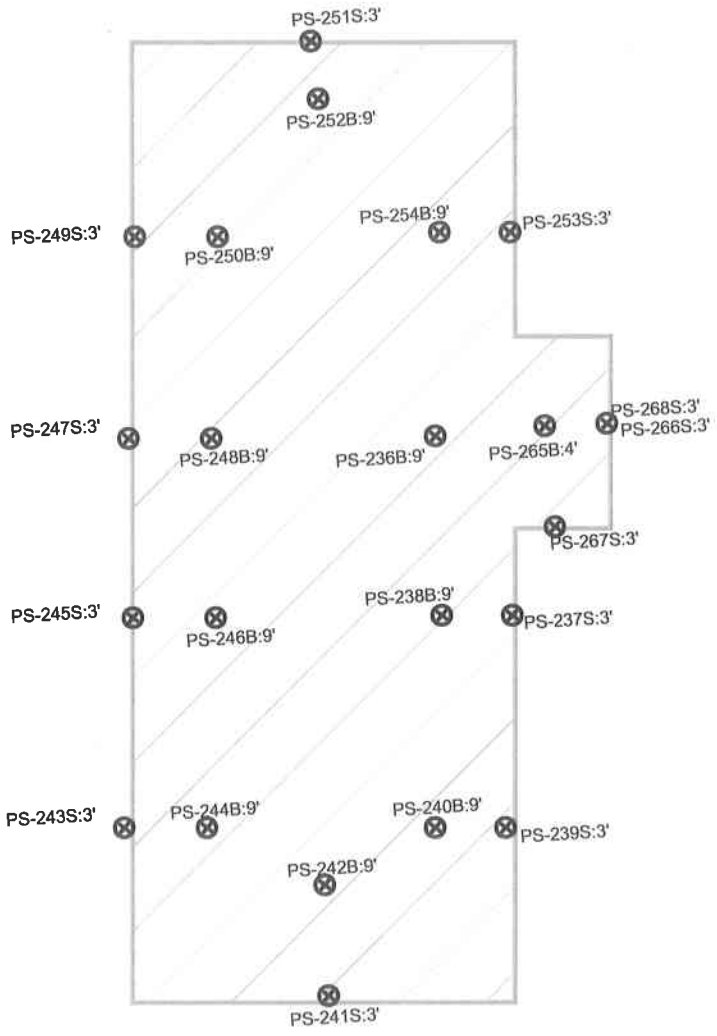
FIGURE 4-7

EXTENT OF EXCAVATION AND FINAL PERFORMANCE SOIL SAMPLING LOCATIONS - AREA 4 2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET *1 of 1*	***DRAWN BY*** *MMH*	***REVIEWED BY*** *SLG*	***DATE*** *04/26/07*



KEY:

PS-9B:6' ⊗ FINAL PERFORMANCE SAMPLES

☐ FINAL EXCAVATION LIMITS

0 5 10 20

SCALE: 1" = 20'

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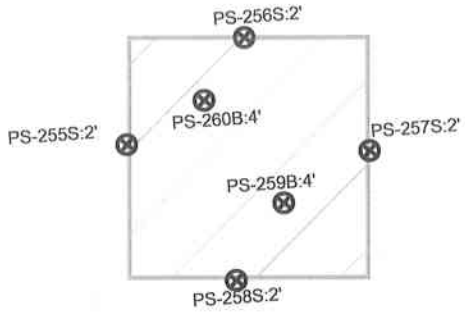
Issaquah, Washington 98027

FIGURE 4-8

EXTENT OF EXCAVATION AND
FINAL PERFORMANCE SOIL SAMPLING
LOCATIONS - AREA 5
2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY MMH	REVIEWED BY SLG	DATE 04/26/07



KEY:

PS-9B:6' ⊗ FINAL PERFORMANCE SAMPLES

FINAL EXCAVATION LIMITS

0 5 10 20

SCALE: 1" = 20'

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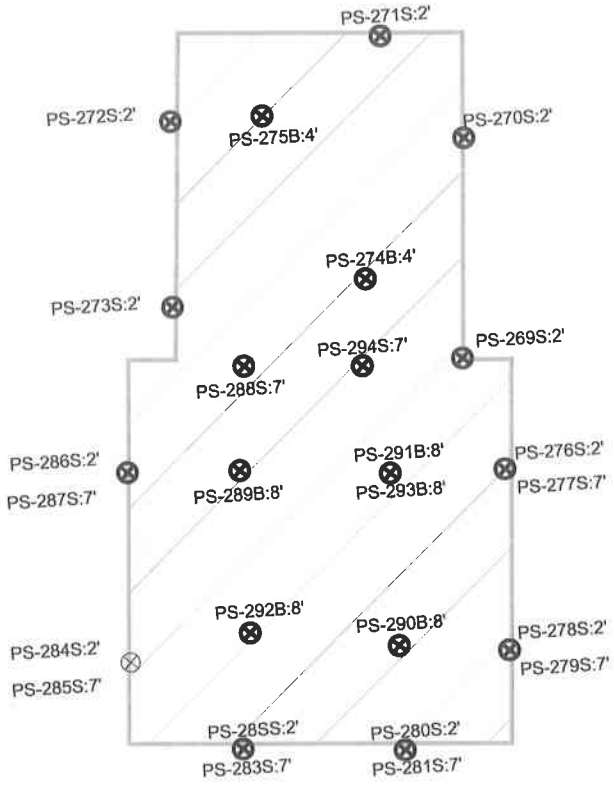
FIGURE 4-9

EXTENT OF EXCAVATION AND
FINAL PERFORMANCE SOIL SAMPLING
LOCATIONS - AREA 6
2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET	**DRAWN BY**	**REVIEWED BY**	**DATE**
1 of 1	MMH	SLG	04/26/07



KEY:

PS-285S:7' ⊗ FINAL PERFORMANCESAMPLE (EXCEEDS MTCA METHOD A SOIL CLEANUP LEVEL FOR UNRESTRICTED LAND USE)

PS-284S:2' ⊗ FINAL PERFORMANCE SAMPLES

0 5 10 20

SCALE: 1" = 20'

FINAL EXCAVATION LIMITS

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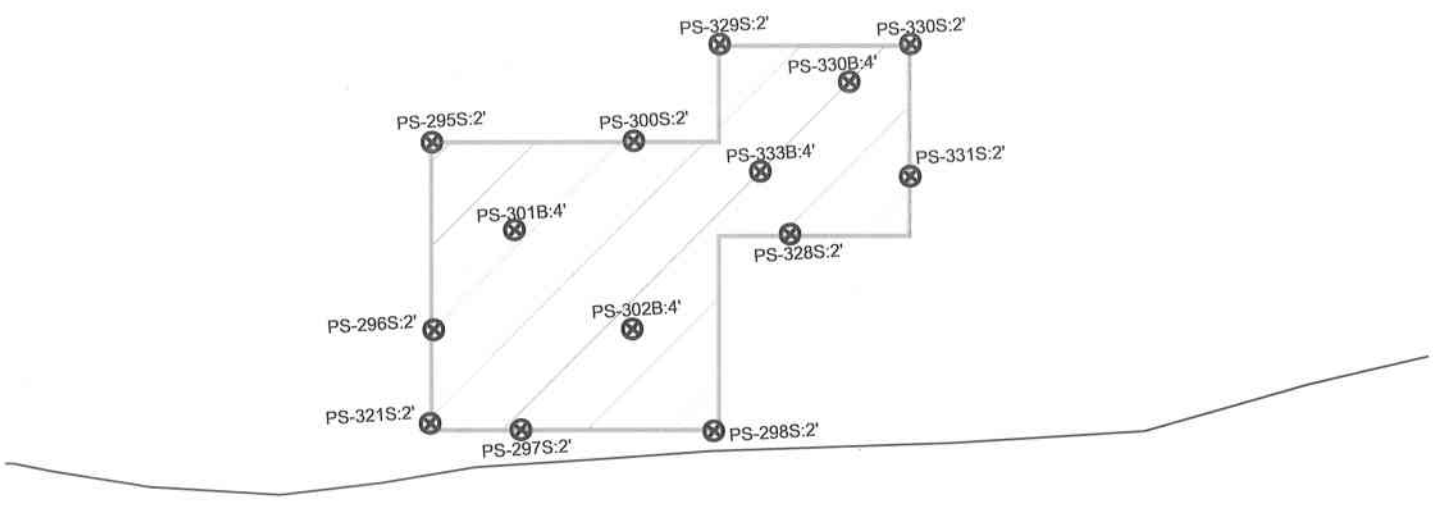
FIGURE 4-10

EXTENT OF EXCAVATION AND
FINAL PERFORMANCE SOIL SAMPLING
LOCATIONS - AREA 7
2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET *1 of 1*	***DRAWN BY*** *MMH*	***REVIEWED BY*** *SLG*	***DATE*** *04/26/07*



KEY:

PS-302B:4' ⊗ FINAL PERFORMANCE SAMPLES

FINAL EXCAVATION LIMITS

0 10 20 40

APPROXIMATE SCALE: 1" = 40'

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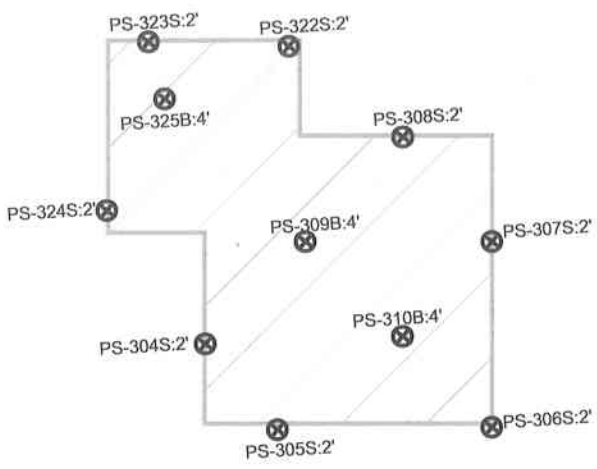
FIGURE 4-11

EXTENT OF EXCAVATION AND FINAL PERFORMANCE SOIL SAMPLING LOCATIONS - AREA 8 2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET *1 of 1*	***DRAWN BY*** *MMH*	***REVIEWED BY*** *SLG*	***DATE*** *04/26/07*



KEY:

PS-302B:4' ⊗ FINAL PERFORMANCE SAMPLES

FINAL EXCAVATION LIMITS

0 10 20 40

SCALE: 1" = 40'

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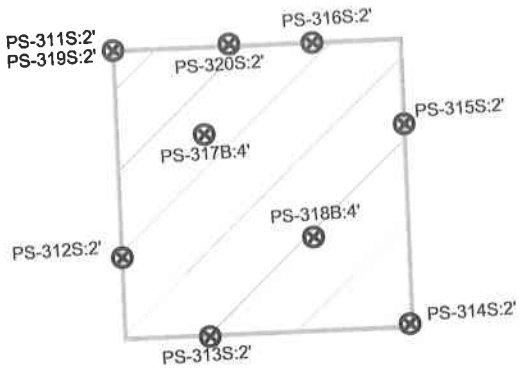
FIGURE 4-12

EXTENT OF EXCAVATION AND
FINAL PERFORMANCE SOIL SAMPLING
LOCATIONS - AREA 9
2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET	***DRAWN BY***	***REVIEWED BY***	***DATE***
1 of 1	*MMH*	*SLG*	*04/26/07*



KEY:

PS-302B:4' ⊗ FINAL PERFORMANCE SAMPLES

FINAL EXCAVATION LIMITS

0 10 20 40

APPROXIMATE SCALE: 1" = 40'

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FIGURE 4-13

EXTENT OF EXCAVATION AND
FINAL PERFORMANCE SOIL SAMPLING
LOCATIONS - AREA 10
2002 IRM

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY MMH	REVIEWED BY SLG	DATE 04/26/07

KEY:

MW-1
Monitoring Well Location

MW-5
Monitoring Well Abandonded April 2002

MW-10
Monitoring Well Abandoned November 2004

0 100 200
APPROXIMATE SCALE: 1" = 200'

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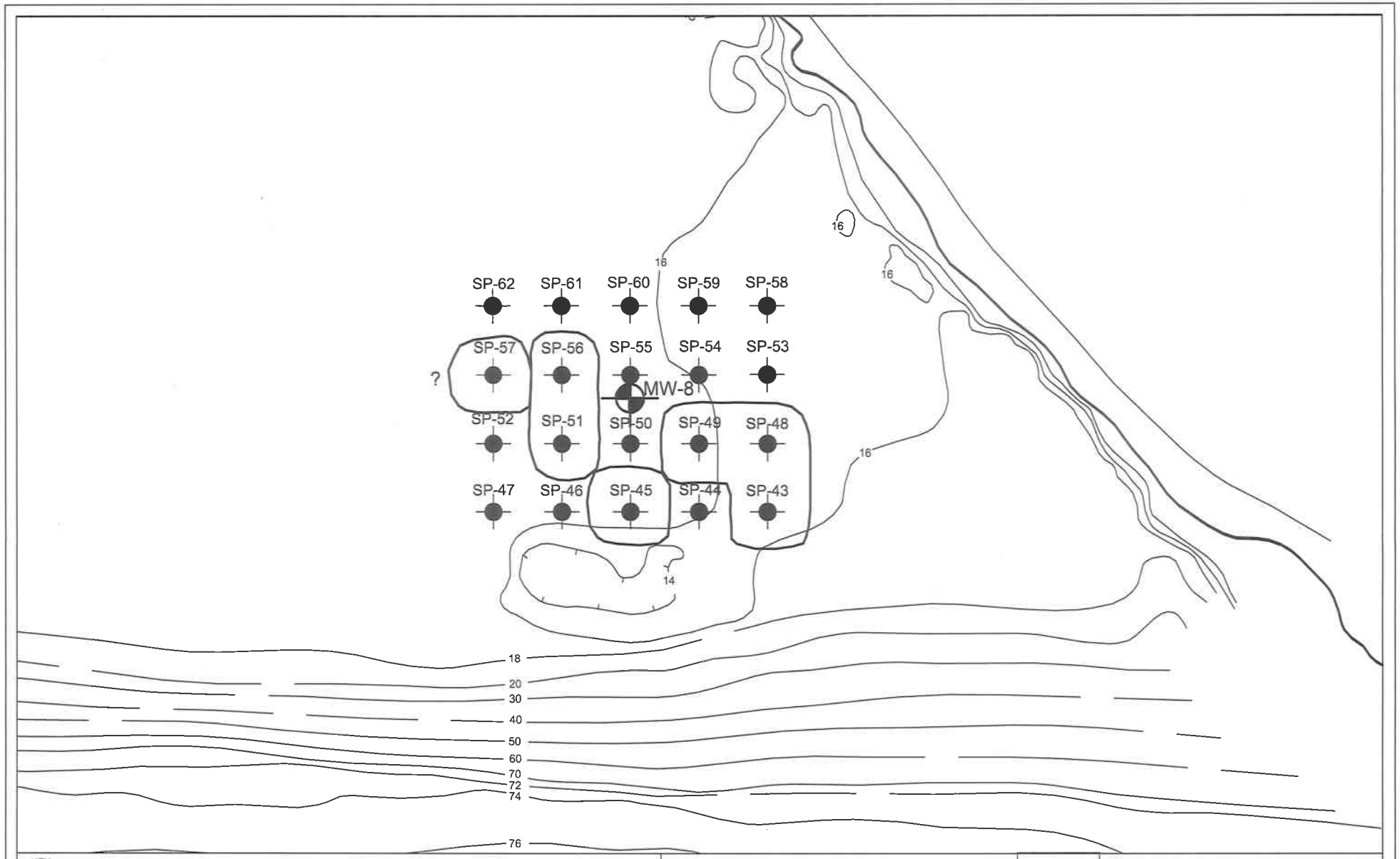
FIGURE 4-14

MONITORING WELL LOCATIONS
GROUND WATER PERFORMANCE SAMPLING

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY SLG	REVIEWED BY SLG	DATE 05/09/07



KEY:

MW-1 - EXISTING MONITORING WELL LOCATION

- SOIL SAMPLING LOCATION FOR ARSENIC AND MERCURY (30 FOOT GRID SPACING)

- INDICATES SOIL CLEANUP LEVEL EXCEEDED AT THIS SAMPLING LOCATION

? ? - ESTIMATED EXTENT OF CONTAMINATED SOIL (QUERIED WHERE UNCERTAIN)

- ESTIMATED EXTENT OF OTHERWISE IMPACTED SOIL

0 15 30 60

SCALE: 1" = 60'

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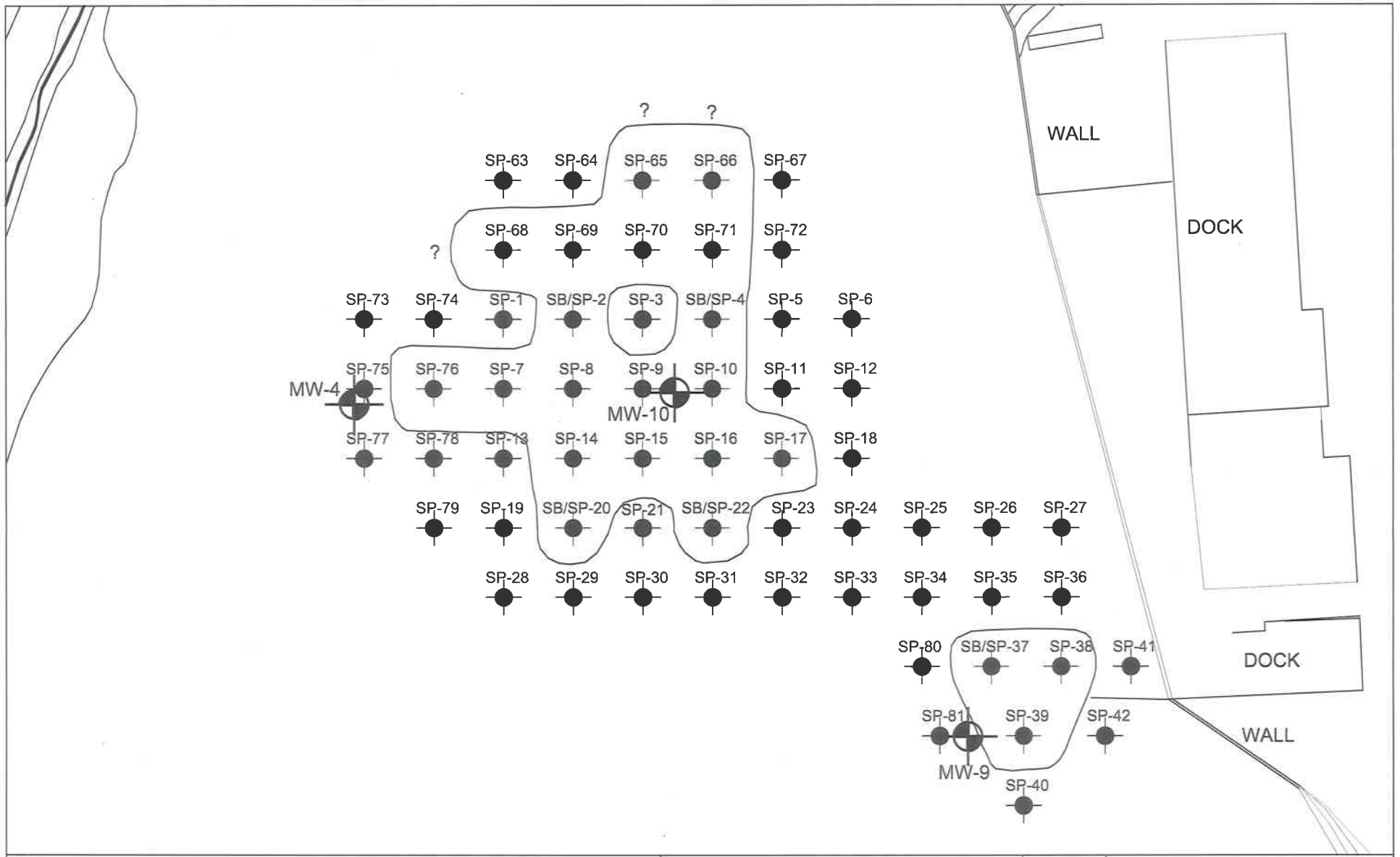
FIGURE 4-15

MW-8 AREA SAMPLING LOCATIONS
2004 INVESTIGATIONS

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON		
SHEET	**DRAWN BY**	**REVIEWED BY**	**DATE**
1 of 1	MMH	SLG	04/20/07



KEY:

MW-1 - EXISTING MONITORING WELL LOCATION

- SOIL SAMPLING LOCATION FOR ARSENIC AND MERCURY (30 FOOT GRID SPACING)

- INDICATES SOIL CLEANUP LEVEL EXCEEDED AT THIS SAMPLING LOCATION

? ? - ESTIMATED EXTENT OF CONTAMINATED SOIL (QUERIED WHERE UNCERTAIN)

0 15 30 60

SCALE: 1" = 60'

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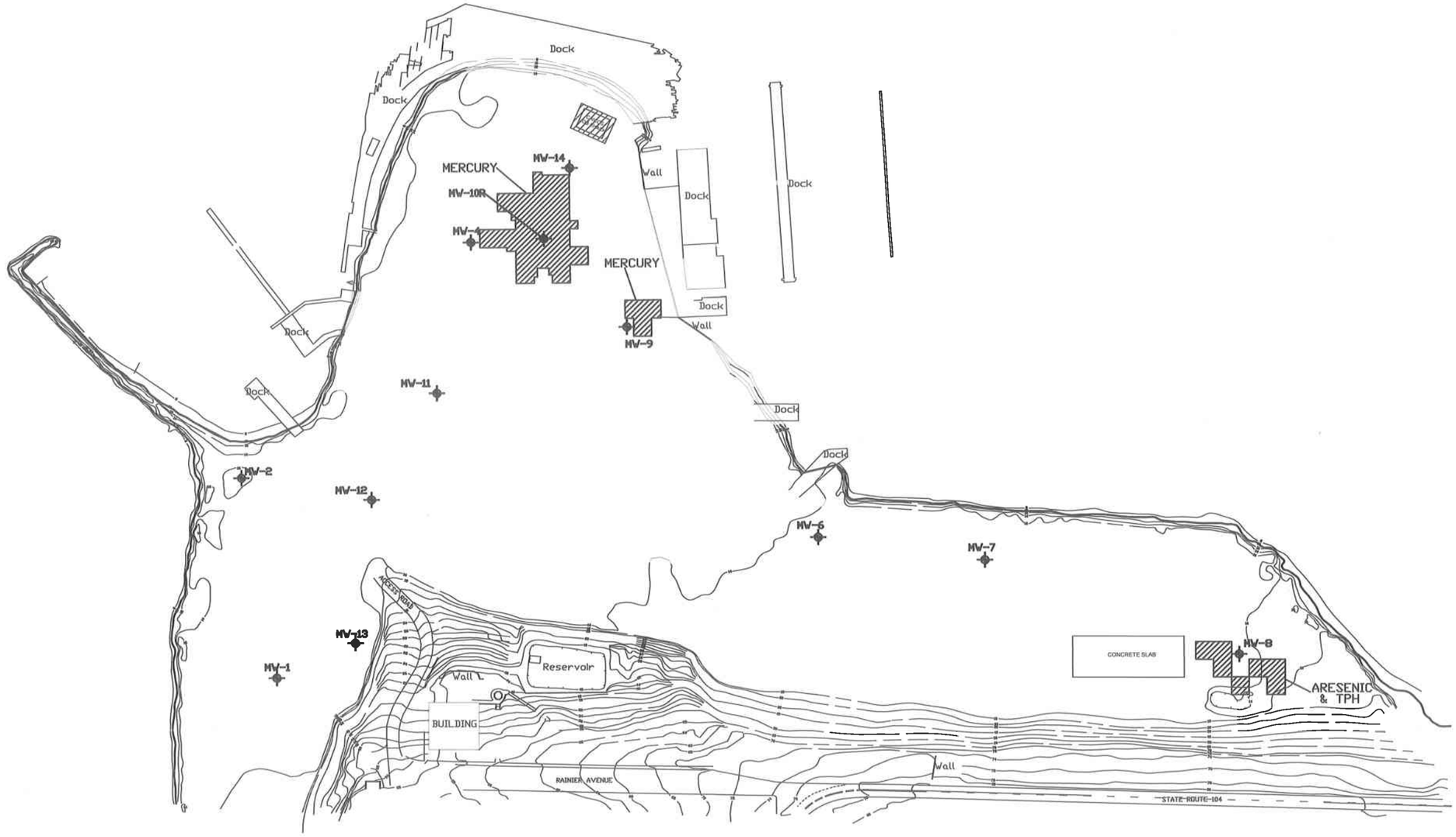
FIGURE 4-16

MW-9 AND MW-10 AREA SAMPLING LOCATIONS
2004 INVESTIGATIONS

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY MMH	REVIEWED BY SLG	DATE 04/20/07



KEY:

MW-1 EXISTING MONITORING WELL LOCATION

2004/2005 EXCAVATION LIMITS

0 100 200

SCALE: 1" = 200'

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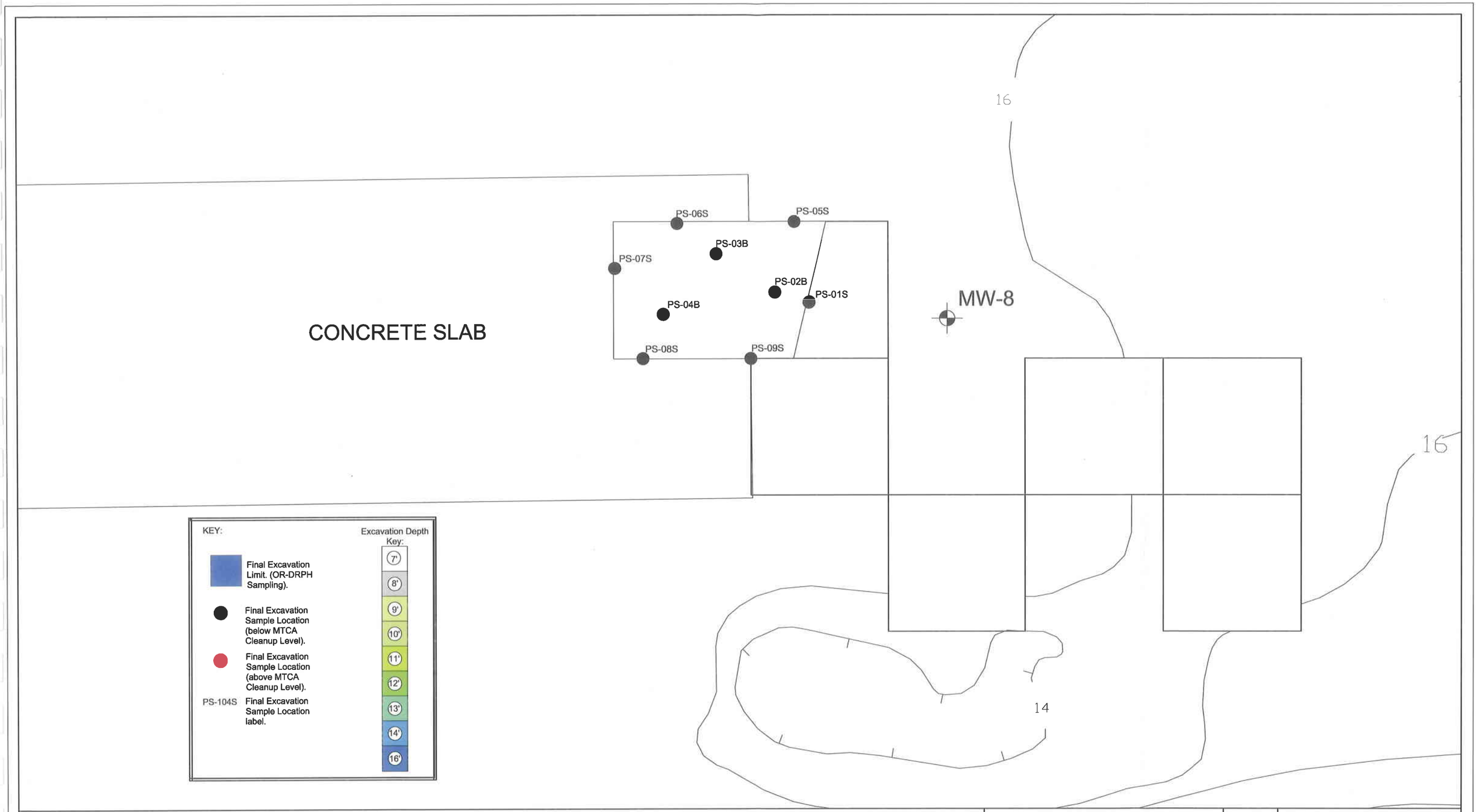
FIGURE 4-17

SITE REPRESENTATION AND
REMEDIAL EXCAVATION AREAS
2004/2005 IRM

PROJECT	17008.2 FORMER MILL SITE		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT GAMBLE, WASHINGTON		
SHEET *1 of 1*	***DRAWN BY*** *SLG*	***REVIEWED BY*** *SLG*	***DATE*** *05/08/07*



KEY:

0 10 20

APPROXIMATE SCALE: 1" = 20'

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FIGURE 4-18

EXTENT OF EXCAVATION AND
FINAL PERFORMANCE SOIL SAMPLING LOCATIONS
MW-8 AREA
2004/2005 IRM

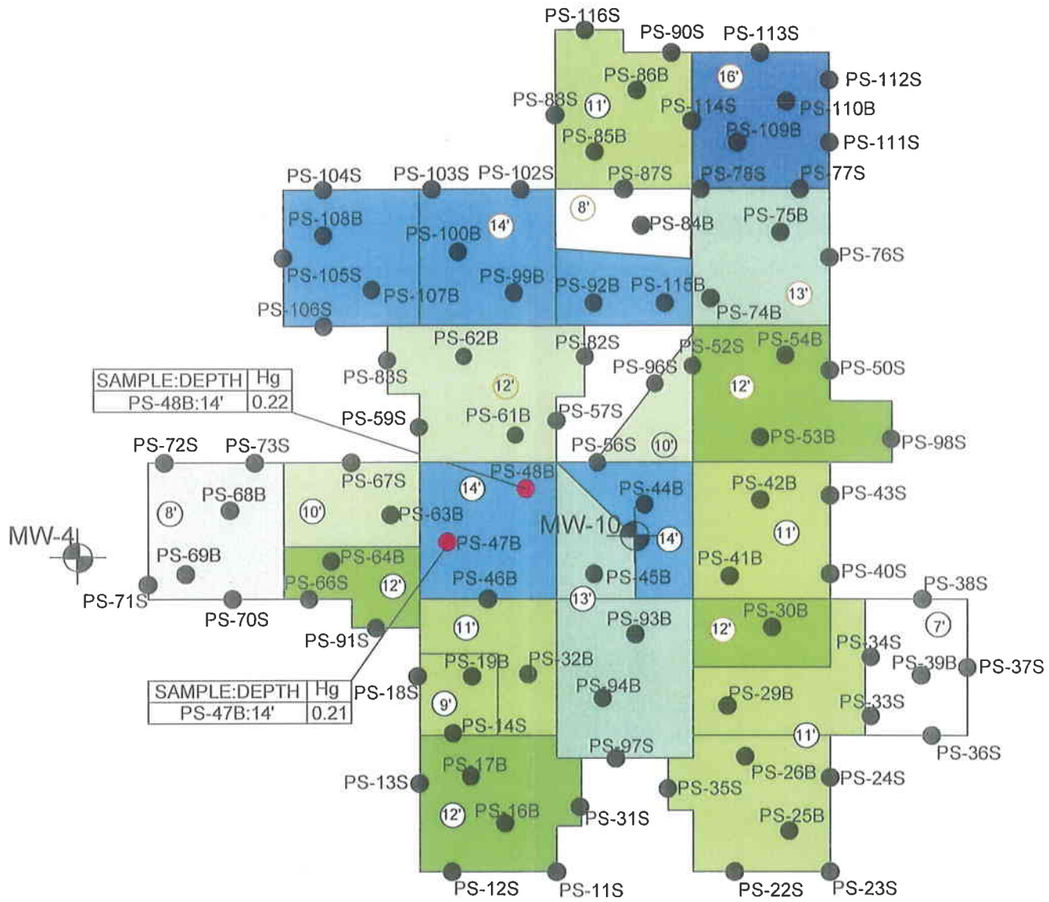
PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON		
SHEET	DRAWN BY	REVIEWED BY	DATE
1 of 1	MMH	SLG	05/08/07

KEY:

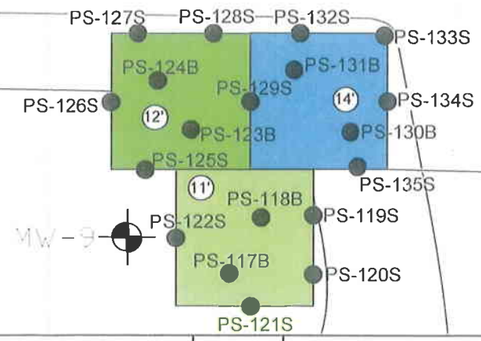
Excavation Depth Key:

- Final Excavation Limit.
- Final Excavation Sample Location (below MTCA Cleanup Level).
- Final Excavation Sample Location (above MTCA Cleanup Level).
- PS-104S Final Excavation Sample Location label.

7' 8' 9' 10' 11' 12' 13' 14' 16'



ACCESS/HAUL ROAD (APPROXIMATE LOCATION)



KEY:

0 15 30

APPROXIMATE SCALE: 1" = 30'

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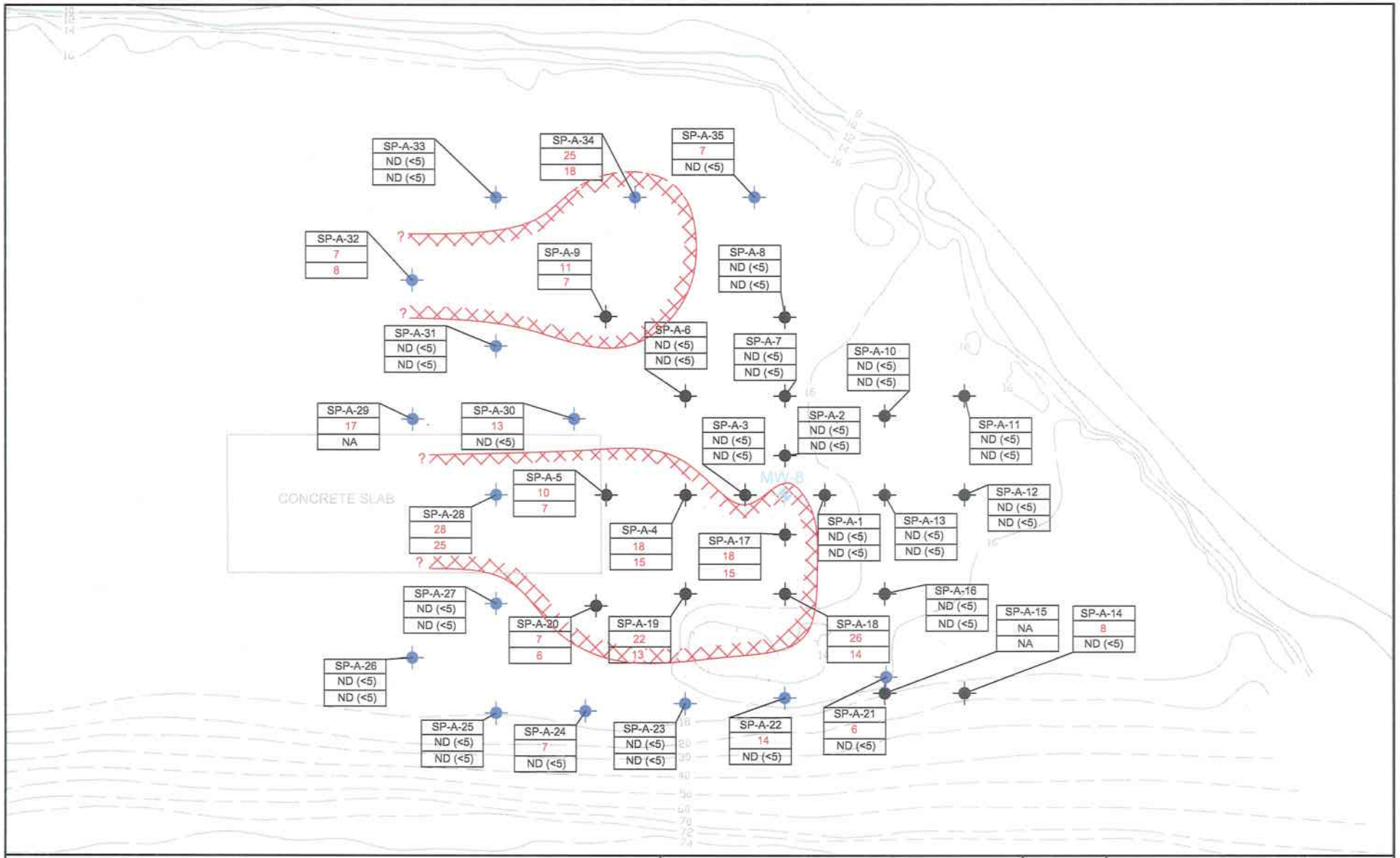
FIGURE 4-19

EXTENT OF EXCAVATION AND FINAL PERFORMANCE SOIL SAMPLING LOCATIONS MW-9 AND MW-10 AREA 2004/2005 IRM

PROJECT	17008 2		
PREPARED FOR	POPE RESOURCES		
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON		
SHEET	DRAWN BY	REVIEWED BY	DATE
1 of 1	MMH	SLG	05/08/07



KEY:

MW-1 EXISTING MONITORING WELL LOCATION

SOIL/GROUND WATER SAMPLING LOCATION - 2005

SOIL/GROUND WATER SAMPLING LOCATION - 2006

SP-A-20	PROBE LOCATION NUMBER
7	TOTAL ARSENIC (MICROGRAMS/LITER)
6	DISSOLVED ARSENIC (MICROGRAMS/LITER)

APPROXIMATE EXTENT OF DISSOLVED ARSENIC IN GROUND WATER

0 35 70

SCALE: 1" = 70'

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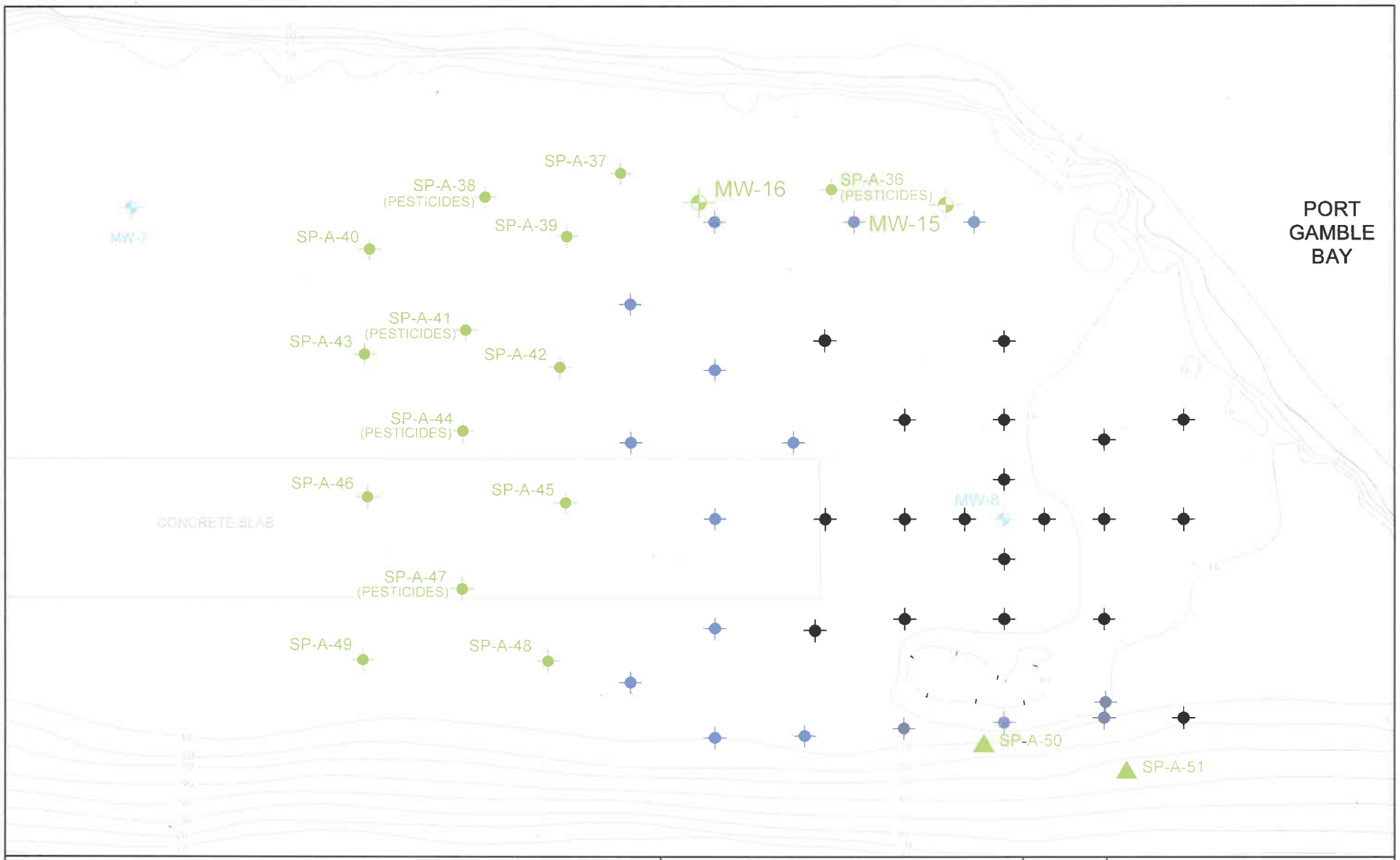
FIGURE 4-20

EXTENT OF ARSENIC IN GROUND WATER
2005/2006 INVESTIGATIONS

PROJECT	17008.2		
PREPARED FOR	POPE RESOURCES		
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON		
SHEET	**DRAWN BY**	**REVIEWED BY**	**DATE**
1 of 1	*SLG*	*SLG*	*05/09/07*



KEY:

- MW-1 — EXISTING MONITORING WELL LOCATION
- SOIL/GROUNDWATER SAMPLING LOCATION - 2005
- SOIL/GROUNDWATER SAMPLING LOCATION - 2006
- MW-15 — NEW MONITORING WELL LOCATION - 2009
- SP-A-43 — DIRECT-PUSH SAMPLING LOCATION (ARSENIC ANALYSIS AT ALL LOCATIONS, PESTICIDE ANALYSIS WHERE INDICATED) - 2009
- SP-A-50 — HAND AUGER SAMPLING LOCATION - 2009

0 25 50 100

APPROXIMATE SCALE: 1" = 100'

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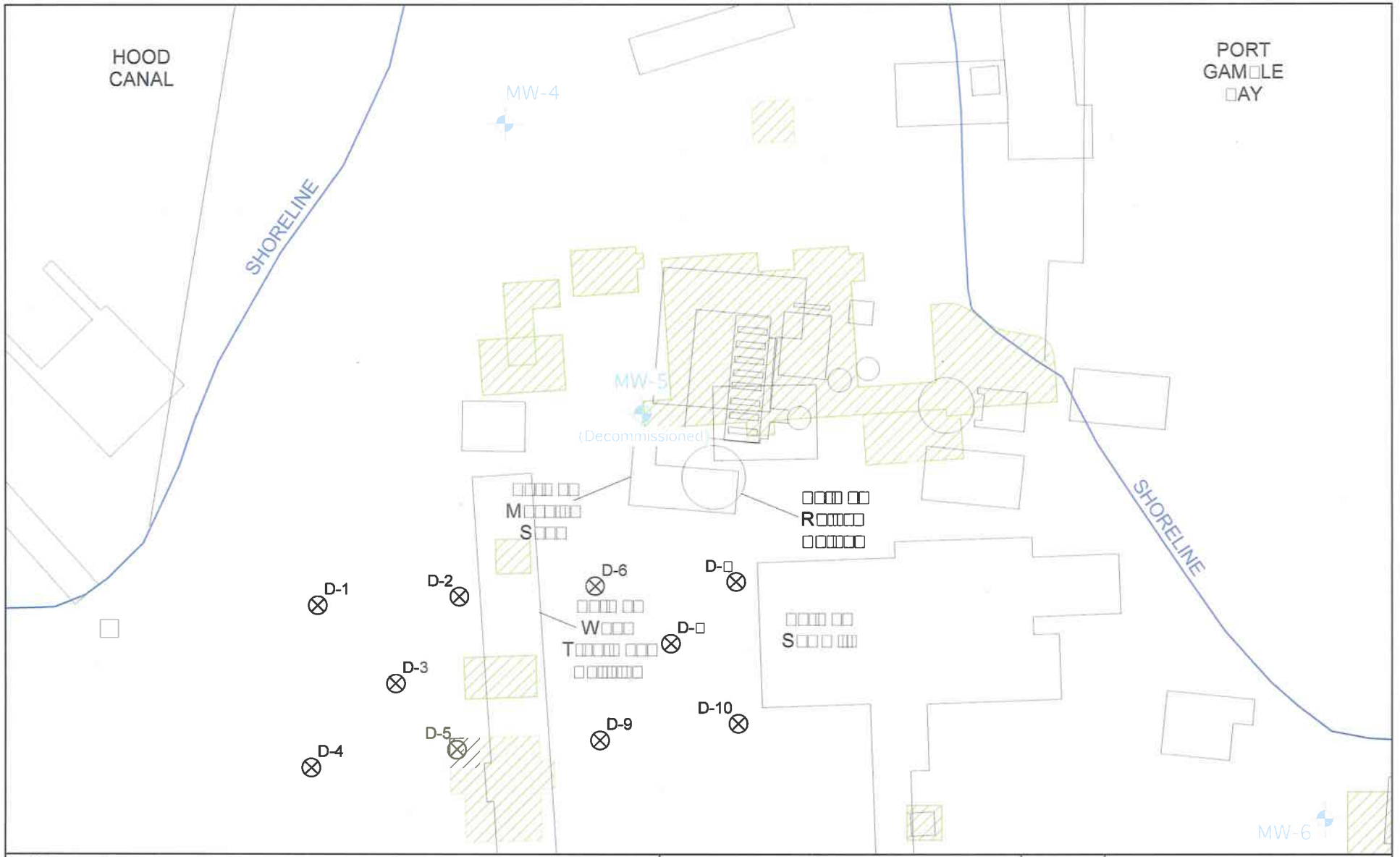
FIGURE 6-1

RI/FS ARSENIC AND PESTICIDE SAMPLING LOCATIONS

PROJECT	17010.1
PREPARED FOR	POPE RESOURCES
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON

SHEET	DRAWN BY	REVIEWED BY	DATE
1 of 1	ARM	DCK	05/05/09



□EY□

⊗ SHALLOW SOIL SAMPLE LOCATIONS □OR DIOXINS, □URANS AND PESTICIDES

LOCATIONS O□ □ORMER STRUCTURES

REMEDIAL EXCA□ATION AREAS

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FIGURE 6-2

DIOXIN, □URAN, AND PESTICIDE SAMPLE LOCATIONS

PROJECT	1□010□1		
PREPARED FOR	POPE RESOURCES		
LOCATION	□ORMER MILL SITE PORT GAM□LE, WASHINGTON		
SHEET	DRAWN BY	REVIEWED BY	DATE
1 of 1	ARM	DCK	05/05/09

SP-A-41		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	13	12

SP-A-39		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	33	33

MW-16		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
4-19	17	13

SP-A-38		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	11	10

SP-A-37		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	37	35

SP-A-40		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	6	6

SP-A-36		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	6	5

MW-7		
Screened Interval (ft. bgs)	Total Mercury (ug/L)	Dissolved Mercury (ug/L)
4-19	ND (<0.2)	ND (<0.2)

MW-15		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
4-19	32	26

MW-7

PORT GAM□LE □AY

SP-A-43		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	6	6

MW-8		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
4-19	11	12

SP-A-44		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	17	15

SP-A-42		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	17	15

CONCRETE SLA

SP-A-46		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	ND (<5)	ND (<5)

SP-A-47		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	30	32

SP-A-49		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	ND (<5)	ND (<5)

SP-A-48		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	ND (<5)	ND (<5)

SP-A-45		
Screened Interval (ft. bgs)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)
8-12	35	39

Wall

STATE ROUTE 104

EXISTING MONITORING WELL LOCATION
SOIL/GROUNDWATER SAMPLING LOCATION - 2005
SOIL/GROUNDWATER SAMPLING LOCATION - 2006
MONITORING WELL LOCATION - 2009
DIRECT-PUSH SAMPLING LOCATION - 2009
HAND AUGER SAMPLING LOCATION - 2009

SCALE 1" = 60'

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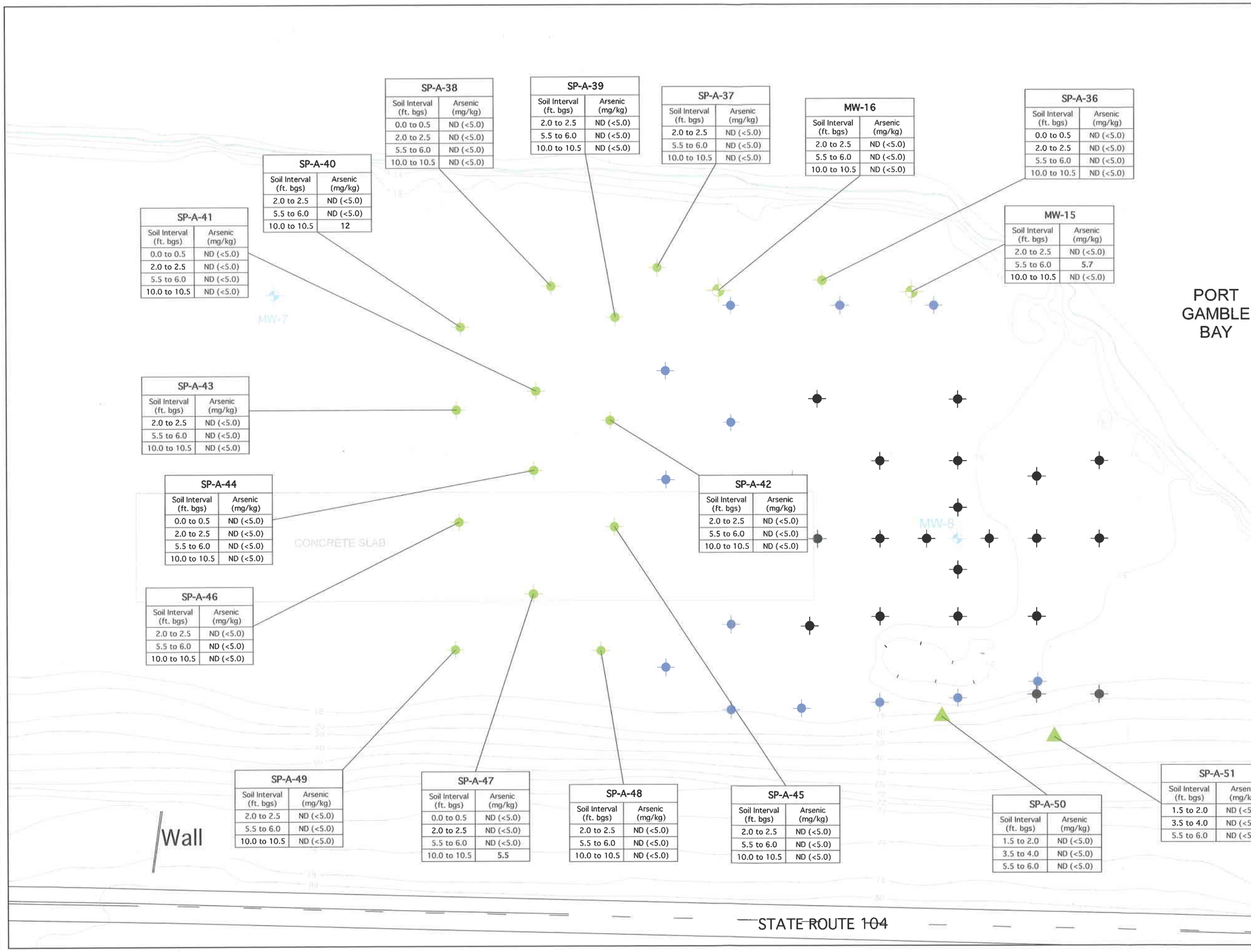
ARSENIC AND MERCURY GROUNDWATER SAMPLING LOCATIONS AND RESULTS

FIGURE 7-1

PROJECT	1.0103		
PREPARED FOR	POPE RESOURCES		
LOCATION	_ORMER MILL SITE PORT GAM .LE, WASHINGTON		
SHEET 1 of 1	DRAWN BY ARM	REVIEWED BY DCK	DATE 05/05/09



PROJECT: 17010.1

PREPARED FOR: POPE RESOURCES

LOCATION: FORMER MILL SITE
PORT GAMBLE, WASHINGTON

DRAWN BY: ARM

REVIEWED BY: DCK

DATE: 05/05/09

SHEET: 1 of 1

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FIGURE 7-2

ARSENIC SOIL SAMPLING
LOCATIONS AND RESULTS

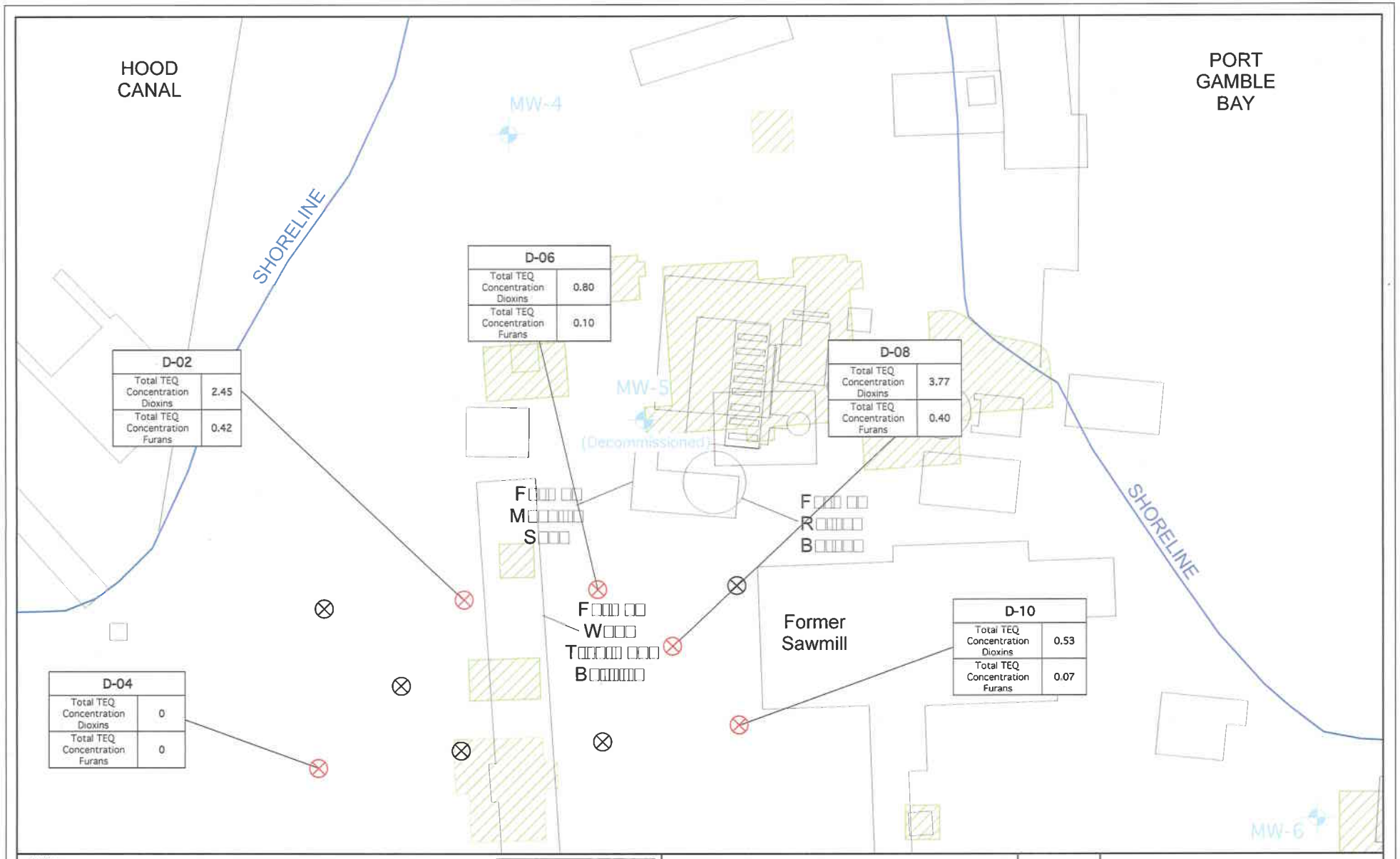

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FIGURE 7-3

DIOXIN AND FURAN SAMPLE RESULTS IN pg/g

PROJECT	17010.1
PREPARED FOR	POPE RESOURCES
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON

SHEET	DRAWN BY	REVIEWED BY	DATE
1 of 1	ARM	DCK	05/05/09

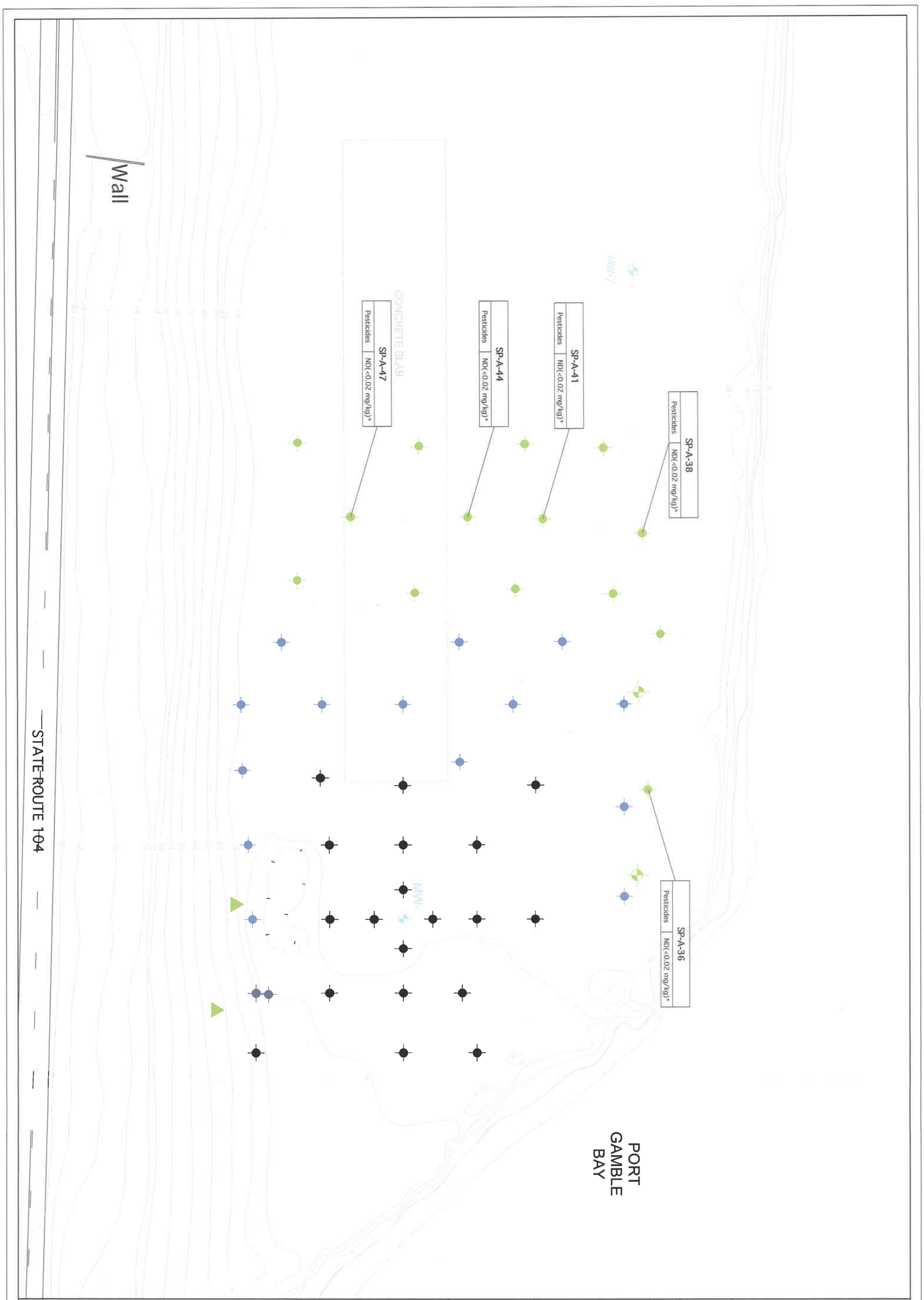

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FIGURE 7-4

SOUTH MILL SITE
PESTICIDE SOIL SAMPLING
LOCATIONS AND RESULTS

PROJECT	17010.1		
PREPARED FOR	POPE RESOURCES		
LOCATION	FORMER MILL SITE PORT GAMBLE, WASHINGTON		
SHEET 1 of 1	DRAWN BY ARM	REVIEWED BY DCK	DATE 05/05/09

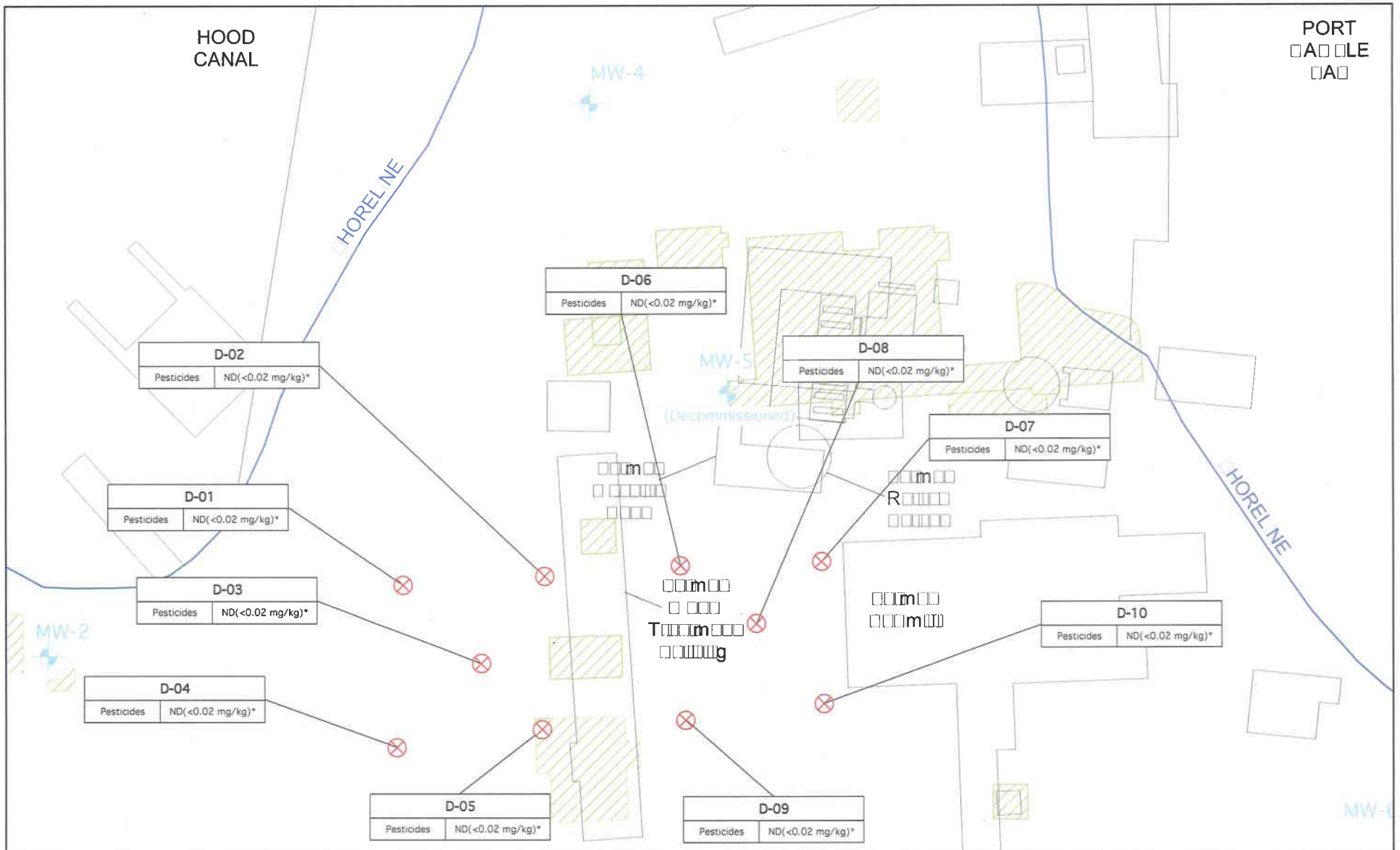

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FIGURE 7-5

NORTH [illegible] PESTICIDE [illegible] PLAN LOCATIONS AND RESULTS IN mg/kg

PROJECT	1.010.1		
PREPARED FOR	POPE RESOURCES		
LOCATION	PORT ANGELES, WASHINGTON		
SHEET 1 of 1	DRAWN BY ARM	REVIEWED BY DCK	DATE 05/05/09

APPENDICES (on CD)