Lower Duwamish Waterway
RM 1.0 to 1.2 East
(King County Lease Parcels)

Summary of Existing Information and Identification of Data Gaps

Prepared for

Toxics Cleanup Program
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Table of Contents

Figures

Tables

Appendices

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Acronyms and Abbreviations

AGI	Applied Geotechnology, Inc.
AST	aboveground storage tank
BEHP	bis(2-ethylhexyl)phthalate
bgs	below ground surface
BMP	best management practice
BTEX	benzene, toluene, ethylbenzene, and xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	chemical of concern
CSCSL	Confirmed and Suspected Contaminated Sites List
CSL	Cleanup Screening Level
CSO	combined sewer overflow
DCA	dichloroethane
DCE	dichloroethene
DPD	City of Seattle Department of Planning and Development
DW	dry weight
EAA	Early Action Area
ECHO	Enforcement and Compliance History Online
Ecology	Washington State Department of Ecology
EOF	emergency overflow
EPA	U.S. Environmental Protection Agency
GE	General Electric
GIS	Geographic Information Systems
HPAH	high molecular weight polycyclic aromatic hydrocarbon
HVAC	heating, ventilating, and air-conditioning
ISIS	Integrated Site Information System
KC	King County
KCIW	King County Industrial Waste
KCLP	King County Lease Parcels
LDW	Lower Duwamish Waterway
LDWG	Lower Duwamish Waterway Group
LPAH	low molecular weight polycyclic aromatic hydrocarbon
LUST	leaking underground storage tank
MEK	methyl ethyl ketone
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
mg/kg	milligrams per kilogram
mgy	million gallons per year
MOU	Memorandum of Understanding
MTCA	Model Toxics Control Act
NAICS	North American Industry Classification System
NFA	No Further Action
ng/kg	nanograms per kilogram
NOAA	National Oceanic and Atmospheric Administration
NOV	Notice of Violation

Acronyms and Abbreviations (Continued)

NPDES	National Pollutant Discharge Elimination System
NWRO	Northwest Regional Office
O&M	Operations and Maintenance
OC	organic carbon
OWS	oil/water separator
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
ppb	parts per billion
ppm	parts per million
PSAPCA	Puget Sound Air Pollution Control Agency
PSCAA	Puget Sound Clean Air Agency
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RM	River Mile
RZA	Rittenhouse-Zeman & Associates, Inc.
SAIC	Science Applications International Corporation
SCAP	Source Control Action Plan
SD	storm drain
SEA-DRU-NAR	Seattle Drug and Narcotics Center
SIC	Standard Industrial Classification
SMS	Sediment Management Standards
SPU	Seattle Public Utilities
sq ft	square foot
SQS	Sediment Quality Standard
SVOC	semivolatile organic compound
SWPPP	Stormwater Pollution Prevention Plan
TCA	trichloroethane
TCE	trichloroethylene
TEQ	toxic equivalency quotient
TOC	total organic carbon
TPH	total petroleum hydrocarbons
TRPH	total recoverable petroleum hydrocarbons
UPRR	Union Pacific Railroad
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VCP	Voluntary Cleanup Program
VOC	volatile organic compound
WAC	Washington Administrative Code
WQS	water quality standards
WWTP	wastewater treatment plant

1.0 Introduction

1.1 Background and Purpose

This *Summary of Existing Information and Identification of Data Gaps Report* (Data Gaps Report) pertains to River Mile (RM) 1.0-1.2 East[1] (King County [KC] Lease Parcels), one of several source control areas identified as part of the overall cleanup process for the Lower Duwamish Waterway (LDW) Superfund Site (Figure 1). It summarizes readily available information regarding properties in the KC Lease Parcels source control area. The purpose of the Data Gaps Report is to:

- Identify chemicals of potential concern in sediments associated with the KC Lease Parcels source control area;
- Evaluate potential contaminant migration pathways to LDW sediments;
- Identify and describe potential adjacent or upland sources of contaminants that could be transported to sediments;
- Identify critical data gaps that should be addressed in order to assess the potential for recontamination of sediments and the need for source control; and
- Determine what, if any, effective source control is already in place.

The LDW consists of 5.5 miles of the Duwamish Waterway as measured from the southern tip of Harbor Island to just south of the Norfolk Combined Sewer Overflow (CSO). The LDW flows into Elliott Bay in Seattle, Washington. The LDW was added to the U.S. Environmental Protection Agency (USEPA or EPA) National Priorities List in September 2001 due to the presence of chemical contaminants in sediment. The key parties involved in the LDW site are EPA, the Washington State Department of Ecology (Ecology), and the Lower Duwamish Waterway Group (LDWG); which is composed of the City of Seattle, King County, the Port of Seattle, and The Boeing Company. In December 2000, EPA and Ecology signed an agreement with the LDWG to conduct a Remedial Investigation/ Feasibility Study (RI/FS) for the LDW site.

EPA is leading the effort to determine the most effective cleanup strategies for the LDW through the RI/FS process. Ecology is leading the effort to investigate upland sources of contamination and to develop plans to reduce contaminant migration to waterway sediments.[2] The LDWG collected data during the Phase I Remedial Investigation (RI) that were used to identify candidate locations for early cleanup action. Seven candidate early action sites (or Tier 1 sites) were identified. Ecology's *Lower Duwamish Waterway Source Control Status Report, 2003 to June 2007* (Ecology 2007b) and *Lower Duwamish Waterway Source Control Status Report, July 2007 to March 2008* (Ecology 2008a) identified another 16 areas where source control actions may be necessary. The KC Lease Parcels source control area was identified as one of these areas.

[1] River miles as defined in this report are measured from the southern tip of Harbor Island.
[2] EPA and Ecology signed an interagency Memorandum of Understanding (MOU) in April 2002 and updated the MOU in April 2004. The MOU divides responsibilities for the site. EPA is the lead agency for the sediment RI/FS, while Ecology is the lead agency for source control issues (EPA and Ecology 2002, 2004).

Subsequently, Ecology and EPA redefined the boundaries of the source control areas, generally defined by stormwater drainage basins.

Ecology is the lead agency for source control for the LDW site. Source control is the process of finding and eliminating or reducing releases of contaminants to LDW sediments, to the extent practicable. The goal of source control is to prevent sediments from being recontaminated after cleanup has been undertaken.

The LDW Source Control Strategy (Ecology 2004a) describes the process for identifying source control issues and implementing effective controls for the LDW. The plan is to identify and manage potential sources of sediment recontamination in coordination with sediment cleanups. Source control will be achieved by using existing administrative and legal authorities to perform inspections and require necessary source control actions.

The strategy is based primarily on the principles of source control for sediment sites described in EPA's Principles for Managing Contaminated Sediment Risks at Hazardous Waste Sites (USEPA 2002), and the Washington State Sediment Management Standards (SMS) (Washington Administrative Code [WAC] 173-340-370[7] and WAC 173-204-400). The Source Control Strategy involves developing and implementing a series of detailed, area-specific Source Control Action Plans (SCAPs).

Before developing a SCAP, Ecology prepares a Data Gaps Report for the source control area. Findings from the Data Gaps Report are reviewed by LDW stakeholders and are incorporated into the SCAP. This process helps to ensure that the action items identified in the SCAP will be effective, implementable, and enforceable. As part of the source control efforts for the KC Lease Parcels source control area, Ecology requested Science Applications International Corporation (SAIC) to prepare this Data Gaps Report.

1.2 Report Organization

Section 2.0 of this report provides background information on the KC Lease Parcels source control area, including location, physical characteristics, chemicals of concern, and pathways by which contaminants may reach sediments. Sections 3.0 and 4.0 describe potential sources of contaminants and data gaps that must be addressed in order to develop and implement a SCAP for the source control area. Section 5.0 provides a summary of data gaps, and Section 6.0 lists the documents cited in this report.

Information presented in this report was obtained from the following sources:

- Ecology Northwest Regional Office (NWRO) Central Records;
- Washington State Archives;
- EPA files;
- Seattle Public Utilities (SPU) business inspection reports;
- Ecology Underground Storage Tank (UST) and Leaking Underground Storage Tank (LUST) lists;
- Ecology Facility/Site Database;

- Ecology Integrated Site Information System (ISIS) Database;
- Washington State Confirmed and Suspected Contaminated Sites List (CSCSL);
- EPA Enforcement and Compliance History Online (ECHO);
- EPA Envirofacts Warehouse;
- King County Geographic Information Systems (GIS) Center Parcel Viewer, Property Tax Records, and iMap;
- GIS shape files produced by SPU; and
- Historical aerial photographs.

Information collected from the Facility/Site Database, ISIS, ECHO, EPA Envirofacts Warehouse and King County property tax records was current as of September 2009. Recent updates to these databases may not be reflected in this report.

1.3 Scope of Report

This report documents readily available information relevant to potential sources of contaminants to sediments associated with the KC Lease Parcels source control area, including outfalls, adjacent properties, and the S Brandon Street CSO basin.

Adjacent properties include Manson Construction Company, Cadman Seattle, Inc., United Western Supply, and J.A. Jack and Sons. In addition, this report includes information about facilities within the S Brandon Street CSO basin, which discharges to the LDW within the KC Lease Parcels source control area.

Air pollution is a potential source of sediment contamination with origins outside of the KC Lease Parcels source control area. Although limited discussion of atmospheric deposition is provided in Section 2.0, the scope of this report does not include an assessment of data gaps pertaining to the effects of air pollution on the sediments associated with the source control area. Because air pollution is a concern for the wider LDW region, Ecology will review work being conducted by the Washington State Department of Health and planned by the Puget Sound Partnership regarding atmospheric deposition.

Information presented in this report is limited to the KC Lease Parcels source control area, direct discharges to the sediments associated with the source control area, and potential adjacent and upland contaminant sources. This report focuses on sources that have the potential to recontaminate sediments associated with the source control area in the event that sediment remediation is required. It does not preclude the potential for recontamination from capped sediments if this remedial option is selected. Source control with regard to any contaminated sediments left in place will be important to address as part of the remedial action selection process for sediments associated with the KC Lease Parcels source control area.

Chemical data have been compared to relevant regulatory criteria and guidelines, as appropriate. The level of assessment conducted for the data reviewed in this report is determined by the source control objectives. The scope of this Data Gaps Report does not include data validation or analysis that exceeds what is required to reasonably achieve source control.

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2.0 King County Lease Parcels Source Control Area

The KC Lease Parcels source control area, also referred to as the RM 1.0-1.2 East source control area, is located along the eastern side of the LDW between RM 1.0 and 1.2, as measured from the southern end of Harbor Island (Figure 1). King County owns the property located directly adjacent to the LDW within this source control area and leases it to several facilities (Figure 2). From north to south, these facilities are:

- Manson Construction Company (Manson Construction),
- Cadman Seattle Inc. (Cadman) and Lehigh Northwest,
- United Western Supply, and
- J.A. Jack & Sons (J.A. Jack).

The LDW is west of these facilities. Located to the east of these properties are East Marginal Way S and other industrial facilities. Slip 1 is north of Manson Construction. Saint Gobain Glass (St. Gobain) is south of J.A. Jack.

There are three outfalls discharging to the LDW within the KC Lease Parcels source control area; all three outfalls are public outfalls maintained by King County (Figure 2):

2007: Unnamed (18-inch composite construction),
2223: S Brandon Street CSO (18-inch ductile iron), and
2244: Dock Pipe #2 Outfall (diameter and material unknown).

Outfall 2007 is located immediately south of RM 1.2 East. The outfall is included in the KC Lease Parcels source control area because stormwater from J.A. Jack may be conveyed to the LDW via Outfall 2007 during storm events.

2.1 Site Description

General background information on the LDW is provided in the Phase I RI Report (Windward 2003), which describes the history of dredging/filling and industrialization of the Duwamish River and its environs, as well as the physiography, physical characteristics, hydrogeology, and hydrology of the area.

The upland areas adjacent to the LDW have been industrialized for many decades; historical and current commercial and industrial operations in the vicinity of the KC Lease Parcels source control area include cement and limestone production facilities, boiler shops, and construction services. Seattle Boiler Works and I.F. Laucks (a paint and glue factory) historically operated in the KC Lease Parcels area (Foster 1945).

In the late 1800s and early 1900s, extensive topographic modifications were made to the Duwamish River to create a straightened channel; many of the current side slips are remnants of old river meanders. Slip 1, which is immediately north of the KC Lease Parcels source control area, is one of these remnants.

Groundwater in the Duwamish Valley alluvium is typically encountered within about 3 meters (10 feet) of the ground surface and under unconfined conditions (Windward 2003). The general direction of groundwater flow is toward the LDW, although the direction may vary locally depending on the nature of the subsurface material, and temporally, based on proximity to the LDW and the influence of tidal action. High tides can cause temporary groundwater flow reversals, generally within 100 to 150 meters (300 to 500 feet) of the LDW (Booth and Herman 1998). Groundwater flow in the vicinity of the source control area is generally to the west-southwest, toward the LDW.

Bottom sediment composition is variable throughout the LDW, ranging from sands to mud. Typically, the sediment consists of slightly sandy silt with varying amounts of organic detritus. Coarser sediments are present in nearshore areas adjacent to storm drain discharges (Weston 1999); finer-grained sediments are typically located in remnant mudflats and along channel side slopes. Sediments associated with the KC Lease Parcels source control area consist of 40.1 to 60 percent fines from approximately RM 1.0 to 1.1 East and greater than 80 percent fines from approximately RM 1.1 to 1.2 East. Total organic carbon (TOC) in this area ranges from 0.34 to 3.93 percent (Appendix A).

In an effort to more thoroughly understand and evaluate historical facility operations and development in the KC Lease Parcels source control area, SAIC reviewed historical aerial photographs from 1936 to 2002. These photographs represent conditions during roughly each decade. The aerial photographs and complete descriptions for the years 1936, 1946, 1956, 1969, 1977, 1990, 1999, and 2004 are provided in Appendix B. For ease of description the properties are identified by the current facility operators. The descriptions are summarized below.

- ***1936:*** The properties adjacent to the LDW are used to store lumber and other construction materials, with the exception of the Cadman and Lehigh Northwest facilities, which support buildings and parking. Docks extend to the LDW from the locations of the Manson Construction and United Western Supply facilities. Two large log booms are moored offshore of the properties occupied by the Cadman and Lehigh Northwest facility.
- ***1946:*** Development is ongoing at the properties occupied by the Manson Construction, Cadman, and Lehigh Northwest facilities, including the construction of a large wharf on the western edge of the property occupied by Manson Construction and additions to two of the buildings on the properties occupied by Cadman and Lehigh Northwest. Another large wharf has been constructed adjacent to the properties occupied by United Western Supply and J.A. Jack, parallel to the shoreline. Lumber and cargo are stored on the properties occupied by United Western Supply and J.A. Jack.
- ***1956:*** A boat ramp has been added at the southwest corner of the property occupied by Manson Construction and several small buildings have been erected. Barges and small vessels are moored offshore of the source control area. Cargo, equipment, and lumber are stored on the properties.
- ***1969:*** The activity at the property occupied by Manson Construction becomes increasingly industrial. Additional construction and demolition have taken place on

the properties occupied by the Cadman, Lehigh Northwest, and United Western Supply facilities. The large wharf adjacent to the United Western Supply facility has been replaced with a narrow dock parallel to the shoreline. J.A. Jack has begun operations at its current location.

- ***1977:*** Several out buildings have been constructed on the property occupied by the Manson Construction facility and two buildings have been demolished on the property occupied by Cadman and Lehigh Northwest. The properties occupied by the United Western Supply and J.A. Jack facilities are relatively unchanged.
- ***1990:*** The shoreline adjacent to the properties occupied by Cadman and Lehigh Northwest appears to have been filled in or a wharf has been constructed. Four silos are now present on the property. At the property occupied by United Western Supply, it appears that a small section of the shoreline has been paved. The properties occupied by the Manson Construction and J.A. Jack facilities are relatively unchanged.
- ***1999:*** Large stockpiles and an additional silo are present on the property occupied by the Cadman and Lehigh Northwest facilities. The remaining properties are relatively unchanged.
- ***2004:*** The source control area is relatively unchanged.

2.2 Chemicals of Concern in Sediment

Chemicals of concern (COCs) in sediment associated with the KC Lease Parcels source control area were identified based on sediment sampling conducted between 1997 and 2006.

2.2.1 Sediment Investigations

Sediment samples have been collected adjacent to the KC Lease Parcels source control area as part of the investigations listed below. Sampling locations are listed in Table 1, and are shown in Figure 3. Data and information regarding the investigations performed prior to 2005 were compiled by Windward Environmental for the LDW RI (Windward 2003, 2007c).

- **King County CSO Water Quality Assessment (King County 1999)**

  From March to June 1997, a total of 13 surface sediment samples were collected (one sample every 5 to 15 days) from one sampling station (WQABRAN) located approximately 150 feet southwest of the S Brandon Street CSO. The samples were analyzed for metals and trace elements, polycyclic aromatic hydrocarbons (PAHs), other semi-volatile organic compounds (SVOCs), phthalates, and polychlorinated biphenyls (PCBs).

- **Duwamish Waterway Sediment Characterization Study (NOAA 1998)**

  Seven surface sediment samples were collected adjacent to the source control area in 1997. All seven samples were analyzed for PCBs and polychlorinated terphenyls.

- **EPA Site Inspection, Lower Duwamish River (Weston 1999)**

  Nine surface sediment samples were collected adjacent to the source control area in August 1998. All samples were analyzed for metals and trace elements, PAHs, phthalates, other SVOCs, and PCBs. Three samples were also analyzed for pesticides, organometals, and volatile organic compounds (VOCs).

- **Lehigh Northwest (Windward 2007c)**

  Three subsurface sediment samples were collected adjacent to the source control area in August 2003. The samples were analyzed for metals and trace elements, PAHs, phthalates, other SVOCs, and PCBs.

- **LDW Phase 2 Remedial Investigation, Round 1, 2, and 3 Sediment Sampling (Windward 2005a, 2005b, 2007b)**

  Eight surface sediment samples were collected adjacent to the source control area during three rounds of sampling for the Phase 2 RI from 2005 to 2006. All samples were analyzed for metals and trace elements, SVOCs, PAHs, phthalates, and PCBs; four samples were analyzed for dioxins/furans; and one sample was analyzed for pesticides.

- **LDW Phase 2 RI Subsurface Sediment Sampling (Windward 2007a)**

  Twenty-three sediment samples were collected from four coring locations adjacent to the source control area during 2006. Ten samples were analyzed for metals and trace elements; 19 samples were analyzed for SVOCs, PAHs, and phthalates; 15 samples were analyzed for PCBs; and four samples were analyzed for organometals, dioxins/furans, and pesticides.

Sediment sampling results are listed in Appendices A-1 and A-2 for surface and subsurface sediments, respectively. In 2005, the sediments were dredged from the area between RM 1.0-1.1 East. Samples collected in 2004 before the dredging activity are included in Appendices A-1 and A-2 in order to understand which potential COCs have been present historically in the sediments associated with the KC Lease Parcels source control area. No additional records of dredging activities in this source control area were found in the files reviewed by SAIC.

2.2.2 Identification of Chemicals of Concern

A COC is defined in this report as a chemical that is present in sediments associated with the KC Lease Parcels source control area at concentrations above regulatory criteria, and is therefore of particular interest with respect to source control. These COCs are the initial focus of the evaluation of potential contaminant sources.

The Washington SMS (Chapter 173-204 WAC) establish marine Sediment Quality Standard (SQS) and Cleanup Screening Level (CSL) values for some chemicals that may be present in sediments. Sediments that meet the SQS criteria (i.e., are present at concentrations below the SQS) have a low likelihood of adverse effects on sediment-dwelling biological resources. However, an exceedance of the SQS numerical criteria does not necessarily indicate adverse effects or toxicity, and the degree of SQS exceedance does not correspond to the level of sediment toxicity. The CSL is greater than or equal to the SQS and represents a higher level of

risk to benthic organisms than the SQS levels. The SQS and CSL values provide a basis for identifying sediments that may pose a risk to some ecological receptors.

A chemical was identified as a COC for the KC Lease Parcels source control area if it was detected in surface or subsurface sediment at concentrations above the SQS in at least one sample. A comparison of sample results to the SQS and CSL values is provided in Appendix A, and those chemicals that were detected at concentrations above their respective SQS/CSL values are listed in Tables 2 and 3 for surface and subsurface sediments, respectively. For non-polar organics, the measured dry weight concentrations were organic carbon (OC) normalized to allow comparison to the SQS/CSL. Chemicals detected in sediment for which no SQS/CSL values are available may be identified as COCs on a case-by-case basis.

Concentrations of chemicals in soil and groundwater were compared to draft soil-to-sediment or groundwater-to-sediment screening levels (SAIC 2006). These screening levels were initially developed to assist in the identification of upland properties that may pose a potential risk of recontamination of sediments at Slip 4. The screening levels incorporate a number of conservative assumptions, including the absence of contaminant dilution and ample time for contaminant concentrations in soil, sediment, and groundwater to achieve equilibrium. In addition, the screening levels do not address issues of contaminant mass flux from upland media to sediments, nor do they address the area or volume of sediment that might be affected by upland contaminants. Because of these assumptions and uncertainties, these screening levels are most appropriately used for one-sided comparisons. If contaminant concentrations in upland soil or groundwater are below these screening levels, then it is unlikely that they will lead to exceedances of the SMS. However, upland concentrations that exceed these screening levels *may or may not* pose a threat to marine sediments; additional site-specific information must be considered in order to make such an assessment. While not currently considered COCs in sediment, these chemicals may warrant further investigation, depending on site-specific conditions, to evaluate the likelihood that they will lead to exceedances of the SMS.

Although not explicitly addressed in the SMS, VOCs in pore water may cause adverse effects on benthic invertebrates and other aquatic biota, and are therefore considered additional COCs for source control efforts in the LDW.

Chemicals with concentrations above the SQS in surface or subsurface sediment samples are listed below. In general, chemicals were present in sediment samples at concentrations only slightly above the SQS values; the greatest exceedances were observed for PCBs at sample locations between the surface and 2 feet bgs offshore of Cadman and Lehigh Northwest, and for PAHs in a surface sample offshore of Cadman and Lehigh Northwest and between 3 to 3.5 feet bgs downstream of Outfall 2007 (Figure 3).

Chemicals Detected at Concentrations Above the SQS/CSL	**Surface Sediment**		**Subsurface Sediment**	
	> SQS	**> CSL**	**> SQS**	**> CSL**
Metals				
Mercury	●	●	●	●
PAHs				
2-Methylnaphthalene	●	●		

Chemicals Detected at Concentrations Above the SQS/CSL	Surface Sediment		Subsurface Sediment	
	> SQS	> CSL	> SQS	> CSL
Acenaphthene	●	●	●	●
Anthracene			●	
Benzo(a)anthracene	●		●	●
Benzo(a)pyrene			●	●
Benzo(b)fluoranthene			●	
Benzofluoranthenes (total calc'd)	●		●	●
Benzo(g,h,i)perylene			●	
Chrysene	●		●	●
Dibenzo(a,h)anthracene			●	
Dibenzofuran	●	●		
Fluoranthene	●		●	●
Fluorene	●	●	●	●
Indeno(1,2,3-cd)pyrene	●		●	
Naphthalene	●	●		
Phenanthrene	●	●	●	●
Pyrene			●	
Total HPAH	●		●	
Total LPAH	●	●	●	●
Phthalates				
Bis (2-ethylhexyl)phthalate			●	
PCBs				
PCBs (total)	●	●	●	●

Exceedance factors, which are a measure of the degree to which maximum detected concentrations exceed the SQS/CSL values, are listed in Tables 2 and 3.
HPAH = high molecular weight PAH
LPAH = low molecular weight PAH

Results for these chemicals are discussed in more detail below.

Metals

Mercury concentrations exceeded the SQS and CSL in surface and subsurface sediment samples. The highest concentration of mercury slightly exceeded the SQS and CSL from surface sample LDW-SS39, which was collected in the general vicinity of the S Brandon Street CSO (Figure 3).

PAHs

PAH concentrations exceeding the SQS were detected in two surface samples, DR087 and LDW-SS35. Concentrations of 2-methylnaphthalene, acenaphthene, dibenzofuran, fluorene, naphthalene, phenanthrene, and total LPAH exceeded the CSL in sample LDW-SS35. LDW-SS35 was collected near the northwest corner of the Cadman and Lehigh Northwest property. PAH concentrations exceeded the SQS in four subsurface sediment samples collected from sediment core LDW-SC23, located downstream of Outfall 2007 at approximately RM 1.2 East (Figure 3). Concentrations of acenaphthene, benzo(a)anthracene, benzo(a)pyrene, total

benzofluoranthenes, chrysene, fluoranthene, fluorene, phenanthrene, and total LPAH in the 3- to 3.5-foot sample and acenaphthene in the 3.5- to 4-foot sample exceeded the CSL.

Phthalates

Bis(2-ethylhexyl)phthalate (BEHP) concentrations exceeded the SQS in two subsurface samples collected from sediment core LDW-SC23 (Figure 3).

PCBs

PCB concentrations exceeded the SQS and/or CSL in eight surface and five subsurface sediment samples from two sediment cores. The greatest PCB concentrations were observed in surface sample LDW-SS37 and the 0- to 2-foot subsurface sample collected from sediment core LDW-SC20; the SQS exceedance factor for both samples was 18 and the CSL exceedance factor was 3.4 for the surface sample and 3.3 for the subsurface sample. These samples were collected from the navigation channel, downstream of the S Brandon Street storm drain (SD) outfall (Figure 3).

Other COCs

Although no sediment quality standards have been promulgated, dioxins and furans are considered to be potential COCs at the KC Lease Parcels source control area. These compounds were detected at five sampling locations. Mammalian dioxin/furan toxic equivalency quotients (TEQs) ranged from 10.6 to 133 ng/kg dry weight (DW) (see Appendix A). The highest concentrations of dioxins/furans were detected at location LDW-SS37.

Organo-tin compounds are considered to be potential COCs at the KC Lease Parcels source control area due to their presence in sediment samples collected in this area. Organo-tin compounds were detected at three sampling locations, with concentrations to 0.18 mg/kg DW tributyltin at location DR087 (see Appendix A).

2.2.3 Summary of Chemicals of Concern in Sediments

As described above, COCs were identified based on the results of sediment sampling conducted between 1997 and 2006. Chemicals that exceeded the SQS in at least one surface or subsurface sediment sample offshore of the KC Lease Parcels source control area are considered COCs. In addition, dioxins/furans, and organo-tin compounds were identified as potential COCs, as described above.

In summary, the following chemicals are considered to be COCs in sediment associated with the KC Lease Parcels source control area:

- PCBs
- PAHs
- Mercury
- BEHP
- Dioxins/furans
- Organo-tin compounds

2.3 Potential Pathways to Sediment

Potential sources of sediment recontamination associated with the KC Lease Parcels source control area include storm drains, CSO outfalls, and discharges from adjacent properties. Transport pathways that could contribute to the recontamination of sediments associated with the KC Lease Parcels source control area following remedial activities include direct discharges via outfalls, surface runoff (sheet flow) from adjacent properties, bank erosion, groundwater discharges, air deposition, and spills directly to the LDW. These pathways are described below and are discussed in more specific detail in Sections 3.0 and 4.0.

2.3.1 Direct Discharges via Outfalls

Direct discharges may occur from public or private SD systems, CSOs, and emergency overflows (EOFs). In the KC Lease Parcels source control area, there are two public storm drains and one CSO (Section 3.0).

Upland areas within the LDW are served by a combination of separated storm/sanitary systems and combined sewer systems. Storm drains convey stormwater runoff collected from pervious surfaces (yards, parks) and impervious surfaces (streets, parking lots, driveways, and rooftops) in the drainage basin. In the LDW, there are both public and private SD systems. Most of the waterfront properties are served by privately owned systems that discharge directly to the waterway. The other upland areas are served by a combination of private and publicly owned systems. Typically, private onsite SD systems discharge to the public storm drain in the street, which conveys runoff from private property and public rights-of-way to the LDW.

The sanitary sewer system collects municipal and industrial wastewater from throughout the LDW area and conveys it to King County's West Point wastewater treatment plant (WWTP), where it is treated before being discharged to Puget Sound. The smaller trunk sewer lines, which collect wastewater from individual properties, are owned and operated by the individual municipalities (e.g., Cities of Seattle and Tukwila) and local sewer districts. The large interceptor system that collects wastewater from the trunk lines is owned and operated by King County. A King County interceptor extends along the west side of East Marginal Way S.

Some areas of the LDW are served by combined sewer systems, which carry both stormwater and municipal/industrial wastewater in a single pipe. These systems were generally constructed before about 1970 because it was less expensive to install a single pipe rather than separate storm and sanitary systems. Under normal rainfall conditions, wastewater and stormwater are conveyed through this combined sewer pipe to a wastewater treatment facility. During large storm events, however, the total volume of wastewater and stormwater can sometimes exceed the conveyance and treatment capacity of the combined sewer system. When this occurs, the combined sewer system is designed to overflow through relief points, called CSOs. The CSOs prevent the combined sewer system from backing up and creating flooding problems.

A mixture of untreated municipal/industrial wastewater and stormwater can potentially be discharged through CSOs to the LDW during these storm events. The City's CSO network has its own National Pollutant Discharge Elimination System (NPDES) permit; the County's CSOs are administered under the NPDES permit established for the West Point WWTP.

An EOF is a discharge that can occur from either the combined or sanitary sewer systems that is not necessarily related to storm conditions and/or system capacity limitations. EOF discharges typically occur as a result of mechanical issues (e.g., pump station failures) or when transport lines are blocked; pump stations are operated by both the City and County. Pressure relief points are provided in the drainage network to discharge flow to an existing storm drain or CSO pipe under emergency conditions to prevent sewer backups. EOF events are not covered under the City's or County's existing CSO wastewater permits.

There are 14 CSOs/EOFs in the LDW (Table 4). The county CSOs at S Brandon Street, Michigan Street, and Hanford No. 1 (discharging via the City's Diagonal Avenue S CSO/SD outfall) had the highest average discharge volumes between 2000 and 2007. The S Brandon Street CSO is located at RM 1.1 East, within the KC Lease Parcels source control area.

Annual stormwater discharge volumes are usually substantially higher than annual CSO discharges because storm drains discharge whenever it rains, while CSOs only occur when storm events exceed the system capacity. Annual stormwater discharges to the LDW have been estimated at approximately 4,000 million gallons per year (mgy) compared to less than 65 mgy from the county CSOs and less than 10 mgy from the city CSOs (Windward 2007c).

To minimize the frequency and volume of CSO events, the County utilizes different CSO control strategies to maximize system capacity. An automated control system manages flows through the King County interceptor system so that the maximum amount of flow is contained in pipelines and storage facilities until it can be conveyed to a regional WWTP for secondary treatment. In some areas of the system, where flows cannot be conveyed to the plant, the overflows are sent to CSO treatment facilities for primary treatment and disinfection prior to discharge. County CSOs discharge untreated wastewater only when flows exceed the capacity of these systems (King County 2007).[3]

As a result, some areas may overflow to different outfalls at different times, depending on the route that the combined stormwater/wastewater has taken through the County conveyance system. Furthermore, some industrial facilities in the LDW basin may discharge stormwater to a separated system and industrial wastewater to a combined system, or a conveyance that begins as a separated system may discharge to a combined system further downstream along the flow path.

When preparing a Data Gaps Report for a source control area, all properties that potentially discharge to that source control area (whether through a CSO/EOF or a separated storm drain) are identified to the extent that the boundaries of the drainage basin are known. However, for areas where drainage basins overlap, a property review is performed only if the property has not already been included in a previously published Data Gaps Report. Exceptions include situations where contaminants may be transported to the current source control area via a transport pathway that was not applicable for the earlier evaluation. The S Brandon Street CSO drainage basin includes properties that have been discussed in other Data Gaps Reports and SCAPs. Table 5 indicates the facilities/properties that are included in other source control areas and have been discussed in previously published Data Gaps Reports and SCAPs.

[3] City CSOs are generally smaller and flows are not treated prior to discharge.

Although COCs from individual industrial and commercial facilities within the CSO basin are significantly diluted, the cumulative effects of CSO events could contribute to recontamination of the sediments associated with the KC Lease Parcels source control area. Industrial and commercial facilities discharging industrial wastes and/or stormwater to the combined sewer system are therefore considered to represent potential but relatively minor sources of sediment recontamination.

Large spills of hazardous substances and waste materials containing COCs may be transported to a storm drain or CSO and therefore have the potential to impact sediment in the LDW. There is a potential for spills of COCs from many of the industrial and commercial businesses in the S Brandon Street CSO drainage basin as well as from trucks and trains transporting hazardous substances and waste materials. Spills that occur in the S Brandon Street CSO basin could enter the onsite or public SD system and be discharged to the LDW through the CSO. Spill prevention is a major element of the business inspections conducted by SPU, King County, and Ecology. Many businesses are required to have spill prevention plans. In the event of a spill, Ecology and SPU respond to and investigate spill incidents.

2.3.2 Surface Runoff (Sheet Flow)

In areas lacking collection systems, spills or leaks on properties adjacent to the LDW could flow directly over impervious surfaces or through creeks and ditches to the waterway. Current operational practices at adjacent properties may contribute to the movement of contaminants to the LDW via runoff. Based on aerial photographs and the documents reviewed, it appears that the facilities adjacent to the LDW are paved. Stormwater treatment systems are used at Cadman and Lehigh Northwest and at J.A. Jack, which reduces the potential for surface runoff to reach the LDW. Surface runoff from other properties adjacent to the LDW may be a source of contaminants to sediments associated with the KC Lease Parcels source control area.

2.3.3 Spills to the LDW

Near-water and over-water activities have the potential to impact adjacent sediment from spills directly to the LDW of material containing COCs. Cadman, Lehigh Northwest, and J.A. Jack conduct loading and unloading activities within the KC Lease Parcels source control area. Accidental spills during loading/unloading operations may result in transport of contaminants to sediment.

2.3.4 Bank Erosion

The banks of the LDW shoreline are susceptible to erosion by wind and surface water, particularly in areas where banks are steep. Shoreline armoring and the presence of vegetation reduce the potential for bank erosion. Contaminants in soils along the banks of the LDW could be released directly to sediments via erosion. Little information was available on the construction of the banks within the KC Lease Parcels source control area and the potential for sediment recontamination via this pathway.

2.3.5 Groundwater Discharges

Contaminants in soil resulting from spills and releases to adjacent properties may be transported to groundwater and subsequently be released to the LDW and the KC Lease Parcels source control area. Groundwater contamination has not been documented at the adjacent properties.

2.3.6 Atmospheric Deposition

Atmospheric deposition occurs when air pollutants enter the LDW directly or through stormwater. Air pollutants may be generated from point or non-point sources. Point sources include industrial facilities, and air pollutants may be generated from painting, sandblasting, loading/unloading of raw materials, and other activities, or through industrial smokestacks. Non-point sources include dispersed sources such as vehicle emissions, aircraft exhaust, and off-gassing from common materials such as plastics. Air pollutants may be transported over long distances by wind, and can be deposited to land and water surfaces by precipitation or particle deposition. None of the properties within the KC Lease Parcels source control area are currently regulated as point sources of air emissions. Five properties within the S Brandon Street CSO basin are currently regulated as point sources of air emissions. These properties are listed below.

Facility	Air Facility System ID
Art Brass Plating Inc. Seattle	5303300386
Capital Industries Inc.	5303300385
Environmental Transport Inc.	5303317794
Longview Fibre Paper & Packaging Inc.	5303315019
Saint Gobain Containers Inc.	5303300004

Contaminants originating from nearby properties and streets may be transported through the air and deposited in the LDW or in areas that drain to the LDW. In January 2010, the EPA filed a consent decree settlement with Saint Gobain Containers Inc. (St. Gobain) to address allegations of violations of the Clean Air Act by St. Gobain. Several states and state agencies, including Washington State and the Puget Sound Clean Air Agency (PSCAA) joined in the settlement. St. Gobain will enhance the five furnaces at the Seattle facility to reduce emissions of nitrogen oxides, sulfur dioxide, and particulate matter (USEPA 2010).

Additional information on recent and ongoing atmospheric deposition studies in the LDW area is summarized in the LDW Source Control Status Reports (Ecology 2007b and subsequent updates); Ecology will continue to monitor these efforts.

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3.0 Potential for Sediment Recontamination from Outfalls

Storm drains convey stormwater runoff collected from streets, parking lots, roof drains, and residential, commercial, and industrial properties to the LDW. Storm drains entering the LDW carry runoff generated by rain and snow. A wide range of chemicals may become dissolved or suspended in runoff as rainwater flows over the land. Urban areas generally accumulate particulates, dust, oil, asphalt, rust, rubber, metals, pesticides, detergents, or other materials as a result of human activities throughout the drainage basin.

Human activities include landscaping, spills, illegal dumping, vehicle maintenance (fueling, washing), and vehicle use (wear on roads, tires, brakes, fluid leaks, and emissions). These materials can be flushed into storm drains during wet weather, and are then conveyed to the waterway, mainly through the stormwater system. In addition, contaminants in soil or groundwater could enter the SD system through cracks or gaps in the stormwater piping.

3.1 Public Outfalls

As described in Section 2.3.1, public outfalls include public storm drains, CSOs, and EOFs. Within the KC Lease Parcels source control area there are two public storm drains and one CSO outfall, which discharge to the LDW (Figure 2):

Outfall No.[1]	Outfall Name	Diameter/Material	Outfall Type
2007	Unnamed	18-inch composite construction	KC SD
2223	S Brandon Street CSO	18-inch ductile iron	KC CSO
2244	Dock Pipe #2 Outfall	15-inch	KC SD

1. Outfall number as listed in Windward 2007c, Appendix H.

Lateral SD lines connect several of the surrounding facilities to these main lines. The extent of the areas from which stormwater drains to Outfalls 2007 and 2244 is shown on Figure 4. The S Brandon Street CSO basin is shown on Figure 5.

3.1.1 S Brandon Street CSO

The S Brandon Street CSO basin covers approximately 380 acres, spanning west-to-east from the LDW to Corson Avenue S and north-to-south from Denver Avenue S to S Michigan Street (Figure 5). Land uses within the CSO basin include industrial and commercial properties and approximately 18 acres of the Union Pacific Railroad (UPRR) Argo Yard. Parts of the S Brandon Street CSO basin overlap with the Duwamish/Diagonal CSO/SD and Michigan Street CSO basins. In areas where the CSO basins overlap, wastewater and stormwater within the S Brandon Street CSO basin may be redirected to the Duwamish/Diagonal or Michigan Street outfalls depending on the route that the combined wastewater and stormwater takes through the County conveyance system.

From 2000 to 2007, combined wastewater and stormwater overflows were discharged through the S Brandon Street CSO on average 23 times per year, with an annual average volume of approximately 31.63 mgy (Table 4) (Tiffany 2008b).

King County Industrial Waste (KCIW) estimates that, on a county-wide basis, industrial discharges comprise less than 0.5 percent of the total volume of a CSO event (Tiffany 2008). Typically, domestic users of the combined sewer system contribute a larger percentage of the chemical loading than industrial users. For example, KCIW testing has indicated that industrial users of the combined sewer system contribute less than 10 percent of the phthalate load, with the remainder coming from uncontrollable sources such as domestic users.

Although COCs from individual industrial and commercial facilities within the CSO basin are significantly diluted, the cumulative effects of CSO events could contribute to recontamination of sediments associated with the KC Lease Parcels source control area. Industrial and commercial facilities discharging industrial wastes and/or stormwater to the combined sewer system are therefore considered to represent potential but relatively minor sources of sediment recontamination.

King County collected four effluent stormwater samples from the S Brandon Street CSO between 2008 and 2009. Several sediment COCs were detected in the samples. The highest concentration detected of each sediment COC is listed below:

Sediment COC	Concentration (µg/L)	Sample Date
Metals		
Mercury	0.43	January 7, 2009
PAHs		
2-Methylnaphthalene	0.155	April 2, 2009
Acenaphthene	0.0564	January 7, 2009
Anthracene	0.974	January 7, 2009
Benzo(a)anthracene	0.37	January 7, 2009
Benzo(a)pyrene	0.37	January 7, 2009
Benzo(b)fluoranthene	0.506	January 7, 2009
Benzo(g,h,i)perylene	0.257	January 7, 2009
Benzo(k)fluoranthene	0.33	April 2, 2009
Chrysene	0.497	April 2, 2009
Dibenzo(a,h)anthracene	0.0925	January 7, 2009
Dibenzofuran	0.0533	January 7, 2009
Fluoranthene	0.687	January 7, 2009
Fluorene	0.168	January 7, 2009
Indeno(1,2,3-cd)pyrene	0.212	January 7, 2009
Naphthalene	0.0122	April 2, 2009
Phenanthrene	0.623	January 7, 2009
Pyrene	0.793	January 7, 2009

Sediment COC	Concentration (µg/L)	Sample Date
Phthalates		
Bis(2-Ethylhexyl)phthalate	10.2	April 2, 2009
PCBs		
PCBs, total	455 nanograms/Liter	January 7, 2009

Source: King County 2009a, 2009b

The following industrial and commercial facilities within the S Brandon Street CSO basin have been identified:

- 128 facilities within the S Brandon Street CSO basin have been assigned Ecology Facility/Site ID numbers (Table 5).
- 11 of these facilities are listed on Ecology's CSCSL.
- 52 of these facilities have active EPA ID numbers.
- 8 of the facilities hold NPDES permits.
- 5 of these facilities have KCIW discharge authorizations or permits.[4]
- 18 of these facilities are listed on Ecology's LUST list.
- 43 of these facilities are listed on Ecology's UST list.

These facilities are listed by category in Appendix C-1 and their locations are shown on the maps in Appendix C-2. Twenty of the 128 facilities with Ecology Facility/Site ID numbers are included in a source control area for which a Data Gaps Report has already been prepared (Table C-10). Although activities at these 20 facilities, such as Art Brass Plating or Duwamish Marine Center, may result in discharges that are eventually conveyed to the S Brandon Street CSO, they are not discussed further in this Data Gaps Report because source control actions (if any) have been identified in previous reports and are considered to be adequate for source control with regard to the S Brandon Street CSO.[5]

Four of the 128 facilities are located adjacent to the LDW within the KC Lease Parcels source control area, and are discussed in Section 4.0 of this Data Gaps Report.

Seven of the 11 facilities on Ecology's CSCSL (Table C-3) have been addressed in Data Gaps Reports for other source control areas (Table C-10). The remaining four facilities are discussed in this (KC Lease Parcels) Data Gaps Report. Soil and/or groundwater contamination, which may be a source of sediment recontamination, exists at these properties. Air Tec Co. Parcel C, General Electric Aviation Division, Sahlberg Equipment, and Shell 121430 are discussed in Appendix C-3 of this Data Gaps Report.

Five of the eight facilities holding NPDES permits are within another source control area (Table C-4). Of the remaining three, Cadman and J.A. Jack are within the KC Lease Parcels source

[4] Note two additional facilities with KCIW discharge authorizations that have not been assigned Ecology Facility/Site ID numbers have been identified (see Table C-5).

[5] One exception is Manson Construction, which was included in the Data Gaps Report for Slip 1 (SAIC 2008). Manson Construction is explicitly included in the KC Lease Parcels source control area because the property is adjacent to the LDW. Potential releases to Slip 1 were discussed in the Slip 1 Data Gaps Report; potential releases to the LDW are discussed in this report.

control area (Section 4.0). A small portion of the UPRR Company, Dawson Street (aka UPRR Argo Yard) is located within the S Brandon Street CSO; however, a review of drainage maps for the facility showed that all stormwater from the property is discharged to the Diagonal Avenue S storm drain (EMR 2007). The Diagonal Avenue S storm drain discharges to the LDW within Early Action Area 1 (EAA-1). The majority of the UPRR facility is located within the Diagonal West SD basin and Duwamish/Diagonal CSO basin.

Three of the five facilities holding KCIW discharge authorizations or permits are within another source control area. Of the remaining two, Cadman is within the KC Lease Parcels source control area (Section 4.0), and General Electric Aviation Division (also listed on the CSCSL) is included in Appendix C-3. Two additional facilities holding KCIW discharge authorizations have been identified, City of Seattle – SPU Materials Storage Yard and Kamco Seafood, Inc. (Table C-5). These facilities have not been assigned Facility/Site ID numbers by Ecology; thus, no files were available to review for these two facilities.

Seven of the 18 LUST facilities are within another source control area. Due to a potential conflict of interest, SAIC did not evaluate the current or historical operations at two LUST facilities: Bob's Texaco Service and Chevron 9-0636. No files were available for review for Union Pacific Motor. Two of the facilities are also listed on the CSCSL (Air Tec Co. Parcel C and Shell 121430), and are discussed in Sections C-3.2.1 and C-3.2.4 of Appendix C-3. The six remaining LUST facilities are included in Sections C-3.3.1 to C-3.3.6 in Appendix C-3 of this Data Gaps Report. These facilities are:

- Draper Machine Works, Inc.
- Environmental Transport, Inc.
- Loomis & Fargo Company
- Former National Transfer, Inc. Seattle
- PNB Building
- Former Western Parcel Express Seattle

The facilities within the S Brandon Street CSO basin with Ecology Facility/Site ID numbers are listed in Table 5. The Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes associated with the activities performed at these companies are listed in Appendix C-1. Based on available information, current operations at these facilities are not likely to represent a source of contaminants to sediments associated with the KC Lease Parcels source control area.

Additionally, an unknown number of undocumented industrial operations may take place within the S Brandon Street CSO basin. Unregulated industrial activities may be an ongoing source of contaminants to sediments associated with the KC Lease Parcels source control area.

3.1.2 Dock Pipe #2 Outfall (Outfall No. 2244)

Based on data provided by SPU, the Dock Pipe #2 outfall drains an area of about 6.5 acres from KC Lease Parcels 9052 and 9070 (Figures 4 and 6). Although the outfall is owned by King County, it functions as a private outfall for the operators at Parcels 9052 and 9070. Cadman, the current operator at these parcels, has an NPDES permit.

3.1.3 Outfall No. 2007

Based on data provided by SPU, Outfall No. 2007 drains an area of about 3.5 acres from KC Lease Parcel 9043 (Figures 4 and 6). Although the outfall is owned by King County, it functions as a private outfall for the operator at Parcel 9043. J.A. Jack, the current operator at the parcel, has an NPDES permit.

3.1.4 Data Gaps

Information needed to assess the potential for sediment recontamination associated with the public SD outfalls and CSO is listed below:

- Data on contaminant concentrations in SD solids within the Cadman and Lehigh Northwest and J.A. Jack SD systems are needed to evaluate whether contaminants are being transported to LDW sediments via Outfalls 2244 and 2007.
- Data on contaminant concentrations in CSO discharges are needed to evaluate whether the S Brandon Street CSO is a significant source of contaminants to LDW sediments.
- Additional information is needed to determine if undocumented and unregulated industrial operations are occurring within the S Brandon Street CSO basin that may be an ongoing source of sediment recontamination.

Information needed to assess the potential for ongoing releases and sediment recontamination associated with current operations at each of the facilities in the S Brandon Street CSO Basin is listed below. This information can be obtained during the facility inspections currently performed by SPU, KCIW, and Ecology.

- Information regarding any ongoing industrial activities is needed to verify that these facilities are in compliance with all applicable regulations and best management practices (BMPs).
- Information on how and where any hazardous materials, chemicals, or hazardous wastes are stored or used at these facilities is needed to evaluate the potential for spills to commingle with wastewater and stormwater.
- Facility plans showing the locations of floor drains, catch basins, sewer connections, and storm drains (if any) are needed to evaluate the potential for contaminants suspended in wastewater and stormwater (if any) to be transported to the LDW via combined sewer discharges.
- Information regarding any containment systems at these properties is needed to evaluate the adequacy of the systems and determine the potential for spills to commingle with wastewater and stormwater.

Information regarding two LUST facilities, Bob's Texaco Service and Chevron 9-0636, needs to be evaluated to determine the potential for sediment recontamination, if any, that may be associated with these facilities.

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4.0 Potential for Sediment Recontamination from Adjacent Properties

Tax parcels in the vicinity of the KC Lease Parcels source control area are shown in Figure 6, identified by the last four digits of the tax identification number.

Aerial photographs of the source control area for the years 1936, 1946, 1956, 1969, 1977, 1990, 1999, and 2004 are provided in Appendix B. Oblique aerial photographs of the source control area shoreline, taken in 1993, 2001, and 2006, are also included in Appendix B.

The property adjacent to the LDW is owned by King County. The following facilities lease the property from King County and were identified as potential sources of contaminants to sediments associated with the KC Lease Parcels source control area:

- Manson Construction Company (Section 4.1),
- Cadman Seattle, Inc. and Lehigh Northwest (Section 4.2),
- United Western Supply (Section 4.3) and,
- J.A. Jack & Sons (Section 4.4).

The potential for sediment recontamination associated with each of these facilities is discussed in the following sections. Additional information needed to assess the potential for sediment recontamination is also identified.

4.1 Manson Construction Company

Facility Summary: Manson Construction Company	
Tax Parcel No.	1924049041, 1924049067
Address	5209 East Marginal Way S
Property Owner	King County
Parcel Size	3.19 acres (139,004 sq ft)
Facility/Site ID	80333167
SIC Code(s)	1629: Heavy Construction, Not Elsewhere Classified
EPA ID No.	WAD007942824
NPDES Permit No.	NA
UST/LUST ID No.	10795

King County leases two parcels adjacent to Slip 1 to Manson Construction Company (Manson Construction). Manson Construction uses 5209 East Marginal Way S as its operating address. The larger of the two parcels (9041) has two buildings erected on the property. The buildings are an 8,460 square foot (sq ft) warehouse built in 1946 and a 9,196 sq ft office built in 1953.[6] Based on aerial photographs, it appears the parcel is mostly paved. A wharf that extends from the

[6] King County GIS Center Parcel Viewer:
http://www.kingcounty.gov/operations/GIS/PropResearch/ParcelViewer.aspx

northern property line into Slip 1 was built in approximately 1946. A rectangular-shaped area at the southwestern edge of the property appears to be unpaved and may consist of native shoreline. Between 1977 and 1990, it appears that Manson Construction expanded their operations to a portion of Parcel 9070, the parcel adjacent to the south (Appendix B).

The smaller parcel (9067) encompasses most of Slip 1 with a small land area at the head of the slip (Figure 2). There are no buildings erected on this parcel. Most of this parcel is located outside the KC Lease Parcels source control area.

Manson Construction is bordered by Slip 1 and the former Snopac parcel to the north, East Marginal Way S to the east, and Lehigh Northwest and Cadman (both owned by Heidelberg Cement), and the LDW to the west.

Manson Construction also leases two King County-owned parcels (9070 and 9052) and sublets them to Cadman and Lehigh Northwest (Section 4.2). Both Cadman and Lehigh Northwest use 5225 East Marginal Way S as an operating address.

Manson Construction was included in the Data Gaps Report and SCAP that were previously published for RM 0.9-1.0 East (Slip 1). Summaries of current and historical operations and environmental investigations and cleanups are available in the *Lower Duwamish Waterway, RM 0.9 to 1.0 East, Slip 1, Summary of Existing Information and Identification of Data Gaps* (SAIC 2008). Source control actions were identified in the *Lower Duwamish Waterway, RM 0.9-1.0 East (Slip 1), Source Control Action Plan* (Ecology 2009f). The potential for sediment recontamination, data gaps, and source control actions identified in the previous reports are summarized in the following sections.

4.1.1 Regulatory History

In January 2008, King County investigated the existing stormwater systems on the King County Lease Parcels. City of Seattle Department of Planning and Development (DPD) records were reviewed. Plans for a stormwater system at the Cadman facility showed a catch basin on the property occupied by Manson Construction. King County inspectors confirmed the presence of a catch basin on the property that matches the location of the catch basin shown on the Cadman stormwater system plans (King County 2008).

Ecology inspected Manson Construction in June 2009 to evaluate source control practices at the facility (after publication of the Slip 1 SCAP [Ecology 2009f]). Ecology directed Manson Construction to improve source control practices at the facility, including providing proper cover and containment for all liquid products and wastes stored outside, control metal grindings and shavings in the vicinity of the machine shop, and to cease outdoor maintenance activities on vehicles and equipment without cover. Ecology indicated that if source control practices were not improved, Manson Construction would be required to obtain coverage under the Industrial General Stormwater Permit (Ecology 2009h).

4.1.2 Potential for Sediment Recontamination

The potential for sediment recontamination from this property, as described in the Slip 1 Data Gaps Report, is similar for the KC Lease Parcels source control area. Previous and possibly current operations at this property may have resulted in residual soil contamination. The potential for sediment recontamination associated with this property is summarized below by transport pathway.

Stormwater Discharge

Based on SPU maps, it appears that all stormwater and wastewater from this facility is conveyed to the sanitary sewer. However, based on plans in the DPD files and King County's observations, a stormwater catch basin may be present at the Manson Construction facility near the fence line that is shared with the Cadman facility. The potential for sediment recontamination via the stormwater pathway is unknown.

Surface Runoff/Spills

Due to the property's proximity to the LDW, contaminants (if any) suspended in surface runoff have the potential to reach the LDW and sediments associated with the KC Lease Parcels source control area.

Soil and Groundwater

A 2002 facility inspection report indicates that soil remediation was performed at the property; however, no additional information (e.g., site assessment report or laboratory data) regarding the remediation activities was available for review by SAIC. The potential for sediment recontamination via this pathway is low to high depending on the levels of residual contamination in soil and groundwater beneath the facility.

No records of seep sampling along the western shoreline of the Manson Construction property were located; however, Seep 76, near the southeast corner of Slip 1, was sampled by the LDWG in 2004 (Windward 2004). Arsenic, copper, lead, mercury, and zinc concentrations in the seep water sample exceeded the marine chronic water quality standards (WQS) and the groundwater-to-sediment screening levels. These metals concentrations may or may not be related to the Manson Construction property.

Bank Erosion/Leaching

Little information was available on the construction of the banks in this area and the potential for sediment recontamination via this pathway. Contaminants in soils, if any, along the banks of the LDW could be released directly to sediments via erosion.

4.1.3 Data Gaps

Information needed to assess the potential for sediment recontamination in Slip 1 was identified and addressed in the Slip 1 Data Gaps Report and SCAP (SAIC 2008; Ecology 2009f). Data gaps

relevant to the potential for recontamination of LDW sediments to the west of Manson Construction property (within the KC Lease Parcels source control area) are discussed below.

Stormwater Discharge

- A facility inspection is needed to determine if stormwater is discharged to the sanitary sewer or the LDW and to determine if the catch basin shown on DPD files and observed by King County personnel is connected to the SD system at the Cadman facility. A follow-up inspection is needed to determine if corrective measures have been implemented to ensure operations at Manson Construction are in compliance with applicable regulations and BMPs to prevent the release of contaminants to the LDW.

Surface Runoff/Spills

- A facility plan showing the locations of all catch basins and storm drains (if any) as well as an evaluation of the slope of impervious surfaces and any associated surface water collection and/or discharge points is needed to evaluate the potential for contaminant transport to the LDW via surface runoff.

Groundwater Discharge

- No laboratory data from site assessment(s) and remediation at the Manson Construction parcel were found in the files reviewed by SAIC. Additional information is needed to evaluate if contaminant concentrations in soil and groundwater beneath this facility have the potential to re-contaminate the sediments associated with the KC Lease Parcels source control area.

Bank Erosion/Leaching

- Additional information on the construction of the banks in this area is needed. Residual soil contamination may be present at this property; therefore, if bank erosion is likely, then data on contaminant concentrations in bank soils is necessary to evaluate the potential for sediment recontamination via this pathway.

With the addition of investigating the catch basin that may be connected to the stormwater system on the Cadman facility and performing a follow-up facility investigation, the action items identified in the Slip 1 SCAP adequately address the above data gaps associated with the LDW sediments to the west of the Manson Construction property.

4.2 Cadman Seattle, Inc. and Lehigh Northwest

Facility Summary: Cadman Seattle, Inc. and Lehigh Northwest	
Tax Parcel No.	1924049052, 1924049070
Address	5225 East Marginal Way S
Property Owner	King County
Parcel Size	9052: 2.16 acres (94,063 sq ft) 9070: 4.62 acres (201,324 sq ft)

Facility Summary: Cadman Seattle, Inc. and Lehigh Northwest	
Facility/Site ID	70313617 (Cadman) 5145176 (Lehigh Northwest)
SIC Code(s)	1442 Construction Sand & Gravel (Cadman) 3241 Cement, Hydraulic (Cadman) 3273 Ready-Mixed Concrete (Cadman) 5211 Lumber & Other Building Materials (Cadman)
EPA ID No.	WAD982651986 (Cadman)
NPDES Permit No.	WA-003094-5 (Cadman, historical permit) WAG503337 (Cadman)
KCIW Permit/ Authorization No.	392, Authorization (Cadman)
UST/LUST ID No.	97744 (UST, Active)

Cadman and Lehigh Northwest occupy two parcels adjacent to the LDW. The facility is bordered by Manson Construction to the north, East Marginal Way S to the east, J.A. Jack to the south, and the LDW to the west. Parcels 9052 and 9070 are leased to Manson Construction by King County. Manson Construction sublets the parcels to Cadman. There is one building on the parcel, a 57,540 sq ft warehouse built in 1969. The entire facility is paved (Cadman 1998).

The property is underlain by approximately 4.5 to 5 feet of fill. The fill consists of silty, clayey, gravelly sand, slightly silty sand, and gravel. A 2.5- to 3-foot thick layer of marsh deposits consisting of sandy silt with trace clay and scattered organics and wood fragments is present beneath the fill. The marshy layer is underlain by dense silty sand with some gravel (Shannon & Wilson 1997).

4.2.1 Current Operations

Cadman manufactures and distributes Portland cement concrete and concrete blocks, sand and gravel. Processed sand and gravel is stockpiled on the property. The washed or crushed materials are used in the production of ready-mix concrete or sold to contractors for construction projects (Cadman 1992). Lehigh Northwest operates a cement terminal at the property. Lehigh Northwest receives cement from barges (Ecology 2009a).

Approximately 11,500 tons of cement and 14,000 tons of sand and gravel are received at the facility by barge each month. The dry cement is piped ashore and stored in silos. Underground pipes convey the dry cement to the ready-mix plant. Sand and gravel are loaded onto a conveyor from the barges and then into trucks. The trucks move the sand and gravel to stockpiles (Ecology 1993d; PSAPCA 1995).

Materials Used in Operations

Cadman stores the following materials and chemicals on the property (Cadman 2009):

Material/Chemical Use	Material/Chemical Name	Quantity Stored (gallons, except as noted)	Storage Location
Concrete Batching Material	Aggregate (sand and gravel)	10,000 tons	Stockpiles
Concrete Binder	Portland Cement	5,000 tons 200 tons	Cement Silos Batch Plant
	Fly Ash	160 tons	Batch Plant
Concrete Additive	Calcium Chloride, MB AE 90, Pozzolith NC 534, Pozzolith 200N, Pozzolith 440N, Rheobuild 3000 FC, Rheomix 235	1,200 (each)	Batch Plant
Exterior Truck Cleaning	Zep TNT	400	Batch Plant
Ecology Blocks	Form Oil	55	Ecology Block Area
Vehicle Maintenance	Torque Fluid 30	110	Maintenance Area
	Engine Oil 40, Grease #2	55 (each)	Maintenance Area
Equipment Maintenance	Hydraulic Oil, NUTO H46	25	Maintenance Area
Vehicle Fuel	Diesel Fuel #2	10,000	Vehicle Fueling Area

The concrete additives are stored in aboveground storage tanks (ASTs) with concrete secondary containment. Diesel fuel is stored in a 10,000-gallon UST (Cadman 2000c). The UST was coated with a protective epoxy liner in 2004 (NW Tank Lining 2004).

Waste Handling

Cadman discharges some wastes to the sanitary sewer. Historically, Cadman discharged wastes under METRO Waste Discharge Permit No. 7536. In 1992, METRO determined that Cadman was not a Significant Industrial User and indicated that Cadman would be issued a Discharge Authorization (METRO 1992). Discharge Authorization Number 392 was issued in 1992 or 1993. Approximately 13,000 gallons of process water is discharged to the sanitary sewer daily. Process water includes noncontact cooling water, wash water from cement bulk trucks, rinse water from loading hoppers, and overflow water from the truck wheel wash (Ecology 1993d; Cadman 2009). Process water is also reused in the concrete pre-mix operation (CH2M Hill 1994).

Transit mixers are washed on a weekly basis using a muriatic acid wash in a Challenge-Cook Enviromatic unit. Concrete residue and the rinse water from the unit are collected and reused in the concrete batch plant (Ecology 1993d).

The property is cleaned daily with a vacuum/sweeper truck (Ecology 1993d).

Stormwater Discharges

Historically, straw bales were used to filter stormwater that had percolated through the sand and gravel stockpiles before discharge to the catch basins. Immediately upstream of Outfall 2244, the stormwater passed through a grit chamber, and baffle type oil/water separator (OWS) (Cadman 1992). Cadman employees and Ecology reported that the OWS was bypassed when stormwater flow exceeded 250 gallons per minute (CH2M Hill 1994). Seventeen catch basins are present on the property (Figure 7). Some catch basins have been sealed and stockpiles are present above the sealed catch basins (CH2M Hill 1994).

Beginning in 1993, carbon dioxide was used in the grit chamber to adjust the pH of the discharge (Ecology 1993d). Polymers were added to the stormwater at the inlet of the OWS to coagulate smaller particles and reduce the turbidity of the discharge (CH2M Hill 1994).

A stormwater treatment system was installed on the property and started up on January 24, 1997 (Cadman 1998). The treatment system adjusts the pH and removes particulate matter from stormwater prior to discharge to the LDW. The treatment system has four components:

- A pH neutralization system using gaseous carbon dioxide,
- A polymer feed system,
- A below ground pump station consisting of centrifugal duplex pumps operating on level control, and
- A plug-flow, above ground detention vault.

The treatment system is designed to operate continuously and has the capacity to contain a 10-year, 24-hour storm. Stormwater from the entire property collects at catch basin 13 and is diverted to the pump station, then diverted to the detention vault (pond) (Cadman 2000c). Most stormwater is recycled in the Cadman concrete batching process. When stormwater in the vault nears the overflow level, stormwater overflow is directed to the LDW (Cadman 2009). Note there is a discrepancy between the stormwater and sanitary sewer line placement information provided by SPU (Figure 4) and by Cadman (Figure 7).

The detention vault is cleaned at least monthly. Accumulated material is re-used for ready-mix concrete or fill dirt (Cadman 2000c). Storm drains and catch basins are cleaned quarterly (Ecology 2009a).

Aggregate and form oil are exposed to stormwater. Stormwater from the Ecology Block area flows into a sump and the water is recycled (Cadman 2000c).

Cadman and Lehigh Northwest's operations are both covered by the facility's Sand and Gravel NPDES permit (Ecology 2009a).

4.2.2 Historical Operations

Ocean Construction Supplies Company and Tilbury Cement Company are historical names for the facility (Anderson Bjornsten 1986). In 1991 the owners of Ocean Construction Supplies,

CBR, purchased Cadman. CBR decided to do business as Cadman in the state of Washington (Ecology 1993d).

Genstar Sand and Gravel Company and Tilbury Cement historically operated a cement distribution terminal at the property. Both companies are historical predecessors to Lehigh Northwest (Cadman 2000b; K&L Gates 2007).

4.2.3 Regulatory History

Stormwater Inspections

A Notice of Penalty was issued to Ocean Construction Supplies Company in June 1991 following two inspections of the facility in January and April 1991. The penalty was assessed because concrete trucks were washed in an area where wash water flowed to the SD system and the drain in the truck wash area was plugged, which caused overflow to be conveyed to the storm drain (Ecology 1993d).

A Notice of Violation (NOV) was issued in December 1992 for consistent noncompliance with the effluent limits mandated for pH and turbidity by the facility's NPDES permit. In February 1993, an Order was issued, requiring Cadman to submit an action plan to achieve compliance with the NPDES permit limitations. Cadman submitted the plan in June 1993 (Ecology 1993d)

Ecology inspected the Cadman facility as part of the NPDES renewal in July 1993. The major sources of stormwater contamination were from aggregate stock piles and solids tracked by truck traffic on the facility. Cadman had implemented BMPs in response to the Order issued in February 1993, including sweeping twice per day and installing the CO2 system to automatically adjust pH in the stormwater effluent. Cadman planned to install a polymer addition system to reduce stormwater turbidity. Overall, Ecology noted that conditions at the facility were satisfactory (Ecology 1993b).

In October 1994, Ecology inspected the Cadman facility as part of the AKART document review. The Ecology inspector noted that the wastewater treatment chemicals were stored with inadequate secondary containment. Runoff from a tool wash area was entering the stormwater system; secondary containment was needed in this area. A tank of form oil and the acid wash area were also lacking secondary containment (Ecology 1994b).

Cadman was granted coverage under the Sand and Gravel General Permit on October 27, 2000. The permit number is WAG503337. Ecology cancelled NPDES permit WA-003094-5 (Ecology 2000b). Ecology issued Administrative Order No. DE 00WQNR-1661 requiring Cadman to monitor stormwater discharges for pH, turbidity, and total suspended solids in addition to the monitoring required by the Sand and Gravel General Permit, and to monitor each discharge to the LDW at least once per day (Ecology 2000a).

Ecology performed a Stormwater Compliance Inspection at the facility in January 2009. Ecology determined that the stormwater pollution prevention plan (SWPPP), monitoring plan, and facility plan needed to be updated and that adequate cover and containment should be provided for all liquids and wastes stored outdoors. Ecology recommended installing catch basin filter inserts to reduce the sediment load to the manhole housing the carbon dioxide sparging unit, and

processing of cement trucks through the wheel-wash since track-out from the facility toward East Marginal Way S has been a chronic issue. Additionally, Ecology recommended that Cadman perform an inventory in the area known as the "boneyard," which is between the maintenance shop and the LDW. Parts and equipment stored in this area may pose a threat to stormwater runoff quality due to its proximity to the LDW (Ecology 2009a).

During the January 2009 inspection, Ecology identified the following issues regarding the facility plan, SWPPP, and stormwater treatment system (Ecology 2009a):

- Facility Plan:
  - Inconsistencies were found between the facility plan and actual facility layout of drain lines connecting to the sanitary sewer and overflow lines directed to the LDW.
  - Connections between the carbon dioxide sparging unit of the stormwater treatment system and the detention pond were not clear on the facility plan.
- SWPPP:
  - Include the storm drain maintenance log,
  - Include copies of the discharge monitoring reports, and
  - Include operating and maintenance manuals for the cement truck wash and concrete truck wheel-wash, carbon dioxide sparging unit, underground storm vault pumps, and detention pond.
- Stormwater Treatment System:
  - The pH meter on the carbon dioxide sparging unit was malfunctioning and the manhole housing the unit was clogged with sediment.
  - The as-built for the detention pond did not correctly depict the configuration of the baffles and outlet pipe at the downstream end of the pond.

In February 2009, Ecology issued a warning letter to Cadman based on the results of the January inspection (Ecology 2009d). Ecology required Cadman to complete the following actions:

- Complete a signed and updated SWPPP that meets the requirements outlined in the General Sand and Gravel Permit.
- Include in the SWPPP a comprehensive facility map that includes all SD lines, pumps, ponds, vaults, sparging systems, wheel and truck washes, and connections to the sanitary sewer.
- Provide proper cover and containment for all liquid products and wastes stored outdoors.
- Verify detention pond overflow system and procedures for discharges to the sanitary sewer or the LDW.

KCIW is currently reviewing archived files relating to the facility's discharge authorization (Mansfield 2009).

Underground Storage Tank Inspections

Ecology inspected the 10,000-gallon UST in 1995 and found it to be in compliance (Ecology 1995). Ecology inspected the UST again in March 2004. Ecology issued a notice of noncompliance due to lack of tightness testing results available for inspection, no recent records of calibration and maintenance of the automatic tank gauge, and a stick that was blocking the overfill protection shut-off valve. The stick was removed immediately and Ecology directed Cadman to perform a standard 3-year test for the UST and obtain a monitor certification for the automatic tank gauge by April 10, 2004 (Ecology 2004b).

Ecology inspected the UST in January 2009. Ecology observed two items of noncompliance: the presence of a stick in the fill pipe which defeated the overfill shut-off device, and failure to inspect the impressed current cathodic protection system every 60 days (Ecology 2009b). Ecology issued a penalty to Cadman due to the stick in the fill pipe (Ecology 2009c).

Air Emissions

In November 1987, Puget Sound Air Pollution Control Agency (PSAPCA) performed a routine inspection at the Ocean Construction/Tilbury Cement facility. No violations were noted and the air contaminant control equipment appeared to be in good working order (PSAPCA 1987a). The following day, PSAPCA issued an NOV to Tilbury Cement due to an emission from the cement storage silos (PSAPCA 1987b, 1987c).

PSAPCA inspected the Ocean Construction/Tilbury Cement facility again in July 1988 for a fugitive dust survey. The inspector noted that the facility was very clean and modern. Dust emissions from a front loader were considered reasonable. PSAPCA recommended that the facility install a conveyor to move materials from barges to storage piles instead of trucks in order to reduce dust emissions (PSAPCA 1988).

In September 1989, PSAPCA issued an NOV to Ocean Construction/Tilbury Cement due to excessive dust on the plant premises and track out to East Marginal Way S (PSAPCA 1989).

PSAPCA performed inspections of the Ocean Construction/Tilbury Cement facility in February 1991 and no violations or unregistered equipment were observed (PSAPCA 1991a).

In October 1991, PSAPCA issued NOV No. 28054 to Ocean Construction following a facility inspection. Fine particulate matter was tracked out from the facility to East Marginal Way S and fugitive dust emissions were observed (PSAPCA 1991b).

In August 1992, Tilbury Cement was issued an NOV by PSAPCA after large dust plumes were observed migrating from the Tilbury Cement facility to the LDW. The dust plumes were apparently generated by a mechanical sweeper that was not equipped with dust control mechanisms. Cadman halted the sweeping activities (PSAPCA 1992).

PSAPCA performed a routine inspection of the Cadman and Tilbury facilities in November 1992. Track out was observed from the plant out to East Marginal Way S and Ohio Avenue S. PSAPCA directed Cadman and Tilbury to update the Operations and Maintenance (O&M) plan

to include baghouse maintenance techniques and schedule out (PSAPCA 1992b). NOV No. 29063 was issued for the track out (PSAPCA 1992c).

NOV No. 31820 was issued to Tilbury Cement and Cadman by PSAPCA in July 1994. The NOV was for failure to have an overflow alarm and dust emissions (PSAPCA 1994).

Routine inspections were performed in January 1995 and May 1997 by PSAPCA and by PSCAA in October 2000 and June 2004. No violations or emissions were observed (PSAPCA 1995, 1997; PSCAA 2000, 2004).

In May 2005, PSCAA inspected the Cadman and Lehigh Northwest facility. Lehigh Northwest had upgraded the baghouses at the facility in February 2005 without first obtaining approval from PSCAA. O&M records for the dust collectors at the baghouses were inadequate. PSAPCA issued a warning to Cadman and Lehigh Northwest (PSCAA 2005).

PSCAA inspected the facility again in June 2006. No violations or emissions were observed (PSCAA 2006). Cadman holds PSCAA permit number 21007 (Cadman 2000d).

4.2.4 Environmental Investigations and Cleanups

Underground Storage Tank Removal

In February 1989 two 550-gallon USTs (Ocean Construction Supplies Company 1989a) storing solvent and waste oil were removed from the facility. Stained soil was present around the fill pipes and a petroleum odor was present in soil surrounding the solvent UST. Stained soil was not present around the waste oil UST. Soil samples were collected beneath each UST and from unstained soil near the solvent UST fill pipe. The samples were analyzed for total petroleum hydrocarbons (TPHs) and VOCs; no analytes were detected at concentrations exceeding the Ecology cleanup levels (Kennedy/Jenks/Chilton 1989). Three other USTs containing petroleum products were removed at the same time; however, no additional information regarding these USTs was available for review (Ocean Construction Supplies Company 1989b).

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment was performed at the facility in December 1996 to identify evidence of past or ongoing contamination. The investigation consisted of a visual reconnaissance of the Cadman and Tilbury facilities and the surrounding area. Environmental concerns identified for the properties leased by Manson Construction (note that Cadman sublets the property from Manson Construction) included: historic creosote use for pole treatment on the property; historic use of the properties as a factory site by WEC and Seattle Boiler Works; historic vehicle maintenance in the shop used by Cadman; and USTs at the Cadman facility (Boateng 1997). Only four pages from the Phase I Environmental Site Assessment report were available for review; therefore, additional information regarding Cadman and Manson Construction may be available in the full report.

4.2.5 Potential for Sediment Recontamination

Chemical concentrations[7] exceed the SQS in sediments near the Cadman and Lehigh Northwest facility (Figure 3, Tables 2 and 3).

The potential for sediment recontamination associated with this property is summarized below by transport pathway.

Stormwater

Stormwater at the facility is generally treated and recycled in the concrete batching process. When the capacity of the stormwater treatment system is exceeded, stormwater is discharged either to the sanitary sewer or to the LDW through Outfall 2244. In February 2009, Ecology determined that parts, equipment, liquid products, and wastes stored outdoors represented a potential threat to stormwater quality. The potential for sediment recontamination via this pathway is unknown and depends on the frequency of discharges to the LDW and the potential concentrations of sediment COCs, if any, in discharges originating from this property.

Surface Runoff/Spills

Operations at Cadman and Lehigh Northwest include offloading cement, sand, and gravel from barges. No spills have been reported. Although spills to the LDW may occur, cement, sand, and gravel are not sediment COCs; therefore, the potential for sediment recontamination via this pathway is low. Although rocks, sand, gravel, and cement are not sediment COCs, spills of these materials may potentially harm the river environment. The facility is adjacent to the LDW; therefore, surface runoff and spills have the potential to reach the LDW.

Soil and Groundwater

There is no information available to determine if soil or groundwater contamination is present at this property.

Bank Erosion/Leaching

Little information was available on the construction of the banks in this area and the potential for sediment recontamination via this pathway. Contaminants in soils, if any, along the banks of the LDW could be released directly to sediments via erosion.

4.2.6 Data Gaps

Information needed to assess the potential for sediment recontamination associated with current or historical operations at Cadman and Lehigh Northwest is listed below.

[7] Sediment COCs in the vicinity of the Cadman and Lehigh facility include mercury, PAHs, and PCBs (Figure 3).

Stormwater Discharge and Surface Runoff/Spills

- A follow-up business inspection of Cadman and Lehigh Northwest is needed to verify compliance with Ecology's recommendations, applicable regulations, and BMPs to prevent the release of contaminants to the LDW.
- A review of the updated SWPPP, when completed, is needed to ensure compliance with Ecology's requirements.

Bank Erosion/Leaching

- Additional information on the construction of the banks in this area is needed.

4.3 United Western Supply

Facility Summary: United Western Supply	
Tax Parcel No.	1924049051
Address	Operating: 5245 East Marginal Way S Parcel: 5409 Ohio Avenue S
Property Owner	King County
Parcel Size	4.67 acres (203,375 sq ft)
Facility/Site ID	9953954
SIC Code(s)	5085 Industrial Supplies
EPA ID No.	WAH000011379 (Inactive) CRK000015650
NPDES Permit No.	None
UST/LUST ID No.	None

United Western Supply subleases Parcel 9051 from ICONCO Inc. (ICONCO) operates on Parcel 9051. ICONCO leases the property from King County. The property is bordered by Cadman and Lehigh Northwest on the north and J.A. Jack on the south. The United Western Supply facility is bordered by the LDW on the west and East Marginal Way S on the east. 9051 is a large parcel adjacent to the LDW. The majority of the parcel is located on the western side of Ohio Avenue S; a small area (approximately 0.2 acre) of the parcel is located on the eastern side of Ohio Avenue S. This 0.2-acre portion is not included in the KC Lease Parcels source control area. Three buildings, owned by ICONCO, are present on the larger portion of the parcel:

- A 69,210 sq ft warehouse, constructed in 1919,
- A 27,312 sq ft warehouse, constructed in 1922, and
- A 3,510 sq ft office and warehouse, constructed in 1955.

A rail spur is present on the property between the 69,210 sq ft warehouse on the northern portion of the property and the smaller warehouses on the southern portion of the property (Figure 8). The property is roughly divided into two equal parts by the rail spur. According to King County Tax Assessor Records, the property is currently used as a terminal for marine and commercial

fishing. The property name is listed as Western Utilities. Western Utilities may have subleased a portion of the property in the early 1990s (HD Supply 2009).

The property is underlain by approximately 6.5 feet of sandy fill. Loose silt is present beneath the fill to a depth of approximately 10 feet bgs. The Duwamish sand, consisting of interbedded sandy silts and silty fine sands is present beneath the silt layer. Groundwater is encountered at approximately 7.5 feet bgs (Zipper Zeman 2001).

4.3.1 Current Operations

United Western Supply is a distributor of foundry and abrasive products, equipment, parts, and supplies for the foundry and surface preparation industries. According to the company's website the following products are available: foundry supplies, metal and carbon products, and abrasive media.

United Western Supply uses a conveyor belt to load and unload sand from rail cars. A bagging machine is used to package the sand. Other equipment used at the property includes a Muller mixer, a pallet wrapper carousel, and forklifts (United Western Supply 2009a).

The company also provides technical assistance on recycling and containment (United Western Supply 2009b). United Western Supply has operated in the northern portion of the property since September 1980 (Cascadia Law Group 2008).

From the documents available for review, SAIC was unable to determine if the buildings on the southern portion of the property are currently occupied.

Stormwater

According to ICONCO, roof drains from the office building discharge to the ground. Four catch basins on the southern portion of the property drain to the rail spur area

4.3.2 Historical Operations

Utilities Warehouse first leased the property from King County in August 1964. The lease stipulates that the property could be used only for manufacturing, industrial, warehousing, or commercial purposes. Apparently, Utilities Warehouse never occupied the property; instead it subleased the property to various tenants. In September 1980, Utilities Warehouse subleased the northern portion of the property to United Western Supply. In October 1994, Utilities Warehouse subleased the southern portion of the property to ICONCO, Inc. Tenants listed in the sublease agreement included Pacific Western Maritime, Inc., J.A. Jack & Sons, United Western Supply, and Ackerly Communication, Inc. Pacific Maritime leased moorage facilities at the property from 1994 to 1999.[8] Ackerly Communications maintained a billboard on a portion of the property. In May 1999, Utilities Warehouse assigned its land lease with King County and sold the buildings and improvements on the property to ICONCO, Inc. ICONCO, Inc. continued to

[8] Note that there are no visible moorage facilities associated with Parcel 9051 on the 2007 aerial photograph available on King County's iMAP website.

sublease the northern portion of the property to United Western Supply (Cascadia Law Group 2008).

In lease documents, ICONCO, Inc. is described as a demolition contractor. ICONCO's offices (e.g., sales and marketing) were located at the property. ICONCO also used the property to support field operations in Washington and Alaska. Equipment and vehicles were serviced at the property, including fueling and removal of waste oil. A 250-gallon AST with secondary containment was used to store waste oil. Lumber, steel plates and shapes used in construction and demolition operations, and salvaged lumber, steel, metal fixtures and masonry products were stored outdoors on the property (Cascadia Law Group 2008).

In 2005, LVI Environmental Services, Inc. (LVI Services) acquired ICONCO (LVI Services 2005). ICONCO's lease was assigned to LVI Services in July 2005. LVI Services operated on the southern portion of the property (Cascadia Law Group 2008). LVI Services' website presents conflicting information regarding its operations in Seattle. The "Locations" map indicates that there is a Seattle office; however, the page listing office addresses does not include an address for a Seattle office (LVI Services 2009). LVI Services's lease expired on December 31, 2009 (Cascadia Law Group 2008).

4.3.3 Regulatory History

EPA has sent CERCLA Section 104(e) Request for Information letters to ICONCO, Western Utilities, and United Western Supply.

4.3.4 Environmental Investigations and Cleanups

A 1998 letter from ICONCO to King County indicates that Boateng Environmental prepared an environmental property assessment report in March 1997. Small piles of sand blast grit were observed along the rail spur. United Western Supply indicated that the piles consisted of copper and nickel slags and silica sand. United Western Supply further indicated that the materials are inert and that the piles were periodically cleaned up to prevent excessive buildup on the rail spur (ICONCO 1998). A copy of the 1997 report, which apparently focuses on United Western Supply, was not available for review.

No records of environmental investigations or cleanups were available for review; however, a geotechnical study was performed at the property in June 2001. The geotechnical study was performed prior to the repair of the United Western Supply warehouse, which was damaged in a February 2001 earthquake (Zipper Zeman 2001).

4.3.5 Potential for Sediment Recontamination

Mercury concentrations exceed the SQS in sediments near the United Western Supply facility (Figure 3).

The potential for sediment recontamination associated with this property is summarized below by transport pathway.

Stormwater

There is no information available to determine if stormwater from the facility is conveyed to the combined sewer system or discharged to LDW.

Surface Runoff/Spills

The facility is adjacent to the LDW; therefore, surface runoff and spills have the potential to reach the LDW. In 1997, copper and nickel slag were observed in the rail spur area. United Western Supply indicated that the area is periodically cleaned; however, it is not known if the practice of allowing slag to accumulate at the rail spur continues.

Soil and Groundwater

There is no information available to determine if soil or groundwater contamination is present at this property.

Bank Erosion/Leaching

Little information was available on the construction of the banks in this area and the potential for sediment recontamination via this pathway. Contaminants in soils, if any, along the banks of the LDW could be released directly to sediments via erosion.

4.3.6 Data Gaps

Information needed to assess the potential for sediment recontamination associated with current or historical operations at United Western Supply is listed below.

Stormwater Discharge and Surface Runoff/Spills

- A business inspection of United Western Supply and the buildings on the southern portion of the property is needed to verify compliance with applicable regulations and BMPs to prevent the release of contaminants to the LDW.
    - Facility plans showing the locations of all catch basins and storm drains (if any) are needed to evaluate the potential for contaminant transport to the LDW via surface runoff.
    - Floor drains and SD lines on the property (if any) should be located and mapped.
    - Information regarding how any hazardous materials or chemicals are stored and used at the facility is needed to evaluate the potential for spills to reach sediments associated with the KC Lease Parcels source control area.
    - Information on any containment system(s) present at the site is needed to evaluate the potential for spills to reach sediments associated with the KC Lease Parcels source control area.

A review of the 1997 environmental assessment, prepared by Boateng, is needed to identify potential pollutant sources associated with United Western Supply. The complete Boateng report was not available for review by SAIC during preparation of this Data Gaps Report.

Bank Erosion/Leaching

- Additional information on the construction of the banks in this area is needed.

4.4 J.A. Jack & Sons

Facility Summary: J.A. Jack & Sons	
Tax Parcel No.	1924049002, 1924049043
Address	9002: 5801 East Marginal Way S 9043: 5427 Ohio Avenue S
Property Owner	King County
Parcel Size	9002: 8.76 acres (381,790 sq ft) 9043: 3.38 acres (147,103 sq ft) 9051: 4.67 acres (203,375 sq ft)
Facility/Site ID	37836248
SIC Code(s)	1422 Crushed & Broken Limestone
EPA ID No.	None
NPDES Permit No.	WAG503082
UST/LUST ID No.	803 (UST)

J.A. Jack & Sons' operations are performed primarily on Parcel 9043. The company also occupies approximately 1 acre on Parcel 9002. J.A. Jack is a subtenant of Saint Gobain Glass Containers (St. Gobain). St. Gobain leases both parcels from King County (J.A. Jack 2008). The facility is bordered by the LDW on the west, United Western Supply on the north, Ohio Avenue S on the east, and St. Gobain to the south. Four buildings are present on Parcel 9043:

- A 2,240 sq ft office building, constructed in 1947,
- A 640 sq ft office building and lunch room, constructed in 1940,
- An 11,840 sq ft batch plant, constructed in 1966, and
- A 4,000 sq ft warehouse, constructed in 1966.

Stormwater from J.A. Jack may be conveyed to Outfall 2007, which is located on Parcel 9002 (Figure 4). The buildings on Parcel 9002 and the remaining area are occupied by St. Gobain. St. Gobain was included in the Data Gaps Report and SCAP that were prepared for the RM 1.2 to 1.7 East Source Control Area.

The property is underlain by approximately 3 feet of crushed limestone and silty sand, followed by approximately 9 feet of moist sand with trace gravel and silt (Associated Earth Sciences 2002).

4.4.1 Current Operations

J.A. Jack has operated at this location since 1967 (SPU 2009a). Limestone is crushed, screened, and stockpiled at the facility (Eckhart 1994). The limestone is offloaded from barges. Front end loaders on the barges load limestone onto a conveyor system that carries the limestone to the

property. The offshore conveyor system apparently connects to additional onshore conveyors to stockpile the limestone on the facility. Crushed limestone is bagged or loaded onto trucks and railcars. Truck washing and parking lot cleaning is performed at the facility (Ecology 2002a, 2007c; J.A. Jack 2003a).

Material and Waste Handling

Approximately 250,000 tons per year of crushed limestone is handled at J.A. Jack. This raw material has been stored in an exposed area since at least November 1989. The facility is capable of storing up to 25,000 tons of crushed limestone at a time (J.A. Jack 2002).

J.A. Jack uses non-hazardous and nontoxic cleaning and degreasing fluids. Diesel fuel, gasoline, hydraulic fluid, and motor oil are stored on the property for company vehicles; however, all vehicle maintenance is performed off property to prevent collection of used oils and greases at the facility (J.A. Jack 2002).

A 10,000-gallon diesel UST was installed on the property in 1981. The UST was retrofit with an epoxy lining, spill and overfill prevention equipment, and cathodic protection equipment in December 1997 (Ulrich Industrial 1997; Pacific Environmental Services 1998). New fiberglass piping was installed in January 1998 (Cusick 1998). Ecology inspected the UST in January 2003; no corrective actions were identified (Wietfeld 2003).

Wash water is generated through truck and parking lot washing activities. Parking lot washing is performed to reduce dust buildup on the property (J.A. Jack 2003a). Wash water is cycled through an underground settling vault and discharged to a drain field (SPU 2009a).

Stormwater

The NPDES permit covers a paved area that is used primarily for truck loading and parking (J.A. Jack 2002). Stormwater and wash water drains to two catch basins on the property and is conveyed to the facility stormwater system (Figure 9). The stormwater system consists of an underground settling vault and ground discharge drain field on the property. The effluent from the catch basins drains to the settling vault and then discharges to the ground discharge drain field (identified as “Infiltration Gallery” in Figure 9). The system is designed to contain a 100-year storm. The drain field is set approximately 400 feet east of the LDW to minimize the potential for potentially contaminated groundwater to discharge to the LDW (J.A. Jack 2003b). The vault is cleaned annually (Ecology 2007c).

In the event of a stormwater system failure or storm event that exceeds that capacity of the system, stormwater and/or wash water can be diverted to the SD line on the St. Gobain property. The SD line on the St. Gobain property discharges to the LDW through Outfall 2007 (J.A. Jack 2003b).

The catch basin located in front of the warehouse (northern catch basin) is cleaned on a weekly basis and the main catch basin (southern catch basin) is cleaned on an as-needed basis, at least once per year (J.A. Jack 2002).

A lip has been built at the western edge of the property, adjacent to the LDW, to prevent sheet flow from reaching the LDW (Ecology 2002a).

4.4.2 Historical Operations

A septic drain field was present on the property until approximately 2003 when the septic tank was filled with sand and the property was connected to the sanitary sewer system (J.A. Jack 2003a). A lumber mill was operated on the property prior to J.A. Jack's operations (J.A. Jack 2008).

In 1987, J.A. Jack received a permit from the Army Corps of Engineers to dredge the LDW to recover spilled limestone from the waterway. The permit allowed J.A. Jack to dredge 1,000 cubic yards per year for 3 years. In 1995, J.A. Jack received a permit from the City of Seattle Department of Construction and Land Use to dredge 500 cubic yards from the LDW to recover spilled limestone. In 2008, J.A. Jack indicated that the recovery dredging would need to be performed again soon; no immediate plans for dredging had been made (J.A. Jack 2008).

4.4.3 Regulatory History

In September 1994, J.A Jack applied for coverage under the Sand and Gravel Industrial Stormwater General Permit (Ecology 1994a). Ecology issued permit number WAG503082 to J.A. Jack in November 1994. The permit allowed for discharge of stormwater only; discharging of process water was not allowed (Ecology 1994c). The permit was updated in 2003 to allow for the discharge of stormwater and process water to groundwater, following the installation of the discharge drain field on the J.A. Jack property (Ecology 2003c).

From January 2001 to January 2002, the turbidity of the stormwater (sampled quarterly) discharged to the LDW from J.A. Jack violated the NPDES permit discharge limits. In February 2001, the pH of stormwater also violated the permit limits (Ecology 2002c). In February, March, and July 2002, the Puget Soundkeeper's Alliance notified J.A. Jack of its intent to file a citizen suit against the company for violations of the Clean Water Act (Smith & Lowney PLLC 2002).

Ecology performed a Water Compliance Inspection at the facility in May 2002. Ecology expressed concern about the proximity of stockpiled limestone to the shoreline. The inspector also observed truck wash water being discharged to the storm drain, which was in violation of the facility's NPDES permit (Ecology 2002a).

Ecology performed a Stormwater Compliance Inspection at the facility in November 2007. The Ecology inspector observed that stormwater from the southern property boundary appeared to flow to the SD system at St. Gobain and indicated that monitoring would be required for the discharge. The inspector indicated that the area beneath the riverside conveyor belt needed to be re-graded and noted that the current condition of the bank was unlikely to prevent turbid discharges to the LDW during a storm event. Additionally, the inspector indicated that better BMPs and housekeeping were needed to address the accumulation of fines around parked trailers near the fire hydrant at the southeast corner of the facility, improved secondary containment was needed for a shipping container used to store petroleum products, and an updated facility plan was needed. The updated facility plan required better details of the locations and types of valves

associated with the stormwater system and possible drainage patterns to the St. Gobain property (Ecology 2007c).

In June 2008, Ecology sent J.A. Jack a warning letter for failure to submit discharge monitoring reports for February and March 2007 (Ecology 2008b).

SPU inspected J.A. Jack in January 2009. SPU indicated that there are three catch basins on the property and that these catch basins are cleaned on an annual basis. Outdoor housekeeping practices needed improvements, including proper storage of the limestone piles. Limestone was spilling into the LDW. SPU found that the spill response procedures were in need of improvement. The SPU inspector's notes include the following passage "Pinch Pt. dug out after each barge/weekly" (SPU 2009a). The Pinch Point area is just north of the barge-to-land conveyor belt (Flint 2010). SPU directed J.A. Jack to complete and post a spill plan, place spill containment and cleanup materials in high risk areas such as the fueling area, contain all materials stored on the property, and to recycle fluorescent tubes. With regard to containing the materials stored on the property, SPU directed J.A. Jack to ensure that piles of limestone do not exceed the height of the barriers that are placed to contain the piles and to move the limestone pile at the northwest corner of the property away from the water's edge or increase the height of the barrier to prevent the limestone from entering the LDW (SPU 2009b).

SPU reinspected the facility in April 2009. J.A. Jack completed the corrective actions with regard to the spill materials. The SWPPP required updates to include the limestone stockpiles. The height of the barriers around the limestone piles had been increased; however, the height of the piles continued to exceed the height of the barriers. The Pinch Point "re-grade" is mentioned again, indicating that Ecology approved the re-grade of the area. Uncontrolled discharges had occurred in the Pinch Point area. The SPU inspector indicated that Ecology blocks were situated in the area, apparently to allow for discharge. J.A. Jack's representative indicated that the Pinch Point area was a lake prior to re-grading the area (SPU 2009c).

EPA has sent a CERCLA Section 104(e) Request for Information letter to J.A. Jack.

J.A. Jack holds PSCAA permit number 11124 (J.A. Jack 2003a).

4.4.4 Environmental Investigations and Cleanups

Infiltration Feasibility Evaluation (2002)

An evaluation was performed in 2002 to determine the rate of stormwater infiltration to the subsurface at the J.A. Jack facility. A test pit (EP-1 on Figure 9) was excavated to a maximum depth of 12 feet below ground surface (bgs) near the northwest corner of the warehouse. Testing results indicated a long-term design infiltration rate of 2 inches per hour (Associated Earth Sciences 2002). No environmental samples were collected for chemical analysis.

4.4.5 Potential for Sediment Recontamination

Chemical concentrations[9] exceed the SQS in sediments near J.A. Jack (Figure 3, Tables 2 and 3). The potential for sediment contamination associated with this property is summarized below by transport pathway.

Stormwater

Stormwater from J.A. Jack is discharged to the onsite stormwater system, which discharges to groundwater. In the event of a system malfunction or storm event that exceeds the capacity of the system, stormwater is directed to SD lines on the St. Gobain property and then discharged to the LDW via Outfall 2007. In November 2007, Ecology observed that stormwater at the southern edge of the property appeared to flow to the SD catch basins on the St. Gobain property instead of to the onsite stormwater system. Contaminants in stormwater, if any, could therefore represent a source of sediment recontamination.

Surface Runoff

The property is paved, has a stormwater collection system, and has a lipped edge to contain surface runoff. In November 2007, Ecology indicated that the area adjacent to the LDW beneath the barge-to-land conveyer system needed to be re-graded to prevent surface runoff from reaching the LDW. Therefore, due to the property's proximity to the LDW, contaminants (if any) suspended in surface runoff have the potential to reach sediments associated with the KC Lease Parcels source control area.

Spills/Direct Discharge

Operations at J.A. Jack include offloading limestone from barges. J.A. Jack has previously dredged the barge offloading area to recover limestone spilled to the LDW during offloading operations. During two inspections in 2009, SPU and Ecology observed limestone spilling into the LDW from stockpiles that were not adequately contained. Although spills to the LDW have occurred, limestone is not a sediment COC. The potential for sediment recontamination via this pathway is very low. However, spills of limestone can potentially harm the river environment.

Soil and Groundwater

There is no information available to determine if soil or groundwater contamination is present at this property. However, stormwater and wash water that is discharged to the infiltration gallery may have the potential to contaminate groundwater. If sediment COCs are present in the groundwater, the groundwater may transport the sediment COCs to the LDW. The potential for sediment recontamination via this pathway is unknown.

[9] Sediment COCs in the vicinity of the J.A. Jack include mercury, BEHP, PAHs, and PCBs (Figure 3).

Bank Erosion/Leaching

In November 2007, Ecology noted that the area adjacent to the LDW and the barge-to-land conveyor system needed to be re-graded to prevent turbid discharges to the LDW. In April 2009, SPU indicated that the Pinch Point area had been re-graded. It appears that turbid discharges to the LDW continue to occur (SPU 2009c).

Little information was available on the construction of the banks in this area and the potential for sediment recontamination via this pathway. Contaminants in soils, if any, along the banks of the LDW could be released directly to sediments via erosion.

4.4.6 Data Gaps

Information needed to assess the potential for sediment recontamination associated with current or historical operations at the J.A. Jack property is listed below.

Stormwater Discharge and Surface Runoff/Spills

- A follow-up business inspection of J.A. Jack is needed to verify compliance with corrective actions identified by Ecology in 2007 and SPU in 2009, applicable regulations, and BMPs to prevent the release of contaminants to the LDW.
- The onsite stormwater collection system needs to be evaluated to determine its efficiency since Ecology inspectors observed stormwater flowing to the catch basins on the St. Gobain property.

Groundwater Discharge

- Information is needed regarding the groundwater quality in the infiltration gallery in order to determine if sediment COCs are present in groundwater and if these COCs may be transported to the LDW.

Surface Runoff and Bank Erosion/Leaching

- Additional information is needed to determine if J.A. Jack has re-graded the area adjacent to the LDW and beneath the barge-to-land conveyer system.
- Additional information is needed to determine if the discharges from the Pinch Point area are permissible and if these discharges are a potential source of sediment recontamination.

5.0 Summary of Data Gaps

Data gaps have been identified for outfalls, adjacent properties, and facilities within the S Brandon Street CSO basin in Sections 3.0 and 4.0. These data gaps are summarized by facility and pathway on Table 6. The data gaps are listed below by potential sediment recontamination pathway.

5.1 Stormwater and Combined Sewer Discharge

5.1.1 Outfalls

- Data on contaminant concentrations in SD solids within the Cadman and Lehigh Northwest and J.A. Jack SD systems are needed to evaluate whether contaminants are being transported to LDW sediments via Outfalls 2244 and 2007.
- Data on contaminant concentrations in CSO discharges are needed to evaluate whether the S Brandon Street CSO is a significant source of contaminants to LDW sediments.
- Additional information is needed to determine if undocumented and unregulated industrial operations are occurring within the S Brandon Street CSO basin that may be an ongoing source of sediment recontamination.

5.1.2 S Brandon Street CSO Facilities

Facility inspections, similar to those currently performed by SPU, KCIW, and Ecology, are needed to collect the following types of information:

- Information regarding any ongoing industrial activities is needed to verify that these facilities are in compliance with all applicable regulations and BMPs.
- Information on how and where any hazardous materials, chemicals, or hazardous wastes are stored or used at these facilities is needed to evaluate the potential for spills to commingle with wastewater and stormwater.
- Facility plans showing the locations of floor drains, catch basins, sewer connections, and storm drains (if any) are needed to evaluate the potential for contaminants suspended in wastewater and stormwater (if any) to be transported to the LDW via combined sewer discharges.
- Information regarding any containment systems at these properties is needed to evaluate the adequacy of the systems and determine the potential for spills to commingle with wastewater and stormwater.

Information regarding two LUST facilities, Bob's Texaco Service and Chevron 9-0636, needs to be evaluated to determine the potential for sediment recontamination, if any, that may be associated with these facilities.

5.1.3 Manson Construction Company

- A facility inspection is needed to determine if stormwater is discharged to the sanitary sewer or to the LDW and to determine if the catch basin shown on DPD files and observed by King County personnel is connected to the SD system at the Cadman facility. A follow-up inspection is needed to determine if corrective measures have been implemented to ensure operations at Manson Construction are in compliance with applicable regulations and BMPs to prevent the release of contaminants to the LDW.

5.1.4 Cadman and Lehigh Northwest

- A follow-up business inspection of Cadman and Lehigh Northwest is needed to verify compliance with Ecology's recommendations, applicable regulations, and BMPs to prevent the release of contaminants to the LDW.
- A review of the updated SWPPP, when completed, is needed to ensure compliance with Ecology's requirements.

5.1.5 United Western Supply

- A business inspection of United Western Supply and the buildings on the southern portion of the property is needed to verify compliance with applicable regulations and BMPs to prevent the release of contaminants to the LDW.
    - Facility plans showing the locations of all catch basins and storm drains (if any) are needed to evaluate the potential for contaminant transport to the LDW via surface runoff.
    - Floor drains and SD lines on the property (if any) should be located and mapped.
    - Information regarding how any hazardous materials or chemicals are stored and used at the facility is needed to evaluate the potential for spills to reach sediments associated with the KC Lease Parcels source control area.
    - Information on any containment system(s) present at the site is needed to evaluate the potential for spills to reach sediments associated with the KC Lease Parcels source control area.
- A review of the 1997 environmental assessment, prepared by Boateng, is needed to identify potential pollutant sources associated with United Western Supply.

5.1.6 J.A. Jack & Sons

- A follow-up business inspection of J.A. Jack is needed to verify compliance with corrective actions identified by Ecology in 2007 and SPU in 2009, applicable regulations, and BMPs to prevent the potential release of contaminants to the LDW.
- The onsite stormwater collection system needs to be evaluated to determine its efficiency since Ecology inspectors observed stormwater flowing to the catch basins on the St. Gobain property.

5.2 Surface Runoff/Spills

5.2.1 Manson Construction Company

- A facility plan showing the locations of all catch basins and storm drains (if any), as well as an evaluation of the slope of impervious surfaces and any associated surface water collection and/or discharge points, is needed to evaluate the potential for contaminant transport to the LDW via surface runoff.

5.3 Groundwater Discharge

5.3.1 Manson Construction Company

- No laboratory data from site assessment(s) and remediation at the Manson Construction parcel were found in the files reviewed by SAIC. Additional information is needed to evaluate if contaminant concentrations in soil and groundwater beneath this facility have the potential to re-contaminate sediments associated with the KC Lease Parcels source control area.

5.3.2 J.A. Jack & Sons

- Information is needed regarding the groundwater quality in the infiltration gallery in order to determine if sediment COCs are present in groundwater and if these COCs may be transported to the LDW.

5.4 Bank Erosion/Leaching

5.4.1 Manson Construction Company, Cadman and Lehigh Northwest, and United Western Supply

- Additional information on the construction of the banks in this area is needed to evaluate the potential for sediment recontamination via this pathway.

5.4.2 J.A. Jack & Sons

- Additional information is needed to determine if J.A. Jack has re-graded the area adjacent to the LDW and beneath the barge-to-land conveyer system.
- Additional information is needed to determine if the discharges from the Pinch Point area are permissible and if these discharges are a potential source of sediment recontamination.

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Figures

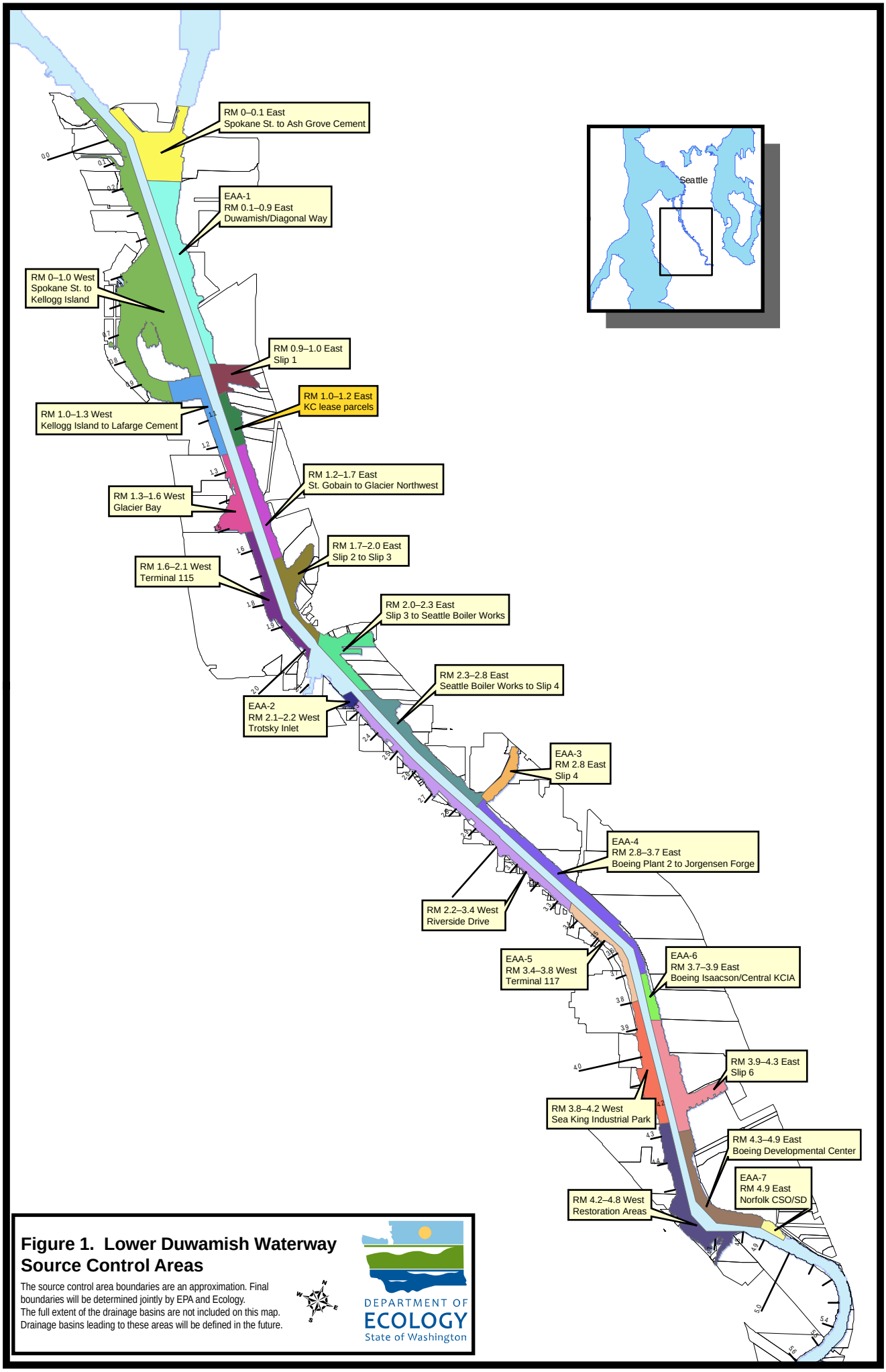

Figure 1. Lower Duwamish Waterway Source Control Areas

The source control area boundaries are an approximation. Final boundaries will be determined jointly by EPA and Ecology.
The full extent of the drainage basins are not included on this map.
Drainage basins leading to these areas will be defined in the future.

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Figure 2. King County Lease Parcels
Source Control Area

0 100 200 400 Feet

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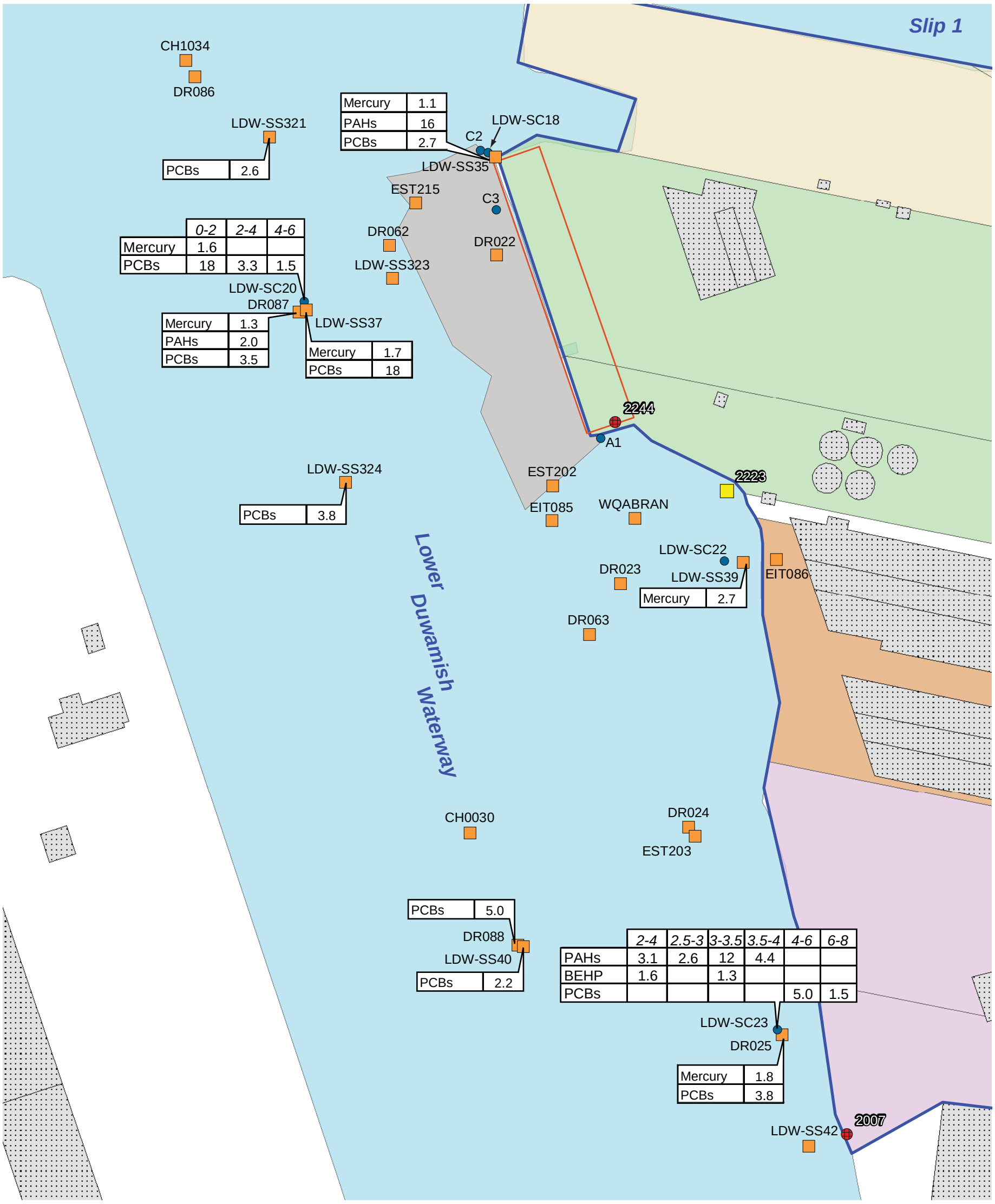

Figure 3. Sediment Sample Locations Associated with the King County Lease Parcels Source Control Area

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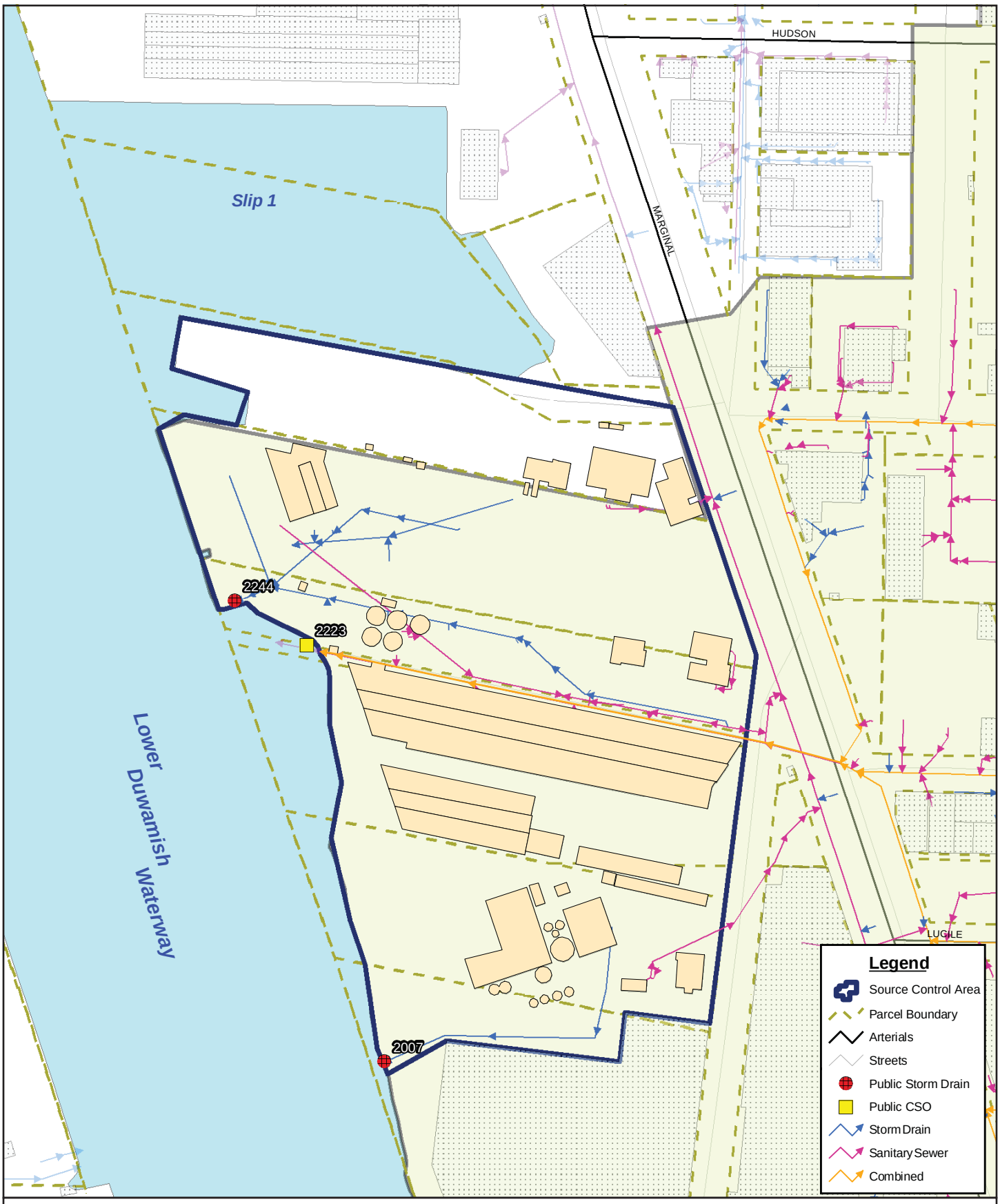

Figure 4. Storm Drain and Sanitary Sewer Lines in the King County Lease Parcels Source Control Area

0 100 200 400 Feet

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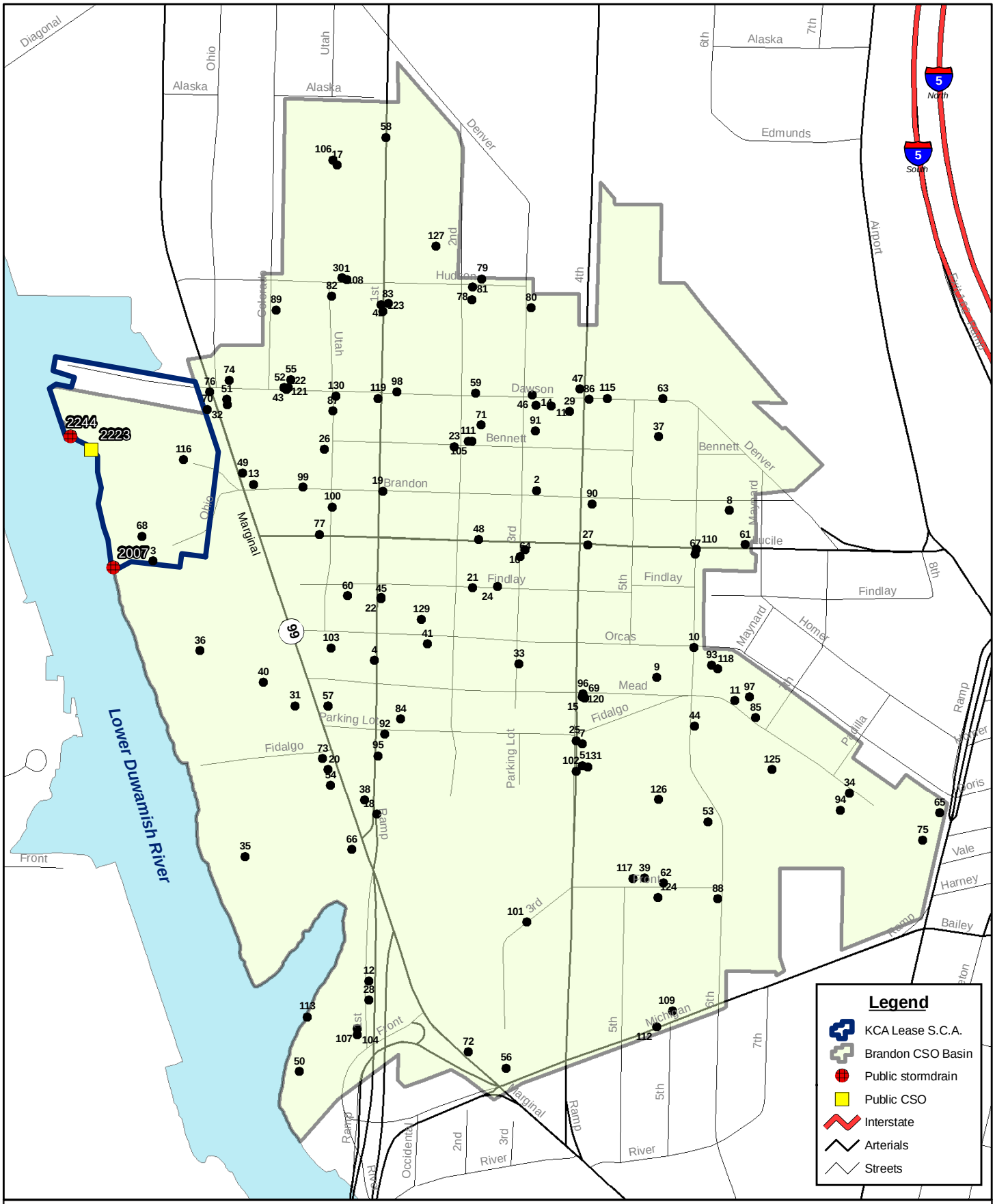

Figure 5. S Brandon Street CSO Basin

0 350 700 1,400 Feet

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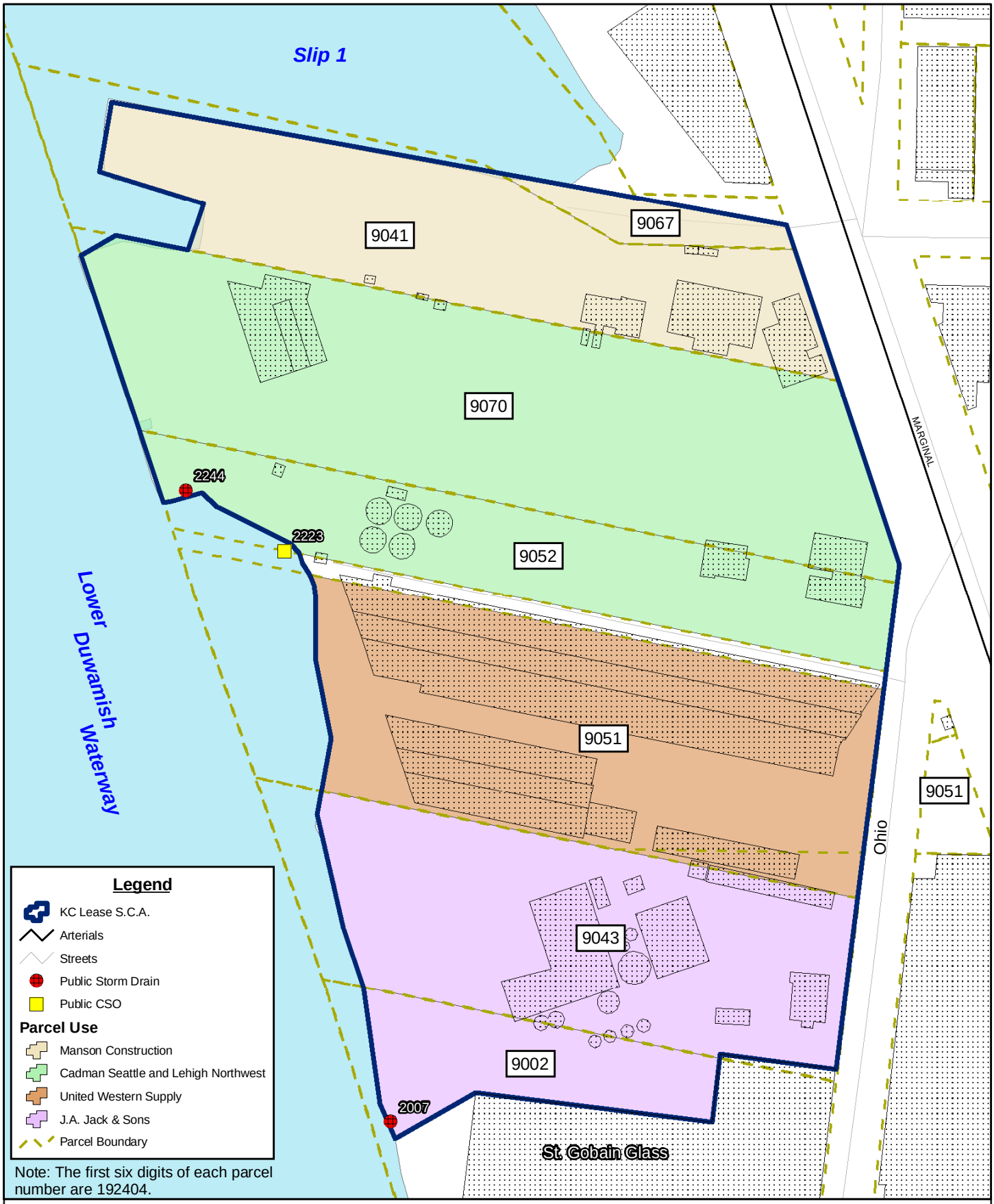

Figure 6. Tax Parcels in the King County Lease Parcels Source Control Area

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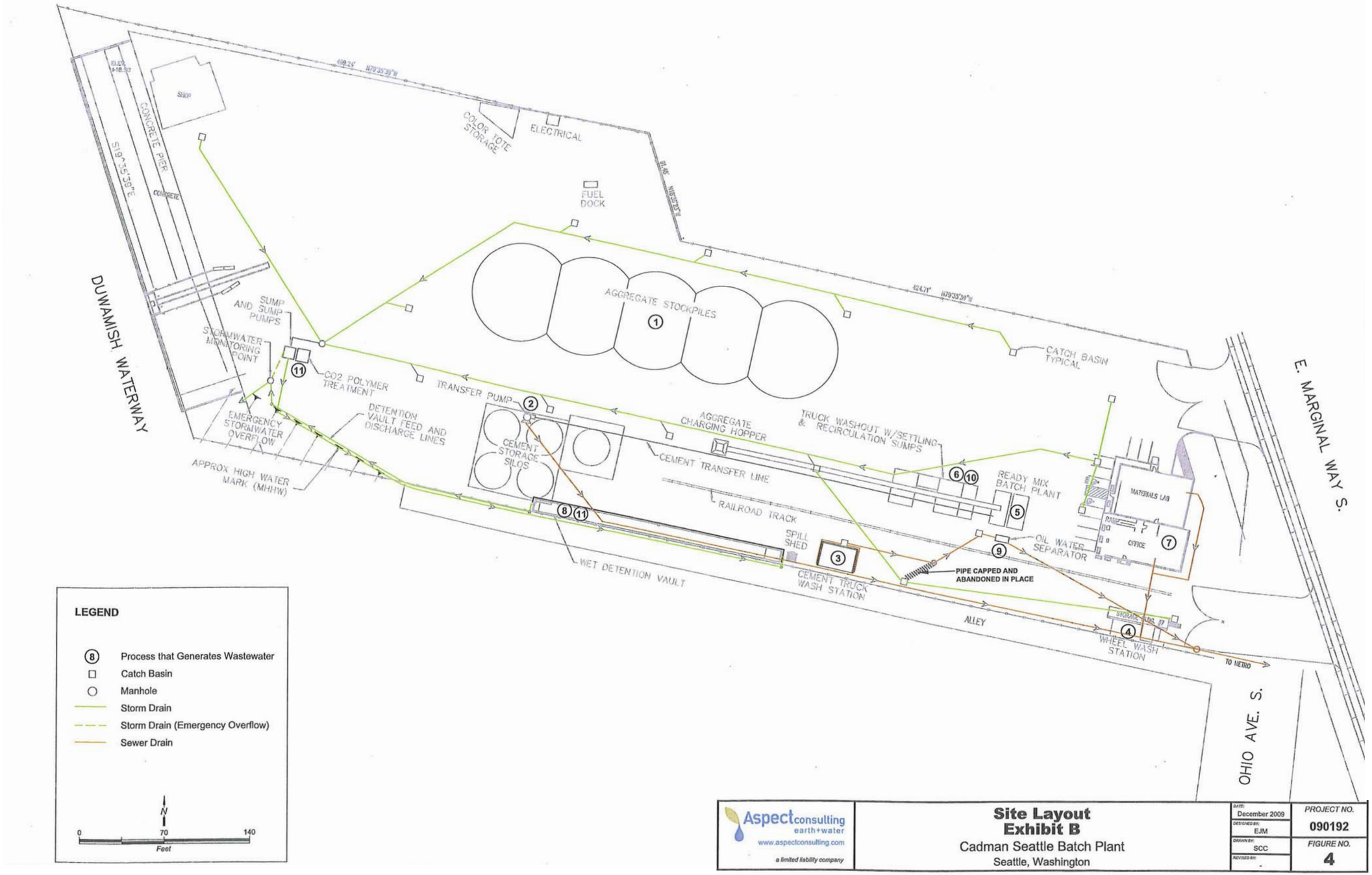
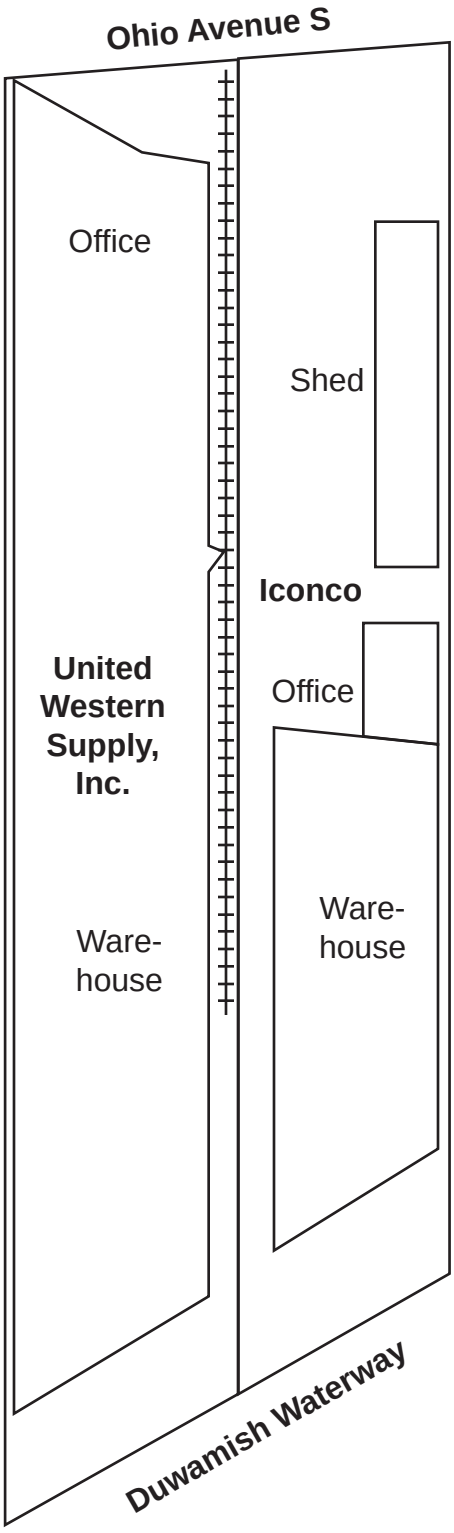
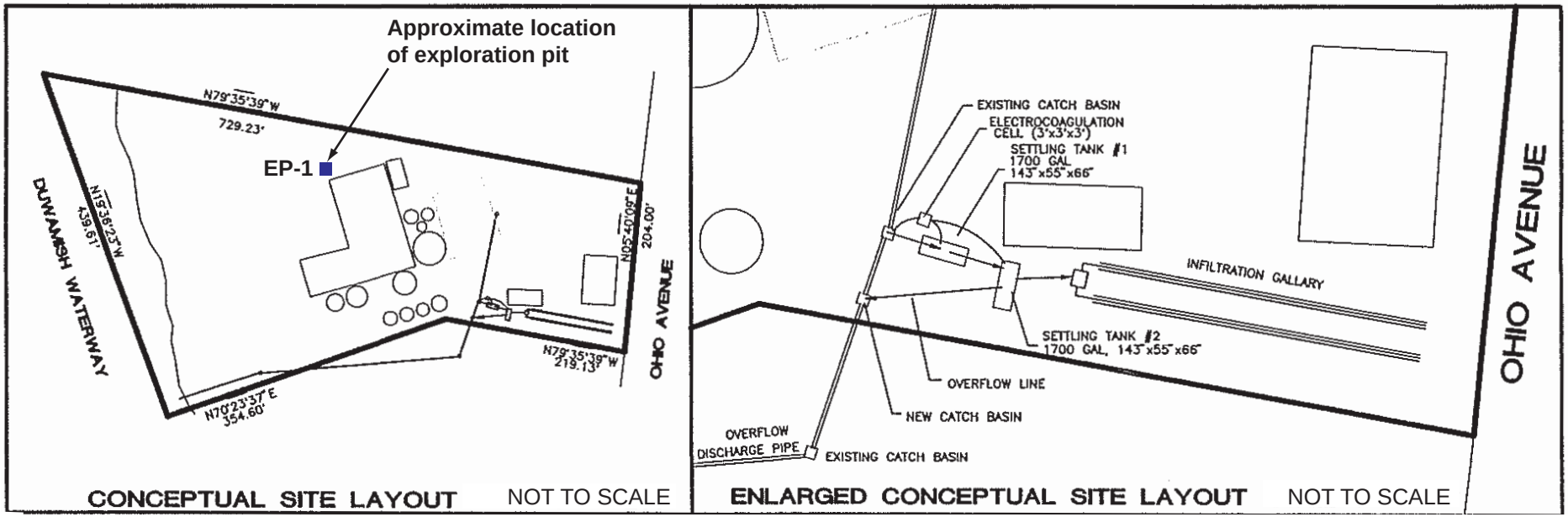


Figure 7. Cadman Seattle, Inc. and Lehigh Northwest Facility Plan



Source: Cascadia Law Group 2008

Figure 8. United Western Supply Facility Plan



Source: Associated Earth Sciences 2002; ESM 2003

Figure 9. J.A. Jack & Sons Facility Plan

Tables

Table 1
Sediment Samples Collected Near the King County Lease Parcels Source Control Area

Location Name	Date Collected	Collection Depth (feet)	Event Name	Source
WQABRAN-430	3/6/1997	Surface	King County CSO Water Quality Assessment	King County 1999
WQABRAN-431	3/12/1997			
WQABRAN-432	3/27/1997			
WQABRAN-433	4/3/1997			
WQABRAN-434	4/8/1997			
WQABRAN-435	4/17/1997			
WQABRAN-436	4/24/1997			
WQABRAN-437	5/1/1997			
WQABRAN-438	5/8/1997			
WQABRAN-439	5/15/1997			
WQABRAN-440	5/20/1997			
WQABRAN-441	5/28/1997			
WQABRAN-442	6/3/1997			
EST202	9/17/1997	Surface	NOAA Site Characterization	NOAA 1998
EST203				
EIT085	9/19/1997			
EST215	10/14/1997			
CH0030	10/16/1997			
CH1034	10/17/1997			
EIT086	11/12/1997			
DR087	8/12/1998	Surface	EPA Site Inspection	Weston 1999
DR022	8/17/1998			
DR023				
DR024				
DR025				
DR062				
DR063				
DR086	8/31/1998			
DR088				
A1	8/29/2003	0 to 4	Lehigh NW	Windward 2007c
C2		0 to 4		
C3		4 to 5		
LDW-SS37	1/18/2005	Surface	LDW RI Phase 2 Round 1	Windward 2005a
LDW-SS40				
LDW-SS42	1/24/2005			
LDW-SS35	3/8/2005	Surface	LDW RI Phase 2 Round 2	Windward 2005b
LDW-SS39	3/11/2005			
LDW-SC22	2/13/2006	0 to 1	LDW Subsurface Sediment 2006	Windward 2007a
		1 to 2		
		2 to 4		
LDW-SC20	2/15/2006	0 to 2		
		2 to 4		
		4 to 6		
		8 to 10		
LDW-SC18	2/16/2006	0 to 1		
		1 to 2		
		2 to 4		
LDW-SC23		0 to 0.5		
		0 to 2		
		0.5 to 1		
		1 to 1.5		
		1.5 to 2		
		2 to 2.5		
		2 to 4		
		2.5 to 3		
		3 to 3.5		
		3.5 to 4		
		4 to 6		
		6 to 8		
		8 to 10		
LDW-SS321	10/4/2006	Surface	LDW RI Phase 2 Round 3	Windward 2007b
LDW-SS323				
LDW-SS324				

Table 2
Chemicals Detected Above Screening Levels in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
Metals											
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Mercury	1.09E+00	3.93		0.41	0.59	mg/kg DW	2.7	1.8
EPA Site Inspection	DR025	8/17/1998	Mercury	7.50E-01	2.54		0.41	0.59	mg/kg DW	1.8	1.3
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Mercury	6.90E-01	2.33		0.41	0.59	mg/kg DW	1.7	1.2
EPA Site Inspection	DR087	8/12/1998	Mercury	5.50E-01	1.67		0.41	0.59	mg/kg DW	1.3	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Mercury	4.60E-01 J	2.01		0.41	0.59	mg/kg DW	1.1	<1
PAHs											
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	2-Methylnaphthalene	3.30E+00	2.01	1.64E+02	38	64	mg/kg OC	4.3	2.6
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Acenaphthene	5.20E+00	2.01	2.59E+02	16	57	mg/kg OC	16	4.5
EPA Site Inspection	DR087	8/12/1998	Acenaphthene	5.30E-01	1.67	3.17E+01	16	57	mg/kg OC	2.0	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzo(a)anthracene	3.20E+00	2.01	1.59E+02	110	270	mg/kg OC	1.4	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzofluoranthenes (total-calc'd)	5.10E+00	2.01	2.54E+02	230	450	mg/kg OC	1.1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Chrysene	3.70E+00	2.01	1.84E+02	110	460	mg/kg OC	1.7	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Dibenzofuran	3.50E+00	2.01	1.74E+02	15	58	mg/kg OC	12	3.0
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Fluoranthene	1.70E+01	2.01	8.46E+02	160	1200	mg/kg OC	5.3	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Fluorene	4.90E+00	2.01	2.44E+02	23	79	mg/kg OC	11	3.1
EPA Site Inspection	DR087	8/12/1998	Indeno(1,2,3-cd)pyrene	6.20E-01	1.67	3.71E+01	34	88	mg/kg OC	1.1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Naphthalene	5.30E+00	2.01	2.64E+02	99	170	mg/kg OC	2.7	1.6
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Phenanthrene	1.50E+01	2.01	7.46E+02	100	480	mg/kg OC	7.5	1.6
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Total HPAH (calc'd)	4.20E+01	2.01	2.09E+03	960	5300	mg/kg OC	2.2	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Total LPAH (calc'd)	3.40E+01	2.01	1.69E+03	370	780	mg/kg OC	4.6	2.2
PCBs											
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	PCBs (total calc'd)	5.10E+00	2.33	2.19E+02	12	65	mg/kg OC	18	3.4
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	PCBs (total calc'd)	6.50E-01	2.01	3.23E+01	12	65	mg/kg OC	2.7	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	PCBs (total calc'd)	5.10E-01 J	1.89	2.70E+01	12	65	mg/kg OC	2.2	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	PCBs (total calc'd)	4.80E-01	1.05	4.57E+01	12	65	mg/kg OC	3.8	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	PCBs (total calc'd)	4.50E-01 J	1.43	3.15E+01	12	65	mg/kg OC	2.6	<1
EPA Site Inspection	DR025	8/17/1998	PCBs (total-calc'd)	1.15E+00	2.54	4.54E+01	12	65	mg/kg OC	3.8	<1
EPA Site Inspection	DR088	8/31/1998	PCBs (total-calc'd)	1.01E+00	1.68	6.01E+01	12	65	mg/kg OC	5.0	<1
EPA Site Inspection	DR087	8/12/1998	PCBs (total-calc'd)	6.96E-01	1.67	4.17E+01	12	65	mg/kg OC	3.5	<1

mg/kg - Milligram per kilogram
ug/kg - Microgram per kilogram
DW - Dry weight
TOC - Total Organic Carbon
OC - Organic carbon normalized
SQS - SMS Sediment Quality Standard
CSL - SMS Cleanup Screening Level

SMS - Sediment Management Standard (Washington Administrative Code 173-204)
PAH - Polycyclic aromatic hydrocarbon
Total HPAH - Total high molecular weight PAH
Total LPAH - Total low molecular weight PAH
PCB - Polychlorinated biphenyl
J - Estimated value between the method detection limit and the laboratory reporting limit

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentrations to the CSL or SQS; exceedance factors are shown only if they are greater than 1.
Sampling events are listed in Table 1.

Table 3
Chemicals Detected Above Screening Levels in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
Metals														
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Mercury	6.50E-01	1.58		0.41	0.59	mg/kg DW	1.6	1.1
PAHs														
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Acenaphthene	2.20E+00	1.3	1.69E+02	16	57	mg/kg OC	11	3.0
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Acenaphthene	2.10E+00	1.3	1.62E+02	16	57	mg/kg OC	10	2.8
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Acenaphthene	1.60E+00	2.29	6.99E+01	16	57	mg/kg OC	4.4	1.2
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Acenaphthene	1.50E+00	2.29	6.55E+01	16	57	mg/kg OC	4.1	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Acenaphthene	5.70E-01	1.39	4.10E+01	16	57	mg/kg OC	2.6	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Acenaphthene	3.70E-01	2.14	1.73E+01	16	57	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Anthracene	8.80E+00	1.3	6.77E+02	220	1200	mg/kg OC	3.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(a)anthracene	7.10E+00	1.3	5.46E+02	110	270	mg/kg OC	5.0	2.0
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(a)anthracene	3.40E+00	2.14	1.59E+02	110	270	mg/kg OC	1.4	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(a)anthracene	3.20E+00	2.14	1.50E+02	110	270	mg/kg OC	1.4	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(a)anthracene	2.80E+00	2.29	1.22E+02	110	270	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(a)anthracene	2.70E+00	2.29	1.18E+02	110	270	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(a)pyrene	3.10E+00	1.3	2.38E+02	99	210	mg/kg OC	2.4	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(a)pyrene	3.00E+00	1.3	2.31E+02	99	210	mg/kg OC	2.3	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(a)pyrene	2.60E+00	2.14	1.21E+02	99	210	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(a)pyrene	2.50E+00	2.14	1.17E+02	99	210	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(b)fluoranthene	4.40E+00	1.3	3.38E+02	230	450	mg/kg OC	1.5	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(b)fluoranthene	3.90E+00	1.3	3.00E+02	230	450	mg/kg OC	1.3	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(g,h,i)perylene	7.30E-01	1.3	5.62E+01	31	78	mg/kg OC	1.8	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(g,h,i)perylene	6.90E-01	1.3	5.31E+01	31	78	mg/kg OC	1.7	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzofluoranthenes (total-calc'd)	6.40E+00	1.3	4.92E+02	230	450	mg/kg OC	2.1	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzofluoranthenes (total-calc'd)	6.00E+00	2.14	2.80E+02	230	450	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Chrysene	7.80E+00	1.3	6.00E+02	110	460	mg/kg OC	5.5	1.3
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Chrysene	7.20E+00	2.14	3.36E+02	110	460	mg/kg OC	3.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Chrysene	3.20E+00	2.29	1.40E+02	110	460	mg/kg OC	1.3	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Chrysene	3.10E+00	2.29	1.35E+02	110	460	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Dibenzo(a,h)anthracene	1.80E-01	1.3	1.38E+01	12	33	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Fluoranthene	2.40E+01	1.3	1.85E+03	160	1200	mg/kg OC	12	1.5
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Fluoranthene	1.00E+01	2.29	4.37E+02	160	1200	mg/kg OC	2.7	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Fluoranthene	7.40E+00 B	2.14	3.46E+02	160	1200	mg/kg OC	2.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Fluorene	2.00E+00	1.3	1.54E+02	23	79	mg/kg OC	6.7	1.9
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Fluorene	1.80E+00	1.3	1.38E+02	23	79	mg/kg OC	6.0	1.8
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Indeno(1,2,3-cd)pyrene	9.30E-01	1.3	7.15E+01	34	88	mg/kg OC	2.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Indeno(1,2,3-cd)pyrene	8.90E-01	1.3	6.85E+01	34	88	mg/kg OC	2.0	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Indeno(1,2,3-cd)pyrene	8.00E-01	2.14	3.74E+01	34	88	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Phenanthrene	1.20E+01	1.3	9.23E+02	100	480	mg/kg OC	9.2	1.9
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Pyrene	1.40E+01	1.3	1.08E+03	1000	1400	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Total HPAH (calc'd)	6.40E+01	1.3	4.92E+03	960	5300	mg/kg OC	5.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Total HPAH (calc'd)	3.15E+01 J	2.14	1.47E+03	960	5300	mg/kg OC	1.5	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Total HPAH (calc'd)	2.50E+01	2.29	1.09E+03	960	5300	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Total LPAH (calc'd)	2.50E+01	1.3	1.92E+03	370	780	mg/kg OC	5.2	2.5
Phthalates														
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Bis(2-ethylhexyl)phthalate	1.60E+00	2.14	7.48E+01	47	78	mg/kg OC	1.6	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Bis(2-ethylhexyl)phthalate	1.60E+00	2.14	7.48E+01	47	78	mg/kg OC	1.6	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Bis(2-ethylhexyl)phthalate	8.00E-01	1.3	6.15E+01	47	78	mg/kg OC	1.3	<1

Table 3
Chemicals Detected Above Screening Levels in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Bis(2-ethylhexyl)phthalate	7.80E-01	1.3	6.00E+01	47	78	mg/kg OC	1.3	<1
PCBs														
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	PCBs (total calc'd)	3.20E+00	1.49	2.15E+02	12	65	mg/kg OC	18	3.3
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	PCBs (total calc'd)	8.80E-01	1.46	6.03E+01	12	65	mg/kg OC	5.0	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	PCBs (total calc'd)	6.00E-01	1.5	4.00E+01	12	65	mg/kg OC	3.3	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4	-	6	PCBs (total calc'd)	4.00E-01	2.22	1.80E+01	12	65	mg/kg OC	1.5	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	6	-	8	PCBs (total calc'd)	4.00E-01	2.25	1.78E+01	12	65	mg/kg OC	1.5	<1

mg/kg - Milligram per kilogram
ug/kg - Microgram per kilogram
DW - Dry weight
TOC - Total Organic Carbon
OC - Organic carbon normalized
SQS - SMS Sediment Quality Standard
CSL - SMS Cleanup Screening Level

SMS - Sediment Management Standard (Washington Administrative Code 173-204)
PAH - Polycyclic aromatic hydrocarbon
Total HPAH - Total high molecular weight PAH
Total LPAH - Total low molecular weight PAH
PCB - Polychlorinated biphenyl
B - The analyte was found in the associated method blank at a level that is significant relative to the sample result
J - Estimated value between the method detection limit and the laboratory reporting limit

Three TOC results were provided in the LDW RI data set for sample LDW-SC20 8-10 feet. The three TOC results for the sample were averaged for the purpose of calculated the mg/kg OC-normalized concentration.
Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentrations to the CSL or SQS; exceedance factors are shown only if they are greater than 1.
Sampling events are listed in Table 1.

Table 4
CSO/EOF Discharges to the Lower Duwamish Waterway

Outfall	Type (Owner)	Discharge Serial Number	Location	Average Overflow Frequency (events/year) 2000 to 2007	Annual average volume (mgy) 2000 to 2007
Diagonal Avenue S[a]	CSO (SPU) SD (SPU)	NA	RM 0.5 E	20.1	15.8[b]
Hanford No. 1[c]	CSO (King County)	031	RM 0.5 E	9	18.75
Duwamish pump station East	CSO (King County)	035	RM 0.5 E	<1.0	0.51
Duwamish pump station West	CSO (King County)	034	RM 0.5 W	<1.0	0.60
S Brandon Street	CSO (King County)	041	RM 1.1 E	23	31.63
Terminal 115	CSO (King County)	038	RM 1.9 W	3	3.52
S Brighton Street	CSO (SPU) SD (SPU)	NA	RM 2.1 E	NA[g]	NA
King County Airport SD#3/PS44 EOF[d]	SD (King County) EOF (SPU)	NA	RM 2.8 E	NA	NA
E Marginal Way S. pump station	EOF (King County)	043	RM 2.8 E	None recorded	NA
8th Avenue S	CSO (King County)	040	RM 2.8 W	0	0
King County Airport SD#2/PS78 EOF[e]	SD (King County) EOF (SPU)	NA	RM 3.8 E	NA	NA
Michigan Street	CSO (King County)	039	RM 1.9 E	11	17.58
W Michigan	CSO (King County)	042	RM 2.0 W	4	1.23
Norfolk	CSO (King County) SD (King County) EOF (SPU)[f]	044	RM 4.8 E	4	0.28

a - The Diagonal Avenue S. SD outfall is shared by stormwater and seven separate overflow points, including the City's Diagonal CSOs and the County's Hanford No. 1 CSO. The overflow frequency and volume listed are for the Diagonal CSOs only.
b - This average volume does not include the contribution from King County's Hanford No. 1 CSO, but does include the remaining seven overflow points that discharge through the Diagonal Avenue S. CSO/SD.
c - Hanford No. 1 discharges to the LDW through the Diagonal Avenue S. SD.
d – SPU Pump Station 44 discharges via EOF No. 117 to King County Airport SD#3 at Slip 4.
e – SPU Pump Station 78 discharges via EOF No. 156 to King County Airport SD#2, near Boeing Isaacson.
f – SPU Pump Station 17 discharges to the Norfolk CSO/SD.
g – Has not overflowed since monitoring began in March 2000.
mgy – million gallons per year
NA – Not available

Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
23766347	80 S Hudson Street Site	SES Seattle	80 S Hudson Street						●	●			1
59441643	Ace Radiator	None	311 S Brandon Street								●		2
63478536	Air Products Manufacturing Corp Seattle	None	5801A East Marginal Way S		●								3
57633623	Air Tec Co. Parcel C	Air Tec Co. Inc., Leavitt Shay Real Estate Co.	5701 1st Avenue S	■		●			●	●			4
26737544	Aleutian Constructors	Cleanscapes	5939 4th Avenue S										5
2992519	AM International	None	5901 4th Avenue S										7
98441868	Amalgamated Sugar Co Seattle	Amalgamated Sugar Co	5400 Denver Avenue S							●			8
47512364	American Dry Ice Orcas	None	672 S Orcas Street		●								9
6346940	American Motor Freight LLC	None	5700 6th Avenue S, Suite 203		●								10
12467128	American Technical Coatings Inc.	None	666 S Fidalgo Street										11
27632327	AR Torrico Sons Shipping Inc	Seattle Biodiesel LLC	6335 1st Avenue S										12
61212661	Argo Blower & Mfg Co Inc	None	5400 E Marginal Way S		●								13
18398858	Argo TOFC	Union Pacific Railroad Co Dawson Street, Dow Chemical	4th Avenue S & Dawson Street							●			14
55897213	Art Brass Plating	None	5815 4th Avenue S										15
88531932	Art Brass Plating Inc Seattle	Helen V. Warner	5516 3rd Avenue S		●	●		●					16
9399901	AT&T Wireless Marginal Way & Alaskan	None	4797 1st Avenue S										17
63217123	Bank & Office Interiors	Ener-G Foods Inc.,	5990 1st Avenue S		●								18
14379672	Battery Systems, Inc.	Allied Battery Co. Inc Seattle, Allied Battery Inc S Brandon, Allied Battery Seattle	105 S Brandon Street		●								19
96937296	Beckwith Kuffel Inc	Beckwith & Kuffel Inc.	5930 1st Avenue S							●			20
91823668	Berg Evans Chain Co	None	217 S Findlay Street										21
32698478	Big Johns Truck Repair Inc Seattle	None	5622-1/2 1st Avenue S										22
86499282	Bindery	None	215 S Bennett Street										23
7118747	Blaser Die Casting Co.	Blaser Tool & Mold Co., Scougal Rubber Corporation	5700 3rd Avenue S			●							24
415282	Blue Nile Inc.	None	5907 4th Avenue S										25
47157762	Bob's Texaco Service	None	5304 1st Avenue S						●	●			26
63627615	Branom Instrument Co Inc	None	5500 4th Avenue S										27
65697348	Burgess Enterprises	Duwamish Marine Center, Samson Tug & Barge, Ray Burgess Co.	6361 1st Avenue S							●			28
37332122	Burlington Env Philip Services Corp	None	402 S Dawson Up Tracks										29
46161728	BYG Cooperative	Abhe Svodboda Inc, SES Inc West Pac Environmental	74 S Hudson Street Warehouse		●								30
77372687	Byrne Specialty Gases, Inc. MEAD		118 S Mead Street										31
70313617	Cadman Seattle Inc	Cadman Inc Seattle, Cadman Seattle, Lehigh Northwest	5225 East Marginal Way S	■	●		●	●		●		♦	32

Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
11598755	Capital Industries Inc	None	5801 3rd Avenue S		●	●							33
99747798	Cenveo Graphic Arts Center	Graphic Arts Center, The Allied Printers	832 S Fidalgo Street		●								34
2253	Certainteed Gypsum Manufacturing	BPB Gypsum, James Hardie Gypsum, Certainteed Gypsum, Lone Star Northwest, Norwest Gypsum	5931 East Marginal Way S		●		●		●	●	●		35
9361279	Charles H Lilly Co	Chas H Lilly CO	5200 Denver Avenue S										37
74478588	Charles H Lilly Co	Chas H Lilly CO	6000 East Marginal Way S										36
1792892	Chevron 90636	Chevron 0636, Chevron SS 90636	5940 East Marginal Way S		●				●	●			38
NA	City of Seattle - SPU Materials Storage Yard	Fray Equipment Co	5821 1st Avenue S					●					129
83494216	Clough Equipment Co S Front S	None	515 S Front Street										39
54757868	Consolidated Freightways Seattle	Shippers Transport Express, Consolidated Freightways UST 11012	6050 East Marginal Way S		●	●			●	●			40
21759322	Continental Industries	None	222 S Orcas Street										41
2363	Craig Taylor Equipment	None	5030 1st Avenue S							●	●		42
53625878	Dawson Street Land Co	None	56 S Dawson Street		●								43
343781	Denco Sales Co	None	711 S Fidalgo Street		●								44
99894694	Don's Radiator	None	5626 1st Avenue S										45
36961494	Dow Chemical USA Michigan Div	Union Pacific Railroad,Union Pacific Railroad Transfer Facility, Argo TOFC, UPRR Diesel Shop, UPRR SEA, Union Pacific Railroad Co. Dawson Street	4th Avenue S & Dawson Street										46
75459442	Draper Machine Works Inc	Draper Machine Works Company, Howard Cooper	5055 4th Avenue S	■					●	●			47
74936217	Dresser Rand	None	225 S Lucile Street		●								48
2521	Drive Line Services of Seattle Inc	None	108 S Brandon Street		●						●		49
21945598	Duwamish Marine Center	Samson Tug & Barge, Burgess Enterprises	6365 1st Avenue S			●							50
87626746	Eagle Systems, Inc.	Milwaukee Motor Transportation Co.	53 S Dawson Street							●			51
22245293	Emerald City Disposal Dawson St	Allied Waste Services, Environmental Transport Inc., NW Waste Emerald City Disposal, Seattle Disposal, West Pac Environmental	54 S Dawson Street	■	●					●			52
78563473	Emerald City Freight Distribution	None	6003 6th Avenue S										53
7307167	Ener-G Foods Inc.	Bank & Office Interiors	5960 1st Avenue S		●							♦	54

Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
36716241	Environmental Transport Inc	Allied Waste Services, Emerald City Disposal Dawson St, NW Waste Emerald City Disposal, Seattle Disposal, West Pac Environmental	54 S Dawson Street	■					●	●			55
2337	Frank's Used Cars	None	6309 East Marginal Way S			●							56
62393528	Fray Equipment Co	City of Seattle - SPU Materials Storage Yard	5821 1st Avenue S							●			57
78676691	Fred Hutchinson Cancer Research Center	Fred Hutchinson CRC / (Former Vincent Metal Goods), Fred Hutchinson Cancer Research CNTR/AKA Vincent Metal Goods, Metal Goods Service Center, Qwest Replacement Project Facility, Vincent Metal Goods Seattle Branch	4755 1st Avenue S		●					●	●		58
15892877	Fryer Knowles Inc	None	211 S Dawson Street										59
73183189	Furniture Spa Inc	Sharps Automotive, Inc.	126 S Findlay Street		●					●			60
83552111	GE Aircraft Engines	None	637 S Lucile Street										61
95662832	GE Aircraft Engines Front St	None	540 S Front Street										62
31535274	GE Lighting Seattle Distribution Center	None	549 S Dawson Street		●								63
2522	General Electric Aviation Div	GE Aviation, General Electric Co. Dawson Street	220 S Dawson Street	■	●	●		●					64
96679259	Georgetown Center	Former Gull Station	NW Corner of Corson Avenue S & S Michigan Street								●		65
95534411	Glacier Northwest East Marginal Way	Kaiser Cement, Lone Star Cement, CEMEX, Slip 2 Duwamish Bank Stabilization	5975 East Marginal Way S		●		●	●	●	●			66
35148584	Greater Seattle Floors	Greater Seattle Floors, LLC	5517 6th Avenue S		●								67
37836248	JA Jack & Sons, Inc.	None	5427 Ohio Avenue S	■			●			●		♦	68
NA	Kamco Seafood, Inc.	None	128 S Orcas Street					●					128
6878135	Kettells	None	5800 4th Avenue S							●			69
5145176	Lehigh Northwest	Lehigh Northwest Dredge	5225 East Marginal Way S	■								♦	70
96377286	Leone VanValkenburg Trust	Exide Technologies Seattle, GNB Battery Technologies	5200 4th Avenue S		●								71
71277652	Lockwood Marine Inc	None	6502 East Marginal Way S										72
2226	Longview Fibre Paper & Packaging Inc	Longview Fibre Company	5901 East Marginal Way S		●	●	●	●	●	●		♦	73
67737549	Loomis Fargo & Co	Loomis Armored Inc	5200 East Marginal Way S	■					●	●			74
13593282	Mail Dispatch, Inc.	None	917 S Nebraska							●			75
80333167	Manson Construction	Manson Construction & Engineering	5209 E Marginal Way S	■	●					●			76
2254	Master Builders	A&C Construction	64 S Lucile Street								●		77
87686611	McKinstry Co	None	4975 A 3rd Avenue S		●								78

Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
61127232	McKinstry Co 215 Hudson St	None	215 S Hudson Street		●								79
85743277	McKinstry Co 5005	None	5005 3rd Avenue S										80
28755278	McKinstry Co Ste B	None	4975 B 3rd Avenue S										81
36652818	Mesher Supply	None	5001 1st Avenue S							●			82
91681677	Michigan Properties	None	5035 1st Avenue S										83
96851494	Mobile Crane Co Inc	Western Bridge Co.	5900 2nd Avenue S		●					●	●		84
46977612	Moore Data Mgmt Svcs Div	None	725 S Fidalgo Street										85
74398946	NAPA Auto Parts Seattle	Genuine Parts Co, Genuine Parts Co. Seattle	5201 4th Avenue S										86
73845797	National Transfer Inc. Seattle	Seadrunar Recycling	5265 Utah Avenue S	■					●	●			87
19371183	Nivas Business Corp	None	6100 6th Avenue S										88
61549757	North Coast Refrigeration Inc	Northcoast Refrigeration Inc.	5047 Colorado Avenue S		●					●			89
44927387	Northwest Corporate Park Building U	None	520 S Brandon Street							●			90
59769876	Northwest Sign Supply	None	5300 4th Avenue S		●								91
57957617	Olympic Medical Corp 1st Ave S	None	5900 1st Avenue S		●								92
29775533	Orcas Business Park LLC	None	650 S Orcas Street		●								93
12545978	Ostex Intl Inc 5955 Airport Way	None	5955 Airport Way S										94
17634	Ott Real Estate Property	None	5903 1st Avenue S								●		95
63721371	Pacific Marine Testing Co	None	5807 4th Avenue S										96
27585467	PNB Building	None	707 S Orcas Street	■					●	●			97
91919568	Proliance International Inc	115 S Dawson Street, Modine Aftermarket Holdings Inc, Modine Western	115 S Dawson Street		●						●		98
73466467	Rental Service Corporation 565	Alpine Equipment Rentals & Supply, Hexcel Medical Division, Prime Equipment 565 Seattle	5421 1st Avenue S		●					●			100
55698119	Riveretzs Auto Care	Winters Investment LP, Former Georgetown Gasco/Tesoro	6185 4th Avenue S						●	●			101
2450	Sahlberg Equipment	Society of Saint Vincent de Paul, US Bank AJ Sahlberg Trust	5950 4th Avenue S	■	●	●							102
94925241	Saint Gobain Containers Inc	Ball Glass, Ball-Foster Glass, Ball-Incon, Northwestern Glass Company, Incon Packaging	5801 East Marginal Way S		●		●	●	●	●		♦	103
1020256	Samson Tug & Barge Co Inc Transporter	Duwamish Marine Center, Burgess Enterprises	6365 1st Avenue S		●							♦	104
59148337	Seacast Inc Seattle	None	207 S Bennett Street		●								105
49423263	Seadrunar Recycling	National Transfer Inc.	28 S Brandon Street	■	●								99
44186982	Sears Roebuck & Co UST 7837	None	4786 1st Avenue S							●			106
5023482	Seattle Biodiesel LLC	AR Torrico Sons Shipping Inc, General Biodiesel Seattle	6333 1st Avenue S		●		●			●			107

Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
18582122	SES Inc West Pac Environmental	BYG Coop, Abhe Svodboda Inc.	74 S Hudson Street		●								108
19688471	Shell Oil Products US SAP 121430	Shell 600 Michigan, Texaco 121430, Texaco Station 632320400 UST 4487, Texaco Station Michigan	600 S Michigan Street	■	●	●			●	●			109
23243637	Simon Golub & Sons Inc	None	5506 6th Avenue S		●								110
85783156	Smith Williston	None	201 S Bennett Street		●								111
5184	St Vincent De Paul Council Seattle	St Vincent De Paul, Sahlberg Equipment	5972 4th Avenue S										131
41677496	Sudden Printing	None	571 S Michigan Street										112
47666565	TW Express	None	7901 1st Avenue S										113
74589256	Union Pacific Motor	None	420 S Dawson Street						●	●			114
44577768	Union Pacific Railroad Co. Dawson Street	Argo TOFC, UPRR Diesel Shop, UPRR SEA, Union Pacific Railroad Transfer Facility	402 S Dawson Street		●		●						115
9953954	United Western Supply	Western Utilities Supply Co., Iconco	5245 East Marginal Way S	■	●							♦	116
33482323	UPS Seattle Export	None	500 S Front Street		●								117
21503	U.S. Starcraft	None	5210 Utah Avenue S		●								130
21468652	Valco Graphics Inc Seattle	None	674 S Orcas Street										118
3258153	Washington Machine Works	None	5211 1st Avenue S, Unit C, Door 4		●								119
72999973	Wear Cote Northwest Inc	None	5811 4th Avenue S										120
4961762	West Pac Environmental	Allied Waste Services, Emerald City Disposal Dawson St, Environmmental Transport Inc., NW Waste Emerald City Disposal, Seattle Disposal	55 S Dawson Street	■									121
28825715	West Pac Environmental Inc	Allied Waste Services, Emerald City Disposal Dawson St, Environmmental Transport Inc., NW Waste Emerald City Disposal, Seattle Disposal	54 S Dawson Street, Suite 100	■									122
39473625	Western Cartage Inc	None	5050 1st Avenue S							●			123
39352815	Western Parcel Express Seattle	Air Data Express, Inc.	525 S Front Street	■					●	●	●		124
33942516	Western Union Telephone Co. UST 97407	None	808 S Fidalgo Street							●			125
56533162	Westmar Services Inc	Airgas Dry Ice	5930 6th Avenue S							●			126
49738534	WW Grainger Inc, Seattle	None	4930 3rd Avenue S										127

Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]

[1] - See Appendix C-2. Map indicates the detail map on which the facility is plotted and the Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

- EAA-1 RM 0.1 to 0.9 East, Duwamish/Diagonal Way
- RM 0.9 to 1.0 East, Slip 1
- RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest
- RM 1.7 to 2.0 East, Slip 2 to Slip 3

■ - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the KC Lease Parcels Data Gaps Report.

● - Additional information regarding this facility is available on the accompanying tables.

♦ - EPA has sent a CERCLA Section 104(e) Request for Information Letter to this facility or property owner.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CSCSL - Confirmed or Suspected Contaminated Sites List
CSO - Combined Sewer Overflow
EAA - Early Action Area
EPA - U.S. Environmental Protection Agency
KCIW - King County Industrial Waste
KCLP - King County Lease Parcels
LUST - Leaking Underground Storage Tank
NFA - No Further Action
NPDES - National Pollutant Discharge Elimination System
RM - River Mile
UST - Underground Storage Tank

Table 6
Summary of Data Gaps
King County Lease Parcels Source Control Area

Facility	Data Gap
Public Outfalls	
S Brandon Street CSO, Dock Pipe #2 Outfall (Outfall 2244) and Outfall No. 2007	***Stormwater Discharge***
	Data on contaminant concentrations in storm drain solids within the Cadman and Lehigh Northwest and J.A. Jack storm drain systems are needed to evaluate whether contaminants are being transported to LDW sediments via Outfalls 2244 and 2007.
	Combined Sewer Discharge
	Data on contaminant concentrations in CSO discharges are needed to evaluate whether the S Brandon Street CSO is a significant source of contaminants to LDW sediments.
	Additional information is needed to determine if undocumented and unregulated industrial operations are occurring within the S Brandon Street CSO basin that may be an ongoing source of sediment recontamination.
Adjacent Properties	
Manson Construction Company[1]	***Stormwater Discharge and Surface Runoff/Spills***
	A facility inspection is need to determine if stormwater is discharged to the sanitary sewer or the LDW and to determine if the catch basin shown on DPD files and observed by King County personnel is connected to the storm drain system at the Cadman facility. A follow-up inspection is needed to determine if corrective measures have been implemented to ensure operations at Manson Construction are in compliance with applicable regulations and BMPs to prevent the release of contaminants to the LDW.
	A facility plan showing the locations of all catch basins and storm drains (if any) as well as an evaluation of the slope of impervious surfaces and any associated surface water collection and/or discharge points is needed to evaluate the potential for contaminant transport to the LDW via surface runoff.
	Groundwater Discharge
	No laboratory data from site assessment(s) and remediation at the Manson Construction parcel were found in the files reviewed by SAIC. Additional information is needed to evaluate if contaminant concentrations in soil and groundwater beneath this facility have the potential to re-contaminate the sediments associated with the KC Lease Parcels source control area.
	Bank Erosion/Leaching
	Additional information on the construction of the banks in this area is needed. Residual soil contamination may be present at this property; therefore, if bank erosion is likely, then data on contaminant concentrations in bank soils are necessary to evaluate the potential for sediment recontamination via this pathway.

[1]The action items identified in the Slip 1 SCAP (Ecology 2009f) adequately address the above data gaps associated with the LDW sediments to the west of the Manson Construction property.

Table 6
Summary of Data Gaps
King County Lease Parcels Source Control Area

Facility	Data Gap
Cadman and Lehigh Northwest	***Stormwater Discharge and Surface Runoff/Spills***
	A follow-up business inspection of Cadman and Lehigh is needed to verify compliance with Ecology's recommendations, applicable regulations, and BMPs to prevent the release of contaminants to the LDW.
	A review of the updated SWPPP, when completed, is needed to ensure compliance with Ecology's requirements.
	Bank Erosion/Leaching
	Additional information on the construction of the banks in this area is needed.
United Western Supply	***Stormwater Discharge and Surface Runoff/Spills***
	A business inspection of UWS and the buildings on the southern portion of the property is needed to verify compliance with applicable regulations and BMPs to prevent the release of contaminants to the LDW.
	A review of the 1997 environmental assessment, prepared by Boateng, is needed to identify potential pollutant sources associated with UWS. The complete Boateng report was not available for review by SAIC during preparation of this Data Gaps Report.
	Bank Erosion/Leaching
	Additional information on the construction of the banks in this area is needed.
J.A. Jack & Sons	***Stormwater Discharge and Surface Runoff/Spills***
	A follow-up business inspection of J.A. Jack is needed to verify compliance with corrective actions identified by Ecology in 2007 and SPU in 2009, applicable regulations, and BMPs to prevent the release of contaminants to the LDW.
	The onsite stormwater collection system needs to be evaluated to determine its efficiency since Ecology inspectors observed stormwater flowing to the catch basins on the St. Gobain property.
	Groundwater Discharge
	Information is needed regarding the groundwater quality in the infiltration gallery in order to determine if sediment COCs are present in groundwater and if these COCs may be transported to the LDW.
	Surface Runoff and Bank Erosion/Leaching
	Additional information is needed to determine if J.A. Jack has re-graded the area adjacent to the LDW and beneath the barge-to-land conveyer system.
	Additional information is needed to determine if the discharges from the Pinch Point area are permissible and if these discharges are a potential source of sediment recontamination.
	Additional information is needed to determine if the discharges from the Pinch Point area are permissible and if these discharges are a potential source of sediment recontamination.

Table 6
Summary of Data Gaps
King County Lease Parcels Source Control Area

Facility	Data Gap
Properties in the Michigan Street CSO Basin	
	Combined Sewer Discharges
Bob's Texaco Service and Chevron 9-0636	These properties need to be evaluated to determine the potential for sediment recontamination, if any, that may be associated with these facilities.
All Properties	Information on current activities at this property is needed to assess the potential for sediment recontamination associated with the property, including the locations of catch basins and storm drains, status and location of hazardous materials or potentially harmful chemicals/wastes stored or used at the facilities, and the adequacy of containment systems (if any).

Appendix A

Sediment Sampling Data
RM 1.0-1.2 East (King County Lease Parcels)

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,4,6,7,8-HpCDD	1.80E-03	2.33	7.73E-02					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	1,2,3,4,6,7,8-HpCDD	6.68E-04	1.43	4.67E-02					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,4,6,7,8-HpCDD	4.33E-04	1.05	4.12E-02					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,4,6,7,8-HpCDD	3.13E-04	1.74	1.80E-02					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,4,6,7,8-HpCDF	4.11E-04	2.33	1.76E-02					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,4,6,7,8-HpCDF	8.25E-05	1.05	7.86E-03					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	1,2,3,4,6,7,8-HpCDF	6.54E-05	1.43	4.57E-03					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,4,6,7,8-HpCDF	5.83E-05	1.74	3.35E-03					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,4,7,8,9-HpCDF	4.28E-05	2.33	1.84E-03					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,4,7,8,9-HpCDF	8.31E-06 J	1.05	7.91E-04					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	1,2,3,4,7,8,9-HpCDF	5.80E-06 J	1.43	4.06E-04					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,4,7,8,9-HpCDF	4.51E-06 J	1.74	2.59E-04					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,4,7,8-HxCDD	1.27E-05	2.33	5.45E-04					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	1,2,3,4,7,8-HxCDD	2.27E-06 J	1.43	1.59E-04					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,4,7,8-HxCDD	2.19E-06 J	1.74	1.26E-04					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,4,7,8-HxCDD	2.10E-06 J	1.05	2.00E-04					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,4,7,8-HxCDF	9.71E-05	2.33	4.17E-03					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,4,7,8-HxCDF	1.42E-05	1.05	1.35E-03					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	1,2,3,4,7,8-HxCDF	9.13E-06 J	1.43	6.38E-04					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,4,7,8-HxCDF	6.87E-06 J	1.74	3.95E-04					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,6,7,8-HxCDD	7.19E-05	2.33	3.09E-03					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	1,2,3,6,7,8-HxCDD	1.79E-05 J	1.43	1.25E-03					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,6,7,8-HxCDD	1.30E-05	1.05	1.24E-03					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,6,7,8-HxCDD	1.14E-05 J	1.74	6.55E-04					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,6,7,8-HxCDF	2.26E-05	2.33	9.70E-04					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,6,7,8-HxCDF	3.85E-06 J	1.05	3.67E-04					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	1,2,3,6,7,8-HxCDF	2.67E-06 J	1.43	1.87E-04					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,6,7,8-HxCDF	2.24E-06 J	1.74	1.29E-04					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,7,8,9-HxCDD	4.00E-05	2.33	1.72E-03					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	1,2,3,7,8,9-HxCDD	9.44E-06 J	1.43	6.60E-04					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,7,8,9-HxCDD	7.01E-06 J	1.74	4.03E-04					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,7,8,9-HxCDD	7.00E-06 J	1.05	6.67E-04					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,7,8,9-HxCDF	1.20E-06 J	2.33	5.15E-05					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,7,8,9-HxCDF	3.31E-07 J	1.05	3.15E-05					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,7,8,9-HxCDF	2.36E-07 J	1.74	1.36E-05					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,7,8-PeCDD	8.33E-06	2.33	3.58E-04					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	1,2,3,7,8-PeCDD	1.76E-06 J	1.43	1.23E-04					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,7,8-PeCDD	1.45E-06 J	1.05	1.38E-04					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,7,8-PeCDD	1.35E-06 J	1.74	7.76E-05					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	1,2,3,7,8-PeCDF	1.38E-05	2.33	5.92E-04					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	1,2,3,7,8-PeCDF	1.30E-06 J	1.05	1.24E-04					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	1,2,3,7,8-PeCDF	1.17E-06 J	1.43	8.18E-05					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	1,2,3,7,8-PeCDF	1.04E-06 J	1.74	5.98E-05					

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	1,4-Dichlorobenzene	4.00E-03 J	2.58	1.55E-01	3.1	9	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	1,4-Dichlorobenzene	3.70E-03 J	2.65	1.40E-01	3.1	9	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	1,4-Dichlorobenzene	3.50E-03 J	2.67	1.31E-01	3.1	9	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	1,4-Dichlorobenzene	3.20E-03 J	2.53	1.26E-01	3.1	9	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	1,4-Dichlorobenzene	3.10E-03 J	2.72	1.14E-01	3.1	9	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	1,4-Dichlorobenzene	2.80E-03 J	2.77	1.01E-01	3.1	9	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	1,4-Dichlorobenzene	2.20E-03 J	2.56	8.59E-02	3.1	9	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	1,4-Dichlorobenzene	2.20E-03 J	2.57	8.56E-02	3.1	9	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	2,3,4,6,7,8-HxCDF	1.19E-05	2.33	5.11E-04					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	2,3,4,6,7,8-HxCDF	1.99E-06 J	1.05	1.90E-04					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	2,3,4,6,7,8-HxCDF	1.73E-06 J	1.74	9.94E-05					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	2,3,4,6,7,8-HxCDF	1.69E-06 J	1.43	1.18E-04					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	2,3,4,7,8-PeCDF	6.25E-05	2.33	2.68E-03					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	2,3,4,7,8-PeCDF	4.49E-06 J	1.05	4.28E-04					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	2,3,4,7,8-PeCDF	2.85E-06 J	1.43	1.99E-04					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	2,3,4,7,8-PeCDF	2.37E-06 J	1.74	1.36E-04					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	2,3,7,8-TCDD	2.94E-06	2.33	1.26E-04					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	2,3,7,8-TCDD	8.23E-07 J	1.43	5.76E-05					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	2,3,7,8-TCDD	7.10E-07 J	1.05	6.76E-05					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	2,3,7,8-TCDD	4.95E-07 J	1.74	2.84E-05					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	2,3,7,8-TCDF	3.97E-04	2.33	1.70E-02					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	2,3,7,8-TCDF	1.79E-06 J	1.05	1.70E-04					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	2,3,7,8-TCDF	1.48E-06 J	1.43	1.03E-04					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	2,3,7,8-TCDF	1.29E-06 J	1.74	7.41E-05					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	2-Methylnaphthalene	3.30E+00	2.01	1.64E+02	38	64	mg/kg OC	4.3	2.6
EPA Site Inspection	DR087	8/12/1998	2-Methylnaphthalene	4.10E-01	1.67	2.46E+01	38	64	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	2-Methylnaphthalene	9.10E-02	3.93	2.32E+00	38	64	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	2-Methylnaphthalene	3.00E-02	1.59	1.89E+00	38	64	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	2-Methylnaphthalene	3.00E-02	2.54	1.18E+00	38	64	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	2-Methylnaphthalene	2.00E-02	2.54	7.87E-01	38	64	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	2-Methylnaphthalene	2.00E-02	2.18	9.17E-01	38	64	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	3-Methylphenol and 4-Methylphenol Coelution	1.00E-01	2.54	3.94E+00					
EPA Site Inspection	DR062	8/17/1998	3-Methylphenol and 4-Methylphenol Coelution	2.00E-02	2.18	9.17E-01					
EPA Site Inspection	DR025	8/17/1998	4,4'-DDD	1.00E-02	2.54	3.94E-01					
EPA Site Inspection	DR025	8/17/1998	4,4'-DDE	7.00E-03	2.54	2.76E-01					
EPA Site Inspection	DR025	8/17/1998	4,4'-DDE	2.00E-03	2.54	7.87E-02					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Acenaphthene	5.20E+00	2.01	2.59E+02	16	57	mg/kg OC	16	4.5
EPA Site Inspection	DR087	8/12/1998	Acenaphthene	5.30E-01	1.67	3.17E+01	16	57	mg/kg OC	2.0	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Acenaphthene	2.60E-01	3.93	6.62E+00	16	57	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Acenaphthene	9.00E-02	1.97	4.57E+00	16	57	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Acenaphthene	8.82E-02	2.57	3.43E+00	16	57	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Acenaphthene	8.17E-02	2.67	3.06E+00	16	57	mg/kg OC	<1	<1

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Acenaphthene	8.06E-02	2.53	3.19E+00	16	57	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Acenaphthene	8.00E-02	1.59	5.03E+00	16	57	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Acenaphthene	7.52E-02	2.77	2.71E+00	16	57	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Acenaphthene	5.45E-02	2.72	2.00E+00	16	57	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Acenaphthene	5.16E-02	2.56	2.02E+00	16	57	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Acenaphthene	4.00E-02	2.54	1.57E+00	16	57	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Acenaphthene	3.90E-02	2.58	1.51E+00	16	57	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Acenaphthene	3.10E-02	2.65	1.17E+00	16	57	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Acenaphthene	3.00E-02	2.54	1.18E+00	16	57	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Acenaphthene	3.00E-02	2.18	1.38E+00	16	57	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Acenaphthene	2.00E-02	2.51	7.97E-01	16	57	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Acenaphthene	2.00E-02	2.54	7.87E-01	16	57	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Acenaphthylene	1.30E-01	2.01	6.47E+00	66	66	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Acenaphthylene	2.00E-02	2.54	7.87E-01	66	66	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Acenaphthylene	2.00E-02	2.54	7.87E-01	66	66	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Aluminum	2.79E+04	2.67						
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Aluminum	2.78E+04	2.72						
EPA Site Inspection	DR025	8/17/1998	Aluminum	2.73E+04	2.54						
EPA Site Inspection	DR086	8/31/1998	Aluminum	2.72E+04	1.97						
EPA Site Inspection	DR025	8/17/1998	Aluminum	2.71E+04	2.54						
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Aluminum	2.60E+04 J	2.54						
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Aluminum	2.60E+04 J	2.53						
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Aluminum	2.50E+04 J	2.57						
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Aluminum	2.50E+04 J	2.77						
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Aluminum	2.40E+04 J	2.53						
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Aluminum	2.40E+04 J	2.65						
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Aluminum	2.40E+04 J	2.54						
EPA Site Inspection	DR024	8/17/1998	Aluminum	2.34E+04	2.51						
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Aluminum	2.30E+04 J	2.56						
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Aluminum	2.30E+04 J	2.54						
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Aluminum	2.30E+04 J	2.57						
EPA Site Inspection	DR023	8/17/1998	Aluminum	2.25E+04	2.51						
EPA Site Inspection	DR063	8/17/1998	Aluminum	2.22E+04	2.62						
EPA Site Inspection	DR088	8/31/1998	Aluminum	2.21E+04	1.68						
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Aluminum	2.20E+04 J	2.58						
EPA Site Inspection	DR025	8/17/1998	Aluminum	2.02E+04	2.54						
EPA Site Inspection	DR062	8/17/1998	Aluminum	1.90E+04	2.18						
EPA Site Inspection	DR087	8/12/1998	Aluminum	1.58E+04	1.67						
EPA Site Inspection	DR022	8/17/1998	Aluminum	1.51E+04	1.59						
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Anthracene	3.50E+00	2.01	1.74E+02	220	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Anthracene	3.60E-01	2.18	1.65E+01	220	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Anthracene	2.70E-01	1.67	1.62E+01	220	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Anthracene	2.50E-01	1.59	1.57E+01	220	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Anthracene	2.50E-01	3.93	6.36E+00	220	1200	mg/kg OC	<1	<1

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR025	8/17/1998	Anthracene	2.00E-01	2.54	7.87E+00	220	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Anthracene	1.60E-01	1.97	8.12E+00	220	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Anthracene	1.40E-01 J	2.72	5.15E+00	220	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Anthracene	1.30E-01	2.51	5.18E+00	220	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Anthracene	1.30E-01 J	2.58	5.04E+00	220	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Anthracene	1.20E-01 J	2.56	4.69E+00	220	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Anthracene	1.20E-01 J	2.53	4.74E+00	220	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Anthracene	1.20E-01 J	2.57	4.67E+00	220	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Anthracene	1.10E-01	2.51	4.38E+00	220	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Anthracene	1.10E-01	2.54	4.33E+00	220	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Anthracene	1.10E-01 J	2.67	4.12E+00	220	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Anthracene	9.90E-02	2.04	4.85E+00	220	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Anthracene	9.70E-02 J	2.77	3.50E+00	220	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Anthracene	9.00E-02	2.62	3.44E+00	220	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Anthracene	8.00E-02	2.54	3.15E+00	220	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Anthracene	7.90E-02 J	2.65	2.98E+00	220	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Anthracene	6.70E-02	1.74	3.85E+00	220	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Anthracene	5.80E-02 J	1.43	4.06E+00	220	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Anthracene	4.00E-02	1.68	2.38E+00	220	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Anthracene	2.70E-02	2.33	1.16E+00	220	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Antimony	4.90E+00 J	2.67	1.84E+02					
EPA Site Inspection	DR088	8/31/1998	Aroclor-1242	3.00E-01	1.68	1.79E+01					
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Aroclor-1242	1.70E-01 J	1.89	8.99E+00					
EPA Site Inspection	DR087	8/12/1998	Aroclor-1242	1.54E-01	1.67	9.22E+00					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Aroclor-1242	1.40E-01	2.01	6.97E+00					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Aroclor-1242	1.10E-01	1.05	1.05E+01					
EPA Site Inspection	DR025	8/17/1998	Aroclor-1242	8.30E-02	2.54	3.27E+00					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Aroclor-1242	7.60E-02 J	1.43	5.31E+00					
EPA Site Inspection	DR025	8/17/1998	Aroclor-1242	4.00E-02	2.54	1.57E+00					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Aroclor-1242	2.60E-02	1.74	1.49E+00					
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Aroclor-1248	2.80E-02	2.04	1.37E+00					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Aroclor-1254	3.30E+00	2.33	1.42E+02					
EPA Site Inspection	DR025	8/17/1998	Aroclor-1254	6.18E-01	2.54	2.43E+01					
EPA Site Inspection	DR088	8/31/1998	Aroclor-1254	4.68E-01	1.68	2.79E+01					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Aroclor-1254	3.40E-01	2.01	1.69E+01					
EPA Site Inspection	DR087	8/12/1998	Aroclor-1254	3.09E-01	1.67	1.85E+01					
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Aroclor-1254	2.30E-01	3.93	5.85E+00					
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Aroclor-1254	2.20E-01	1.89	1.16E+01					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Aroclor-1254	2.10E-01	1.05	2.00E+01					
EPA Site Inspection	DR025	8/17/1998	Aroclor-1254	1.48E-01	2.54	5.83E+00					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Aroclor-1254	1.40E-01 J	1.43	9.79E+00					
EPA Site Inspection	DR063	8/17/1998	Aroclor-1254	1.26E-01	2.62	4.81E+00					
EPA Site Inspection	DR025	8/17/1998	Aroclor-1254	1.06E-01	2.54	4.17E+00					
EPA Site Inspection	DR024	8/17/1998	Aroclor-1254	1.00E-01	2.51	3.98E+00					

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Aroclor-1254	1.00E-01	2.77	3.61E+00					
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Aroclor-1254	8.50E-02	2.67	3.18E+00					
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Aroclor-1254	7.60E-02	2.53	3.00E+00					
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Aroclor-1254	6.80E-02	2.58	2.64E+00					
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Aroclor-1254	6.60E-02	2.57	2.57E+00					
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Aroclor-1254	6.40E-02	2.56	2.50E+00					
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Aroclor-1254	6.30E-02	2.65	2.38E+00					
EPA Site Inspection	DR086	8/31/1998	Aroclor-1254	6.20E-02	1.97	3.15E+00					
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Aroclor-1254	6.20E-02	2.72	2.28E+00					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Aroclor-1254	5.70E-02	1.74	3.28E+00					
EPA Site Inspection	DR062	8/17/1998	Aroclor-1254	5.60E-02	2.18	2.57E+00					
EPA Site Inspection	DR022	8/17/1998	Aroclor-1254	4.30E-02	1.59	2.70E+00					
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Aroclor-1254	4.20E-02	2.04	2.06E+00					
EPA Site Inspection	DR023	8/17/1998	Aroclor-1254	2.60E-02	2.51	1.04E+00					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Aroclor-1260	1.80E+00	2.33	7.73E+01					
EPA Site Inspection	DR025	8/17/1998	Aroclor-1260	4.53E-01	2.54	1.78E+01					
EPA Site Inspection	DR088	8/31/1998	Aroclor-1260	2.42E-01 J	1.68	1.44E+01					
EPA Site Inspection	DR087	8/12/1998	Aroclor-1260	2.33E-01	1.67	1.40E+01					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Aroclor-1260	2.30E-01 J	1.43	1.61E+01					
EPA Site Inspection	DR063	8/17/1998	Aroclor-1260	1.76E-01	2.62	6.72E+00					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Aroclor-1260	1.70E-01	2.01	8.46E+00					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Aroclor-1260	1.60E-01	1.05	1.52E+01					
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Aroclor-1260	1.20E-01	1.89	6.35E+00					
EPA Site Inspection	DR025	8/17/1998	Aroclor-1260	1.04E-01	2.54	4.09E+00					
EPA Site Inspection	DR025	8/17/1998	Aroclor-1260	9.80E-02	2.54	3.86E+00					
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Aroclor-1260	9.10E-02	2.77	3.29E+00					
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Aroclor-1260	9.00E-02	2.58	3.49E+00					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Aroclor-1260	8.30E-02	1.74	4.77E+00					
EPA Site Inspection	DR024	8/17/1998	Aroclor-1260	8.00E-02	2.51	3.19E+00					
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Aroclor-1260	6.70E-02	2.53	2.65E+00					
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Aroclor-1260	5.70E-02	2.57	2.22E+00					
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Aroclor-1260	5.60E-02	2.56	2.19E+00					
EPA Site Inspection	DR062	8/17/1998	Aroclor-1260	5.40E-02 J	2.18	2.48E+00					
EPA Site Inspection	DR086	8/31/1998	Aroclor-1260	5.40E-02 J	1.97	2.74E+00					
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Aroclor-1260	5.10E-02	2.67	1.91E+00					
EPA Site Inspection	DR022	8/17/1998	Aroclor-1260	4.30E-02 J	1.59	2.70E+00					
EPA Site Inspection	DR023	8/17/1998	Aroclor-1260	4.10E-02 J	2.51	1.63E+00					
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Aroclor-1260	4.10E-02	2.72	1.51E+00					
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Aroclor-1260	3.80E-02	2.04	1.86E+00					
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Arsenic	3.05E+01	3.93		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Arsenic	2.20E+01	2.54		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Arsenic	2.20E+01	2.77		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Arsenic	2.00E+01	2.65		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Arsenic	2.00E+01	2.57		57	93	mg/kg DW	<1	<1

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Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Arsenic	1.90E+01	2.58		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Arsenic	1.80E+01	2.54		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Arsenic	1.80E+01	2.53		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Arsenic	1.80E+01	2.57		57	93	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Arsenic	1.77E+01	1.05		57	93	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Arsenic	1.71E+01	2.04		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR087	8/12/1998	Arsenic	1.68E+01 J	1.67		57	93	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Arsenic	1.67E+01	1.89		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Arsenic	1.60E+01	2.54		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR088	8/31/1998	Arsenic	1.54E+01	1.68		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Arsenic	1.50E+01	2.72		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Arsenic	1.50E+01	2.56		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Arsenic	1.50E+01	2.53		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Arsenic	1.40E+01	2.54		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Arsenic	1.40E+01	2.67		57	93	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Arsenic	1.40E+01	2.54		57	93	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Arsenic	1.36E+01	2.33		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Arsenic	1.29E+01	2.54		57	93	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Arsenic	1.29E+01	1.43		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR063	8/17/1998	Arsenic	1.26E+01	2.62		57	93	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Arsenic	1.26E+01	2.01		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR024	8/17/1998	Arsenic	1.24E+01	2.51		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR023	8/17/1998	Arsenic	1.19E+01	2.51		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR062	8/17/1998	Arsenic	1.09E+01	2.18		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR022	8/17/1998	Arsenic	9.70E+00	1.59		57	93	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Arsenic	9.50E+00	1.74		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR086	8/31/1998	Arsenic	9.10E+00	1.97		57	93	mg/kg DW	<1	<1
EPA Site Inspection	DR087	8/12/1998	Barium	1.35E+02	1.67	8.08E+03					
EPA Site Inspection	DR088	8/31/1998	Barium	1.28E+02	1.68	7.62E+03					
EPA Site Inspection	DR025	8/17/1998	Barium	1.14E+02	2.54	4.49E+03					
EPA Site Inspection	DR025	8/17/1998	Barium	1.02E+02	2.54	4.02E+03					
EPA Site Inspection	DR024	8/17/1998	Barium	9.20E+01	2.51	3.67E+03					
EPA Site Inspection	DR086	8/31/1998	Barium	9.10E+01	1.97	4.62E+03					
EPA Site Inspection	DR063	8/17/1998	Barium	8.70E+01	2.62	3.32E+03					
EPA Site Inspection	DR023	8/17/1998	Barium	8.20E+01	2.51	3.27E+03					
EPA Site Inspection	DR025	8/17/1998	Barium	8.20E+01	2.54	3.23E+03					
EPA Site Inspection	DR062	8/17/1998	Barium	7.40E+01	2.18	3.39E+03					
EPA Site Inspection	DR022	8/17/1998	Barium	5.10E+01	1.59	3.21E+03					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzo(a)anthracene	3.20E+00	2.01	1.59E+02	110	270	mg/kg OC	1.4	<1
EPA Site Inspection	DR022	8/17/1998	Benzo(a)anthracene	7.80E-01	1.59	4.91E+01	110	270	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Benzo(a)anthracene	7.60E-01	1.67	4.55E+01	110	270	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Benzo(a)anthracene	6.20E-01	2.18	2.84E+01	110	270	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(a)anthracene	4.70E-01	2.54	1.85E+01	110	270	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Benzo(a)anthracene	4.10E-01	2.51	1.63E+01	110	270	mg/kg OC	<1	<1

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Benzo(a)anthracene	3.90E-01	3.93	9.92E+00	110	270	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Benzo(a)anthracene	3.80E-01	1.97	1.93E+01	110	270	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Benzo(a)anthracene	3.50E-01	2.51	1.39E+01	110	270	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Benzo(a)anthracene	3.50E-01 J	2.58	1.36E+01	110	270	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(a)anthracene	3.30E-01	2.54	1.30E+01	110	270	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Benzo(a)anthracene	3.30E-01 J	2.77	1.19E+01	110	270	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Benzo(a)anthracene	3.20E-01 J	2.67	1.20E+01	110	270	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Benzo(a)anthracene	3.20E-01 J	2.57	1.25E+01	110	270	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Benzo(a)anthracene	3.00E-01	2.62	1.15E+01	110	270	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Benzo(a)anthracene	3.00E-01 J	2.72	1.10E+01	110	270	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Benzo(a)anthracene	2.90E-01 J	2.56	1.13E+01	110	270	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Benzo(a)anthracene	2.80E-01 J	2.53	1.11E+01	110	270	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Benzo(a)anthracene	2.50E-01 J	2.65	9.43E+00	110	270	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Benzo(a)anthracene	2.20E-01	2.04	1.08E+01	110	270	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(a)anthracene	2.00E-01	2.54	7.87E+00	110	270	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Benzo(a)anthracene	1.80E-01	1.74	1.03E+01	110	270	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Benzo(a)anthracene	1.60E-01	2.33	6.87E+00	110	270	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Benzo(a)anthracene	1.60E-01	1.43	1.12E+01	110	270	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Benzo(a)anthracene	1.20E-01	1.68	7.14E+00	110	270	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Benzo(a)anthracene	6.70E-02	1.89	3.54E+00	110	270	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Benzo(a)anthracene	4.90E-02 J	1.05	4.67E+00	110	270	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzo(a)pyrene	2.00E+00	2.01	9.95E+01	99	210	mg/kg OC	1.0	<1
EPA Site Inspection	DR087	8/12/1998	Benzo(a)pyrene	8.40E-01	1.67	5.03E+01	99	210	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Benzo(a)pyrene	4.70E-01	3.93	1.20E+01	99	210	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Benzo(a)pyrene	4.50E-01	1.59	2.83E+01	99	210	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Benzo(a)pyrene	4.40E-01	2.18	2.02E+01	99	210	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(a)pyrene	4.30E-01	2.54	1.69E+01	99	210	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Benzo(a)pyrene	3.70E-01	2.51	1.47E+01	99	210	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(a)pyrene	3.60E-01	2.54	1.42E+01	99	210	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(a)pyrene	3.40E-01	2.54	1.34E+01	99	210	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Benzo(a)pyrene	2.80E-01	2.51	1.12E+01	99	210	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Benzo(a)pyrene	2.70E-01 J	2.67	1.01E+01	99	210	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Benzo(a)pyrene	2.60E-01	2.62	9.92E+00	99	210	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Benzo(a)pyrene	2.60E-01 J	2.72	9.56E+00	99	210	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Benzo(a)pyrene	2.50E-01 J	2.58	9.69E+00	99	210	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Benzo(a)pyrene	2.40E-01 J	2.56	9.38E+00	99	210	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Benzo(a)pyrene	2.30E-01	2.04	1.13E+01	99	210	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Benzo(a)pyrene	2.20E-01 J	2.77	7.94E+00	99	210	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Benzo(a)pyrene	2.20E-01	1.74	1.26E+01	99	210	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Benzo(a)pyrene	2.10E-01	1.97	1.07E+01	99	210	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Benzo(a)pyrene	2.10E-01 J	2.53	8.30E+00	99	210	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Benzo(a)pyrene	2.10E-01 J	2.57	8.17E+00	99	210	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Benzo(a)pyrene	1.90E-01 J	2.65	7.17E+00	99	210	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Benzo(a)pyrene	1.60E-01	1.68	9.52E+00	99	210	mg/kg OC	<1	<1

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Benzo(a)pyrene	1.60E-01	1.43	1.12E+01	99	210	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Benzo(a)pyrene	1.40E-01	2.33	6.01E+00	99	210	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Benzo(a)pyrene	6.60E-02	1.89	3.49E+00	99	210	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Benzo(a)pyrene	6.20E-02	1.05	5.90E+00	99	210	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzo(b)fluoranthene	2.70E+00	2.01	1.34E+02	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Benzo(b)fluoranthene	8.40E-01	1.67	5.03E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Benzo(b)fluoranthene	6.20E-01	1.59	3.90E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Benzo(b)fluoranthene	5.70E-01	2.18	2.61E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Benzo(b)fluoranthene	5.38E-01	2.58	2.09E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(b)fluoranthene	5.30E-01	2.54	2.09E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Benzo(b)fluoranthene	5.19E-01	2.77	1.87E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Benzo(b)fluoranthene	5.14E-01	2.53	2.03E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Benzo(b)fluoranthene	4.98E-01	2.57	1.94E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(b)fluoranthene	4.80E-01	2.54	1.89E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Benzo(b)fluoranthene	4.70E-01	2.72	1.73E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Benzo(b)fluoranthene	4.64E-01	2.67	1.74E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Benzo(b)fluoranthene	4.60E-01	2.51	1.83E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Benzo(b)fluoranthene	4.50E-01	3.93	1.15E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Benzo(b)fluoranthene	4.49E-01	2.65	1.69E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Benzo(b)fluoranthene	4.40E-01	2.56	1.72E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(b)fluoranthene	3.80E-01	2.54	1.50E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Benzo(b)fluoranthene	3.70E-01	2.62	1.41E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Benzo(b)fluoranthene	3.60E-01	2.51	1.43E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Benzo(b)fluoranthene	3.60E-01	1.74	2.07E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Benzo(b)fluoranthene	3.30E-01	2.04	1.62E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Benzo(b)fluoranthene	2.50E-01	1.97	1.27E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Benzo(b)fluoranthene	2.30E-01	2.33	9.87E+00	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Benzo(b)fluoranthene	1.90E-01	1.43	1.33E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Benzo(b)fluoranthene	1.80E-01	1.68	1.07E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Benzo(b)fluoranthene	7.70E-02	1.89	4.07E+00	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Benzo(b)fluoranthene	7.60E-02	1.05	7.24E+00	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Benzo(g,h,i)perylene	5.20E-01	1.67	3.11E+01	31	78	mg/kg OC	1.0	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzo(g,h,i)perylene	4.70E-01	2.01	2.34E+01	31	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Benzo(g,h,i)perylene	3.20E-01 J	2.53	1.26E+01	31	78	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Benzo(g,h,i)perylene	2.40E-01	2.51	9.56E+00	31	78	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(g,h,i)perylene	2.30E-01	2.54	9.06E+00	31	78	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Benzo(g,h,i)perylene	2.30E-01	2.18	1.06E+01	31	78	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(g,h,i)perylene	2.20E-01	2.54	8.66E+00	31	78	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Benzo(g,h,i)perylene	2.10E-01	1.59	1.32E+01	31	78	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(g,h,i)perylene	1.90E-01	2.54	7.48E+00	31	78	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Benzo(g,h,i)perylene	1.80E-01	2.51	7.17E+00	31	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Benzo(g,h,i)perylene	1.70E-01 J	2.77	6.14E+00	31	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Benzo(g,h,i)perylene	1.60E-01 J	2.57	6.23E+00	31	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Benzo(g,h,i)perylene	1.60E-01	3.93	4.07E+00	31	78	mg/kg OC	<1	<1

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Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR063	8/17/1998	Benzo(g,h,i)perylene	1.50E-01	2.62	5.73E+00	31	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Benzo(g,h,i)perylene	1.50E-01 J	2.72	5.51E+00	31	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Benzo(g,h,i)perylene	1.50E-01 J	2.65	5.66E+00	31	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Benzo(g,h,i)perylene	1.50E-01 J	2.58	5.81E+00	31	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Benzo(g,h,i)perylene	1.40E-01 J	2.67	5.24E+00	31	78	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Benzo(g,h,i)perylene	1.20E-01	1.68	7.14E+00	31	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Benzo(g,h,i)perylene	1.20E-01 J	2.56	4.69E+00	31	78	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Benzo(g,h,i)perylene	1.10E-01	1.97	5.58E+00	31	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Benzo(g,h,i)perylene	9.80E-02	1.74	5.63E+00	31	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Benzo(g,h,i)perylene	9.20E-02	1.43	6.43E+00	31	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Benzo(g,h,i)perylene	5.80E-02 J	2.04	2.84E+00	31	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Benzo(g,h,i)perylene	3.60E-02	1.89	1.90E+00	31	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzo(k)fluoranthene	2.40E+00	2.01	1.19E+02	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Benzo(k)fluoranthene	7.00E-01	1.67	4.19E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Benzo(k)fluoranthene	6.20E-01	3.93	1.58E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Benzo(k)fluoranthene	4.50E-01	1.59	2.83E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Benzo(k)fluoranthene	4.00E-01	2.18	1.83E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(k)fluoranthene	3.90E-01	2.54	1.54E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Benzo(k)fluoranthene	3.80E-01	2.04	1.86E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Benzo(k)fluoranthene	3.70E-01	2.51	1.47E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(k)fluoranthene	3.40E-01	2.54	1.34E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzo(k)fluoranthene	3.10E-01	2.54	1.22E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Benzo(k)fluoranthene	2.80E-01	2.51	1.12E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Benzo(k)fluoranthene	2.40E-01 J	2.77	8.66E+00	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Benzo(k)fluoranthene	2.40E-01 J	2.58	9.30E+00	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Benzo(k)fluoranthene	2.30E-01	2.62	8.78E+00	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Benzo(k)fluoranthene	2.10E-01	1.97	1.07E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Benzo(k)fluoranthene	2.00E-01	2.67	7.49E+00	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Benzo(k)fluoranthene	1.91E-01	2.72	7.02E+00	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Benzo(k)fluoranthene	1.90E-01 J	2.53	7.51E+00	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Benzo(k)fluoranthene	1.90E-01	1.74	1.09E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Benzo(k)fluoranthene	1.80E-01 J	2.57	7.00E+00	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Benzo(k)fluoranthene	1.80E-01 J	2.65	6.79E+00	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Benzo(k)fluoranthene	1.80E-01	1.43	1.26E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Benzo(k)fluoranthene	1.60E-01 J	2.56	6.25E+00	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Benzo(k)fluoranthene	1.40E-01	1.68	8.33E+00	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Benzo(k)fluoranthene	7.40E-02	1.05	7.05E+00	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Benzo(k)fluoranthene	5.30E-02	1.89	2.80E+00	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzofluoranthenes (total-calc'd)	5.10E+00	2.01	2.54E+02	230	450	mg/kg OC	1.1	<1
EPA Site Inspection	DR087	8/12/1998	Benzofluoranthenes (total-calc'd)	1.54E+00	1.67	9.22E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Benzofluoranthenes (total-calc'd)	1.07E+00	1.59	6.73E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Benzofluoranthenes (total-calc'd)	1.07E+00	3.93	2.72E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Benzofluoranthenes (total-calc'd)	9.70E-01	2.18	4.45E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzofluoranthenes (total-calc'd)	9.20E-01	2.54	3.62E+01	230	450	mg/kg OC	<1	<1

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR023	8/17/1998	Benzofluoranthenes (total-calc'd)	8.30E-01	2.51	3.31E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzofluoranthenes (total-calc'd)	8.20E-01	2.54	3.23E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Benzofluoranthenes (total-calc'd)	7.78E-01	2.58	3.02E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Benzofluoranthenes (total-calc'd)	7.59E-01	2.77	2.74E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Benzofluoranthenes (total-calc'd)	7.10E-01	2.04	3.48E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Benzofluoranthenes (total-calc'd)	7.04E-01	2.53	2.78E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Benzofluoranthenes (total-calc'd)	6.90E-01	2.54	2.72E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Benzofluoranthenes (total-calc'd)	6.78E-01	2.57	2.64E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Benzofluoranthenes (total-calc'd)	6.64E-01	2.67	2.49E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Benzofluoranthenes (total-calc'd)	6.61E-01	2.72	2.43E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Benzofluoranthenes (total-calc'd)	6.40E-01	2.51	2.55E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Benzofluoranthenes (total-calc'd)	6.29E-01	2.65	2.37E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Benzofluoranthenes (total-calc'd)	6.00E-01	2.62	2.29E+01	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Benzofluoranthenes (total-calc'd)	6.00E-01	2.56	2.34E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Benzofluoranthenes (total-calc'd)	5.50E-01	1.74	3.16E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Benzofluoranthenes (total-calc'd)	4.60E-01	1.97	2.34E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Benzofluoranthenes (total-calc'd)	3.70E-01	1.43	2.59E+01	230	450	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Benzofluoranthenes (total-calc'd)	3.20E-01	1.68	1.90E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Benzofluoranthenes (total-calc'd)	2.30E-01	2.33	9.87E+00	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Benzofluoranthenes (total-calc'd)	1.50E-01	1.05	1.43E+01	230	450	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Benzofluoranthenes (total-calc'd)	1.30E-01	1.89	6.88E+00	230	450	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Benzoic acid	2.20E-01	2.56		650	650	ug/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzoic acid	8.20E-02	2.01		650	650	ug/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Beryllium	5.90E-01	2.77	2.13E+01					
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Beryllium	5.70E-01	2.65	2.15E+01					
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Beryllium	5.60E-01	2.54	2.20E+01					
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Beryllium	5.50E-01	2.57	2.14E+01					
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Beryllium	5.20E-01	2.58	2.02E+01					
EPA Site Inspection	DR023	8/17/1998	Beryllium	5.10E-01	2.51	2.03E+01					
EPA Site Inspection	DR063	8/17/1998	Beryllium	5.00E-01	2.62	1.91E+01					
EPA Site Inspection	DR024	8/17/1998	Beryllium	4.90E-01	2.51	1.95E+01					
EPA Site Inspection	DR086	8/31/1998	Beryllium	4.70E-01	1.97	2.39E+01					
EPA Site Inspection	DR025	8/17/1998	Beryllium	4.60E-01	2.54	1.81E+01					
EPA Site Inspection	DR062	8/17/1998	Beryllium	4.30E-01	2.18	1.97E+01					
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Beryllium	4.20E-01	2.54	1.65E+01					
EPA Site Inspection	DR025	8/17/1998	Beryllium	4.10E-01	2.54	1.61E+01					
EPA Site Inspection	DR088	8/31/1998	Beryllium	4.00E-01	1.68	2.38E+01					
EPA Site Inspection	DR025	8/17/1998	Beryllium	3.90E-01	2.54	1.54E+01					
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Beryllium	3.90E-01	2.53	1.54E+01					
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Beryllium	3.80E-01	2.56	1.48E+01					
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Beryllium	3.70E-01	2.67	1.39E+01					
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Beryllium	3.70E-01	2.53	1.46E+01					
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Beryllium	3.60E-01	2.54	1.42E+01					
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Beryllium	3.60E-01	2.57	1.40E+01					

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Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR087	8/12/1998	Beryllium	3.50E-01	1.67	2.10E+01					
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Beryllium	3.50E-01	2.72	1.29E+01					
EPA Site Inspection	DR022	8/17/1998	Beryllium	3.00E-01	1.59	1.89E+01					
EPA Site Inspection	DR025	8/17/1998	Bis(2-ethylhexyl)phthalate	8.00E-01	2.54	3.15E+01	47	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Bis(2-ethylhexyl)phthalate	7.64E-01	2.67	2.86E+01	47	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Bis(2-ethylhexyl)phthalate	7.60E-01	2.33	3.26E+01	47	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Bis(2-ethylhexyl)phthalate	7.54E-01	2.72	2.77E+01	47	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Bis(2-ethylhexyl)phthalate	7.41E-01	2.77	2.68E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Bis(2-ethylhexyl)phthalate	6.60E-01 J	1.59	4.15E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Bis(2-ethylhexyl)phthalate	6.30E-01	2.51	2.51E+01	47	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Bis(2-ethylhexyl)phthalate	6.10E-01	2.56	2.38E+01	47	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Bis(2-ethylhexyl)phthalate	5.94E-01	2.57	2.31E+01	47	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Bis(2-ethylhexyl)phthalate	5.94E-01	2.58	2.30E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Bis(2-ethylhexyl)phthalate	5.70E-01	2.18	2.61E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Bis(2-ethylhexyl)phthalate	5.70E-01	1.67	3.41E+01	47	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Bis(2-ethylhexyl)phthalate	5.67E-01	2.65	2.14E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Bis(2-ethylhexyl)phthalate	5.60E-01	2.54	2.20E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Bis(2-ethylhexyl)phthalate	5.10E-01	2.62	1.95E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Bis(2-ethylhexyl)phthalate	4.90E-01	2.54	1.93E+01	47	78	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Bis(2-ethylhexyl)phthalate	4.71E-01	2.53	1.86E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Bis(2-ethylhexyl)phthalate	4.50E-01	2.51	1.79E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Bis(2-ethylhexyl)phthalate	4.10E-01	1.68	2.44E+01	47	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Bis(2-ethylhexyl)phthalate	3.80E-01	2.04	1.86E+01	47	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Bis(2-ethylhexyl)phthalate	3.70E-01	2.01	1.84E+01	47	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Bis(2-ethylhexyl)phthalate	3.30E-01	1.74	1.90E+01	47	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Bis(2-ethylhexyl)phthalate	2.70E-01	1.89	1.43E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Bis(2-ethylhexyl)phthalate	2.40E-01	1.97	1.22E+01	47	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Bis(2-ethylhexyl)phthalate	2.00E-01	1.43	1.40E+01	47	78	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Bis(2-ethylhexyl)phthalate	1.40E-01	1.05	1.33E+01	47	78	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Butyl benzyl phthalate	6.00E-02	1.59	3.77E+00	4.9	64	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Butyl benzyl phthalate	6.00E-02	2.54	2.36E+00	4.9	64	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Butyl benzyl phthalate	4.70E-02	2.72	1.73E+00	4.9	64	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Butyl benzyl phthalate	4.70E-02	2.58	1.82E+00	4.9	64	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Butyl benzyl phthalate	4.40E-02	2.56	1.72E+00	4.9	64	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Butyl benzyl phthalate	4.30E-02	2.67	1.61E+00	4.9	64	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Butyl benzyl phthalate	4.00E-02	2.51	1.59E+00	4.9	64	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Butyl benzyl phthalate	4.00E-02	2.62	1.53E+00	4.9	64	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Butyl benzyl phthalate	4.00E-02	1.67	2.40E+00	4.9	64	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Butyl benzyl phthalate	4.00E-02	1.68	2.38E+00	4.9	64	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Butyl benzyl phthalate	3.90E-02	2.77	1.41E+00	4.9	64	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Butyl benzyl phthalate	3.70E-02	2.53	1.46E+00	4.9	64	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Butyl benzyl phthalate	3.50E-02	2.65	1.32E+00	4.9	64	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Butyl benzyl phthalate	3.40E-02	2.57	1.32E+00	4.9	64	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Butyl benzyl phthalate	2.70E-02	1.74	1.55E+00	4.9	64	mg/kg OC	<1	<1

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Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Butyl benzyl phthalate	2.10E-02	1.43	1.47E+00	4.9	64	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Butyl benzyl phthalate	2.00E-02	1.97	1.02E+00	4.9	64	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Butyl benzyl phthalate	1.40E-02	1.05	1.33E+00	4.9	64	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Cadmium	3.00E+00	2.33		5.1	6.7	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Cadmium	1.40E+00	2.54		5.1	6.7	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Cadmium	1.10E+00	3.93		5.1	6.7	mg/kg DW	<1	<1
EPA Site Inspection	DR088	8/31/1998	Cadmium	1.00E+00	1.68		5.1	6.7	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Cadmium	1.00E+00	2.01		5.1	6.7	mg/kg DW	<1	<1
EPA Site Inspection	DR087	8/12/1998	Cadmium	9.70E-01	1.67		5.1	6.7	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Cadmium	8.00E-01	1.89		5.1	6.7	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Cadmium	7.00E-01	2.04		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Cadmium	5.00E-01	2.54		5.1	6.7	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Cadmium	5.00E-01	1.43		5.1	6.7	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Cadmium	5.00E-01	1.05		5.1	6.7	mg/kg DW	<1	<1
EPA Site Inspection	DR063	8/17/1998	Cadmium	4.80E-01	2.62		5.1	6.7	mg/kg DW	<1	<1
EPA Site Inspection	DR023	8/17/1998	Cadmium	4.70E-01	2.51		5.1	6.7	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Cadmium	4.60E-01	2.54		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Cadmium	4.30E-01	2.53		5.1	6.7	mg/kg DW	<1	<1
EPA Site Inspection	DR062	8/17/1998	Cadmium	4.20E-01	2.18		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Cadmium	4.20E-01	2.54		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Cadmium	4.20E-01	2.57		5.1	6.7	mg/kg DW	<1	<1
EPA Site Inspection	DR024	8/17/1998	Cadmium	4.10E-01	2.51		5.1	6.7	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Cadmium	4.00E-01	2.54		5.1	6.7	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Cadmium	4.00E-01	1.74		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Cadmium	3.90E-01	2.77		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Cadmium	3.60E-01	2.56		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Cadmium	3.60E-01	2.54		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Cadmium	3.50E-01	2.53		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Cadmium	3.50E-01	2.65		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Cadmium	3.40E-01	2.57		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Cadmium	3.10E-01 J	2.67		5.1	6.7	mg/kg DW	<1	<1
EPA Site Inspection	DR022	8/17/1998	Cadmium	3.00E-01	1.59		5.1	6.7	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Cadmium	3.00E-01 J	2.72		5.1	6.7	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Carbazole	1.30E+00	2.01	6.47E+01					
EPA Site Inspection	DR087	8/12/1998	Carbazole	1.20E-01	1.67	7.19E+00					
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Carbazole	8.80E-02	3.93	2.24E+00					
EPA Site Inspection	DR022	8/17/1998	Carbazole	8.00E-02	1.59	5.03E+00					
EPA Site Inspection	DR062	8/17/1998	Carbazole	7.00E-02	2.18	3.21E+00					
EPA Site Inspection	DR023	8/17/1998	Carbazole	4.00E-02	2.51	1.59E+00					
EPA Site Inspection	DR025	8/17/1998	Carbazole	4.00E-02	2.54	1.57E+00					
EPA Site Inspection	DR024	8/17/1998	Carbazole	3.00E-02	2.51	1.20E+00					
EPA Site Inspection	DR025	8/17/1998	Carbazole	3.00E-02	2.54	1.18E+00					
EPA Site Inspection	DR025	8/17/1998	Carbazole	3.00E-02	2.54	1.18E+00					
EPA Site Inspection	DR063	8/17/1998	Carbazole	3.00E-02	2.62	1.15E+00					

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR086	8/31/1998	Carbazole	3.00E-02	1.97	1.52E+00					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Chromium	8.92E+01	2.33		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Chromium	5.20E+01	2.54		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Chromium	4.07E+01	2.54		260	270	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Chromium	4.04E+01	3.93		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR088	8/31/1998	Chromium	3.90E+01	1.68		260	270	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Chromium	3.66E+01	2.04		260	270	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Chromium	3.64E+01	1.89		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Chromium	3.60E+01	2.54		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR087	8/12/1998	Chromium	3.60E+01 J	1.67		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Chromium	3.53E+01	2.77		260	270	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Chromium	3.51E+01	2.01		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Chromium	3.44E+01	2.67		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Chromium	3.41E+01	2.72		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Chromium	3.41E+01	2.54		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR024	8/17/1998	Chromium	3.30E+01	2.51		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR063	8/17/1998	Chromium	3.30E+01	2.62		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Chromium	3.30E+01	2.54		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Chromium	3.29E+01	2.53		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Chromium	3.29E+01	2.57		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Chromium	3.29E+01	2.65		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR023	8/17/1998	Chromium	3.20E+01	2.51		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Chromium	3.10E+01	2.54		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR086	8/31/1998	Chromium	3.10E+01	1.97		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Chromium	3.08E+01	2.53		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Chromium	3.04E+01	2.56		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Chromium	3.02E+01	2.57		260	270	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Chromium	2.97E+01	2.58		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR062	8/17/1998	Chromium	2.80E+01	2.18		260	270	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Chromium	2.77E+01	1.74		260	270	mg/kg DW	<1	<1
EPA Site Inspection	DR022	8/17/1998	Chromium	2.40E+01	1.59		260	270	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Chromium	2.17E+01	1.05		260	270	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Chromium	2.11E+01	1.43		260	270	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Chrysene	3.70E+00	2.01	1.84E+02	110	460	mg/kg OC	1.7	<1
EPA Site Inspection	DR022	8/17/1998	Chrysene	8.80E-01	1.59	5.53E+01	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Chrysene	8.00E-01	1.67	4.79E+01	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Chrysene	7.30E-01	2.18	3.35E+01	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Chrysene	6.10E-01	2.54	2.40E+01	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Chrysene	5.20E-01	2.54	2.05E+01	110	460	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Chrysene	5.20E-01	2.58	2.02E+01	110	460	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Chrysene	5.20E-01	3.93	1.32E+01	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Chrysene	5.10E-01	2.51	2.03E+01	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Chrysene	4.60E-01	2.51	1.83E+01	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Chrysene	4.50E-01	2.62	1.72E+01	110	460	mg/kg OC	<1	<1

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Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Chrysene	4.44E-01	2.57	1.73E+01	110	460	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Chrysene	4.40E-01	2.67	1.65E+01	110	460	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Chrysene	4.37E-01	2.72	1.61E+01	110	460	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Chrysene	4.36E-01	2.77	1.57E+01	110	460	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Chrysene	4.35E-01	2.53	1.72E+01	110	460	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Chrysene	4.27E-01	2.56	1.67E+01	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Chrysene	4.00E-01	1.97	2.03E+01	110	460	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Chrysene	3.92E-01	2.65	1.48E+01	110	460	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Chrysene	3.50E-01	2.04	1.72E+01	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Chrysene	3.10E-01	2.54	1.22E+01	110	460	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Chrysene	3.00E-01	1.74	1.72E+01	110	460	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Chrysene	2.20E-01	1.43	1.54E+01	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Chrysene	1.60E-01	1.68	9.52E+00	110	460	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Chrysene	1.20E-01	1.89	6.35E+00	110	460	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Chrysene	1.10E-01	2.33	4.72E+00	110	460	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Chrysene	6.60E-02	1.05	6.29E+00	110	460	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Cobalt	1.20E+01	1.97	6.09E+02					
EPA Site Inspection	DR023	8/17/1998	Cobalt	1.10E+01	2.51	4.38E+02					
EPA Site Inspection	DR024	8/17/1998	Cobalt	1.10E+01	2.51	4.38E+02					
EPA Site Inspection	DR025	8/17/1998	Cobalt	1.10E+01	2.54	4.33E+02					
EPA Site Inspection	DR025	8/17/1998	Cobalt	1.10E+01	2.54	4.33E+02					
EPA Site Inspection	DR063	8/17/1998	Cobalt	1.10E+01	2.62	4.20E+02					
EPA Site Inspection	DR062	8/17/1998	Cobalt	1.00E+01	2.18	4.59E+02					
EPA Site Inspection	DR088	8/31/1998	Cobalt	1.00E+01	1.68	5.95E+02					
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Cobalt	1.00E+01	2.04	4.90E+02					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Cobalt	9.60E+00	2.33	4.12E+02					
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Cobalt	9.50E+00	1.89	5.03E+02					
EPA Site Inspection	DR022	8/17/1998	Cobalt	9.00E+00	1.59	5.66E+02					
EPA Site Inspection	DR025	8/17/1998	Cobalt	9.00E+00	2.54	3.54E+02					
EPA Site Inspection	DR087	8/12/1998	Cobalt	9.00E+00	1.67	5.39E+02					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Cobalt	8.50E+00	1.74	4.89E+02					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Cobalt	8.30E+00	2.01	4.13E+02					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Cobalt	7.60E+00	1.05	7.24E+02					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Cobalt	7.30E+00	1.43	5.10E+02					
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Cobalt	6.00E+00	3.93	1.53E+02					
EPA Site Inspection	DR088	8/31/1998	Copper	1.87E+02	1.68		390	390	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Copper	1.80E+02 J	2.01		390	390	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Copper	1.08E+02	2.33		390	390	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Copper	1.07E+02	2.04		390	390	mg/kg DW	<1	<1
EPA Site Inspection	DR087	8/12/1998	Copper	8.70E+01	1.67		390	390	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Copper	8.42E+01	1.89		390	390	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Copper	8.20E+01	2.54		390	390	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Copper	8.10E+01	2.54		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Copper	7.80E+01	2.77		390	390	mg/kg DW	<1	<1

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Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR063	8/17/1998	Copper	7.70E+01	2.62		390	390	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Copper	7.59E+01	1.74		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Copper	7.58E+01	2.54		390	390	mg/kg DW	<1	<1
EPA Site Inspection	DR023	8/17/1998	Copper	7.50E+01	2.51		390	390	mg/kg DW	<1	<1
EPA Site Inspection	DR024	8/17/1998	Copper	7.40E+01	2.51		390	390	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Copper	7.30E+01	2.54		390	390	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Copper	7.19E+01	1.05		390	390	mg/kg DW	<1	<1
EPA Site Inspection	DR062	8/17/1998	Copper	7.10E+01	2.18		390	390	mg/kg DW	<1	<1
EPA Site Inspection	DR022	8/17/1998	Copper	6.60E+01	1.59		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Copper	6.55E+01	2.57		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Copper	6.42E+01	2.67		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Copper	6.36E+01	2.54		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Copper	6.28E+01	2.54		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Copper	6.22E+01	2.65		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Copper	6.11E+01	2.57		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Copper	6.10E+01	2.72		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Copper	6.02E+01	2.53		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Copper	5.96E+01	2.53		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Copper	5.85E+01	2.56		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Copper	5.79E+01	2.58		390	390	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Copper	5.52E+01	3.93		390	390	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Copper	5.36E+01	1.43		390	390	mg/kg DW	<1	<1
EPA Site Inspection	DR086	8/31/1998	Copper	5.10E+01	1.97		390	390	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Coprostanol	2.72E+00	2.56	1.06E+02					
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Coprostanol	2.69E+00	2.57	1.05E+02					
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Coprostanol	2.66E+00	2.58	1.03E+02					
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Coprostanol	2.40E+00	2.67	8.99E+01					
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Coprostanol	2.40E+00	2.72	8.82E+01					
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Coprostanol	2.29E+00	2.77	8.27E+01					
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Coprostanol	2.01E+00	2.65	7.58E+01					
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Coprostanol	1.73E+00	2.53	6.84E+01					
EPA Site Inspection	DR025	8/17/1998	DDTs (total-calc'd)	1.70E-02	2.54	6.69E-01					
EPA Site Inspection	DR025	8/17/1998	DDTs (total-calc'd)	2.00E-03	2.54	7.87E-02					
EPA Site Inspection	DR087	8/12/1998	Dibenzo(a,h)anthracene	2.10E-01	1.67	1.26E+01	12	33	mg/kg OC	1.0	<1
EPA Site Inspection	DR023	8/17/1998	Dibenzo(a,h)anthracene	7.00E-02	2.51	2.79E+00	12	33	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Dibenzo(a,h)anthracene	7.00E-02	2.18	3.21E+00	12	33	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Dibenzo(a,h)anthracene	6.00E-02	1.59	3.77E+00	12	33	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Dibenzo(a,h)anthracene	6.00E-02	2.54	2.36E+00	12	33	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Dibenzo(a,h)anthracene	5.00E-02	2.51	1.99E+00	12	33	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Dibenzo(a,h)anthracene	5.00E-02	2.54	1.97E+00	12	33	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Dibenzo(a,h)anthracene	5.00E-02	2.54	1.97E+00	12	33	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Dibenzo(a,h)anthracene	5.00E-02	2.62	1.91E+00	12	33	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Dibenzo(a,h)anthracene	3.90E-02	1.43	2.73E+00	12	33	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Dibenzo(a,h)anthracene	3.00E-02	1.97	1.52E+00	12	33	mg/kg OC	<1	<1

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR088	8/31/1998	Dibenzo(a,h)anthracene	3.00E-02	1.68	1.79E+00	12	33	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Dibenzo(a,h)anthracene	1.60E-02 J	1.74	9.20E-01	12	33	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Dibenzo(a,h)anthracene	7.40E-03 J	1.05	7.05E-01	12	33	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Dibenzofuran	3.50E+00	2.01	1.74E+02	15	58	mg/kg OC	12	3.0
EPA Site Inspection	DR087	8/12/1998	Dibenzofuran	1.90E-01	1.67	1.14E+01	15	58	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Dibenzofuran	9.00E-02	1.97	4.57E+00	15	58	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Dibenzofuran	6.80E-02	2.77	2.45E+00	15	58	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Dibenzofuran	6.50E-02	2.67	2.43E+00	15	58	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Dibenzofuran	6.00E-02	1.59	3.77E+00	15	58	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Dibenzofuran	5.50E-02	2.72	2.02E+00	15	58	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Dibenzofuran	4.00E-02	2.54	1.57E+00	15	58	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Dibenzofuran	4.00E-02	2.18	1.83E+00	15	58	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Dibenzofuran	3.00E-02	2.51	1.20E+00	15	58	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Dibenzofuran	2.00E-02	2.51	7.97E-01	15	58	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Dibenzofuran	2.00E-02	2.54	7.87E-01	15	58	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Dibenzofuran	2.00E-02	2.54	7.87E-01	15	58	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Dibenzofuran	2.00E-02	2.62	7.63E-01	15	58	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Dibutyltin as ion	5.50E-02	1.67	3.29E+00					
EPA Site Inspection	DR025	8/17/1998	Dibutyltin as ion	3.50E-02 J	2.54	1.38E+00					
EPA Site Inspection	DR025	8/17/1998	Dibutyltin as ion	3.20E-02	2.54	1.26E+00					
EPA Site Inspection	DR025	8/17/1998	Dibutyltin as ion	9.00E-03	2.54	3.54E-01					
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Diethyl phthalate	1.20E-01	3.93	3.05E+00	61	110	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Dimethyl phthalate	2.50E-02	1.43	1.75E+00	53	53	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Dimethyl phthalate	2.00E-02	2.51	7.97E-01	53	53	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Dimethyl phthalate	7.30E-03	1.74	4.20E-01	53	53	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Di-n-butyl phthalate	4.00E-02	2.54	1.57E+00	220	1700	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Di-n-butyl phthalate	4.00E-02	2.18	1.83E+00	220	1700	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Di-n-butyl phthalate	4.00E-02	2.62	1.53E+00	220	1700	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Di-n-butyl phthalate	3.00E-02	2.51	1.20E+00	220	1700	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Di-n-butyl phthalate	3.00E-02	2.54	1.18E+00	220	1700	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Di-n-butyl phthalate	2.00E-02	2.51	7.97E-01	220	1700	mg/kg OC	<1	<1
LDWRI-SurfaceSedimentRound1	LDW-SS37	1/8/2005	Dioxin/furan TEQ - Mammal	1.33E-04 J	2.33	5.71E-03					
LDWRI-SurfaceSedimentRound3	LDW-SS321	10/4/2006	Dioxin/furan TEQ - Mammal	1.64E-05 J	1.43	1.15E-03					
LDWRI-SurfaceSedimentRound3	LDW-SS323	10/4/2006	Dioxin/furan TEQ - Mammal	1.05E-05 J	1.74	6.03E-04					
LDWRI-SurfaceSedimentRound3	LDW-SS324	10/4/2006	Dioxin/furan TEQ - Mammal	1.45E-05 J	1.05	1.38E-03					
LDWRI-SurfaceSedimentRound3	LDW-SS321	10/4/2006	Dioxin/furan TEQ - Mammal	1.69E-05 J	1.43	1.18E-03					
LDWRI-SurfaceSedimentRound3	LDW-SS323	10/4/2006	Dioxin/furan TEQ - Mammal	1.06E-05 J	1.74	6.09E-04					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Fluoranthene	1.70E+01	2.01	8.46E+02	160	1200	mg/kg OC	5.3	<1
EPA Site Inspection	DR022	8/17/1998	Fluoranthene	2.10E+00	1.59	1.32E+02	160	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Fluoranthene	1.80E+00	1.67	1.08E+02	160	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Fluoranthene	1.70E+00	2.18	7.80E+01	160	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Fluoranthene	1.30E+00	1.97	6.60E+01	160	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Fluoranthene	1.20E+00	2.54	4.72E+01	160	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Fluoranthene	1.20E+00	3.93	3.05E+01	160	1200	mg/kg OC	<1	<1

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Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Fluoranthene	1.10E+00 J	2.57	4.28E+01	160	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Fluoranthene	1.00E+00	2.51	3.98E+01	160	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Fluoranthene	1.00E+00 J	2.77	3.61E+01	160	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Fluoranthene	9.60E-01 J	2.58	3.72E+01	160	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Fluoranthene	8.80E-01 J	2.53	3.48E+01	160	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Fluoranthene	8.70E-01	2.51	3.47E+01	160	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Fluoranthene	8.50E-01 J	2.56	3.32E+01	160	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Fluoranthene	7.70E-01 J	2.67	2.88E+01	160	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Fluoranthene	7.50E-01 J	2.72	2.76E+01	160	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Fluoranthene	7.10E-01	2.54	2.80E+01	160	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Fluoranthene	7.10E-01	2.62	2.71E+01	160	1200	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Fluoranthene	7.10E-01 J	2.65	2.68E+01	160	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Fluoranthene	4.70E-01	2.04	2.30E+01	160	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Fluoranthene	4.20E-01	2.54	1.65E+01	160	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Fluoranthene	3.70E-01	1.43	2.59E+01	160	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Fluoranthene	3.60E-01	1.74	2.07E+01	160	1200	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Fluoranthene	2.30E-01	1.68	1.37E+01	160	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Fluoranthene	2.30E-01	2.33	9.87E+00	160	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Fluoranthene	1.70E-01	1.89	8.99E+00	160	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Fluoranthene	1.20E-01	1.05	1.14E+01	160	1200	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Fluorene	4.90E+00	2.01	2.44E+02	23	79	mg/kg OC	11	3.1
EPA Site Inspection	DR086	8/31/1998	Fluorene	2.60E-01	1.97	1.32E+01	23	79	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Fluorene	1.80E-01	1.67	1.08E+01	23	79	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Fluorene	1.30E-01 J	2.57	5.06E+00	23	79	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Fluorene	1.20E-01	3.93	3.05E+00	23	79	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Fluorene	1.10E-01	1.59	6.92E+00	23	79	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Fluorene	1.10E-01 J	2.53	4.35E+00	23	79	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Fluorene	9.50E-02 J	2.77	3.43E+00	23	79	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Fluorene	9.20E-02 J	2.67	3.45E+00	23	79	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Fluorene	7.40E-02 J	2.72	2.72E+00	23	79	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Fluorene	7.00E-02	2.18	3.21E+00	23	79	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Fluorene	6.90E-02 J	2.58	2.67E+00	23	79	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Fluorene	5.50E-02 J	2.56	2.15E+00	23	79	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Fluorene	5.10E-02 J	2.65	1.92E+00	23	79	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Fluorene	5.00E-02	2.54	1.97E+00	23	79	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Fluorene	4.00E-02	2.51	1.59E+00	23	79	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Fluorene	4.00E-02	2.54	1.57E+00	23	79	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Fluorene	4.00E-02	2.54	1.57E+00	23	79	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Fluorene	4.00E-02	2.62	1.53E+00	23	79	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Fluorene	3.00E-02	2.51	1.20E+00	23	79	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Fluorene	2.00E-02	1.68	1.19E+00	23	79	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Indeno(1,2,3-cd)pyrene	6.60E-01	2.01	3.28E+01	34	88	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Indeno(1,2,3-cd)pyrene	6.20E-01	1.67	3.71E+01	34	88	mg/kg OC	1.1	<1
EPA Site Inspection	DR023	8/17/1998	Indeno(1,2,3-cd)pyrene	2.60E-01	2.51	1.04E+01	34	88	mg/kg OC	<1	<1

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Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR025	8/17/1998	Indeno(1,2,3-cd)pyrene	2.60E-01	2.54	1.02E+01	34	88	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Indeno(1,2,3-cd)pyrene	2.60E-01	2.18	1.19E+01	34	88	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Indeno(1,2,3-cd)pyrene	2.60E-01	3.93	6.62E+00	34	88	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Indeno(1,2,3-cd)pyrene	2.50E-01	1.59	1.57E+01	34	88	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Indeno(1,2,3-cd)pyrene	2.30E-01	2.54	9.06E+00	34	88	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Indeno(1,2,3-cd)pyrene	2.00E-01	2.54	7.87E+00	34	88	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Indeno(1,2,3-cd)pyrene	2.00E-01 J	2.58	7.75E+00	34	88	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Indeno(1,2,3-cd)pyrene	1.90E-01	2.51	7.57E+00	34	88	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Indeno(1,2,3-cd)pyrene	1.90E-01 J	2.53	7.51E+00	34	88	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Indeno(1,2,3-cd)pyrene	1.80E-01 J	2.77	6.50E+00	34	88	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Indeno(1,2,3-cd)pyrene	1.70E-01 J	2.57	6.61E+00	34	88	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Indeno(1,2,3-cd)pyrene	1.60E-01	2.62	6.11E+00	34	88	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Indeno(1,2,3-cd)pyrene	1.60E-01 J	2.72	5.88E+00	34	88	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Indeno(1,2,3-cd)pyrene	1.60E-01 J	2.65	6.04E+00	34	88	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Indeno(1,2,3-cd)pyrene	1.50E-01 J	2.67	5.62E+00	34	88	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Indeno(1,2,3-cd)pyrene	1.50E-01 J	2.56	5.86E+00	34	88	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Indeno(1,2,3-cd)pyrene	1.20E-01	1.97	6.09E+00	34	88	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Indeno(1,2,3-cd)pyrene	1.20E-01	1.68	7.14E+00	34	88	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Indeno(1,2,3-cd)pyrene	9.70E-02	1.74	5.57E+00	34	88	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Indeno(1,2,3-cd)pyrene	8.40E-02	1.43	5.87E+00	34	88	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Indeno(1,2,3-cd)pyrene	8.00E-02	2.33	3.43E+00	34	88	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Indeno(1,2,3-cd)pyrene	3.80E-02	1.89	2.01E+00	34	88	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Indeno(1,2,3-cd)pyrene	2.00E-02	2.04	9.80E-01	34	88	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Iron	3.60E+04 J	2.67	1.35E+06					
EPA Site Inspection	DR025	8/17/1998	Iron	3.53E+04 J	2.54	1.39E+06					
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Iron	3.50E+04 J	2.72	1.29E+06					
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Iron	3.40E+04 J	2.54	1.34E+06					
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Iron	3.40E+04 J	2.53	1.34E+06					
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Iron	3.40E+04 J	2.77	1.23E+06					
EPA Site Inspection	DR025	8/17/1998	Iron	3.35E+04 J	2.54	1.32E+06					
EPA Site Inspection	DR086	8/31/1998	Iron	3.32E+04 J	1.97	1.69E+06					
EPA Site Inspection	DR024	8/17/1998	Iron	3.30E+04	2.51	1.31E+06					
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Iron	3.30E+04 J	2.54	1.30E+06					
EPA Site Inspection	DR063	8/17/1998	Iron	3.21E+04	2.62	1.23E+06					
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Iron	3.20E+04 J	2.57	1.25E+06					
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Iron	3.20E+04 J	2.65	1.21E+06					
EPA Site Inspection	DR023	8/17/1998	Iron	3.12E+04 J	2.51	1.24E+06					
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Iron	3.10E+04 J	2.56	1.21E+06					
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Iron	3.10E+04 J	2.53	1.23E+06					
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Iron	3.10E+04 J	2.57	1.21E+06					
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Iron	3.00E+04 J	2.58	1.16E+06					
EPA Site Inspection	DR025	8/17/1998	Iron	2.98E+04	2.54	1.17E+06					
EPA Site Inspection	DR088	8/31/1998	Iron	2.90E+04 J	1.68	1.73E+06					
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Iron	2.90E+04 J	2.54	1.14E+06					

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR062	8/17/1998	Iron	2.76E+04 J	2.18	1.27E+06					
EPA Site Inspection	DR087	8/12/1998	Iron	2.48E+04 J	1.67	1.49E+06					
EPA Site Inspection	DR022	8/17/1998	Iron	2.35E+04 J	1.59	1.48E+06					
EPA Site Inspection	DR087	8/12/1998	Lead	1.27E+02 J	1.67		450	530	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Lead	1.03E+02	2.33		450	530	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Lead	7.90E+01	3.93		450	530	mg/kg DW	<1	<1
EPA Site Inspection	DR088	8/31/1998	Lead	7.73E+01 J	1.68		450	530	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Lead	7.11E+01	2.54		450	530	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Lead	6.20E+01	2.04		450	530	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Lead	6.04E+01	2.54		450	530	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Lead	5.60E+01	1.89		450	530	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Lead	5.50E+01	2.01		450	530	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Lead	4.90E+01	1.43		450	530	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Lead	4.53E+01	2.54		450	530	mg/kg DW	<1	<1
EPA Site Inspection	DR023	8/17/1998	Lead	4.31E+01	2.51		450	530	mg/kg DW	<1	<1
EPA Site Inspection	DR063	8/17/1998	Lead	4.22E+01	2.62		450	530	mg/kg DW	<1	<1
EPA Site Inspection	DR024	8/17/1998	Lead	4.16E+01	2.51		450	530	mg/kg DW	<1	<1
EPA Site Inspection	DR062	8/17/1998	Lead	3.99E+01	2.18		450	530	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Lead	3.70E+01	1.74		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Lead	3.40E+01	2.77		450	530	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Lead	3.20E+01	1.05		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Lead	3.18E+01	2.54		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Lead	3.16E+01	2.65		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Lead	3.14E+01	2.57		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Lead	3.09E+01	2.57		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Lead	3.06E+01	2.54		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Lead	2.99E+01	2.72		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Lead	2.95E+01	2.67		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Lead	2.92E+01	2.53		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Lead	2.91E+01	2.58		450	530	mg/kg DW	<1	<1
EPA Site Inspection	DR022	8/17/1998	Lead	2.90E+01	1.59		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Lead	2.68E+01	2.54		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Lead	2.66E+01	2.56		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Lead	2.51E+01	2.53		450	530	mg/kg DW	<1	<1
EPA Site Inspection	DR086	8/31/1998	Lead	2.49E+01 J	1.97		450	530	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Magnesium	9.63E+03	2.67	3.61E+05					
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Magnesium	9.27E+03	2.54	3.65E+05					
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Magnesium	9.21E+03	2.72	3.39E+05					
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Magnesium	9.20E+03	2.53	3.64E+05					
EPA Site Inspection	DR025	8/17/1998	Magnesium	9.12E+03	2.54	3.59E+05					
EPA Site Inspection	DR086	8/31/1998	Magnesium	8.93E+03	1.97	4.53E+05					
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Magnesium	8.92E+03	2.57	3.47E+05					
EPA Site Inspection	DR025	8/17/1998	Magnesium	8.82E+03	2.54	3.47E+05					
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Magnesium	8.82E+03	2.53	3.49E+05					

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR024	8/17/1998	Magnesium	8.57E+03	2.51	3.41E+05					
EPA Site Inspection	DR063	8/17/1998	Magnesium	8.57E+03	2.62	3.27E+05					
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Magnesium	8.51E+03	2.56	3.32E+05					
EPA Site Inspection	DR023	8/17/1998	Magnesium	8.31E+03	2.51	3.31E+05					
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Magnesium	8.19E+03	2.54	3.22E+05					
EPA Site Inspection	DR025	8/17/1998	Magnesium	7.93E+03	2.54	3.12E+05					
EPA Site Inspection	DR062	8/17/1998	Magnesium	7.69E+03	2.18	3.53E+05					
EPA Site Inspection	DR088	8/31/1998	Magnesium	7.43E+03	1.68	4.42E+05					
EPA Site Inspection	DR087	8/12/1998	Magnesium	7.24E+03	1.67	4.34E+05					
EPA Site Inspection	DR022	8/17/1998	Magnesium	6.83E+03	1.59	4.30E+05					
EPA Site Inspection	DR025	8/17/1998	Manganese	3.90E+02	2.54	1.54E+04					
EPA Site Inspection	DR086	8/31/1998	Manganese	3.80E+02	1.97	1.93E+04					
EPA Site Inspection	DR024	8/17/1998	Manganese	3.68E+02	2.51	1.47E+04					
EPA Site Inspection	DR025	8/17/1998	Manganese	3.49E+02	2.54	1.37E+04					
EPA Site Inspection	DR025	8/17/1998	Manganese	3.48E+02	2.54	1.37E+04					
EPA Site Inspection	DR023	8/17/1998	Manganese	3.45E+02	2.51	1.37E+04					
EPA Site Inspection	DR063	8/17/1998	Manganese	3.44E+02	2.62	1.31E+04					
EPA Site Inspection	DR062	8/17/1998	Manganese	3.17E+02	2.18	1.45E+04					
EPA Site Inspection	DR088	8/31/1998	Manganese	3.09E+02	1.68	1.84E+04					
EPA Site Inspection	DR022	8/17/1998	Manganese	3.02E+02	1.59	1.90E+04					
EPA Site Inspection	DR087	8/12/1998	Manganese	2.74E+02	1.67	1.64E+04					
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Mercury	1.09E+00	3.93		0.41	0.59	mg/kg DW	2.7	1.8
EPA Site Inspection	DR025	8/17/1998	Mercury	7.50E-01	2.54		0.41	0.59	mg/kg DW	1.8	1.3
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Mercury	6.90E-01	2.33		0.41	0.59	mg/kg DW	1.7	1.2
EPA Site Inspection	DR087	8/12/1998	Mercury	5.50E-01	1.67		0.41	0.59	mg/kg DW	1.3	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Mercury	4.60E-01 J	2.01		0.41	0.59	mg/kg DW	1.1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Mercury	3.50E-01	1.89		0.41	0.59	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Mercury	3.10E-01	2.04		0.41	0.59	mg/kg DW	<1	<1
EPA Site Inspection	DR088	8/31/1998	Mercury	2.90E-01	1.68		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Mercury	2.80E-01	2.54		0.41	0.59	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Mercury	2.60E-01	2.54		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Mercury	2.60E-01	2.77		0.41	0.59	mg/kg DW	<1	<1
EPA Site Inspection	DR063	8/17/1998	Mercury	2.50E-01	2.62		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Mercury	2.40E-01	2.65		0.41	0.59	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Mercury	2.30E-01	2.54		0.41	0.59	mg/kg DW	<1	<1
EPA Site Inspection	DR023	8/17/1998	Mercury	2.20E-01	2.51		0.41	0.59	mg/kg DW	<1	<1
EPA Site Inspection	DR062	8/17/1998	Mercury	2.20E-01	2.18		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Mercury	2.20E-01	2.72		0.41	0.59	mg/kg DW	<1	<1
EPA Site Inspection	DR024	8/17/1998	Mercury	2.10E-01	2.51		0.41	0.59	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Mercury	2.00E-01	1.05		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Mercury	1.90E-01	2.57		0.41	0.59	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Mercury	1.90E-01	1.74		0.41	0.59	mg/kg DW	<1	<1
EPA Site Inspection	DR022	8/17/1998	Mercury	1.80E-01	1.59		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Mercury	1.80E-01	2.67		0.41	0.59	mg/kg DW	<1	<1

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Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Mercury	1.80E-01	2.54		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Mercury	1.80E-01	2.53		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Mercury	1.80E-01	2.57		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Mercury	1.80E-01	2.54		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Mercury	1.80E-01	2.58		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Mercury	1.70E-01	2.56		0.41	0.59	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Mercury	1.50E-01	2.53		0.41	0.59	mg/kg DW	<1	<1
EPA Site Inspection	DR086	8/31/1998	Mercury	1.40E-01	1.97		0.41	0.59	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Mercury	1.30E-01	1.43		0.41	0.59	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Methyl ethyl ketone	1.35E-02	2.54	5.31E-01					
EPA Site Inspection	DR087	8/12/1998	Methyl ethyl ketone	1.06E-02	1.67	6.35E-01					
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Methylmercury	1.81E-03	2.58	7.02E-02					
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Methylmercury	1.71E-03	2.77	6.17E-02					
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Methylmercury	1.62E-03	2.57	6.30E-02					
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Methylmercury	1.59E-03	2.57	6.19E-02					
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Methylmercury	1.50E-03	2.54	5.91E-02					
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Methylmercury	1.49E-03	2.54	5.87E-02					
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Methylmercury	1.42E-03	2.65	5.36E-02					
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Methylmercury	1.34E-03	2.53	5.30E-02					
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Methylmercury	1.29E-03	2.54	5.08E-02					
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Methylmercury	1.26E-03	2.67	4.72E-02					
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Methylmercury	1.26E-03	2.53	4.98E-02					
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Methylmercury	1.24E-03	2.72	4.56E-02					
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Methylmercury	1.23E-03	2.56	4.80E-02					
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Molybdenum	9.10E+00	3.93	2.32E+02					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Molybdenum	3.10E+00	2.33	1.33E+02					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Molybdenum	2.20E+00	2.01	1.09E+02					
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Molybdenum	2.10E+00	2.04	1.03E+02					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Molybdenum	1.80E+00	1.05	1.71E+02					
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Molybdenum	1.70E+00	1.89	8.99E+01					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Molybdenum	1.30E+00	1.43	9.09E+01					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Molybdenum	7.00E-01	1.74	4.02E+01					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Naphthalene	5.30E+00	2.01	2.64E+02	99	170	mg/kg OC	2.7	1.6
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Naphthalene	1.00E-01	3.93	2.54E+00	99	170	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Naphthalene	5.00E-02	2.54	1.97E+00	99	170	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Naphthalene	4.00E-02	1.59	2.52E+00	99	170	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Naphthalene	4.00E-02	2.54	1.57E+00	99	170	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Naphthalene	3.00E-02	2.18	1.38E+00	99	170	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Naphthalene	3.00E-02	1.67	1.80E+00	99	170	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	n-Butyltin	5.60E-02 J	2.54	2.20E+00					
EPA Site Inspection	DR025	8/17/1998	n-Butyltin	4.00E-02 J	2.54	1.57E+00					
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Nickel	3.33E+01	2.77	1.20E+03					
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Nickel	3.24E+01	2.65	1.22E+03					
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Nickel	3.12E+01	2.67	1.17E+03					

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Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Nickel	3.05E+01	2.57	1.19E+03					
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Nickel	3.04E+01	2.54	1.20E+03					
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Nickel	3.04E+01	2.53	1.20E+03					
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Nickel	3.03E+01	2.72	1.11E+03					
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Nickel	2.92E+01	2.54	1.15E+03					
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Nickel	2.91E+01	2.57	1.13E+03					
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Nickel	2.86E+01	2.53	1.13E+03					
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Nickel	2.82E+01	2.54	1.11E+03					
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Nickel	2.82E+01	2.58	1.09E+03					
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Nickel	2.80E+01	2.56	1.09E+03					
EPA Site Inspection	DR025	8/17/1998	Nickel	2.70E+01	2.54	1.06E+03					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Nickel	2.70E+01	2.33	1.16E+03					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Nickel	2.49E+01	1.74	1.43E+03					
EPA Site Inspection	DR024	8/17/1998	Nickel	2.48E+01	2.51	9.88E+02					
EPA Site Inspection	DR023	8/17/1998	Nickel	2.38E+01	2.51	9.48E+02					
EPA Site Inspection	DR025	8/17/1998	Nickel	2.38E+01	2.54	9.37E+02					
EPA Site Inspection	DR063	8/17/1998	Nickel	2.38E+01	2.62	9.08E+02					
EPA Site Inspection	DR025	8/17/1998	Nickel	2.34E+01	2.54	9.21E+02					
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Nickel	2.30E+01	1.89	1.22E+03					
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Nickel	2.30E+01	2.04	1.13E+03					
EPA Site Inspection	DR086	8/31/1998	Nickel	2.23E+01 J	1.97	1.13E+03					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Nickel	2.20E+01	2.01	1.09E+03					
EPA Site Inspection	DR062	8/17/1998	Nickel	2.14E+01	2.18	9.82E+02					
EPA Site Inspection	DR087	8/12/1998	Nickel	2.06E+01	1.67	1.23E+03					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Nickel	2.05E+01	1.43	1.43E+03					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Nickel	2.03E+01	1.05	1.93E+03					
EPA Site Inspection	DR088	8/31/1998	Nickel	2.00E+01 J	1.68	1.19E+03					
EPA Site Inspection	DR022	8/17/1998	Nickel	1.98E+01	1.59	1.25E+03					
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Nickel	1.60E+01	3.93	4.07E+02					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	OCDD	1.82E-02	2.33	7.81E-01					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	OCDD	4.90E-03	1.43	3.43E-01					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	OCDD	3.75E-03	1.05	3.57E-01					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	OCDD	2.97E-03	1.74	1.71E-01					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	OCDF	1.36E-03	2.33	5.84E-02					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	OCDF	3.19E-04	1.05	3.04E-02					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	OCDF	2.50E-04	1.43	1.75E-02					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	OCDF	2.03E-04	1.74	1.17E-02					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	PCBs (total calc'd)	5.10E+00	2.33	2.19E+02	12	65	mg/kg OC	18	3.4
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	PCBs (total calc'd)	6.50E-01	2.01	3.23E+01	12	65	mg/kg OC	2.7	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	PCBs (total calc'd)	5.10E-01 J	1.89	2.70E+01	12	65	mg/kg OC	2.2	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	PCBs (total calc'd)	4.80E-01	1.05	4.57E+01	12	65	mg/kg OC	3.8	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	PCBs (total calc'd)	4.50E-01 J	1.43	3.15E+01	12	65	mg/kg OC	2.6	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	PCBs (total calc'd)	2.30E-01	3.93	5.85E+00	12	65	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	PCBs (total calc'd)	1.66E-01	1.74	9.54E+00	12	65	mg/kg OC	<1	<1

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	PCBs (total calc'd)	1.08E-01	2.04	5.29E+00	12	65	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	PCBs (total-calc'd)	1.15E+00	2.54	4.54E+01	12	65	mg/kg OC	3.8	<1
EPA Site Inspection	DR088	8/31/1998	PCBs (total-calc'd)	1.01E+00	1.68	6.01E+01	12	65	mg/kg OC	5.0	<1
EPA Site Inspection	DR087	8/12/1998	PCBs (total-calc'd)	6.96E-01	1.67	4.17E+01	12	65	mg/kg OC	3.5	<1
EPA Site Inspection	DR063	8/17/1998	PCBs (total-calc'd)	3.02E-01	2.62	1.15E+01	12	65	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	PCBs (total-calc'd)	2.86E-01	2.54	1.13E+01	12	65	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	PCBs (total-calc'd)	2.10E-01	2.54	8.27E+00	12	65	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	PCBs (total-calc'd)	1.91E-01	2.77	6.90E+00	12	65	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	PCBs (total-calc'd)	1.80E-01	2.51	7.17E+00	12	65	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	PCBs (total-calc'd)	1.58E-01	2.58	6.12E+00	12	65	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	PCBs (total-calc'd)	1.43E-01	2.53	5.65E+00	12	65	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	PCBs (total-calc'd)	1.36E-01	2.67	5.09E+00	12	65	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	PCBs (total-calc'd)	1.23E-01	2.57	4.79E+00	12	65	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	PCBs (total-calc'd)	1.20E-01	2.56	4.69E+00	12	65	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	PCBs (total-calc'd)	1.16E-01	1.97	5.89E+00	12	65	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	PCBs (total-calc'd)	1.10E-01	2.18	5.05E+00	12	65	mg/kg OC	<1	<1
NOAA Site Characterization	EST215	10/14/1997	PCBs (total-calc'd)	1.10E-01	1.71	6.43E+00	12	65	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	PCBs (total-calc'd)	1.03E-01	2.72	3.79E+00	12	65	mg/kg OC	<1	<1
NOAA Site Characterization	EST202	9/17/1997	PCBs (total-calc'd)	1.00E-01	2.1	4.76E+00	12	65	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	PCBs (total-calc'd)	8.60E-02	1.59	5.41E+00	12	65	mg/kg OC	<1	<1
NOAA Site Characterization	CH0030	10/16/1997	PCBs (total-calc'd)	8.30E-02	1.94	4.28E+00	12	65	mg/kg OC	<1	<1
NOAA Site Characterization	EST203	9/17/1997	PCBs (total-calc'd)	8.30E-02	2.23	3.72E+00	12	65	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	PCBs (total-calc'd)	6.70E-02	2.51	2.67E+00	12	65	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	PCBs (total-calc'd)	6.30E-02	2.65	2.38E+00	12	65	mg/kg OC	<1	<1
NOAA Site Characterization	CH1034	10/17/1997	PCBs (total-calc'd)	5.10E-02	1.61	3.17E+00	12	65	mg/kg OC	<1	<1
NOAA Site Characterization	EIT086[1]	11/12/1997	PCBs (total-calc'd)	1.40E-02	0.34	4.12E+00	30	1000	mg/kg DW	<1	<1
NOAA Site Characterization	EIT085	9/19/1997	PCBs (total-calc'd)	4.00E-03	0.79	5.06E-01	12	65	mg/kg OC	<1	<1
NOAA Site Characterization	EIT085	9/19/1997	PCTs (total)	2.10E-02	0.79	2.66E+00					
NOAA Site Characterization	EST203	9/17/1997	PCTs (total)	1.70E-02	2.23	7.62E-01					
NOAA Site Characterization	EST202	9/17/1997	PCTs (total)	1.60E-02	2.1	7.62E-01					
NOAA Site Characterization	CH0030	10/16/1997	PCTs (total)	1.40E-02	1.94	7.22E-01					
NOAA Site Characterization	EST215	10/14/1997	PCTs (total)	1.30E-02	1.71	7.60E-01					
NOAA Site Characterization	CH1034	10/17/1997	PCTs (total)	8.00E-03 J	1.61	4.97E-01					
NOAA Site Characterization	EIT086	11/12/1997	PCTs (total)	6.70E-03 J	0.34	1.97E+00					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Phenanthrene	1.50E+01	2.01	7.46E+02	100	480	mg/kg OC	7.5	1.6
EPA Site Inspection	DR086	8/31/1998	Phenanthrene	1.50E+00	1.97	7.61E+01	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Phenanthrene	1.20E+00	1.67	7.19E+01	100	480	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Phenanthrene	9.30E-01	3.93	2.37E+01	100	480	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Phenanthrene	6.50E-01 J	2.57	2.53E+01	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Phenanthrene	5.80E-01	1.59	3.65E+01	100	480	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Phenanthrene	4.80E-01 J	2.77	1.73E+01	100	480	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Phenanthrene	4.50E-01 J	2.53	1.78E+01	100	480	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Phenanthrene	4.10E-01 J	2.58	1.59E+01	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Phenanthrene	3.90E-01	2.18	1.79E+01	100	480	mg/kg OC	<1	<1

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Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Phenanthrene	3.90E-01 J	2.67	1.46E+01	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Phenanthrene	3.70E-01	2.54	1.46E+01	100	480	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Phenanthrene	3.70E-01 J	2.72	1.36E+01	100	480	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Phenanthrene	2.80E-01 J	2.56	1.09E+01	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Phenanthrene	2.60E-01	2.51	1.04E+01	100	480	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Phenanthrene	2.50E-01 J	2.65	9.43E+00	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Phenanthrene	2.40E-01	2.62	9.16E+00	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Phenanthrene	2.20E-01	2.51	8.76E+00	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Phenanthrene	2.20E-01	2.54	8.66E+00	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Phenanthrene	1.90E-01	2.54	7.48E+00	100	480	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Phenanthrene	1.70E-01	2.04	8.33E+00	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Phenanthrene	1.40E-01	1.68	8.33E+00	100	480	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Phenanthrene	1.30E-01	1.43	9.09E+00	100	480	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Phenanthrene	1.20E-01	1.74	6.90E+00	100	480	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Phenanthrene	5.50E-02	1.89	2.91E+00	100	480	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Phenanthrene	5.30E-02 J	1.05	5.05E+00	100	480	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Phenanthrene	5.20E-02	2.33	2.23E+00	100	480	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Phenol	4.10E-01	2.62		420	1200	ug/kg DW	<1	<1
EPA Site Inspection	DR024	8/17/1998	Phenol	1.90E-01	2.51		420	1200	ug/kg DW	<1	<1
EPA Site Inspection	DR062	8/17/1998	Phenol	1.90E-01	2.18		420	1200	ug/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Phenol	1.80E-01	2.04		420	1200	ug/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Phenol	1.40E-01	1.43		420	1200	ug/kg DW	<1	<1
EPA Site Inspection	DR022	8/17/1998	Phenol	9.00E-02	1.59		420	1200	ug/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Phenol	9.00E-02	2.54		420	1200	ug/kg DW	<1	<1
EPA Site Inspection	DR023	8/17/1998	Phenol	8.00E-02	2.51		420	1200	ug/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Phenol	3.00E-02	2.54		420	1200	ug/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Phenol	2.20E-02	1.89		420	1200	ug/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Pyrene	1.00E+01	2.01	4.98E+02	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Pyrene	1.90E+00	1.59	1.19E+02	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Pyrene	1.30E+00	2.18	5.96E+01	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR087	8/12/1998	Pyrene	1.30E+00	1.67	7.78E+01	1000	1400	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Pyrene	1.20E+00	3.93	3.05E+01	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Pyrene	1.10E+00	2.54	4.33E+01	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Pyrene	1.00E+00	2.54	3.94E+01	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Pyrene	9.10E-01	2.54	3.58E+01	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Pyrene	8.80E-01	1.97	4.47E+01	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Pyrene	8.20E-01	2.51	3.27E+01	1000	1400	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Pyrene	8.20E-01 J	2.57	3.19E+01	1000	1400	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Pyrene	7.70E-01 J	2.58	2.98E+01	1000	1400	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Pyrene	7.20E-01 J	2.77	2.60E+01	1000	1400	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Pyrene	7.10E-01 J	2.67	2.66E+01	1000	1400	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Pyrene	7.10E-01 J	2.72	2.61E+01	1000	1400	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Pyrene	6.70E-01 J	2.53	2.65E+01	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Pyrene	6.40E-01	2.51	2.55E+01	1000	1400	mg/kg OC	<1	<1

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Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Pyrene	6.10E-01 J	2.65	2.30E+01	1000	1400	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Pyrene	6.00E-01 J	2.56	2.34E+01	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Pyrene	5.80E-01	2.62	2.21E+01	1000	1400	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Pyrene	4.80E-01	2.04	2.35E+01	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Pyrene	4.30E-01	1.68	2.56E+01	1000	1400	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Pyrene	4.00E-01	1.74	2.30E+01	1000	1400	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Pyrene	3.70E-01	1.43	2.59E+01	1000	1400	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Pyrene	2.70E-01	2.33	1.16E+01	1000	1400	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Pyrene	1.70E-01	1.05	1.62E+01	1000	1400	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Pyrene	1.40E-01	1.89	7.41E+00	1000	1400	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Selenium	2.30E+01 J	1.97	1.17E+03					
EPA Site Inspection	DR088	8/31/1998	Selenium	1.90E+01 J	1.68	1.13E+03					
EPA Site Inspection	DR023	8/17/1998	Selenium	9.00E+00	2.51	3.59E+02					
EPA Site Inspection	DR024	8/17/1998	Selenium	8.00E+00	2.51	3.19E+02					
EPA Site Inspection	DR062	8/17/1998	Selenium	8.00E+00	2.18	3.67E+02					
EPA Site Inspection	DR025	8/17/1998	Selenium	7.00E+00	2.54	2.76E+02					
EPA Site Inspection	DR063	8/17/1998	Selenium	7.00E+00	2.62	2.67E+02					
EPA Site Inspection	DR022	8/17/1998	Selenium	6.00E+00	1.59	3.77E+02					
EPA Site Inspection	DR087	8/12/1998	Selenium	8.00E-01 J	1.67	4.79E+01					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Silver	3.90E+00	2.33		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Silver	1.99E+00	2.54		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR088	8/31/1998	Silver	8.50E-01	1.68		6.1	6.1	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Silver	8.00E-01	2.01		6.1	6.1	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Silver	7.70E-01	2.54		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR087	8/12/1998	Silver	7.50E-01	1.67		6.1	6.1	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Silver	7.00E-01	1.89		6.1	6.1	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Silver	6.00E-01	2.04		6.1	6.1	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Silver	6.00E-01	3.93		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Silver	5.00E-01	2.54		6.1	6.1	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Silver	5.00E-01	2.77		6.1	6.1	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Silver	5.00E-01 J	1.74		6.1	6.1	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Silver	5.00E-01 J	1.05		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR024	8/17/1998	Silver	4.90E-01	2.51		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR063	8/17/1998	Silver	4.70E-01	2.62		6.1	6.1	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Silver	4.70E-01	2.65		6.1	6.1	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Silver	4.60E-01	2.54		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR023	8/17/1998	Silver	4.50E-01	2.51		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Silver	4.50E-01	2.54		6.1	6.1	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Silver	4.30E-01	2.58		6.1	6.1	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Silver	4.20E-01	2.57		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR062	8/17/1998	Silver	4.10E-01	2.18		6.1	6.1	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Silver	4.00E-01 J	1.43		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR022	8/17/1998	Silver	3.30E-01	1.59		6.1	6.1	mg/kg DW	<1	<1
EPA Site Inspection	DR086	8/31/1998	Silver	3.30E-01	1.97		6.1	6.1	mg/kg DW	<1	<1

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR088	8/31/1998	Thallium	1.60E-01 J	1.68	9.52E+00					
EPA Site Inspection	DR024	8/17/1998	Thallium	1.50E-01	2.51	5.98E+00					
EPA Site Inspection	DR063	8/17/1998	Thallium	1.50E-01	2.62	5.73E+00					
EPA Site Inspection	DR023	8/17/1998	Thallium	1.30E-01 J	2.51	5.18E+00					
EPA Site Inspection	DR025	8/17/1998	Thallium	1.30E-01	2.54	5.12E+00					
EPA Site Inspection	DR086	8/31/1998	Thallium	1.30E-01 J	1.97	6.60E+00					
EPA Site Inspection	DR087	8/12/1998	Thallium	1.30E-01	1.67	7.78E+00					
EPA Site Inspection	DR062	8/17/1998	Thallium	1.10E-01 J	2.18	5.05E+00					
EPA Site Inspection	DR022	8/17/1998	Thallium	7.00E-02 J	1.59	4.40E+00					
EPA Site Inspection	DR087	8/12/1998	Tin	1.10E+01 J	1.67	6.59E+02					
EPA Site Inspection	DR088	8/31/1998	Tin	1.00E+01	1.68	5.95E+02					
EPA Site Inspection	DR025	8/17/1998	Tin	8.00E+00	2.54	3.15E+02					
EPA Site Inspection	DR025	8/17/1998	Tin	6.00E+00	2.54	2.36E+02					
EPA Site Inspection	DR024	8/17/1998	Tin	5.00E+00	2.51	1.99E+02					
EPA Site Inspection	DR025	8/17/1998	Tin	5.00E+00	2.54	1.97E+02					
EPA Site Inspection	DR063	8/17/1998	Tin	5.00E+00	2.62	1.91E+02					
EPA Site Inspection	DR023	8/17/1998	Tin	4.84E+00 J	2.51	1.93E+02					
EPA Site Inspection	DR022	8/17/1998	Tin	4.26E+00 J	1.59	2.68E+02					
EPA Site Inspection	DR062	8/17/1998	Tin	4.00E+00 J	2.18	1.83E+02					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Total HPAH (calc'd)	4.20E+01	2.01	2.09E+03	960	5300	mg/kg OC	2.2	<1
EPA Site Inspection	DR087	8/12/1998	Total HPAH (calc'd)	8.39E+00	1.67	5.02E+02	960	5300	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Total HPAH (calc'd)	7.70E+00	1.59	4.84E+02	960	5300	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Total HPAH (calc'd)	6.32E+00	2.18	2.90E+02	960	5300	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Total HPAH (calc'd)	5.30E+00	3.93	1.35E+02	960	5300	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Total HPAH (calc'd)	4.87E+00	2.54	1.92E+02	960	5300	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Total HPAH (calc'd)	4.56E+00	2.54	1.80E+02	960	5300	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Total HPAH (calc'd)	4.51E+00	2.51	1.80E+02	960	5300	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Total HPAH (calc'd)	3.98E+00	2.58	1.54E+02	960	5300	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Total HPAH (calc'd)	3.90E+00	2.57	1.52E+02	960	5300	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Total HPAH (calc'd)	3.89E+00	1.97	1.97E+02	960	5300	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Total HPAH (calc'd)	3.82E+00	2.77	1.38E+02	960	5300	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Total HPAH (calc'd)	3.69E+00	2.53	1.46E+02	960	5300	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Total HPAH (calc'd)	3.66E+00	2.51	1.46E+02	960	5300	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Total HPAH (calc'd)	3.46E+00	2.67	1.30E+02	960	5300	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Total HPAH (calc'd)	3.43E+00	2.72	1.26E+02	960	5300	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Total HPAH (calc'd)	3.40E+00	2.54	1.34E+02	960	5300	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Total HPAH (calc'd)	3.28E+00	2.56	1.28E+02	960	5300	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Total HPAH (calc'd)	3.26E+00	2.62	1.24E+02	960	5300	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Total HPAH (calc'd)	3.09E+00	2.65	1.17E+02	960	5300	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Total HPAH (calc'd)	2.54E+00 J	2.04	1.25E+02	960	5300	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Total HPAH (calc'd)	2.22E+00 J	1.74	1.28E+02	960	5300	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Total HPAH (calc'd)	1.87E+00	1.43	1.31E+02	960	5300	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Total HPAH (calc'd)	1.69E+00	1.68	1.01E+02	960	5300	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Total HPAH (calc'd)	1.22E+00	2.33	5.24E+01	960	5300	mg/kg OC	<1	<1

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Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Total HPAH (calc'd)	7.70E-01	1.89	4.07E+01	960	5300	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Total HPAH (calc'd)	6.20E-01 J	1.05	5.90E+01	960	5300	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Total LPAH (calc'd)	3.40E+01	2.01	1.69E+03	370	780	mg/kg OC	4.6	2.2
EPA Site Inspection	DR087	8/12/1998	Total LPAH (calc'd)	2.21E+00	1.67	1.32E+02	370	780	mg/kg OC	<1	<1
EPA Site Inspection	DR086	8/31/1998	Total LPAH (calc'd)	2.01E+00	1.97	1.02E+02	370	780	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Total LPAH (calc'd)	1.66E+00	3.93	4.22E+01	370	780	mg/kg OC	<1	<1
EPA Site Inspection	DR022	8/17/1998	Total LPAH (calc'd)	1.06E+00	1.59	6.67E+01	370	780	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Total LPAH (calc'd)	9.88E-01	2.57	3.85E+01	370	780	mg/kg OC	<1	<1
EPA Site Inspection	DR062	8/17/1998	Total LPAH (calc'd)	8.80E-01	2.18	4.04E+01	370	780	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Total LPAH (calc'd)	7.61E-01	2.53	3.01E+01	370	780	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Total LPAH (calc'd)	7.47E-01	2.77	2.70E+01	370	780	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Total LPAH (calc'd)	7.10E-01	2.54	2.80E+01	370	780	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Total LPAH (calc'd)	6.74E-01	2.67	2.52E+01	370	780	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Total LPAH (calc'd)	6.48E-01	2.58	2.51E+01	370	780	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Total LPAH (calc'd)	6.39E-01	2.72	2.35E+01	370	780	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Total LPAH (calc'd)	5.07E-01	2.56	1.98E+01	370	780	mg/kg OC	<1	<1
EPA Site Inspection	DR023	8/17/1998	Total LPAH (calc'd)	4.50E-01	2.51	1.79E+01	370	780	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Total LPAH (calc'd)	4.20E-01	2.54	1.65E+01	370	780	mg/kg OC	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Total LPAH (calc'd)	4.11E-01	2.65	1.55E+01	370	780	mg/kg OC	<1	<1
EPA Site Inspection	DR025	8/17/1998	Total LPAH (calc'd)	3.90E-01	2.54	1.54E+01	370	780	mg/kg OC	<1	<1
EPA Site Inspection	DR063	8/17/1998	Total LPAH (calc'd)	3.70E-01	2.62	1.41E+01	370	780	mg/kg OC	<1	<1
EPA Site Inspection	DR024	8/17/1998	Total LPAH (calc'd)	3.60E-01	2.51	1.43E+01	370	780	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Total LPAH (calc'd)	2.70E-01	2.04	1.32E+01	370	780	mg/kg OC	<1	<1
EPA Site Inspection	DR088	8/31/1998	Total LPAH (calc'd)	2.00E-01	1.68	1.19E+01	370	780	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Total LPAH (calc'd)	1.90E-01 J	1.43	1.33E+01	370	780	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Total LPAH (calc'd)	1.90E-01	1.74	1.09E+01	370	780	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Total LPAH (calc'd)	7.90E-02	2.33	3.39E+00	370	780	mg/kg OC	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Total LPAH (calc'd)	5.50E-02	1.89	2.91E+00	370	780	mg/kg OC	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Total LPAH (calc'd)	5.30E-02 J	1.05	5.05E+00	370	780	mg/kg OC	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Total PAH (calc'd)	7.60E+01	2.01	3.78E+03					
EPA Site Inspection	DR087	8/12/1998	Total PAH (calc'd)	1.06E+01	1.67	6.35E+02					
EPA Site Inspection	DR022	8/17/1998	Total PAH (calc'd)	8.76E+00	1.59	5.51E+02					
EPA Site Inspection	DR062	8/17/1998	Total PAH (calc'd)	7.20E+00	2.18	3.30E+02					
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Total PAH (calc'd)	6.90E+00	3.93	1.76E+02					
EPA Site Inspection	DR086	8/31/1998	Total PAH (calc'd)	5.90E+00	1.97	2.99E+02					
EPA Site Inspection	DR025	8/17/1998	Total PAH (calc'd)	5.58E+00	2.54	2.20E+02					
EPA Site Inspection	DR025	8/17/1998	Total PAH (calc'd)	4.98E+00	2.54	1.96E+02					
EPA Site Inspection	DR023	8/17/1998	Total PAH (calc'd)	4.96E+00	2.51	1.98E+02					
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Total PAH (calc'd)	4.89E+00	2.57	1.90E+02					
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Total PAH (calc'd)	4.63E+00	2.58	1.79E+02					
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Total PAH (calc'd)	4.56E+00	2.77	1.65E+02					
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Total PAH (calc'd)	4.45E+00	2.53	1.76E+02					
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Total PAH (calc'd)	4.14E+00	2.67	1.55E+02					
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Total PAH (calc'd)	4.07E+00	2.72	1.50E+02					

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Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR024	8/17/1998	Total PAH (calc'd)	4.02E+00	2.51	1.60E+02					
EPA Site Inspection	DR025	8/17/1998	Total PAH (calc'd)	3.79E+00	2.54	1.49E+02					
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Total PAH (calc'd)	3.78E+00	2.56	1.48E+02					
EPA Site Inspection	DR063	8/17/1998	Total PAH (calc'd)	3.63E+00	2.62	1.39E+02					
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Total PAH (calc'd)	3.50E+00	2.65	1.32E+02					
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Total PAH (calc'd)	2.81E+00 J	2.04	1.38E+02					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Total PAH (calc'd)	2.41E+00 J	1.74	1.39E+02					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Total PAH (calc'd)	2.05E+00 J	1.43	1.43E+02					
EPA Site Inspection	DR088	8/31/1998	Total PAH (calc'd)	1.89E+00	1.68	1.13E+02					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Total PAH (calc'd)	1.30E+00	2.33	5.58E+01					
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Total PAH (calc'd)	8.20E-01	1.89	4.34E+01					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Total PAH (calc'd)	6.80E-01 J	1.05	6.48E+01					
EPA Site Inspection	DR087	8/12/1998	Tributyltin as ion	1.80E-01	1.67	1.08E+01					
EPA Site Inspection	DR025	8/17/1998	Tributyltin as ion	1.30E-01	2.54	5.12E+00					
EPA Site Inspection	DR025	8/17/1998	Tributyltin as ion	1.30E-01	2.54	5.12E+00					
EPA Site Inspection	DR025	8/17/1998	Tributyltin as ion	2.20E-02	2.54	8.66E-01					
EPA Site Inspection	DR025	8/17/1998	Vanadium	7.90E+01	2.54	3.11E+03					
EPA Site Inspection	DR025	8/17/1998	Vanadium	7.90E+01	2.54	3.11E+03					
EPA Site Inspection	DR086	8/31/1998	Vanadium	7.90E+01	1.97	4.01E+03					
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Vanadium	7.42E+01	2.04	3.64E+03					
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Vanadium	7.03E+01	2.33	3.02E+03					
EPA Site Inspection	DR088	8/31/1998	Vanadium	7.00E+01	1.68	4.17E+03					
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Vanadium	6.58E+01	1.89	3.48E+03					
EPA Site Inspection	DR024	8/17/1998	Vanadium	6.50E+01	2.51	2.59E+03					
EPA Site Inspection	DR063	8/17/1998	Vanadium	6.30E+01	2.62	2.40E+03					
EPA Site Inspection	DR023	8/17/1998	Vanadium	6.00E+01	2.51	2.39E+03					
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Vanadium	5.87E+01	3.93	1.49E+03					
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Vanadium	5.84E+01	2.01	2.91E+03					
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Vanadium	5.72E+01	1.74	3.29E+03					
EPA Site Inspection	DR025	8/17/1998	Vanadium	5.70E+01	2.54	2.24E+03					
EPA Site Inspection	DR062	8/17/1998	Vanadium	5.30E+01	2.18	2.43E+03					
EPA Site Inspection	DR087	8/12/1998	Vanadium	5.10E+01	1.67	3.05E+03					
EPA Site Inspection	DR022	8/17/1998	Vanadium	4.60E+01	1.59	2.89E+03					
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Vanadium	4.50E+01	1.05	4.29E+03					
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Vanadium	4.45E+01	1.43	3.11E+03					
EPA Site Inspection	DR087	8/12/1998	Zinc	2.25E+02	1.67		410	960	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Zinc	2.20E+02	2.33		410	960	mg/kg DW	<1	<1
EPA Site Inspection	DR088	8/31/1998	Zinc	1.69E+02	1.68		410	960	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Zinc	1.59E+02	2.01		410	960	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS42	1/24/2005	Zinc	1.57E+02	2.04		410	960	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Zinc	1.52E+02	2.54		410	960	mg/kg DW	<1	<1
EPA Site Inspection	DR025	8/17/1998	Zinc	1.46E+02	2.54		410	960	mg/kg DW	<1	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	Zinc	1.41E+02	1.89		410	960	mg/kg DW	<1	<1
EPA Site Inspection	DR024	8/17/1998	Zinc	1.38E+02	2.51		410	960	mg/kg DW	<1	<1

Table A-1
Chemicals Detected in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
EPA Site Inspection	DR025	8/17/1998	Zinc	1.38E+02	2.54		410	960	mg/kg DW	<1	<1
EPA Site Inspection	DR063	8/17/1998	Zinc	1.37E+02	2.62		410	960	mg/kg DW	<1	<1
EPA Site Inspection	DR023	8/17/1998	Zinc	1.34E+02	2.51		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-440	5/20/1997	Zinc	1.26E+02	2.77		410	960	mg/kg DW	<1	<1
EPA Site Inspection	DR062	8/17/1998	Zinc	1.23E+02	2.18		410	960	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS323	10/4/2006	Zinc	1.18E+02	1.74		410	960	mg/kg DW	<1	<1
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Zinc	1.17E+02	3.93		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-434	4/8/1997	Zinc	1.15E+02	2.53		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-442	6/3/1997	Zinc	1.15E+02	2.58		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-437	5/1/1997	Zinc	1.12E+02	2.57		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-439	5/15/1997	Zinc	1.12E+02	2.54		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-438	5/8/1997	Zinc	1.11E+02	2.65		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-430	3/6/1997	Zinc	1.10E+02	2.67		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-431	3/12/1997	Zinc	1.07E+02	2.72		410	960	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	Zinc	1.07E+02	1.43		410	960	mg/kg DW	<1	<1
EPA Site Inspection	DR022	8/17/1998	Zinc	1.06E+02	1.59		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-432	3/27/1997	Zinc	1.05E+02	2.54		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-441	5/28/1997	Zinc	1.05E+02	2.57		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-433	4/3/1997	Zinc	1.04E+02	2.56		410	960	mg/kg DW	<1	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	Zinc	1.02E+02	1.05		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-435	4/17/1997	Zinc	1.00E+02	2.53		410	960	mg/kg DW	<1	<1
King County CSO Water Quality Asessment	WQABRAN-436	4/24/1997	Zinc	9.96E+01	2.54		410	960	mg/kg DW	<1	<1
EPA Site Inspection	DR086	8/31/1998	Zinc	9.40E+01	1.97		410	960	mg/kg DW	<1	<1

mg/kg - Milligram per kilogram
ug/kg - Microgram per kilogram
DW - Dry weight
TOC - Total Organic Carbon
OC - Organic carbon normalized
SQS - SMS Sediment Quality Standard
CSL - SMS Cleanup Screening Level
PAH - Polycyclic aromatic hydrocarbon
Total HPAH - Total high molecular weight PAH
Total LPAH - Total low molecular weight PAH
PCB - Polychlorinated biphenyl
J - Estimated value between the method detection limit and the laboratory reporting limit
SMS - Sediment Management Standard (Washington Administrative Code 173-204)
JN - Estimated value between the method detection limit and laboratory reporting limit; tentative identification, the analyte exhibits low spectral match
NA - Not Applicable

[1] Due to the low TOC in this sample, results were compared to the Lowest Apparent Effects Threshold (LAET) value rather than the SQS and/or CSL (Ecology 1996e). In most cases the Benthic LAET value replaced the CSL value and the Microtox LAET value replaced the SQS value. In some cases one or the other of these values was not available and therefore was not reported in the table.
Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentrations to the CSL or SQS; exceedance factors are shown only if they are greater than 1.
Chemicals with exceedance factors are shaded.
Sampling events are listed in Table 1.

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,4,6,7,8-HpCDD	5.08E-03 BD	2.22	2.29E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,4,6,7,8-HpCDD	4.77E-03 BD	2.22	2.15E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,4,6,7,8-HpCDD	9.24E-04 B	1.58	5.85E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,2,3,4,6,7,8-HpCDD	7.29E-04 B	1.5	4.86E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,4,6,7,8-HpCDD	7.28E-05 B	1.93	3.77E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,4,6,7,8-HpCDD	7.19E-05 B	1.93	3.73E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,4,6,7,8-HpCDF	2.65E-03	2.22	1.19E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,4,6,7,8-HpCDF	2.33E-03	2.22	1.05E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,2,3,4,6,7,8-HpCDF	3.14E-04	1.5	2.09E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,4,6,7,8-HpCDF	2.73E-04	1.58	1.73E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,4,6,7,8-HpCDF	6.84E-05	1.93	3.54E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,4,6,7,8-HpCDF	6.15E-05	1.93	3.19E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,4,7,8,9-HpCDF	3.06E-04	2.22	1.38E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,4,7,8,9-HpCDF	2.91E-04	2.22	1.31E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,2,3,4,7,8,9-HpCDF	3.30E-05	1.5	2.20E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,4,7,8,9-HpCDF	2.48E-05	1.58	1.57E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,4,7,8,9-HpCDF	1.98E-06	1.93	1.03E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,4,7,8,9-HpCDF	1.78E-06	1.93	9.22E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,4,7,8-HxCDD	7.33E-06 DJ	2.22	3.30E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,4,7,8-HxCDD	7.05E-06 DJ	2.22	3.18E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,4,7,8-HxCDD	6.08E-06	1.58	3.85E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,2,3,4,7,8-HxCDD	1.53E-06	1.5	1.02E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,4,7,8-HxCDD	7.25E-07 J	1.93	3.76E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,4,7,8-HxCDD	6.75E-07 J	1.93	3.50E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,4,7,8-HxCDF	4.79E-04	2.22	2.16E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,4,7,8-HxCDF	4.54E-04	2.22	2.05E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,2,3,4,7,8-HxCDF	5.21E-05	1.5	3.47E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,4,7,8-HxCDF	3.93E-05	1.58	2.49E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,4,7,8-HxCDF	2.96E-06	1.93	1.53E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,4,7,8-HxCDF	2.80E-06	1.93	1.45E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,6,7,8-HxCDD	1.73E-04 D	2.22	7.79E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,6,7,8-HxCDD	1.64E-04 D	2.22	7.39E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,6,7,8-HxCDD	3.77E-05	1.58	2.39E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,2,3,6,7,8-HxCDD	2.34E-05	1.5	1.56E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,6,7,8-HxCDD	4.64E-06	1.93	2.40E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,6,7,8-HxCDD	4.60E-06	1.93	2.38E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,6,7,8-HxCDF	7.75E-05	2.22	3.49E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,6,7,8-HxCDF	7.45E-05	2.22	3.36E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,6,7,8-HxCDF	1.21E-05	1.58	7.66E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,2,3,6,7,8-HxCDF	9.78E-06	1.5	6.52E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,6,7,8-HxCDF	2.77E-06	1.93	1.44E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,6,7,8-HxCDF	2.65E-06	1.93	1.37E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,7,8,9-HxCDD	2.43E-05 D	2.22	1.09E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,7,8,9-HxCDD	2.30E-05 D	2.22	1.04E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,7,8,9-HxCDD	1.86E-05	1.58	1.18E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,2,3,7,8,9-HxCDD	6.53E-06	1.5	4.35E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,7,8,9-HxCDD	2.28E-06	1.93	1.18E-04					

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,7,8,9-HxCDD	2.19E-06	1.93	1.13E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,7,8,9-HxCDF	8.64E-06	2.22	3.89E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,7,8,9-HxCDF	7.40E-06	2.22	3.33E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,7,8,9-HxCDF	5.45E-07 J	1.58	3.45E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,7,8,9-HxCDF	1.34E-07 J	1.93	6.94E-06					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,7,8,9-HxCDF	1.22E-07 J	1.93	6.32E-06					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,7,8-PeCDD	3.78E-06	1.58	2.39E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,7,8-PeCDD	3.71E-06	2.22	1.67E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,7,8-PeCDD	3.51E-06	2.22	1.58E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,2,3,7,8-PeCDD	1.15E-06	1.5	7.67E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,7,8-PeCDD	1.09E-06	1.93	5.65E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,7,8-PeCDD	1.04E-06	1.93	5.39E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,7,8-PeCDF	1.84E-05	2.22	8.29E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	1,2,3,7,8-PeCDF	1.77E-05	2.22	7.97E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	1,2,3,7,8-PeCDF	4.40E-06	1.58	2.78E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,2,3,7,8-PeCDF	2.47E-06	1.5	1.65E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,7,8-PeCDF	1.22E-06	1.93	6.32E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	1,2,3,7,8-PeCDF	1.16E-06	1.93	6.01E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,4-Dichlorobenzene	2.00E-02	1.5	1.33E+00	3.1	9	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	1,4-Dichlorobenzene	1.60E-02 J	1.5	1.07E+00	3.1	9	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4 - 6	1,4-Dichlorobenzene	4.00E-03 J	1.46	2.74E-01	3.1	9	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0 - 0.5	1,4-Dichlorobenzene	3.70E-03 J	2.05	1.80E-01	3.1	9	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0 - 1	1,4-Dichlorobenzene	3.00E-03 J	2.3	1.30E-01	3.1	9	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	1-Methylnaphthalene	1.70E-01	1.3	1.31E+01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	1-Methylnaphthalene	1.50E-01	2.29	6.55E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 2.5	1-Methylnaphthalene	7.00E-02	1.78	3.93E+00					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0 - 1	1-Methylnaphthalene	4.60E-02	2.3	2.00E+00					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	2,3,4,6,7,8-HxCDF	2.91E-05	2.22	1.31E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	2,3,4,6,7,8-HxCDF	2.72E-05	2.22	1.23E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	2,3,4,6,7,8-HxCDF	6.29E-06	1.58	3.98E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	2,3,4,6,7,8-HxCDF	4.87E-06	1.5	3.25E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	2,3,4,6,7,8-HxCDF	3.01E-06	1.93	1.56E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	2,3,4,6,7,8-HxCDF	2.96E-06	1.93	1.53E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	2,3,4,7,8-PeCDF	6.25E-05	2.22	2.82E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	2,3,4,7,8-PeCDF	6.10E-05	2.22	2.75E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	2,3,4,7,8-PeCDF	1.76E-05	1.58	1.11E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	2,3,4,7,8-PeCDF	7.65E-06	1.5	5.10E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	2,3,4,7,8-PeCDF	2.77E-06 B	1.93	1.44E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	2,3,4,7,8-PeCDF	2.71E-06 B	1.93	1.40E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	2,3,7,8-TCDD	1.88E-06	1.58	1.19E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	2,3,7,8-TCDD	9.50E-07 DJ	2.22	4.28E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	2,3,7,8-TCDD	8.30E-07 DJ	2.22	3.74E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	2,3,7,8-TCDD	4.96E-07	1.5	3.31E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	2,3,7,8-TCDD	3.33E-07	1.93	1.73E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	2,3,7,8-TCDD	3.15E-07	1.93	1.63E-05					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	2,3,7,8-TCDF	9.54E-05	1.58	6.04E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	2,3,7,8-TCDF	6.09E-06	1.58	3.85E-04					

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	2,3,7,8-TCDF	4.71E-06	1.93	2.44E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	2,3,7,8-TCDF	4.53E-06	1.93	2.35E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	2,3,7,8-TCDF	4.19E-06	2.22	1.89E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4 - 6	2,3,7,8-TCDF	3.84E-06	2.22	1.73E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	2,3,7,8-TCDF	2.87E-06	1.5	1.91E-04					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8 - 10	2,3,7,8-TCDF	1.44E-06	1.93	7.46E-05					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	2,4-Dimethylphenol	9.90E-03 M	1.3	7.62E-01	29	29	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	2-Methylnaphthalene	1.20E-01	1.3	9.23E+00	38	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 2.5	2-Methylnaphthalene	8.90E-02	1.78	5.00E+00	38	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0 - 1	2-Methylnaphthalene	3.00E-02	2.3	1.30E+00	38	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	2-Methylphenol	1.00E-02	2.14	4.67E-01	63	63	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5 - 2	2-Methylphenol	9.30E-03 M	1.6	5.81E-01	63	63	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	2-Methylphenol	8.70E-03 M	1.3	6.69E-01	63	63	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 2.5	2-Methylphenol	8.60E-03 M	1.78	4.83E-01	63	63	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0 - 2	2-Methylphenol	7.10E-03	2.12	3.35E-01	63	63	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5 - 1	2-Methylphenol	6.20E-03 M	2.17	2.86E-01	63	63	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0 - 0.5	2-Methylphenol	6.10E-03	2.05	2.98E-01	63	63	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	2-Methylphenol	6.10E-03 M	2.29	2.66E-01	63	63	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Acenaphthene	2.20E+00	1.3	1.69E+02	16	57	mg/kg OC	11	3.0
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Acenaphthene	2.10E+00	1.3	1.62E+02	16	57	mg/kg OC	10	2.8
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Acenaphthene	1.60E+00	2.29	6.99E+01	16	57	mg/kg OC	4.4	1.2
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Acenaphthene	1.50E+00	2.29	6.55E+01	16	57	mg/kg OC	4.1	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5 - 3	Acenaphthene	5.70E-01	1.39	4.10E+01	16	57	mg/kg OC	2.6	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Acenaphthene	3.70E-01	2.14	1.73E+01	16	57	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Acenaphthene	3.40E-01	2.14	1.59E+01	16	57	mg/kg OC	1.0	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0 - 1	Acenaphthene	2.00E-01	2.3	8.70E+00	16	57	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 2.5	Acenaphthene	1.50E-01	1.78	8.43E+00	16	57	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0 - 1	Acenaphthene	4.80E-02 J	1.77	2.71E+00	16	57	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5 - 2	Acenaphthene	4.80E-02 J	1.6	3.00E+00	16	57	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1 - 1.5	Acenaphthene	4.00E-02 J	1.76	2.27E+00	16	57	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1 - 2	Acenaphthene	2.50E-02	2.18	1.15E+00	16	57	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Acenaphthylene	1.30E-01	1.3	1.00E+01	66	66	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Acenaphthylene	9.90E-02 J	2.14	4.63E+00	66	66	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Acenaphthylene	9.50E-02	2.14	4.44E+00	66	66	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Acenaphthylene	7.60E-02	2.29	3.32E+00	66	66	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 2.5	Acenaphthylene	4.10E-02 J	1.78	2.30E+00	66	66	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0 - 0.5	Acenaphthylene	3.30E-02 J	2.05	1.61E+00	66	66	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1 - 2	Acenaphthylene	1.80E-02 J	2.18	8.26E-01	66	66	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0 - 1	Acenaphthylene	1.20E-02 J	2.3	5.22E-01	66	66	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	Acenaphthylene	1.10E-02 J	1.58	6.96E-01	66	66	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Anthracene	8.80E+00	1.3	6.77E+02	220	1200	mg/kg OC	3.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Anthracene	1.70E+00	2.14	7.94E+01	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Anthracene	1.60E+00	2.14	7.48E+01	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Anthracene	1.10E+00	2.29	4.80E+01	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Anthracene	1.10E+00	2.29	4.80E+01	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 2.5	Anthracene	4.80E-01	1.78	2.70E+01	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0 - 1	Anthracene	2.90E-01	2.3	1.26E+01	220	1200	mg/kg OC	<1	<1

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Anthracene	1.70E-01	1.39	1.22E+01	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Anthracene	1.50E-01	1.77	8.47E+00	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Anthracene	1.40E-01	2.05	6.83E+00	220	1200	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Anthracene	1.20E-01	2.0	6.00E+00	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Anthracene	1.20E-01	1.76	6.82E+00	220	1200	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Anthracene	1.00E-01	2.0	5.00E+00	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Anthracene	8.70E-02	1.6	5.44E+00	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Anthracene	8.60E-02	2.17	3.96E+00	220	1200	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Anthracene	7.20E-02	2.0	3.60E+00	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Anthracene	6.60E-02	2.12	3.11E+00	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Anthracene	5.30E-02 J	1.46	3.63E+00	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Anthracene	4.30E-02	1.58	2.72E+00	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Anthracene	3.40E-02	2.18	1.56E+00	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Anthracene	2.10E-02	1.5	1.40E+00	220	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Aroclor-1242	8.50E-02	1.46	5.82E+00					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4	-	6	Aroclor-1242	4.40E-02	2.22	1.98E+00					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Aroclor-1248	1.20E+00	1.58	7.59E+01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Aroclor-1248	7.60E-02	1.5	5.07E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Aroclor-1248	6.00E-02	2.14	2.80E+00					
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Aroclor-1248	3.80E-02	1.77	2.15E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Aroclor-1248	3.60E-02	2.12	1.70E+00					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Aroclor-1248	5.10E-03	2.3	2.22E-01					
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Aroclor-1248	5.00E-03	0.963	5.19E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Aroclor-1254	1.30E+00	1.58	8.23E+01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Aroclor-1254	3.80E-01	1.46	2.60E+01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Aroclor-1254	2.50E-01	1.5	1.67E+01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	6	-	8	Aroclor-1254	1.90E-01	2.25	8.44E+00					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4	-	6	Aroclor-1254	1.70E-01	2.22	7.66E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Aroclor-1254	9.20E-02	2.14	4.30E+00					
Lehigh NW	C2	8/29/2003	0	-	4	Aroclor-1254	8.70E-02	2.0	4.35E+00					
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Aroclor-1254	8.00E-02	1.77	4.52E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Aroclor-1254	7.70E-02	2.12	3.63E+00					
Lehigh NW	C3	8/29/2003	4	-	5	Aroclor-1254	4.90E-02	2.0	2.45E+00					
Lehigh NW	A1	8/29/2003	0	-	4	Aroclor-1254	3.20E-02	2.0	1.60E+00					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Aroclor-1254	2.30E-02	2.3	1.00E+00					
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Aroclor-1254	9.00E-03	0.963	9.35E-01					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Aroclor-1254	8.50E-03	2.18	3.90E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Aroclor-1260	7.30E-01	1.58	4.62E+01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Aroclor-1260	4.10E-01	1.46	2.81E+01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Aroclor-1260	2.70E-01	1.5	1.80E+01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	6	-	8	Aroclor-1260	2.10E-01	2.25	9.33E+00					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4	-	6	Aroclor-1260	1.90E-01	2.22	8.56E+00					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8	-	10	Aroclor-1260	9.50E-02	1.93	4.92E+00					
Lehigh NW	C2	8/29/2003	0	-	4	Aroclor-1260	7.20E-02	2.0	3.60E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Aroclor-1260	6.70E-02	2.14	3.13E+00					
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Aroclor-1260	6.40E-02	1.77	3.62E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Aroclor-1260	6.40E-02	2.12	3.02E+00					

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Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	8	-	10	Aroclor-1260	4.10E-02	1.63	2.52E+00					
Lehigh NW	C3	8/29/2003	4	-	5	Aroclor-1260	3.00E-02	2.0	1.50E+00					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Aroclor-1260	2.80E-02	2.3	1.22E+00					
Lehigh NW	A1	8/29/2003	0	-	4	Aroclor-1260	2.60E-02	2.0	1.30E+00					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Aroclor-1260	1.70E-02	2.18	7.80E-01					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Aroclor-1260	7.80E-03 P	1.44	5.42E-01					
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Aroclor-1260	5.60E-03	0.963	5.82E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Arsenic	2.00E+01	1.58		57	93	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Arsenic	2.00E+01	2.14		57	93	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Arsenic	1.80E+01	2.12		57	93	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Arsenic	1.70E+01	1.5		57	93	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Arsenic	1.70E+01	1.5		57	93	mg/kg DW	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Arsenic	1.60E+01	2.0		57	93	mg/kg DW	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Arsenic	1.20E+01	2.0		57	93	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Arsenic	1.20E+01	2.3		57	93	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Arsenic	1.10E+01	1.77		57	93	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Arsenic	1.10E+01	2.3		57	93	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Arsenic	8.00E+00	2.18		57	93	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Arsenic	7.00E+00	1.44		57	93	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(a)anthracene	7.10E+00	1.3	5.46E+02	110	270	mg/kg OC	5.0	2.0
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(a)anthracene	3.40E+00	2.14	1.59E+02	110	270	mg/kg OC	1.4	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(a)anthracene	3.20E+00	2.14	1.50E+02	110	270	mg/kg OC	1.4	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(a)anthracene	2.80E+00	2.29	1.22E+02	110	270	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(a)anthracene	2.70E+00	2.29	1.18E+02	110	270	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Benzo(a)anthracene	1.10E+00	1.78	6.18E+01	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Benzo(a)anthracene	4.90E-01	1.77	2.77E+01	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Benzo(a)anthracene	4.40E-01	2.05	2.15E+01	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Benzo(a)anthracene	3.40E-01	1.6	2.13E+01	110	270	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Benzo(a)anthracene	3.10E-01	2.0	1.55E+01	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Benzo(a)anthracene	3.10E-01	1.76	1.76E+01	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Benzo(a)anthracene	2.80E-01	2.17	1.29E+01	110	270	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Benzo(a)anthracene	2.60E-01	2.0	1.30E+01	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Benzo(a)anthracene	2.20E-01	1.39	1.58E+01	110	270	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Benzo(a)anthracene	2.10E-01	2.0	1.05E+01	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Benzo(a)anthracene	1.90E-01	2.12	8.96E+00	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Benzo(a)anthracene	1.80E-01	1.46	1.23E+01	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Benzo(a)anthracene	1.30E-01	2.3	5.65E+00	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Benzo(a)anthracene	8.60E-02	1.58	5.44E+00	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Benzo(a)anthracene	5.10E-02	2.18	2.34E+00	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Benzo(a)anthracene	3.80E-02	1.5	2.53E+00	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Benzo(a)anthracene	1.60E-02 J	0.963	1.66E+00	110	270	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(a)pyrene	3.10E+00	1.3	2.38E+02	99	210	mg/kg OC	2.4	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(a)pyrene	3.00E+00	1.3	2.31E+02	99	210	mg/kg OC	2.3	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(a)pyrene	2.60E+00	2.14	1.21E+02	99	210	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(a)pyrene	2.50E+00	2.14	1.17E+02	99	210	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(a)pyrene	1.20E+00	2.29	5.24E+01	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(a)pyrene	1.20E+00	2.29	5.24E+01	99	210	mg/kg OC	<1	<1

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Benzo(a)pyrene	8.20E-01	1.78	4.61E+01	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Benzo(a)pyrene	4.10E-01	1.76	2.33E+01	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Benzo(a)pyrene	4.00E-01	2.05	1.95E+01	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Benzo(a)pyrene	3.60E-01	1.6	2.25E+01	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Benzo(a)pyrene	3.40E-01	1.77	1.92E+01	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Benzo(a)pyrene	3.20E-01	2.17	1.47E+01	99	210	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Benzo(a)pyrene	2.90E-01	2.0	1.45E+01	99	210	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Benzo(a)pyrene	2.90E-01	2.0	1.45E+01	99	210	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Benzo(a)pyrene	2.60E-01	2.0	1.30E+01	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Benzo(a)pyrene	2.30E-01	2.12	1.08E+01	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Benzo(a)pyrene	2.00E-01	1.46	1.37E+01	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Benzo(a)pyrene	1.10E-01	1.39	7.91E+00	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Benzo(a)pyrene	9.40E-02	1.58	5.95E+00	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Benzo(a)pyrene	9.10E-02	2.3	3.96E+00	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Benzo(a)pyrene	9.00E-02	2.18	4.13E+00	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Benzo(a)pyrene	3.90E-02	1.5	2.60E+00	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Benzo(a)pyrene	2.70E-02	0.963	2.80E+00	99	210	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(b)fluoranthene	4.40E+00	1.3	3.38E+02	230	450	mg/kg OC	1.5	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(b)fluoranthene	3.90E+00	1.3	3.00E+02	230	450	mg/kg OC	1.3	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(b)fluoranthene	3.80E+00	2.14	1.78E+02	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(b)fluoranthene	3.50E+00	2.14	1.64E+02	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(b)fluoranthene	2.10E+00	2.29	9.17E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(b)fluoranthene	1.90E+00	2.29	8.30E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Benzo(b)fluoranthene	8.00E-01	1.78	4.49E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Benzo(b)fluoranthene	6.00E-01	2.05	2.93E+01	230	450	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Benzo(b)fluoranthene	5.70E-01	2.0	2.85E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Benzo(b)fluoranthene	5.40E-01	1.76	3.07E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Benzo(b)fluoranthene	5.30E-01	2.17	2.44E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Benzo(b)fluoranthene	5.00E-01	1.77	2.82E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Benzo(b)fluoranthene	4.00E-01	1.6	2.50E+01	230	450	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Benzo(b)fluoranthene	3.50E-01	2.0	1.75E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Benzo(b)fluoranthene	3.50E-01	2.12	1.65E+01	230	450	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Benzo(b)fluoranthene	3.10E-01	2.0	1.55E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Benzo(b)fluoranthene	3.00E-01	1.46	2.05E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Benzo(b)fluoranthene	1.50E-01	1.58	9.49E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Benzo(b)fluoranthene	1.40E-01	1.39	1.01E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Benzo(b)fluoranthene	1.20E-01	2.3	5.22E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Benzo(b)fluoranthene	9.10E-02	2.18	4.17E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Benzo(b)fluoranthene	7.70E-02	1.5	5.13E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Benzo(b)fluoranthene	4.00E-02	0.963	4.15E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(g,h,i)perylene	7.30E-01	1.3	5.62E+01	31	78	mg/kg OC	1.8	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(g,h,i)perylene	6.90E-01	1.3	5.31E+01	31	78	mg/kg OC	1.7	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(g,h,i)perylene	5.70E-01	2.14	2.66E+01	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(g,h,i)perylene	4.90E-01	2.14	2.29E+01	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Benzo(g,h,i)perylene	4.20E-01	1.78	2.36E+01	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(g,h,i)perylene	2.90E-01 J	2.29	1.27E+01	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(g,h,i)perylene	2.70E-01	2.29	1.18E+01	31	78	mg/kg OC	<1	<1

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Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Benzo(g,h,i)perylene	2.20E-01	2.05	1.07E+01	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Benzo(g,h,i)perylene	2.00E-01	1.76	1.14E+01	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Benzo(g,h,i)perylene	1.90E-01	1.6	1.19E+01	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Benzo(g,h,i)perylene	1.80E-01	2.17	8.29E+00	31	78	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Benzo(g,h,i)perylene	1.40E-01	2.0	7.00E+00	31	78	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Benzo(g,h,i)perylene	1.20E-01	2.0	6.00E+00	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Benzo(g,h,i)perylene	1.00E-01	1.46	6.85E+00	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Benzo(g,h,i)perylene	8.20E-02	1.77	4.63E+00	31	78	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Benzo(g,h,i)perylene	6.00E-02	2.0	3.00E+00	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Benzo(g,h,i)perylene	4.60E-02 J	1.39	3.31E+00	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Benzo(g,h,i)perylene	4.40E-02 J	2.12	2.08E+00	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Benzo(g,h,i)perylene	4.00E-02	2.3	1.74E+00	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Benzo(g,h,i)perylene	3.90E-02	2.18	1.79E+00	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Benzo(g,h,i)perylene	2.00E-02 J	1.58	1.27E+00	31	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(k)fluoranthene	2.90E+00	1.3	2.23E+02	230	450	mg/kg OC	1.0	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(k)fluoranthene	2.60E+00	2.14	1.21E+02	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzo(k)fluoranthene	2.50E+00	1.3	1.92E+02	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzo(k)fluoranthene	2.20E+00	2.14	1.03E+02	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(k)fluoranthene	1.30E+00	2.29	5.68E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzo(k)fluoranthene	1.20E+00	2.29	5.24E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Benzo(k)fluoranthene	7.30E-01	1.78	4.10E+01	230	450	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Benzo(k)fluoranthene	5.20E-01	2.0	2.60E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Benzo(k)fluoranthene	4.70E-01	1.77	2.66E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Benzo(k)fluoranthene	4.00E-01	2.05	1.95E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Benzo(k)fluoranthene	3.90E-01	1.76	2.22E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Benzo(k)fluoranthene	3.70E-01	1.6	2.31E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Benzo(k)fluoranthene	3.20E-01	2.12	1.51E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Benzo(k)fluoranthene	2.70E-01	2.17	1.24E+01	230	450	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Benzo(k)fluoranthene	2.30E-01	2.0	1.15E+01	230	450	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Benzo(k)fluoranthene	2.30E-01	2.0	1.15E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Benzo(k)fluoranthene	1.80E-01	1.46	1.23E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Benzo(k)fluoranthene	1.20E-01	1.58	7.59E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Benzo(k)fluoranthene	1.20E-01	1.39	8.63E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Benzo(k)fluoranthene	9.10E-02	2.3	3.96E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Benzo(k)fluoranthene	6.50E-02	2.18	2.98E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Benzo(k)fluoranthene	4.90E-02	1.5	3.27E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Benzo(k)fluoranthene	3.00E-02	0.963	3.12E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Benzofluoranthenes (total-calc'd)	6.40E+00	1.3	4.92E+02	230	450	mg/kg OC	2.1	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzofluoranthenes (total-calc'd)	6.00E+00	2.14	2.80E+02	230	450	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Benzofluoranthenes (total-calc'd)	3.10E+00	2.29	1.35E+02	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	3	Benzofluoranthenes (total-calc'd)	1.53E+00	1.78	8.60E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	1	Benzofluoranthenes (total-calc'd)	1.00E+00	2.05	4.88E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Benzofluoranthenes (total-calc'd)	9.70E-01	1.77	5.48E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	2	Benzofluoranthenes (total-calc'd)	9.30E-01	1.76	5.28E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Benzofluoranthenes (total-calc'd)	8.00E-01	2.17	3.69E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Benzofluoranthenes (total-calc'd)	7.70E-01	1.6	4.81E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Benzofluoranthenes (total-calc'd)	6.70E-01	2.12	3.16E+01	230	450	mg/kg OC	<1	<1

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Benzofluoranthenes (total-calc'd)	4.80E-01	1.46	3.29E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Benzofluoranthenes (total-calc'd)	2.70E-01	1.49	1.81E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Benzofluoranthenes (total-calc'd)	2.60E-01	1.39	1.87E+01	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Benzofluoranthenes (total-calc'd)	2.10E-01	2.3	9.13E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1.1	-	2	Benzofluoranthenes (total-calc'd)	1.56E-01	2.18	7.16E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Benzofluoranthenes (total-calc'd)	1.26E-01 J	1.5	8.40E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Benzofluoranthenes (total-calc'd)	7.00E-02	0.963	7.27E+00	230	450	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Benzoic acid	2.50E-01	2.12	1.18E+01	650	650	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Benzoic acid	2.40E-01	2.14	1.12E+01	650	650	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Benzoic acid	9.30E-02	1.58	5.89E+00	650	650	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Benzoic acid	7.80E-02	1.77	4.41E+00	650	650	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Benzoic acid	6.70E-02	1.5	4.47E+00	650	650	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Benzoic acid	5.40E-02 J	0.963	5.61E+00	650	650	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Bis(2-ethylhexyl)phthalate	1.60E+00	2.14	7.48E+01	47	78	mg/kg OC	1.6	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Bis(2-ethylhexyl)phthalate	1.60E+00	2.14	7.48E+01	47	78	mg/kg OC	1.6	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Bis(2-ethylhexyl)phthalate	8.00E-01	1.3	6.15E+01	47	78	mg/kg OC	1.3	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Bis(2-ethylhexyl)phthalate	7.80E-01	1.3	6.00E+01	47	78	mg/kg OC	1.3	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Bis(2-ethylhexyl)phthalate	6.20E-01	1.58	3.92E+01	47	78	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Bis(2-ethylhexyl)phthalate	5.30E-01	2.0	2.65E+01	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Bis(2-ethylhexyl)phthalate	4.20E-01	2.17	1.94E+01	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Bis(2-ethylhexyl)phthalate	3.90E-01	2.29	1.70E+01	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Bis(2-ethylhexyl)phthalate	3.90E-01	1.46	2.67E+01	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Bis(2-ethylhexyl)phthalate	3.80E-01	2.29	1.66E+01	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Bis(2-ethylhexyl)phthalate	3.40E-01	2.05	1.66E+01	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Bis(2-ethylhexyl)phthalate	3.20E-01	1.76	1.82E+01	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Bis(2-ethylhexyl)phthalate	1.80E-01	2.12	8.49E+00	47	78	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Bis(2-ethylhexyl)phthalate	1.40E-01	2.0	7.00E+00	47	78	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Bis(2-ethylhexyl)phthalate	1.20E-01	2.0	6.00E+00	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Bis(2-ethylhexyl)phthalate	1.10E-01	1.6	6.88E+00	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Bis(2-ethylhexyl)phthalate	1.10E-01	1.78	6.18E+00	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Bis(2-ethylhexyl)phthalate	8.70E-02	1.77	4.92E+00	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Bis(2-ethylhexyl)phthalate	7.10E-02	1.5	4.73E+00	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Bis(2-ethylhexyl)phthalate	6.80E-02	1.39	4.89E+00	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Bis(2-ethylhexyl)phthalate	5.60E-02	2.3	2.43E+00	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Bis(2-ethylhexyl)phthalate	1.80E-02 J	0.963	1.87E+00	47	78	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Butyl benzyl phthalate	4.10E-02	1.58	2.59E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Butyl benzyl phthalate	4.00E-02	2.05	1.95E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Butyl benzyl phthalate	3.80E-02	2.17	1.75E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Butyl benzyl phthalate	3.50E-02	2.05	1.71E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Butyl benzyl phthalate	3.50E-02	2.17	1.61E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Butyl benzyl phthalate	3.20E-02	1.3	2.46E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Butyl benzyl phthalate	3.00E-02	1.76	1.70E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Butyl benzyl phthalate	3.00E-02	2.29	1.31E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Butyl benzyl phthalate	2.80E-02	2.12	1.32E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Butyl benzyl phthalate	2.80E-02	1.76	1.59E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Butyl benzyl phthalate	2.40E-02	2.14	1.12E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Butyl benzyl phthalate	2.40E-02	1.46	1.64E+00	4.9	64	mg/kg OC	<1	<1

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Butyl benzyl phthalate	2.20E-02	1.5	1.47E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Butyl benzyl phthalate	1.70E-02	1.5	1.13E+00	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Butyl benzyl phthalate	1.00E-02	1.6	6.25E-01	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Butyl benzyl phthalate	8.60E-03	1.78	4.83E-01	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Butyl benzyl phthalate	8.00E-03	1.39	5.76E-01	4.9	64	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Cadmium	1.90E+00	1.58		5.1	6.7	mg/kg DW	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Cadmium	7.00E-01	2.0		5.1	6.7	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Cadmium	7.00E-01	1.5		5.1	6.7	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Cadmium	7.00E-01	1.5		5.1	6.7	mg/kg DW	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Cadmium	5.00E-01	2.0		5.1	6.7	mg/kg DW	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Cadmium	5.00E-01	2.0		5.1	6.7	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Cadmium	5.00E-01	2.12		5.1	6.7	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Cadmium	3.00E-01	1.77		5.1	6.7	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Cadmium	3.00E-01	2.3		5.1	6.7	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Cadmium	3.00E-01	2.3		5.1	6.7	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Cadmium	3.00E-01	2.18		5.1	6.7	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Chromium	6.70E+01	1.58		260	270	mg/kg DW	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Chromium	3.79E+01	2.0		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Chromium	3.48E+01	1.5		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Chromium	3.46E+01	1.5		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Chromium	3.34E+01	2.14		260	270	mg/kg DW	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Chromium	3.14E+01	2.0		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Chromium	2.95E+01	2.12		260	270	mg/kg DW	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Chromium	2.62E+01	2.0		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Chromium	2.20E+01	1.77		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Chromium	2.03E+01	2.3		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Chromium	1.89E+01	2.18		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Chromium	1.84E+01	2.3		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Chromium	1.43E+01	0.963		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Chromium	1.30E+01	1.44		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	2	-	4	Chromium	1.05E+01	1.63		260	270	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Chrysene	7.80E+00	1.3	6.00E+02	110	460	mg/kg OC	5.5	1.3
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Chrysene	7.20E+00	2.14	3.36E+02	110	460	mg/kg OC	3.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Chrysene	3.20E+00	2.29	1.40E+02	110	460	mg/kg OC	1.3	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Chrysene	3.10E+00	2.29	1.35E+02	110	460	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Chrysene	1.10E+00	1.78	6.18E+01	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Chrysene	7.40E-01	1.77	4.18E+01	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Chrysene	6.90E-01	2.05	3.37E+01	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Chrysene	5.00E-01	1.76	2.84E+01	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Chrysene	5.00E-01	1.6	3.13E+01	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Chrysene	4.80E-01	2.17	2.21E+01	110	460	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Chrysene	4.60E-01	2.0	2.30E+01	110	460	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Chrysene	4.00E-01	2.0	2.00E+01	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Chrysene	2.90E-01	2.12	1.37E+01	110	460	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Chrysene	2.80E-01	2.0	1.40E+01	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Chrysene	2.30E-01	1.39	1.65E+01	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Chrysene	2.20E-01	1.46	1.51E+01	110	460	mg/kg OC	<1	<1

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Chrysene	1.60E-01	2.3	6.96E+00	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Chrysene	1.20E-01	1.58	7.59E+00	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Chrysene	6.70E-02	2.18	3.07E+00	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Chrysene	5.00E-02	1.5	3.33E+00	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Chrysene	1.70E-02 J	0.963	1.77E+00	110	460	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Cobalt	1.17E+01	1.58						
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Cobalt	1.10E+01	1.5						
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Cobalt	1.09E+01	1.5						
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Cobalt	1.09E+01	2.14						
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Cobalt	9.00E+00	2.12						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Cobalt	6.80E+00	2.3						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Cobalt	6.30E+00	2.3						
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Cobalt	6.00E+00	1.77						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Cobalt	5.60E+00	2.18						
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Cobalt	5.10E+00	0.963						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Cobalt	4.30E+00	1.44						
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	2	-	4	Cobalt	3.90E+00	1.63						
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Copper	9.04E+01	1.58		390	390	mg/kg DW	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Copper	7.40E+01	2.0		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Copper	7.33E+01	2.14		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Copper	7.06E+01	2.3		390	390	mg/kg DW	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Copper	6.93E+01	2.0		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Copper	6.77E+01	2.12		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Copper	5.74E+01	1.5		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Copper	5.66E+01	1.5		390	390	mg/kg DW	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Copper	4.40E+01	2.0		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Copper	3.79E+01	1.77		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Copper	3.51E+01	2.3		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Copper	2.81E+01	2.18		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Copper	1.85E+01	0.963		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Copper	1.77E+01	1.44		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	2	-	4	Copper	1.27E+01	1.63		390	390	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	delta-BHC	1.10E+00	2.12	5.19E+01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	delta-BHC	8.30E-03	2.14	3.88E-01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Dibenzo(a,h)anthracene	2.00E-01	2.14	9.35E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Dibenzo(a,h)anthracene	1.80E-01	2.14	8.41E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Dibenzo(a,h)anthracene	1.80E-01	1.3	1.38E+01	12	33	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Dibenzo(a,h)anthracene	1.00E-01	1.6	6.25E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Dibenzo(a,h)anthracene	8.00E-02	1.78	4.49E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Dibenzo(a,h)anthracene	8.00E-02	2.29	3.49E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Dibenzo(a,h)anthracene	4.30E-02	1.46	2.95E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Dibenzo(a,h)anthracene	3.30E-02	2.05	1.61E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Dibenzo(a,h)anthracene	3.30E-02	1.76	1.88E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Dibenzo(a,h)anthracene	3.20E-02	2.05	1.56E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Dibenzo(a,h)anthracene	3.20E-02	1.6	2.00E+00	12	33	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Dibenzo(a,h)anthracene	2.90E-02	2.0	1.45E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Dibenzo(a,h)anthracene	2.90E-02	1.76	1.65E+00	12	33	mg/kg OC	<1	<1

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
Lehigh NW	C2	8/29/2003	0	-	4	Dibenzo(a,h)anthracene	2.70E-02	2.0	1.35E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Dibenzo(a,h)anthracene	2.60E-02	2.17	1.20E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Dibenzo(a,h)anthracene	2.40E-02	2.17	1.11E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Dibenzo(a,h)anthracene	1.40E-02	1.39	1.01E+00	12	33	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Dibenzofuran	6.80E-01	1.3	5.23E+01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Dibenzofuran	6.50E-01	1.3	5.00E+01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Dibenzofuran	3.20E-01 J	2.29	1.40E+01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Dibenzofuran	3.20E-01	2.29	1.40E+01					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Dibenzofuran	1.20E-01	2.3	5.22E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Dibenzofuran	1.20E-01	1.78	6.74E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Dibenzofuran	1.10E-01	2.14	5.14E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Dibenzofuran	1.10E-01	1.39	7.91E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Dibutyltin as ion	1.20E-02 M	2.12	5.66E-01					
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Di-n-butyl phthalate	6.20E-02	0.963	6.44E+00	220	1700	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Di-n-butyl phthalate	3.70E-02 B	2.18	1.70E+00	220	1700	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Di-n-butyl phthalate	2.90E-02 B	2.3	1.26E+00	220	1700	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Di-n-butyl phthalate	2.40E-02	1.58	1.52E+00	220	1700	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Di-n-butyl phthalate	2.30E-02	1.5	1.53E+00	220	1700	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	2	-	4	Di-n-butyl phthalate	1.40E-02 J	1.63	8.59E-01	220	1700	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Fluoranthene	2.40E+01	1.3	1.85E+03	160	1200	mg/kg OC	12	1.5
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Fluoranthene	1.00E+01	2.29	4.37E+02	160	1200	mg/kg OC	2.7	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Fluoranthene	7.40E+00 B	2.14	3.46E+02	160	1200	mg/kg OC	2.2	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Fluoranthene	2.60E+00	1.77	1.47E+02	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Fluoranthene	2.40E+00	1.78	1.35E+02	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Fluoranthene	1.20E+00	1.39	8.63E+01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Fluoranthene	9.20E-01	2.05	4.49E+01	160	1200	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Fluoranthene	7.60E-01	2.0	3.80E+01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Fluoranthene	7.50E-01	1.6	4.69E+01	160	1200	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Fluoranthene	7.40E-01	2.0	3.70E+01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Fluoranthene	5.80E-01	2.3	2.52E+01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Fluoranthene	5.80E-01	1.76	3.30E+01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Fluoranthene	4.50E-01 B	2.12	2.12E+01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Fluoranthene	4.20E-01	1.46	2.88E+01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Fluoranthene	4.10E-01	2.17	1.89E+01	160	1200	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Fluoranthene	3.30E-01	2.0	1.65E+01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Fluoranthene	2.90E-01	1.58	1.84E+01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Fluoranthene	1.60E-01	1.5	1.07E+01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Fluoranthene	1.50E-01	2.18	6.88E+00	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Fluoranthene	3.60E-02	0.963	3.74E+00	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Fluoranthene	1.20E-02 J	1.44	8.33E-01	160	1200	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Fluorene	2.00E+00	1.3	1.54E+02	23	79	mg/kg OC	6.7	1.9
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Fluorene	1.80E+00	1.3	1.38E+02	23	79	mg/kg OC	6.0	1.8
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Fluorene	4.80E-01	2.29	2.10E+01	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Fluorene	4.60E-01	2.29	2.01E+01	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Fluorene	3.10E-01	2.14	1.45E+01	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Fluorene	2.60E-01	2.14	1.21E+01	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Fluorene	2.30E-01	1.39	1.65E+01	23	79	mg/kg OC	<1	<1

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Fluorene	1.90E-01	1.78	1.07E+01	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Fluorene	1.80E-01	2.3	7.83E+00	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Fluorene	4.70E-02 J	1.76	2.67E+00	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Fluorene	4.40E-02 J	1.6	2.75E+00	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Fluorene	3.60E-02 J	1.77	2.03E+00	23	79	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Fluorene	2.00E-02	2.0	1.00E+00	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Fluorene	2.00E-02	2.18	9.17E-01	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Fluorene	1.20E-02 J	1.58	7.59E-01	23	79	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Indeno(1,2,3-cd)pyrene	9.30E-01	1.3	7.15E+01	34	88	mg/kg OC	2.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Indeno(1,2,3-cd)pyrene	8.90E-01	1.3	6.85E+01	34	88	mg/kg OC	2.0	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Indeno(1,2,3-cd)pyrene	8.00E-01	2.14	3.74E+01	34	88	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Indeno(1,2,3-cd)pyrene	6.80E-01	2.14	3.18E+01	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Indeno(1,2,3-cd)pyrene	4.00E-01	1.78	2.25E+01	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Indeno(1,2,3-cd)pyrene	3.70E-01	2.29	1.62E+01	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Indeno(1,2,3-cd)pyrene	3.60E-01 J	2.29	1.57E+01	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Indeno(1,2,3-cd)pyrene	2.20E-01	2.05	1.07E+01	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Indeno(1,2,3-cd)pyrene	2.10E-01	1.76	1.19E+01	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Indeno(1,2,3-cd)pyrene	2.10E-01	1.6	1.31E+01	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Indeno(1,2,3-cd)pyrene	1.80E-01	2.17	8.29E+00	34	88	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Indeno(1,2,3-cd)pyrene	1.50E-01	2.0	7.50E+00	34	88	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Indeno(1,2,3-cd)pyrene	1.30E-01	2.0	6.50E+00	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Indeno(1,2,3-cd)pyrene	9.40E-02	1.77	5.31E+00	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Indeno(1,2,3-cd)pyrene	8.30E-02	1.46	5.68E+00	34	88	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Indeno(1,2,3-cd)pyrene	7.50E-02	2.0	3.75E+00	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Indeno(1,2,3-cd)pyrene	5.20E-02 J	2.12	2.45E+00	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Indeno(1,2,3-cd)pyrene	4.90E-02 J	1.39	3.53E+00	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Indeno(1,2,3-cd)pyrene	4.40E-02	2.18	2.02E+00	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Indeno(1,2,3-cd)pyrene	4.20E-02	2.3	1.83E+00	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Indeno(1,2,3-cd)pyrene	1.80E-02 J	1.58	1.14E+00	34	88	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Lead	8.20E+01	1.58		450	530	mg/kg DW	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Lead	5.70E+01	2.0		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Lead	5.60E+01	2.12		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Lead	5.30E+01	2.3		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Lead	4.60E+01	2.14		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Lead	3.90E+01	2.3		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Lead	3.60E+01	2.18		450	530	mg/kg DW	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Lead	3.40E+01	2.0		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Lead	3.30E+01	1.5		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Lead	3.20E+01	1.5		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Lead	2.50E+01	1.44		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Lead	2.20E+01	1.77		450	530	mg/kg DW	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Lead	1.70E+01	2.0		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Lead	7.00E+00	0.963		450	530	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Mercury	6.50E-01	1.58		0.41	0.59	mg/kg DW	1.6	1.1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Mercury	3.50E-01	1.5		0.41	0.59	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Mercury	3.50E-01	1.5		0.41	0.59	mg/kg DW	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Mercury	2.50E-01	2.0		0.41	0.59	mg/kg DW	<1	<1

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Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
Lehigh NW	C3	8/29/2003	4	-	5	Mercury	2.30E-01	2.0		0.41	0.59	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Mercury	2.00E-01	2.12		0.41	0.59	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Mercury	2.00E-01	2.14		0.41	0.59	mg/kg DW	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Mercury	1.70E-01	2.0		0.41	0.59	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Mercury	1.40E-01	2.3		0.41	0.59	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Mercury	1.40E-01	2.18		0.41	0.59	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Mercury	1.30E-01	2.3		0.41	0.59	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Mercury	1.10E-01	1.77		0.41	0.59	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Molybdenum	2.80E+00	2.18						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Molybdenum	2.40E+00	2.3						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Molybdenum	2.20E+00	2.3						
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Molybdenum	2.00E+00	1.58						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Molybdenum	1.10E+00	1.44						
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Molybdenum	1.10E+00	2.14						
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Molybdenum	9.00E-01	1.77						
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Monobutyltin as ion	8.00E-03 M	2.12	3.77E-01					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Naphthalene	2.00E-01	1.3	1.54E+01	99	170	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Naphthalene	1.10E-01	1.78	6.18E+00	99	170	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Naphthalene	5.50E-02 J	2.29	2.40E+00	99	170	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Naphthalene	4.80E-02	2.3	2.09E+00	99	170	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Naphthalene	3.50E-02 J	1.77	1.98E+00	99	170	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Naphthalene	3.00E-02	2.18	1.38E+00	99	170	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Naphthalene	1.20E-02 J	1.58	7.59E-01	99	170	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Nickel	2.80E+01	1.58						
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Nickel	2.80E+01	2.14						
Lehigh NW	A1	8/29/2003	0	-	4	Nickel	2.60E+01	2.0						
Lehigh NW	C2	8/29/2003	0	-	4	Nickel	2.30E+01	2.0						
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Nickel	2.20E+01	1.5						
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Nickel	2.20E+01	2.12						
Lehigh NW	C3	8/29/2003	4	-	5	Nickel	2.10E+01	2.0						
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Nickel	2.10E+01	1.5						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Nickel	2.10E+01	2.3						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Nickel	1.50E+01	2.18						
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Nickel	1.40E+01	1.77						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Nickel	1.30E+01	2.3						
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Nickel	1.00E+01	0.963						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Nickel	9.00E+00	1.44						
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	2	-	4	Nickel	7.00E+00	1.63						
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4	-	6	OCDD	3.80E-02 BD	2.22	1.71E+00					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4	-	6	OCDD	3.46E-02 BD	2.22	1.56E+00					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	OCDD	8.22E-03 BD	1.58	5.20E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	OCDD	6.09E-03 BD	1.5	4.06E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8	-	10	OCDD	4.53E-04 B	1.93	2.35E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8	-	10	OCDD	4.52E-04 B	1.93	2.34E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4	-	6	OCDF	1.41E-02 BD	2.22	6.35E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4	-	6	OCDF	1.29E-02 BD	2.22	5.81E-01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	OCDF	1.41E-03 B	1.5	9.40E-02					

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	OCDF	1.05E-03 B	1.58	6.65E-02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8	-	10	OCDF	1.53E-04 B	1.93	7.93E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8	-	10	OCDF	1.42E-04 B	1.93	7.36E-03					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	PCBs (total calc'd)	3.20E+00	1.49	2.15E+02	12	65	mg/kg OC	18	3.3
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	PCBs (total calc'd)	8.80E-01	1.46	6.03E+01	12	65	mg/kg OC	5.0	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	PCBs (total calc'd)	6.00E-01	1.5	4.00E+01	12	65	mg/kg OC	3.3	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4	-	6	PCBs (total calc'd)	4.00E-01	2.22	1.80E+01	12	65	mg/kg OC	1.5	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	6	-	8	PCBs (total calc'd)	4.00E-01	2.25	1.78E+01	12	65	mg/kg OC	1.5	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	PCBs (total calc'd)	2.19E-01	2.14	1.02E+01	12	65	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	PCBs (total calc'd)	1.82E-01	1.77	1.03E+01	12	65	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	PCBs (total calc'd)	1.77E-01	2.12	8.35E+00	12	65	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	8	-	10	PCBs (total calc'd)	9.50E-02	1.85	5.14E+00	12	65	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	PCBs (total calc'd)	5.60E-02	2.3	2.43E+00	12	65	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	8	-	10	PCBs (total calc'd)	4.10E-02	1.63	2.52E+00	12	65	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1.1	-	2	PCBs (total calc'd)	2.60E-02 J	2.18	1.19E+00	12	65	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	PCBs (total calc'd)	1.96E-02	0.963	2.04E+00	12	65	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	PCBs (total calc'd)	7.80E-03 J	1.44	5.42E-01	12	65	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Pentachlorophenol	4.00E-02	1.46	2.74E+00	360	690	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Phenanthrene	1.20E+01	1.3	9.23E+02	100	480	mg/kg OC	9.2	1.9
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Phenanthrene	1.70E+00	1.78	9.55E+01	100	480	mg/kg OC	1.0	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Phenanthrene	1.40E+00	2.29	6.11E+01	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Phenanthrene	1.30E+00	2.29	5.68E+01	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Phenanthrene	1.20E+00	2.14	5.61E+01	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Phenanthrene	1.20E+00	2.14	5.61E+01	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Phenanthrene	5.70E-01	2.3	2.48E+01	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Phenanthrene	4.80E-01	1.6	3.00E+01	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Phenanthrene	3.80E-01	1.76	2.16E+01	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Phenanthrene	3.80E-01	1.39	2.73E+01	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Phenanthrene	2.90E-01	1.77	1.64E+01	100	480	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Phenanthrene	2.30E-01	2.0	1.15E+01	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Phenanthrene	2.10E-01	2.05	1.02E+01	100	480	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Phenanthrene	1.70E-01	2.0	8.50E+00	100	480	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Phenanthrene	1.50E-01	2.0	7.50E+00	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Phenanthrene	1.50E-01	1.46	1.03E+01	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Phenanthrene	1.40E-01	2.17	6.45E+00	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Phenanthrene	1.00E-01	2.18	4.59E+00	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Phenanthrene	1.00E-01	2.12	4.72E+00	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Phenanthrene	6.60E-02	1.58	4.18E+00	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Phenanthrene	4.60E-02	1.5	3.07E+00	100	480	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Phenol	4.00E-01 B	2.05	1.95E+01	420	1200	ug/kg DW	1.0	<1
Lehigh NW	A1	8/29/2003	0	-	4	Phenol	3.00E-01	2.0	1.50E+01	420	1200	ug/kg DW	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Phenol	8.60E-02	2.0	4.30E+00	420	1200	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Phenol	6.50E-02 B	2.17	3.00E+00	420	1200	ug/kg DW	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Phenol	6.00E-02	2.0	3.00E+00	420	1200	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Phenol	2.40E-02	2.3	1.04E+00	420	1200	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Phenol	1.50E-02 J	2.18	6.88E-01	420	1200	ug/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Phenol	1.40E-02 J	1.44	9.72E-01	420	1200	ug/kg DW	<1	<1

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)		TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Pyrene	1.40E+01		1.3	1.08E+03	1000	1400	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Pyrene	5.80E+00		2.29	2.53E+02	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Pyrene	4.50E+00		2.14	2.10E+02	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Pyrene	4.40E+00		2.29	1.92E+02	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Pyrene	3.80E+00		2.14	1.78E+02	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Pyrene	3.00E+00		1.78	1.69E+02	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Pyrene	1.70E+00		1.77	9.60E+01	1000	1400	mg/kg OC	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Pyrene	1.20E+00		2.0	6.00E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Pyrene	1.00E+00		1.76	5.68E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Pyrene	1.00E+00		1.6	6.25E+01	1000	1400	mg/kg OC	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Pyrene	9.80E-01		2.0	4.90E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Pyrene	9.20E-01		2.05	4.49E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Pyrene	7.40E-01		1.46	5.07E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Pyrene	7.00E-01		1.39	5.04E+01	1000	1400	mg/kg OC	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Pyrene	6.90E-01		2.0	3.45E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Pyrene	6.60E-01		2.17	3.04E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Pyrene	6.40E-01		2.12	3.02E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Pyrene	5.50E-01		2.3	2.39E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Pyrene	3.20E-01		1.58	2.03E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Pyrene	1.60E-01		1.5	1.07E+01	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Pyrene	1.60E-01		2.18	7.34E+00	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Pyrene	7.60E-02		0.963	7.89E+00	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Pyrene	1.50E-02	J	1.44	1.04E+00	1000	1400	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Silver	2.30E+00		1.58		6.1	6.1	mg/kg DW	<1	<1
Lehigh NW	A1	8/29/2003	0	-	4	Silver	1.30E+00		2.0		6.1	6.1	mg/kg DW	<1	<1
Lehigh NW	C2	8/29/2003	0	-	4	Silver	1.20E+00		2.0		6.1	6.1	mg/kg DW	<1	<1
Lehigh NW	C3	8/29/2003	4	-	5	Silver	7.00E-01		2.0		6.1	6.1	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Silver	6.00E-01		1.5		6.1	6.1	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Silver	6.00E-01		1.5		6.1	6.1	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Total HPAH (calc'd)	6.40E+01		1.3	4.92E+03	960	5300	mg/kg OC	5.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Total HPAH (calc'd)	3.15E+01	J	2.14	1.47E+03	960	5300	mg/kg OC	1.5	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Total HPAH (calc'd)	2.50E+01		2.29	1.09E+03	960	5300	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	3	Total HPAH (calc'd)	1.09E+01		1.78	6.12E+02	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Total HPAH (calc'd)	7.00E+00		1.77	3.95E+02	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	1	Total HPAH (calc'd)	4.84E+00	J	2.05	2.36E+02	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Total HPAH (calc'd)	4.20E+00	J	1.6	2.63E+02	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Total HPAH (calc'd)	4.20E+00	J	1.76	2.39E+02	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Total HPAH (calc'd)	3.33E+00	J	2.17	1.53E+02	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Total HPAH (calc'd)	2.80E+00	J	1.39	2.01E+02	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Total HPAH (calc'd)	2.57E+00	J	2.12	1.21E+02	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Total HPAH (calc'd)	2.47E+00		1.46	1.69E+02	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Total HPAH (calc'd)	1.80E+00		2.3	7.83E+01	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Total HPAH (calc'd)	1.22E+00	J	1.49	8.19E+01	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1.1	-	2	Total HPAH (calc'd)	7.60E-01		2.18	3.49E+01	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Total HPAH (calc'd)	5.70E-01	J	1.5	3.80E+01	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Total HPAH (calc'd)	2.42E-01	J	0.963	2.51E+01	960	5300	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Total HPAH (calc'd)	2.70E-02	J	1.44	1.88E+00	960	5300	mg/kg OC	<1	<1

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)			Chemical	Conc'n (mg/kg DW)		TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Total LPAH (calc'd)	2.50E+01		1.3	1.92E+03	370	780	mg/kg OC	5.2	2.5
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Total LPAH (calc'd)	4.50E+00	J	2.29	1.97E+02	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Total LPAH (calc'd)	3.50E+00		2.14	1.64E+02	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Total LPAH (calc'd)	2.70E+00	J	1.78	1.52E+02	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Total LPAH (calc'd)	1.35E+00		1.39	9.71E+01	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Total LPAH (calc'd)	1.30E+00	J	2.3	5.65E+01	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Total LPAH (calc'd)	6.60E-01	J	1.6	4.13E+01	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Total LPAH (calc'd)	5.90E-01	J	1.76	3.35E+01	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Total LPAH (calc'd)	5.60E-01	J	1.77	3.16E+01	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Total LPAH (calc'd)	3.80E-01	J	2.05	1.85E+01	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1.1	-	2	Total LPAH (calc'd)	2.30E-01	J	2.18	1.06E+01	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Total LPAH (calc'd)	2.30E-01		2.17	1.06E+01	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Total LPAH (calc'd)	2.00E-01	J	1.46	1.37E+01	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Total LPAH (calc'd)	1.70E-01		2.12	8.02E+00	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Total LPAH (calc'd)	1.44E-01	J	1.49	9.66E+00	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Total LPAH (calc'd)	6.70E-02	J	1.5	4.47E+00	370	780	mg/kg OC	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	-	3.5	Total PAH (calc'd)	8.90E+01		1.3	6.85E+03					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Total PAH (calc'd)	3.49E+01	J	2.14	1.63E+03					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5	-	4	Total PAH (calc'd)	3.00E+01	J	2.29	1.31E+03					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	2.5	Total PAH (calc'd)	1.35E+01	J	1.78	7.58E+02					
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Total PAH (calc'd)	7.60E+00	J	1.77	4.29E+02					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	0.5	Total PAH (calc'd)	5.23E+00	J	2.05	2.55E+02					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1.5	-	2	Total PAH (calc'd)	4.80E+00	J	1.6	3.00E+02					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	1	-	1.5	Total PAH (calc'd)	4.80E+00	J	1.76	2.73E+02					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5	-	3	Total PAH (calc'd)	4.20E+00	J	1.39	3.02E+02					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0.5	-	1	Total PAH (calc'd)	3.56E+00	J	2.17	1.64E+02					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Total PAH (calc'd)	3.10E+00	J	2.3	1.35E+02					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Total PAH (calc'd)	2.73E+00	J	2.12	1.29E+02					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Total PAH (calc'd)	2.67E+00	J	1.46	1.83E+02					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Total PAH (calc'd)	1.36E+00	J	1.49	9.13E+01					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1.1	-	2	Total PAH (calc'd)	9.80E-01	J	2.18	4.50E+01					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Total PAH (calc'd)	6.40E-01	J	1.5	4.27E+01					
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Total PAH (calc'd)	2.42E-01	J	0.963	2.51E+01					
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2	-	4	Total PAH (calc'd)	2.70E-02	J	1.44	1.88E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Tributyltin as ion	5.50E-02		2.12	2.59E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Tributyltin as ion	4.70E-02		2.14	2.20E+00					
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	-	6	Tributyltin as ion	2.70E-02		1.46	1.85E+00					
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	-	2	Vanadium	8.69E+01		1.58						
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Vanadium	8.07E+01		1.5						
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	-	4	Vanadium	7.91E+01		1.5						
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2	-	4	Vanadium	7.15E+01		2.14						
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0	-	2	Vanadium	6.50E+01		2.12						
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0	-	1	Vanadium	4.99E+01		1.77						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Vanadium	4.99E+01		2.3						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0	-	1	Vanadium	4.97E+01		2.3						
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1	-	2	Vanadium	4.74E+01		2.18						
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1	-	2	Vanadium	4.47E+01		0.963						

Table A-2
Chemicals Detected in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2 - 4	Vanadium	4.39E+01	1.44						
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	2 - 4	Vanadium	3.87E+01	1.63						
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	Zinc	1.73E+02	1.58		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Zinc	1.59E+02	2.14		410	960	mg/kg DW	<1	<1
Lehigh NW	A1	8/29/2003	0 - 4	Zinc	1.25E+02	2.0		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	0 - 2	Zinc	1.22E+02	2.12		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	Zinc	1.04E+02	1.5		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2 - 4	Zinc	1.03E+02	1.5		410	960	mg/kg DW	<1	<1
Lehigh NW	C2	8/29/2003	0 - 4	Zinc	9.83E+01	2.0		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	0 - 1	Zinc	7.90E+01	1.77		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0 - 1	Zinc	7.74E+01	2.3		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	0 - 1	Zinc	7.46E+01	2.3		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	1 - 2	Zinc	6.79E+01	2.18		410	960	mg/kg DW	<1	<1
Lehigh NW	C3	8/29/2003	4 - 5	Zinc	6.43E+01	2.0		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC22	2/13/2006	2 - 4	Zinc	4.79E+01	1.44		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	1 - 2	Zinc	3.43E+01	0.963		410	960	mg/kg DW	<1	<1
LDW Subsurface Sediment 2006	LDW-SC18	2/16/2006	2 - 4	Zinc	2.03E+01	1.63		410	960	mg/kg DW	<1	<1

mg/kg - Milligram per kilogram
ug/kg - Microgram per kilogram
DW - Dry weight
TOC - Total Organic Carbon
OC - Organic carbon normalized
SQS - SMS Sediment Quality Standard
CSL - SMS Cleanup Screening Level
PAH - Polycyclic aromatic hydrocarbon
Total HPAH - Total high molecular weight PAH
Total LPAH - Total low molecular weight PAH
PCB - Polychlorinated biphenyl
SMS - Sediment Management Standard (Washington Administrative Code 173-204)
B - The analyte was found in the associated method blank at a level that is significant relative to the sample result
D - Duplicate sample
J - Estimated value between the method detection limit and the laboratory reporting limit
M - Value is a calculated "whole-body" result
P - The gas chromatography or high performance liquid chromatography confirmation criteria were exceeded. The relative percent difference is greater than 40 percent between the two analytical results.

Samples from the Lehigh NW event were not analyzed for TOC. A TOC of 2.0 percent was assumed for the Lehigh NW event samples, based on the average percent TOC, 1.9, for the LDW and the Thiessen polygon analysis prepared for the draft final LDW RI, which indicates that TOC in the sample area is greater than or equal to 2.0 percent (Windward 2008 [0074]).
Three TOC results were provided in the LDW RI data set for sample LDW-SC20 8-10 feet. The three TOC results for the sample were averaged for the purpose of calculated the mg/kg OC-normalized concentration.
Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentrations to the CSL or SQS; exceedance factors are shown only if they are greater than 1.
Chemicals with exceedance factors are shaded.
Sampling events are listed in Table 1.

Appendix B

Photographs

B-1 Historical Aerial Photograph Review

B-2 Historical Aerial and Oblique Shoreline Photographs

Appendix B-1

Historical Aerial Photograph Review

Appendix B

Lower Duwamish Waterway
RM 1.0–1.2 East (King County Lease Parcels)
Historical Aerial Photograph Review

In an effort to more thoroughly understand and evaluate historical facility operations and development in the RM 1.0–1.2 East source control area, SAIC reviewed historical aerial photographs from 1936 to 2004. At a minimum, these photographs represent conditions of roughly each decade. Additional photographs are available; however, if during a cursory assessment there were no apparent changes, photographs less than a decade apart were not included in this summary. Aerial photographs for the years 1936, 1946, 1956, 1969, 1977, 1990, 1999, and 2004 are described below.

For purposes of discussion, current-day street names are used as reference points. **Manson Construction Company** is located on the south side of Slip 1 and is bordered by the LDW on the west and East Marginal Way S on the east. **Cadman Seattle, Inc. and Lehigh Northwest** occupy two parcels on the south side of Manson Construction and also are bordered by the LDW on the west and East Marginal Way S on the east. **United Western Supply** is bordered by the LDW on the west and Ohio Avenue S on the east and is located South of Cadman and Lehigh. **J.A. Jack & Sons** is the southern-most property located in this source control area and is bordered by the LDW on the west and Ohio Avenue S on the east. **Upland Areas** are considered to be the general vicinity surrounding the source control area.

1936

Manson Construction Company: The property appears to have been used historically as a storage yard for building materials, including lumber. A small building is present at the western property line near the LDW. It appears that a dock or above-water structure extends west over the LDW. No other buildings or other permanent structures appear to be present.

Cadman Seattle, Inc. and Lehigh Northwest: Two large buildings and three smaller buildings are present. With the exception of the buildings and associated parking areas, both parcels consist of vacant undeveloped land. Two large log booms are rafted together and moored on the eastern side of the LDW off the Cadman and Lehigh properties.

United Western Supply: One very large rectangular building spans almost the entire northern property line. Another large rectangular building is located in the southwest corner of the property. The southeastern portion of the property is used for lumber storage. The remaining area is undeveloped and appears to only serve as vehicle parking. A long narrow dock appears to be used to gain access to moored boats and two dock-type structures.

J.A. Jack: The property appears to be primarily used for storing lumber and other materials. A small building is located on the east side of the property near Ohio Avenue S. No other buildings or over-water surfaces are present.

Upland Areas: Farmlands appear to be immediately east of East Marginal Way S. Several buildings, likely both residential and commercial in nature, are distributed throughout the surrounding area. East Marginal Way S can be seen bisecting this area, but relatively few other roads are present. Most of these roads appear to be unpaved.

1946

Manson Construction Company: The property appears to be undergoing a major redevelopment. The lumber, previously stored on site, has been removed and no buildings are present. The initial stages of a large wharf construction, or reconstruction, project can be observed on the northern portion of the property. A small triangular land mass, possibly fill, extends into Slip 1 from the north side of the Manson Construction property.

Cadman Seattle, Inc. and Lehigh Northwest: An addition to an existing building located on the west central side of the property has been constructed. Brush and vegetation appears to have dominated the eastern portion of this property. Construction appears to be ongoing for an addition to the large building located on the southeastern portion of the property. A second small office type building located on the eastern side of the property was built.

United Western Supply: A large portion of the riverbank appears to have been filled in to allow for construction of an over-water structure. A large tanker type vessel is moored adjacent to the property. The southeast corner of the property now serves as parking and is being used as storage for various materials, including lumber.

J.A. Jack: The property continues to be used primarily for lumber and/or cargo storage. The shoreline development that took place at the United Western Supply property extends to the south and spans both the J.A. Jack and United Western Supply properties.

The **Upland Areas** have undergone significant development. Several large industrial buildings and storage areas are present east of East Marginal Way S and several roads have been widened.

1956

Manson Construction Company: The dock construction project along the northern boundary of the property appears to be complete. Various other small outbuildings have been constructed. Several small barges are located adjacent to the property in the LDW. Two buildings were constructed on the eastern portion of the property adjacent to East Marginal Way S. The remaining property is primarily used as cargo and/or equipment storage. A boat ramp is present at the southwest corner of the property.

Cadman Seattle, Inc. and Lehigh Northwest: The eastern portion of the property has been cleared and is used for materials storage. The building addition to the building on the southeastern portion of the property appears to be complete. Several barges are located offshore from this property. The building on the west central side of the property has been demolished, but it appears the addition to the building remains.

United Western Supply: The property appears to be relatively unchanged. Several small ships are moored at the dock adjacent to the property.

J.A. Jack: Relatively few changes are visible and the property continues to be used primarily for lumber storage and other cargo.

The **Upland Areas** have again undergone significant development. Industrial- and storage-related businesses clearly begin to dominate the surrounding areas. Several large warehouse-type buildings have been constructed. This area appears to serve as a major hub for cargo transport and storage.

1969

Manson Construction Company: The property remains relatively unchanged; however, there is increased storage of industrial type equipment and material on the wharf, which extends out over the south side of Slip 1.

Cadman Seattle, Inc. and Lehigh Northwest: The property appears relatively unchanged with the exception of the demolition of the building in the west central portion of the property.

United Western Supply: Two additional buildings were constructed on the property. One is a long narrow building located along the south property line and another is a small square building located near Ohio Avenue S. The over-water structure on the west side of this facility was removed and replaced by a small narrow dock that runs parallel to the shoreline.

J.A. Jack: The property has undergone a change in function and no longer serves as a lumber storage yard. It appears that J.A. Jack is now operating at the property. Two buildings were constructed in the center of the parcel and appear to provide elevator functions for rock or a similar material processing. Two smaller buildings are located on the east side of the parcel near Ohio Avenue S. Several stockpiles of crushed material were observed in the aerial photographs.

The **Upland Areas** continue to transition into a more industrial function as additional construction and activity continues to take place.

1977

Manson Construction Company: Several small out buildings to the west of the primary building have been added at the Manson Construction property. Multiple barges are moored in Slip 1 on adjacent docks.

Cadman Seattle, Inc. and Lehigh Northwest: The addition to the large building in the southeastern portion of the property has been removed and a small building on the eastern side of the large building was also torn down.

United Western Supply: The property remains relatively unchanged.

J.A. Jack: The property continues to process and store stockpiles of crush material.

The **Upland Areas** appear to continue towards the trend in industrial construction and redevelopment.

1990

Manson Construction Company: The property remains relatively unchanged.

Cadman Seattle, Inc. and Lehigh Northwest: The shoreline section of the property has been filled in or an over-water structure was constructed. Various pieces of equipment, including a crane, is located on this surface. The large rectangular building located in the center of the south parcel has been removed and four silos were built west of the previous building's footprint. Another building was constructed on the east side of the property located near to East Marginal Way S.

United Western Supply: The property supports large barge moorage along the LDW. It appears that a small section of shoreline was paved and is now used as parking or storage.

J.A. Jack: The property remains relatively unchanged.

The **Upland Areas** color aerial photographs confirm that the surrounding areas have been paved. Development and redevelopment continues to take place. The surrounding industry provides parking and/or storage for numerous semi truck trailers and cargo containers.

1999

Manson Construction Company: The activities at the property appear to remain unchanged; however, several more large barges and cranes are moored along the north and west sides of the property.

Cadman Seattle, Inc. and Lehigh Northwest: The property provides moorage to large barges and stockpiles of various gravel or rock materials are present. An additional silo was constructed and located on the east side of the previous four silos.

United Western Supply: A small building has been removed from the eastern portion of the parcel.

J.A. Jack: The property remains relatively unchanged.

The **Upland Areas** have undergone relatively few significant changes.

2004

Manson Construction Company: The property appears to continue to be used for the same purposes and has had little reconstruction or development. Several larger barges with large cranes are moored adjacent to the property.

Cadman Seattle, Inc. and Lehigh Northwest: A triangular building has been removed from the western side of the property. Materials are now stored in this area. A small square building was constructed near the edge of the river.

United Western Supply: The property remains relatively unchanged.

J.A. Jack: The property remains relatively unchanged.

The **Upland Areas: A large building has been** constructed on the east side of East Marginal Way S, across from the Cadman and Lehigh parcels.

Appendix B-2

Historical Aerial and Oblique Shoreline Photographs

SAIC® From Science to Solutions

Figure B–1. RM 1.0 to 1.2 East (King County Lease Parcels): 1936

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Figure B–2. RM 1.0 to 1.2 East (King County Lease Parcels): 1946

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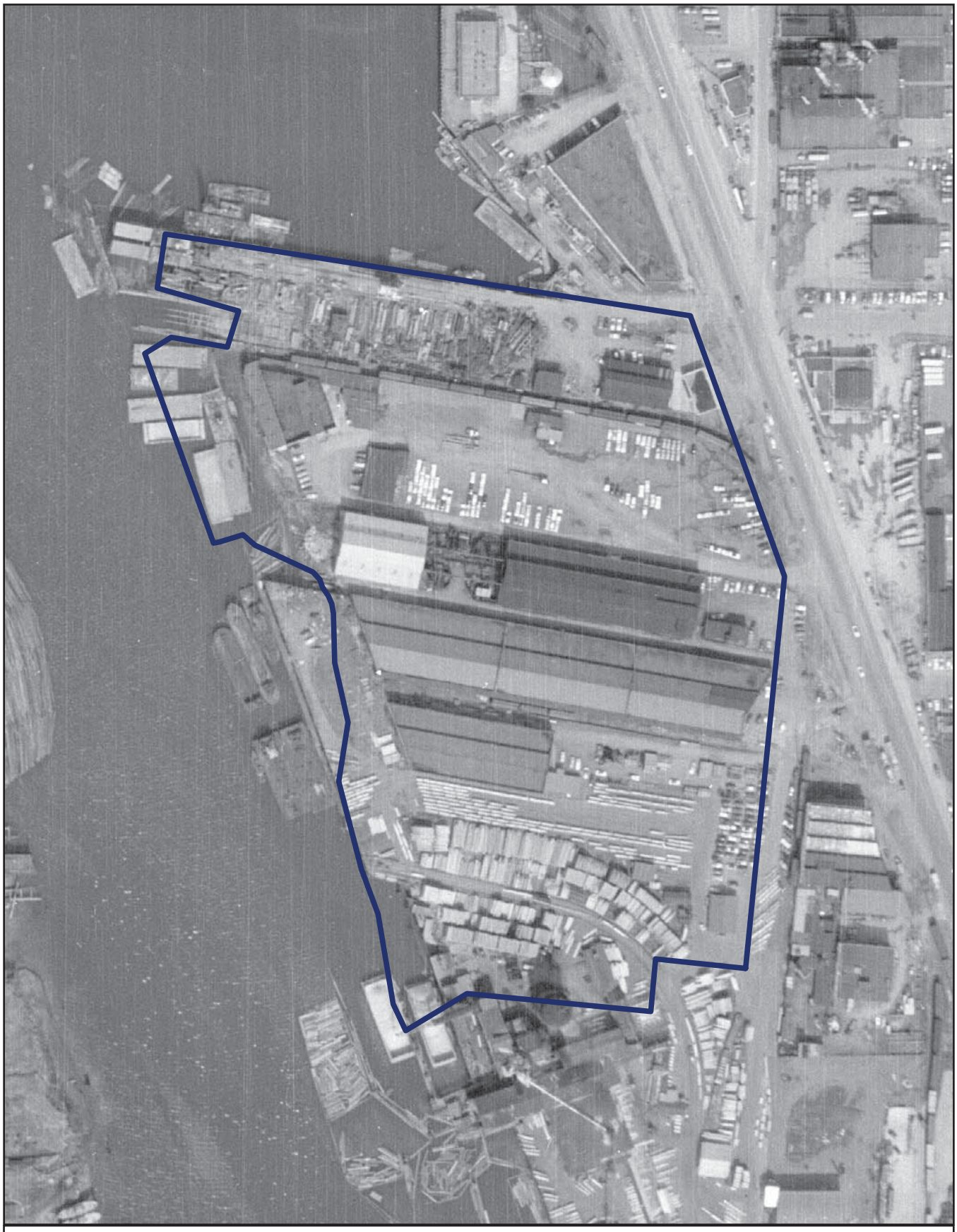

SAIC® From Science to Solutions

Figure B–3. RM 1.0 to 1.2 East (King County Lease Parcels): 1956

DEPARTMENT OF ECOLOGY State of Washington

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Figure B–4. RM 1.0 to 1.2 East (King County Lease Parcels): 1969

DEPARTMENT OF ECOLOGY State of Washington

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Figure B–5. RM 1.0 to 1.2 East (King County Lease Parcels): 1977

DEPARTMENT OF ECOLOGY State of Washington

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Figure B–6. RM 1.0 to 1.2 East (King County Lease Parcels): 1990

DEPARTMENT OF ECOLOGY State of Washington

SAIC® From Science to Solutions

Figure B–7. RM 1.0 to 1.2 East (King County Lease Parcels): 1999

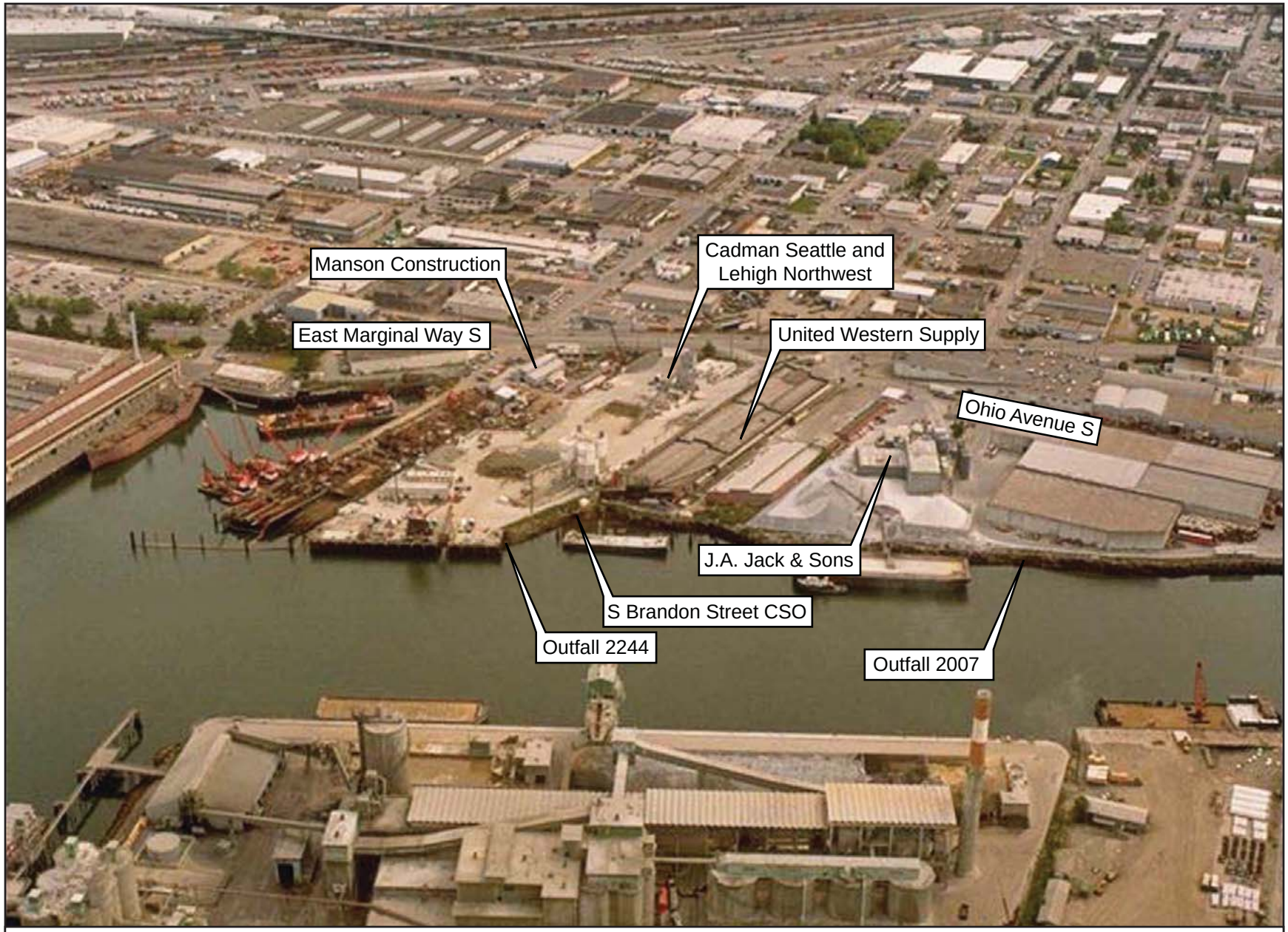
DEPARTMENT OF ECOLOGY State of Washington

SAIC® From Science to Solutions

Figure B–8. RM 1.0 to 1.2 East (King County Lease Parcels): 2004

N

DEPARTMENT OF ECOLOGY State of Washington

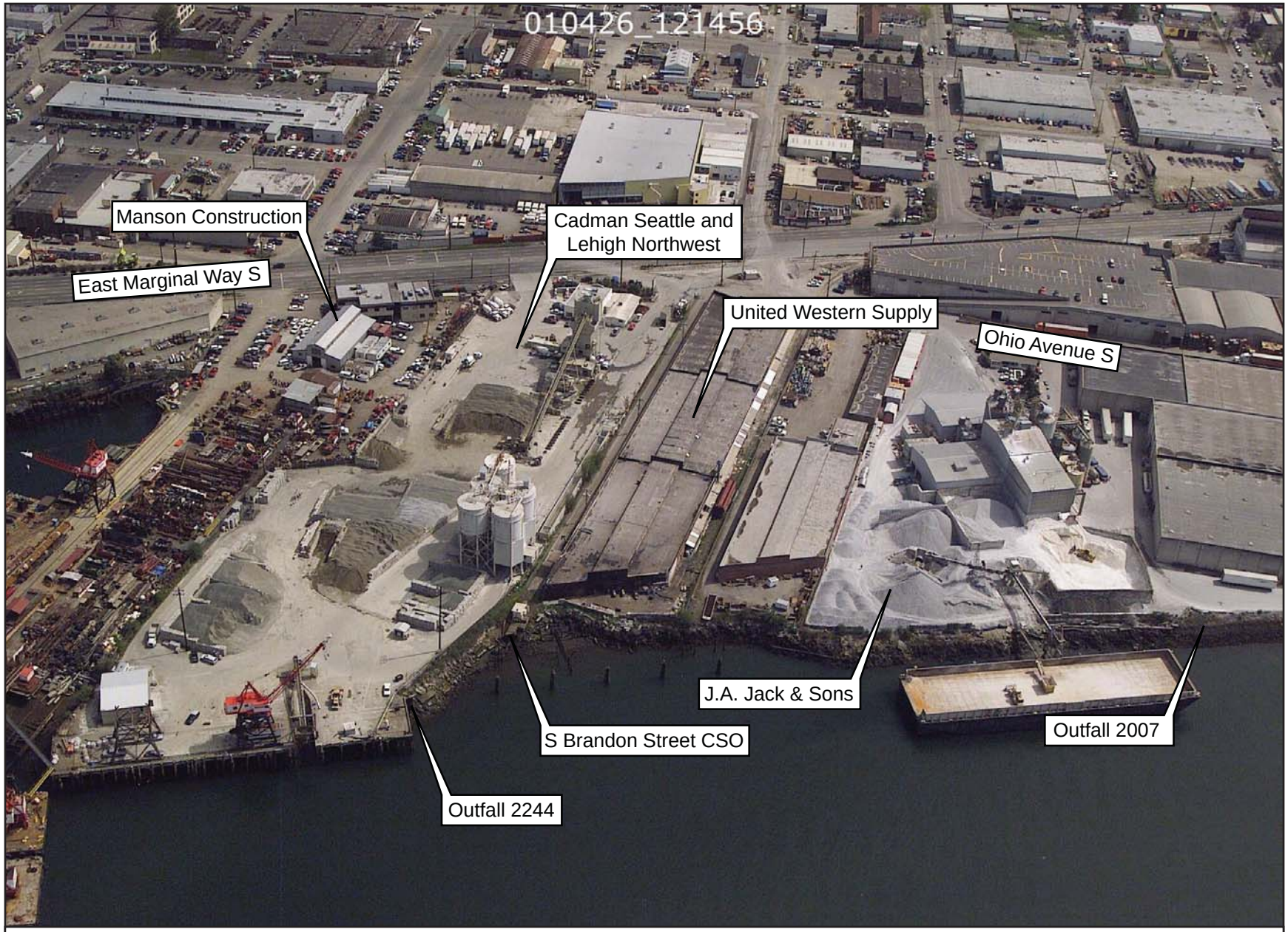


SAIC® From Science to Solutions

Figure B–9. RM 1.0 to 1.2 East (King County Lease Parcels): 1993

N

DEPARTMENT OF ECOLOGY State of Washington



SAIC From Science to Solutions

Figure B–10. RM 1.0 to 1.2 East (King County Lease Parcels): 2001

N

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SAIC From Science to Solutions

Figure B–11. RM 1.0 to 1.2 East (King County Lease Parcels): 2006

N

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Appendix C

S Brandon Street CSO Maps and Facility Information

Appendix C-1

S Brandon Street CSO Basin Facilities

Appendix C-1
List of Tables

Table C-1
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
23766347	80 S Hudson Street Site	SES Seattle	80 S Hudson Street						●	●			1
59441643	Ace Radiator	None	311 S Brandon Street								●		2
63478536	Air Products Manufacturing Corp Seattle	None	5801A East Marginal Way S		●								3
57633623	Air Tec Co. Parcel C	Air Tec Co. Inc., Leavitt Shay Real Estate Co.	5701 1st Avenue S	■		●			●	●			4
26737544	Aleutian Constructors	Cleanscapes	5939 4th Avenue S										5
2992519	AM International	None	5901 4th Avenue S										7
98441868	Amalgamated Sugar Co Seattle	Amalgamated Sugar Co	5400 Denver Avenue S							●			8
47512364	American Dry Ice Orcas	None	672 S Orcas Street		●								9
6346940	American Motor Freight LLC	None	5700 6th Avenue S, Suite 203		●								10
12467128	American Technical Coatings Inc.	None	666 S Fidalgo Street										11
27632327	AR Torrico Sons Shipping Inc	Seattle Biodiesel LLC	6335 1st Avenue S										12
61212661	Argo Blower & Mfg Co Inc	None	5400 E Marginal Way S		●								13
18398858	Argo TOFC	Union Pacific Railroad Co Dawson Street, Dow Chemical	4th Avenue S & Dawson Street							●			14
55897213	Art Brass Plating	None	5815 4th Avenue S										15
88531932	Art Brass Plating Inc Seattle	Helen V. Warner	5516 3rd Avenue S		●	●		●					16
9399901	AT&T Wireless Marginal Way & Alaskan	None	4797 1st Avenue S										17
63217123	Bank & Office Interiors	Ener-G Foods Inc.,	5990 1st Avenue S		●								18
14379672	Battery Systems, Inc.	Allied Battery Co. Inc Seattle, Allied Battery Inc S Brandon, Allied Battery Seattle	105 S Brandon Street		●								19
96937296	Beckwith Kuffel Inc	Beckwith & Kuffel Inc.	5930 1st Avenue S							●			20
91823668	Berg Evans Chain Co	None	217 S Findlay Street										21
32698478	Big Johns Truck Repair Inc Seattle	None	5622-1/2 1st Avenue S										22
86499282	Bindery	None	215 S Bennett Street										23
7118747	Blaser Die Casting Co.	Blaser Tool & Mold Co., Scougal Rubber Corporation	5700 3rd Avenue S			●							24
415282	Blue Nile Inc.	None	5907 4th Avenue S										25
47157762	Bob's Texaco Service	None	5304 1st Avenue S						●	●			26
63627615	Branom Instrument Co Inc	None	5500 4th Avenue S										27
65697348	Burgess Enterprises	Duwamish Marine Center, Samson Tug & Barge, Ray Burgess Co.	6361 1st Avenue S							●			28
37332122	Burlington Env Philip Services Corp	None	402 S Dawson Up Tracks										29
46161728	BYG Cooperative	Abhe Svodboda Inc, SES Inc West Pac Environmental	74 S Hudson Street Warehouse		●								30
77372687	Byrne Specialty Gases, Inc. MEAD		118 S Mead Street										31
70313617	Cadman Seattle Inc	Cadman Inc Seattle, Cadman Seattle, Lehigh Northwest	5225 East Marginal Way S	■	●		●	●		●		♦	32

Table C-1
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
11598755	Capital Industries Inc	None	5801 3rd Avenue S		●	●							33
99747798	Cenveo Graphic Arts Center	Graphic Arts Center, The Allied Printers	832 S Fidalgo Street		●								34
2253	Certainteed Gypsum Manufacturing	BPB Gypsum, James Hardie Gypsum, Certainteed Gypsum, Lone Star Northwest, Norwest Gypsum	5931 East Marginal Way S		●		●		●	●	●		35
9361279	Charles H Lilly Co	Chas H Lilly CO	5200 Denver Avenue S										37
74478588	Charles H Lilly Co	Chas H Lilly CO	6000 East Marginal Way S										36
1792892	Chevron 90636	Chevron 0636, Chevron SS 90636	5940 East Marginal Way S		●				●	●			38
NA	City of Seattle - SPU Materials Storage Yard	Fray Equipment Co	5821 1st Avenue S					●					129
83494216	Clough Equipment Co S Front S	None	515 S Front Street										39
54757868	Consolidated Freightways Seattle	Shippers Transport Express, Consolidated Freightways UST 11012	6050 East Marginal Way S		●	●			●	●			40
21759322	Continental Industries	None	222 S Orcas Street										41
2363	Craig Taylor Equipment	None	5030 1st Avenue S							●	●		42
53625878	Dawson Street Land Co	None	56 S Dawson Street		●								43
343781	Denco Sales Co	None	711 S Fidalgo Street		●								44
99894694	Don's Radiator	None	5626 1st Avenue S										45
36961494	Dow Chemical USA Michigan Div	Union Pacific Railroad,Union Pacific Railroad Transfer Facility, Argo TOFC, UPRR Diesel Shop, UPRR SEA, Union Pacific Railroad Co. Dawson Street	4th Avenue S & Dawson Street										46
75459442	Draper Machine Works Inc	Draper Machine Works Company, Howard Cooper	5055 4th Avenue S	■					●	●			47
74936217	Dresser Rand	None	225 S Lucile Street		●								48
2521	Drive Line Services of Seattle Inc	None	108 S Brandon Street		●						●		49
21945598	Duwamish Marine Center	Samson Tug & Barge, Burgess Enterprises	6365 1st Avenue S			●							50
87626746	Eagle Systems, Inc.	Milwaukee Motor Transportation Co.	53 S Dawson Street							●			51
22245293	Emerald City Disposal Dawson St	Allied Waste Services, Environmental Transport Inc., NW Waste Emerald City Disposal, Seattle Disposal, West Pac Environmental	54 S Dawson Street	■	●					●			52
78563473	Emerald City Freight Distribution	None	6003 6th Avenue S										53
7307167	Ener-G Foods Inc.	Bank & Office Interiors	5960 1st Avenue S		●							♦	54

Table C-1
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
36716241	Environmental Transport Inc	Allied Waste Services, Emerald City Disposal Dawson St, NW Waste Emerald City Disposal, Seattle Disposal, West Pac Environmental	54 S Dawson Street	■					●	●			55
2337	Frank's Used Cars	None	6309 East Marginal Way S			●							56
62393528	Fray Equipment Co	City of Seattle - SPU Materials Storage Yard	5821 1st Avenue S							●			57
78676691	Fred Hutchinson Cancer Research Center	Fred Hutchinson CRC / (Former Vincent Metal Goods), Fred Hutchinson Cancer Research CNTR/AKA Vincent Metal Goods, Metal Goods Service Center, Qwest Replacement Project Facility, Vincent Metal Goods Seattle Branch	4755 1st Avenue S		●					●	●		58
15892877	Fryer Knowles Inc	None	211 S Dawson Street										59
73183189	Furniture Spa Inc	Sharps Automotive, Inc.	126 S Findlay Street		●					●			60
83552111	GE Aircraft Engines	None	637 S Lucile Street										61
95662832	GE Aircraft Engines Front St	None	540 S Front Street										62
31535274	GE Lighting Seattle Distribution Center	None	549 S Dawson Street		●								63
2522	General Electric Aviation Div	GE Aviation, General Electric Co. Dawson Street	220 S Dawson Street	■	●	●		●					64
96679259	Georgetown Center	Former Gull Station	NW Corner of Corson Avenue S & S Michigan Street								●		65
95534411	Glacier Northwest East Marginal Way	Kaiser Cement, Lone Star Cement, CEMEX, Slip 2 Duwamish Bank Stabilization	5975 East Marginal Way S		●		●	●	●	●			66
35148584	Greater Seattle Floors	Greater Seattle Floors, LLC	5517 6th Avenue S		●								67
37836248	JA Jack & Sons, Inc.	None	5427 Ohio Avenue S	■			●			●		♦	68
NA	Kamco Seafood, Inc.	None	128 S Orcas Street					●					128
6878135	Kettells	None	5800 4th Avenue S							●			69
5145176	Lehigh Northwest	Lehigh Northwest Dredge	5225 East Marginal Way S	■								♦	70
96377286	Leone VanValkenburg Trust	Exide Technologies Seattle, GNB Battery Technologies	5200 4th Avenue S		●								71
71277652	Lockwood Marine Inc	None	6502 East Marginal Way S										72
2226	Longview Fibre Paper & Packaging Inc	Longview Fibre Company	5901 East Marginal Way S		●	●	●	●	●	●		♦	73
67737549	Loomis Fargo & Co	Loomis Armored Inc	5200 East Marginal Way S	■					●	●			74
13593282	Mail Dispatch, Inc.	None	917 S Nebraska							●			75
80333167	Manson Construction	Manson Construction & Engineering	5209 E Marginal Way S	■	●					●			76
2254	Master Builders	A&C Construction	64 S Lucile Street								●		77
87686611	McKinstry Co	None	4975 A 3rd Avenue S		●								78

Table C-1
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
61127232	McKinstry Co 215 Hudson St	None	215 S Hudson Street		●								79
85743277	McKinstry Co 5005	None	5005 3rd Avenue S										80
28755278	McKinstry Co Ste B	None	4975 B 3rd Avenue S										81
36652818	Mesher Supply	None	5001 1st Avenue S							●			82
91681677	Michigan Properties	None	5035 1st Avenue S										83
96851494	Mobile Crane Co Inc	Western Bridge Co.	5900 2nd Avenue S		●					●	●		84
46977612	Moore Data Mgmt Svcs Div	None	725 S Fidalgo Street										85
74398946	NAPA Auto Parts Seattle	Genuine Parts Co, Genuine Parts Co. Seattle	5201 4th Avenue S										86
73845797	National Transfer Inc. Seattle	Seadrunar Recycling	5265 Utah Avenue S	■					●	●			87
19371183	Nivas Business Corp	None	6100 6th Avenue S										88
61549757	North Coast Refrigeration Inc	Northcoast Refrigeration Inc.	5047 Colorado Avenue S		●					●			89
44927387	Northwest Corporate Park Building U	None	520 S Brandon Street							●			90
59769876	Northwest Sign Supply	None	5300 4th Avenue S		●								91
57957617	Olympic Medical Corp 1st Ave S	None	5900 1st Avenue S		●								92
29775533	Orcas Business Park LLC	None	650 S Orcas Street		●								93
12545978	Ostex Intl Inc 5955 Airport Way	None	5955 Airport Way S										94
17634	Ott Real Estate Property	None	5903 1st Avenue S								●		95
63721371	Pacific Marine Testing Co	None	5807 4th Avenue S										96
27585467	PNB Building	None	707 S Orcas Street	■					●	●			97
91919568	Proliance International Inc	115 S Dawson Street, Modine Aftermarket Holdings Inc, Modine Western	115 S Dawson Street		●						●		98
73466467	Rental Service Corporation 565	Alpine Equipment Rentals & Supply, Hexcel Medical Division, Prime Equipment 565 Seattle	5421 1st Avenue S		●					●			100
55698119	Riveretzs Auto Care	Winters Investment LP, Former Georgetown Gasco/Tesoro	6185 4th Avenue S						●	●			101
2450	Sahlberg Equipment	Society of Saint Vincent de Paul, US Bank AJ Sahlberg Trust	5950 4th Avenue S	■	●	●							102
94925241	Saint Gobain Containers Inc	Ball Glass, Ball-Foster Glass, Ball-Incon, Northwestern Glass Company, Incon Packaging	5801 East Marginal Way S		●		●	●	●	●		♦	103
1020256	Samson Tug & Barge Co Inc Transporter	Duwamish Marine Center, Burgess Enterprises	6365 1st Avenue S		●							♦	104
59148337	Seacast Inc Seattle	None	207 S Bennett Street		●								105
49423263	Seadrunar Recycling	National Transfer Inc.	28 S Brandon Street	■	●								99
44186982	Sears Roebuck & Co UST 7837	None	4786 1st Avenue S							●			106
5023482	Seattle Biodiesel LLC	AR Torrico Sons Shipping Inc, General Biodiesel Seattle	6333 1st Avenue S		●		●			●			107

Table C-1
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
18582122	SES Inc West Pac Environmental	BYG Coop, Abhe Svodboda Inc.	74 S Hudson Street		●								108
19688471	Shell Oil Products US SAP 121430	Shell 600 Michigan, Texaco 121430, Texaco Station 632320400 UST 4487, Texaco Station Michigan	600 S Michigan Street	■	●	●			●	●			109
23243637	Simon Golub & Sons Inc	None	5506 6th Avenue S		●								110
85783156	Smith Williston	None	201 S Bennett Street		●								111
5184	St Vincent De Paul Council Seattle	St Vincent De Paul, Sahlberg Equipment	5972 4th Avenue S										131
41677496	Sudden Printing	None	571 S Michigan Street										112
47666565	TW Express	None	7901 1st Avenue S										113
74589256	Union Pacific Motor	None	420 S Dawson Street						●	●			114
44577768	Union Pacific Railroad Co. Dawson Street	Argo TOFC, UPRR Diesel Shop, UPRR SEA, Union Pacific Railroad Transfer Facility	402 S Dawson Street		●		●						115
9953954	United Western Supply	Western Utilities Supply Co., Iconco	5245 East Marginal Way S	■	●							♦	116
33482323	UPS Seattle Export	None	500 S Front Street		●								117
21503	U.S. Starcraft	None	5210 Utah Avenue S		●								130
21468652	Valco Graphics Inc Seattle	None	674 S Orcas Street										118
3258153	Washington Machine Works	None	5211 1st Avenue S, Unit C, Door 4		●								119
72999973	Wear Cote Northwest Inc	None	5811 4th Avenue S										120
4961762	West Pac Environmental	Allied Waste Services, Emerald City Disposal Dawson St, Environmmental Transport Inc., NW Waste Emerald City Disposal, Seattle Disposal	55 S Dawson Street	■									121
28825715	West Pac Environmental Inc	Allied Waste Services, Emerald City Disposal Dawson St, Environmmental Transport Inc., NW Waste Emerald City Disposal, Seattle Disposal	54 S Dawson Street, Suite 100	■									122
39473625	Western Cartage Inc	None	5050 1st Avenue S							●			123
39352815	Western Parcel Express Seattle	Air Data Express, Inc.	525 S Front Street	■					●	●	●		124
33942516	Western Union Telephone Co. UST 97407	None	808 S Fidalgo Street							●			125
56533162	Westmar Services Inc	Airgas Dry Ice	5930 6th Avenue S							●			126
49738534	WW Grainger Inc, Seattle	None	4930 3rd Avenue S										127

Table C-1
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]

[1] - See Appendix C-2, Maps C-1 through C-6. Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

- EAA-1 RM 0.1 to 0.9 East, Duwamish/Diagonal Way
- RM 0.9 to 1.0 East, Slip 1
- RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest
- RM 1.7 to 2.0 East, Slip 2 to Slip 3

■ - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the KC Lease Parcels Data Gaps Report.

● - Additional information regarding this facility is available on the accompanying tables.

♦ - EPA has sent a CERCLA Section 104(e) Request for Information Letter to this facility or property owner.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CSCSL - Confirmed or Suspected Contaminated Sites List
CSO - Combined Sewer Overflow
EAA - Early Action Area
EPA - U.S. Environmental Protection Agency
KCIW - King County Industrial Waste
KCLP - King County Lease Parcels
LUST - Leaking Underground Storage Tank
NFA - No Further Action
NPDES - National Pollutant Discharge Elimination System
RM - River Mile
UST - Underground Storage Tank

Table C-2
Facilities in the S Brandon Street CSO Basin with Active EPA Identification Numbers

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	EPA ID	HWG	HW Mgmt	HW Planner	HW Transfer	Tier 2	TRI	Map ID[1]
63478536	Air Products Manufacturing Corp Seattle	5801A East Marginal Way S		CRK000037830					●		3
47512364	American Dry Ice Orcas	672 S Orcas Street		CRK000023250					●		9
6346940	American Motor Freight LLC	5700 6th Avenue S, Suite 203		WAH000034000		●					10
61212661	Argo Blower & Mfg Co Inc	5400 E Marginal Way S		WAD988492120	●						13
88531932	Art Brass Plating Inc Seattle	5516 3rd Avenue S		WAD981772957	●		●		●	●	16
63217123	Bank & Office Interiors	5990 1st Avenue S		WAD988522074	●						18
14379672	Battery Systems, Inc.	105 S Brandon Street		CRK000047150					●		19
46161728	BYG Cooperative	74 S Hudson Street Warehouse		WAD988511473	●						30
70313617	Cadman Seattle Inc	5225 East Marginal Way S	■	WAD982651986		●			●		32
11598755	Capital Industries Inc	5801 3rd Avenue S		WAD009245465	●		●		●	●	33
99747798	Cenveo Graphic Arts Center	832 S Fidalgo Street		WAD009244609	●		●				34
2253	Certainteed Gypsum Manufacturing	5931 East Marginal Way S		WAD980382972	●				●		35
1792892	Chevron 90636	5940 East Marginal Way S		WAD982654006	●	●			●		38
54757868	Consolidated Freightways Seattle	6050 East Marginal Way S		WAD041918897	●				●		40
53625878	Dawson Street Land Co	56 S Dawson Street		WAD988520136	●						43
343781	Denco Sales Co	711 S Fidalgo Street		WAH000019224	●						44
74936217	Dresser Rand	225 S Lucile Street		WAD981764152	●	●					48
2521	Drive Line Services of Seattle Inc	108 S Brandon Street		WAD988517884	●						49
22245293	Emerald City Disposal Dawson St	54 S Dawson Street	■	WAD007943194	●	●	●		●		52
7307167	Ener-G Foods Inc.	5960 1st Avenue S		CRK000061000					●		54
78676691	Fred Hutchinson Cancer Research Center	4755 1st Avenue S		WA0000085266	●						58
73183189	Furniture Spa Inc	126 S Findlay Street		WAH000014282	●		●				60
31535274	GE Lighting Seattle Distribution Center	549 S Dawson Street		WA0000861187	●						63
2522	General Electric Aviation Div	220 S Dawson Street	■	WAD009278706	●		●		●	●	64
95534411	Glacier Northwest East Marginal Way	5975 East Marginal Way S		WAD980986061	●		●		●		66
35148584	Greater Seattle Floors	5517 6th Avenue S		WAD981768740	●						67
96377286	Leone VanValkenburg Trust	5200 4th Avenue S		CRK000022220					●		71
2226	Longview Fibre Paper & Packaging Inc	5901 East Marginal Way S		WAD009282161	●	●			●		73
80333167	Manson Construction	5209 E Marginal Way S	■	WAD007942824	●	●					76

Table C-2
Facilities in the S Brandon Street CSO Basin with Active EPA Identification Numbers

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	EPA ID	HWG	HW Mgmt	HW Planner	HW Transfer	Tier 2	TRI	Map ID[1]
87686611	McKinstry Co	4975 A 3rd Avenue S		WAD988472890	●						78
61127232	McKinstry Co 215 Hudson St	215 S Hudson Street		WA0000230490	●						79
96851494	Mobile Crane Co Inc	5900 2nd Avenue S		WAD988492823	●						84
61549757	North Coast Refrigeration Inc	5047 Colorado Avenue S		WAD988511085					●		89
59769876	Northwest Sign Supply	5300 4th Avenue S		WAH000010520	●						91
57957617	Olympic Medical Corp 1st Ave S	5900 1st Avenue S		WAD988497228	●						92
29775533	Orcas Business Park LLC	650 S Orcas Street		WAH000013367	●						93
91919568	Proliance International Inc	115 S Dawson Street		WAD980977755					●	●	98
73466467	Rental Service Corporation 565	5421 1st Avenue S		WAD086256989		●			●		100
2450	Sahlberg Equipment	5950 4th Avenue S	■	WAD988490496	●						102
94925241	Saint Gobain Containers Inc	5801 East Marginal Way S		WAD044589935	●		●		●	●	103
1020256	Samson Tug & Barge Co Inc Transporter	6365 1st Avenue S		WAH000029081		●		●			104
59148337	Seacast Inc Seattle	207 S Bennett Street		WAD988492906	●						105
49423263	Seadrunar Recycling	28 S Brandon Street	■	WAD988523205	●						99
5023482	Seattle Biodiesel LLC	6333 1st Avenue S		WAH000026520	●		●				107
18582122	SES Inc West Pac Environmental	74 S Hudson Street		WAD980981963	●		●				108
19688471	Shell Oil Products US SAP 121430	600 S Michigan Street	■	WAD988504056	●				●		109
23243637	Simon Golub & Sons Inc	5506 6th Avenue S		WAD988479390	●						110
85783156	Smith Williston	201 S Bennett Street		WAD009248519	●						111
44577768	Union Pacific Railroad Co. Dawson Street	402 S Dawson Street		WAH000016659 CRK000015610		●			●		115
9953954	United Western Supply	5245 East Marginal Way S	■	WAH000011379 CRK000015650	●				●		116
33482323	UPS Seattle Export	500 S Front Street		WA0000380295	●						117
21503	U.S. Starcraft	5210 Utah Avenue S		WAH000035512	●						130
3258153	Washington Machine Works	5211 1st Avenue S, Unit C, Door 4		WAD988467213	●						119

[1] - See Appendix C-2. Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

	RM 0.9 to 1.0 East, Slip 1
	RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest
	RM 1.7 to 2.0 East, Slip 2 to Slip 3

Table C-2
Facilities in the S Brandon Street CSO Basin with Active EPA Identification Numbers

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	EPA ID	HWG	HW Mgmt	HW Planner	HW Transfer	Tier 2	TRI	Map ID[1]

■ - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the KC Lease Parcels Data Gaps Report.

CSO - Combined Sewer Overflow
EPA - U.S. Environmental Protection Agency
KCLP - King County Lease Parcels
RCRA - Resource Conservation and Recovery Act
RM - River Mile

HWG - Facilities that generate any quantity of a dangerous waste. They may be classified as SQG, MQG, or LQG depending on hazardous waste generated for a given month.
HW Mgmt - Facilities that are required to have a RCRA Site ID# but who do not generate and/or manage hazardous waste (XQG generator status). This includes transporters, used oil recycler's, and dangerous waste fuel marketers and burners.
HW Planner - Under Chapter 173-307 WAC, facilities that report under Section 313 of the Emergency Planning/Community Right-To-Know Act (EPCRA), or that generate more than 2,640 pounds of hazardous waste per year, must prepare Pollution Prevention Plans.

HW Transfer - Transfer facility is a site, owned, leased or operated by a transporter of regulated hazardous waste shipments where any of the following occurs: 1) receives wastes from another transporter, 2) transfers wastes from one transport vehicle to

Tier 2 - Businesses that store 10,000 pounds or more of a hazardous chemical or 500 pounds or less, depending on the chemical, of an extremely hazardous chemical on site at any one time must report annually. Reports are sent to the State Emergency Response Commission.
TRI - Facilities in specific industries that manufacture, process or use more than the threshold amount of one or more of 600 listed toxic chemicals. Most threshold amounts are 10,000 or 25,000 pounds per year. Some chemicals have much lower thresholds.

Table C-3
Facilities within the S Brandon Street CSO Basin
Listed on Ecology's Confirmed or Suspected Contaminated Site List

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	Soil	Groundwater	Sediment	Surface Water	Air	Map ID[1]
57633623	Air Tec Co. Parcel C	5701 1st Avenue S	■	*Confirmed* Petroleum Products	*Confirmed* Petroleum Products				4
88531932	Art Brass Plating Inc Seattle	5516 3rd Avenue S		*Confirmed* Halogenated Organic Compounds	*Confirmed* Halogenated Organic Compounds				16
7118747	Blaser Die Casting Co.	5700 3rd Avenue S		*Suspected* Halogenated Organic Compounds	*Below Cleanup Levels* Halogenated Organic Compounds			*Confirmed* Halogenated Organic Compounds	24
11598755	Capital Industries Inc	5801 3rd Avenue S		*Confirmed* Halogenated Organic Compounds	*Confirmed* Halogenated Organic Compounds			*Suspected* Halogenated Organic Compounds	33
54757868	Consolidated Freightways Seattle	6050 East Marginal Way S		*Confirmed* Petroleum Products	*Suspected* Non-Halogenated Solvents PAH				40
21945598	Duwamish Marine Center	6365 1st Avenue S		*Suspected* Non-Halogenated Solvents *Confirmed* Base/Neutral/Acid Organics EPA Priority Pollutants Metals PCBs Petroleum Products PAHs	*Suspected* PAH *Confirmed* Petroleum Products Non-Halogenated Solvents				50

Table C-3
Facilities within the S Brandon Street CSO Basin
Listed on Ecology's Confirmed or Suspected Contaminated Site List

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	Soil	Groundwater	Sediment	Surface Water	Air	Map ID[1]
2337	Frank's Used Cars	6309 East Marginal Way S		*Suspected* Halogenated Organic Compounds Non-Halogenated Solvents *Confirmed* EPA Priority Pollutants PCBs Petroleum Products	*Suspected* Halogenated Organic Compounds EPA Priority Pollutants PCBs Petroleum Products Non-Halogenated Solvents	*Suspected* Halogenated Organic Compounds EPA Priority Pollutants Petroleum Products Non-Halogenated Solvents	*Suspected* Halogenated Organic Compounds EPA Priority Pollutants PCBs Non-Halogenated Solvents *Confirmed* Petroleum Products	*Suspected* Halogenated Organic Compounds Petroleum Products Non-Halogenated Solvents	56
2522	General Electric Aviation Div	220 S Dawson Street	■	*Confirmed* Base/Neutral/Acid Organics Halogenated Organic Compounds Petroleum Products	*Confirmed* Base/Neutral/Acid Organics Halogenated Organic Compounds Petroleum Products			*Confirmed* Halogenated Organic Compounds	64
2226	Longview Fibre Paper & Packaging Inc	5901 East Marginal Way S		*Confirmed* Petroleum Products PAHs	*Confirmed* Base/Neutral/Acid Organics Petroleum Products PAHs		*Confirmed* Base/Neutral/Acid Organics Petroleum Products PAHs	*Confirmed* Base/Neutral/Acid Organics Petroleum Products PAHs	73
2450	Sahlberg Equipment	5950 4th Avenue S	■	*Remediated* Petroleum Products	*Confirmed* Halogenated Organic Compounds Petroleum Products		*Suspected* Halogenated Organic Compounds Petroleum Products		102
19688471	Shell Oil Products US SAP 121430	600 S Michigan Street	■	*Below Cleanup Levels* Metals *Confirmed* Petroleum Products	*Confirmed* Metals Petroleum Products				109

Table C-3
Facilities within the S Brandon Street CSO Basin
Listed on Ecology's Confirmed or Suspected Contaminated Site List

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	Soil	Groundwater	Sediment	Surface Water	Air	Map ID[1]

[1] - See Appendix C-2, Map C-2. Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest

RM 1.7 to 2.0 East, Slip 2 to Slip 3

■ - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the KC Lease Parcels Data Gaps Report.

CSO - Combined sewer overflow
KCLP - King County Lease Parcels
PAHs - polynuclear aromatic hydrocarbons
PCBs - polychlorinated biphenyls
RM - River Mile

Table C-4
Facilities in the S Brandon Street CSO Basin with NPDES Permits

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	NPDES	Map ID[1]
70313617	Cadman Seattle Inc	5225 East Marginal Way S	■	WAG503337	32
2253	Certainteed Gypsum Manufacturing	5931 East Marginal Way S		SO3000056	35
95534411	Glacier Northwest East Marginal Way	5975 East Marginal Way S		WAG503191	66
37836248	JA Jack & Sons, Inc.	5427 Ohio Avenue S	■	WAG503082	68
2226	Longview Fibre Paper & Packaging Inc	5901 East Marginal Way S		SO3000206	73
94925241	Saint Gobain Containers Inc	5801 East Marginal Way S		SO3001134	103
5023482	Seattle Biodiesel LLC	6333 1st Avenue S		SO3010447A	107
44577768	Union Pacific Railroad Co. Dawson Street	402 S Dawson Street		SO3001155	115

[1] - See Appendix C-2, Map C-3. Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

	RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest
	RM 1.7 to 2.0 East, Slip 2 to Slip 3

■ - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the KC Lease Parcels Data Gaps Report.

CSO - Combined sewer overflow
KCLP - King County Lease Parcels
NPDES - National Pollutant Discharge Elimination System
RM - River Mile

Table C-5
Facilities in the S Brandon Street CSO Basin with KCIW Discharge Authorizations or Permits

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	KCIW Discharge Number	Permit or Authorization	Expiration Date	Description of Operation/ Nature of Wastewater	Map ID[1]
88531932	Art Brass Plating Inc Seattle	5516 3rd Avenue S		7222	Permit	3/3/2010	Electroplating, plating, and polishing	16
70313617	Cadman Seattle Inc	5225 East Marginal Way S	■	392	Authorization - Minor	10/12/2012	Cement manufacturing	32
NA	City of Seattle - SPU Materials Storage Yard	5821 1st Avenue S		744	Authorization - Minor	1/30/2012	General Type	129
2522	General Electric Aviation Div	220 S Dawson Street	■	543	Authorization - Minor	8/2/2014	Groundwater remediation	64
95534411	Glacier Northwest East Marginal Way	5975 East Marginal Way S		450	Authorization - Minor	9/21/2010	Cement manufacturing	66
NA	Kamco Seafood, Inc.	128 S Orcas Street		739	Authorization - Minor	12/22/2013	Food Processing - Fish	128
2226	Longview Fibre Paper & Packaging Inc	5901 East Marginal Way S		631-02	Authorization - Major	11/25/2013	Corrugated container manufacturing	73
94925241	Saint Gobain Containers Inc	5801 East Marginal Way S		555-03	Authorization - Major	2/13/2012	Glass container manufacturing	103

[1] - See Appendix C-2, Map C-4. Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

	RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest
	RM 1.7 to 2.0 East, Slip 2 to Slip 3

■ - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the EAA-1 Data Gaps Report.

CSO - Combined sewer overflow
KCIW - King County Industrial Waste
KCLP - King County Lease Parcels
RM - River Mile

Table C-6
Properties in the S Brandon Street CSO Basin with Leaking Underground Storage Tanks

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	UST Site ID	LUST Release ID	Media	Release Status	Release Status Change Date	Map ID[1]
23766347	80 S Hudson Street Site	80 S Hudson Street		200323	1884	Soil, Groundwater	Reported Cleaned Up	4/29/1997	1
57633623	Air Tec Co. Parcel C	5701 1st Avenue S	■	97435	532723	Soil, Groundwater	Cleanup Started	4/4/2000	4
47157762	Bob's Texaco Service	5304 1st Avenue S		4734	1959	Soil, Groundwater	Awaiting Cleanup	5/24/1995	26
2253	Certainteed Gypsum Manufacturing	5931 East Marginal Way S		7095	1903	Soil	Reported Cleaned Up	1/26/2001	35
1792892	Chevron 90636	5940 East Marginal Way S		5061	393280	Soil, Groundwater	Awaiting Cleanup	11/9/1993	38
54757868	Consolidated Freightways Seattle	6050 East Marginal Way S		11012	2626	Soil, Groundwater	Cleanup Started	6/1/1995	40
75459442	Draper Machine Works Inc	5055 4th Avenue S	■	3876	1630	Soil	Reported Cleaned Up	6/29/2000	47
36716241	Environmental Transport Inc	54 S Dawson Street	■	7423	3568	Soil	Reported Cleaned Up	2/10/2009	55
95534411	Glacier Northwest East Marginal Way	5975 East Marginal Way S		2211	1365	Soil, Surface Water	Cleanup Started	9/28/1995	66
2226	Longview Fibre Paper & Packaging Inc	5901 East Marginal Way S		7348	3449	Soil, Groundwater	Monitoring	3/10/2003	73
67737549	Loomis Fargo & Co	5200 East Marginal Way S	■	12101	1979	Soil	Reported Cleaned Up	2/6/1991	74
73845797	National Transfer Inc. Seattle	5265 Utah Avenue S	■	10267	1844	Soil	Reported Cleaned Up	6/1/1995	87
27585467	PNB Building	707 S Orcas Street	■	200597	3034	Soil, Groundwater	Reported Cleaned Up	5/21/1995	97
55698119	Riveretzs Auto Care	6185 4th Avenue S		100530	592203	Soil	Reported Cleaned Up	7/25/2007	101
94925241	Saint Gobain Containers Inc	5801 East Marginal Way S		5333	1644	Soil, Groundwater	Reported Cleaned Up	6/1/1995	103
19688471	Shell Oil Products US SAP 121430	600 S Michigan Street	■	4487	309690	Soil, Groundwater	Monitoring	1/20/2000	109
74589256	Union Pacific Motor	420 S Dawson Street		9146	2920	Soil, Groundwater	Monitoring	7/10/1990	114
39352815	Western Parcel Express Seattle	525 S Front Street	■	97775	491225	Soil, Groundwater	Reported Cleaned Up	8/7/2000	124

[1] - See Appendix C-2, Map C-5. Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

- EAA-1 RM 0.1 to 0.9 East, Duwamish/Diagonal Way
- RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest
- RM 1.7 to 2.0 East, Slip 2 to Slip 3

■ - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the KC Lease Parcels Data Gaps Report.

CSO - Combined sewer overflow
EAA - Early Action Area
KCLP - King County Lease Parcels
LUST - Leaking Underground Storage Tank
RM - River Mile
UST - Underground Storage Tank

Table C-7
Properties in the S Brandon Street CSO Basin with Underground Storage Tanks

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	UST Site ID	Operational	Removed	Closed-in-Place	Unknown	Exempt	Temporarily Closed	Closure in Process	Map ID[1]
23766347	80 S Hudson Street Site	80 S Hudson Street		200323		3						1
57633623	Air Tec Co. Parcel C	5701 1st Avenue S	■	97435		4						4
98441868	Amalgamated Sugar Co Seattle	5400 Denver Avenue S		4313		3						8
18398858	Argo TOFC	4th Avenue S & Dawson Street		7803			1					14
96937296	Beckwith Kuffel Inc	5930 1st Avenue S		9853		2						20
47157762	Bob's Texaco Service	5304 1st Avenue S		4734		5						26
65697348	Burgess Enterprises	6361 1st Avenue S		101434							1	28
70313617	Cadman Seattle Inc	5225 East Marginal Way S	■	97744	1							32
2253	Certainteed Gypsum Manufacturing	5931 East Marginal Way S		7095		6						35
1792892	Chevron 90636	5940 East Marginal Way S		5061	3	2						38
54757868	Consolidated Freightways Seattle	6050 East Marginal Way S		11012		2			1	1		40
2363	Craig Taylor Equipment	5030 1st Avenue S		200514				1				42
75459442	Draper Machine Works Inc	5055 4th Avenue S	■	3876		2						47
87626746	Eagle Systems, Inc.	53 S Dawson Street		4258		1						51
22245293	Emerald City Disposal Dawson St	54 S Dawson Street	■	101485		1						52
36716241	Environmental Transport Inc	54 S Dawson Street	■	7423		7	3					55
62393528	Fray Equipment Co	5821 1st Avenue S		3150		4	3					57
78676691	Fred Hutchinson Cancer Research Center	4755 1st Avenue S		543770		3						58
73183189	Furniture Spa Inc	126 S Findlay Street		2448		1						60
95534411	Glacier Northwest East Marginal Way	5975 East Marginal Way S		2211	2	2						66
37836248	JA Jack & Sons, Inc.	5427 Ohio Avenue S	■	803	1							68
6878135	Kettells	5800 4th Avenue S		619229							2	69
2226	Longview Fibre Paper & Packaging Inc	5901 East Marginal Way S		7348		3						73
67737549	Loomis Fargo & Co	5200 East Marginal Way S	■	12101		2						74
13593282	Mail Dispatch, Inc.	917 S Nebraska		899				1				75
80333167	Manson Construction	5209 E Marginal Way S	■	10795		1						76
36652818	Mesher Supply	5001 1st Avenue S		529431			1					82
96851494	Mobile Crane Co Inc	5900 2nd Avenue S		10209		4			1			84
73845797	National Transfer Inc. Seattle	5265 Utah Avenue S	■	10267		1						87
61549757	North Coast Refrigeration Inc	5047 Colorado Avenue S		101495			1					89
44927387	Northwest Corporate Park Building U	520 S Brandon Street		485916		1						90
27585467	PNB Building	707 S Orcas Street	■	200597		3						97
73466467	Rental Service Corporation 565	5421 1st Avenue S		100566	2							100
55698119	Riveretzs Auto Care	6185 4th Avenue S		100530	3	1						101
94925241	Saint Gobain Containers Inc	5801 East Marginal Way S		5333		4	3					103

Table C-7
Properties in the S Brandon Street CSO Basin with Underground Storage Tanks

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	UST Site ID	Operational	Removed	Closed-in-Place	Unknown	Exempt	Temporarily Closed	Closure in Process	Map ID[1]
44186982	Sears Roebuck & Co UST 7837	4786 1st Avenue S		7837		1						106
5023482	Seattle Biodiesel LLC	6333 1st Avenue S		619241	1							107
19688471	Shell Oil Products US SAP 121430	600 S Michigan Street	■	4487	4	1			1			109
74589256	Union Pacific Motor	420 S Dawson Street		9146		2						114
39473625	Western Cartage Inc	5050 1st Avenue S		101949		1						123
39352815	Western Parcel Express Seattle	525 S Front Street	■	97775		2						124
33942516	Western Union Telephone Co. UST 97407	808 S Fidalgo Street		97407		1						125
56533162	Westmar Services Inc	5930 6th Avenue S		11537		2						126

[1] - See Appendix C-2, Map C-6. Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

- EAA-1 RM 0.1 to 0.9 East, Duwamish/Diagonal Way
- RM 0.9 to 1.0 East, Slip 1
- RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest
- RM 1.7 to 2.0 East, Slip 2 to Slip 3

■ - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the KC Lease Parcels Data Gaps Report.

CSO - Combined sewer overflow
EAA - Early Action Area
KCLP -King County Lease Parcels
RM - River Mile
UST - Underground Storage Tank

Table C-8
Facilities in the S Brandon Street CSO Basin that are listed on Ecology's No Further Action List

Facility/ Site ID	Facility Name	Facility Address	KCLP Data Gaps Report	NFA Date	NFA Type	Map ID[1]
59441643	Ace Radiator	311 S Brandon Street		12/30/2002	NFA after assessment, IRAP or VCP	2
2253	Certainteed Gypsum Manufacturing	5931 East Marginal Way S		2/23/2006	NFA after assessment, IRAP or VCP	35
2363	Craig Taylor Equipment	5030 1st Avenue S		5/16/1996	NFA after assessment, IRAP or VCP	42
2521	Drive Line Services of Seattle Inc	108 S Brandon Street		11/29/1994	NFA after assessment, IRAP or VCP	49
78676691	Fred Hutchinson Cancer Research Center	4755 1st Avenue S		1/26/1999	NFA after assessment, IRAP or VCP	58
96679259	Georgetown Center	NW Corner of Corson Avenue S & S Michigan Street		12/20/2004	Restrictive Covenant, Institutional Controls	65
2254	Master Builders	64 S Lucile Street		7/10/1998	NFA after assessment, IRAP or VCP	77
96851494	Mobile Crane Co Inc	5900 2nd Avenue S		5/10/2002	NFA after assessment, IRAP or VCP	84
17634	Ott Real Estate Property	5903 1st Avenue S		5/22/1996	NFA after assessment, IRAP or VCP	95
91919568	Proliance International Inc	115 S Dawson Street		10/2/2006	NFA after assessment, IRAP or VCP	98
39352815	Western Parcel Express Seattle	525 S Front Street	■	2/5/2002	Restrictive Covenant, Institutional Controls	124

[1] - See Appendix C-2, Maps C-1 through C-6. Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest

■ - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the King County Lease Parcels Data Gaps Report.

CSO - Combined sewer overflow
IRAP - Independent Remedial Action Program
KCLP - King County Lease Parcels
NFA - No Further Action
RM - River Mile
VCP - Voluntary Cleanup Program

Table C-9
SIC and NAICS Codes for Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database and Not Included in Another Source Control Area or Discussed in the King County Lease Parcels Data Gaps Report

Facility/ Site ID	Facility Name	Facility Address	SIC Code	SIC Description	NAICS Code	NAICS Description	Ecology Interaction(s)	Map ID[1]
59441643	Ace Radiator	311 S Brandon Street	7539	Automotive Repair Shops, NEC	NA	NA	SCS (no ID listed) - Inactive HW Planner WAD027405406 - Inactive HWG WAD027405406 - Inactive	2
63478536	Air Products Manufacturing Corp Seattle	5801A East Marginal Way S	2813	Industrial Gases	NA	NA	Tier 2 CRK000037830 - Active	3
26737544	Aleutian Constructors	5939 4th Avenue S	1541 1542 1629	Industrial Buidlings & Warehouses Nonresidential Construction, NEC Heavy Construction, NEC	NA	NA	HWG WAD982654972 - Inactive	5
2992519	AM International	5901 4th Avenue S	9999	Nonclassifiable Establishments	NA	NA	HWG WAD001680883 - Inactive	7
98441868	Amalgamated Sugar Co Seattle	5400 Denver Avenue S	2063 4214	Beet Sugar Local Trucking with Storage	42259	Other Farm Product Raw Material Wholesaler	UST ID 4313 - Inactive HWG WAD988508628 - Inactive	8
47512364	American Dry Ice Orcas	672 S Orcas Street	5169	Chemicals & Allied Products, NEC	NA	NA	Tier 2 CRK000023250 - Active	9
6346940	American Motor Freight LLC	5700 6th Avenue S, Suite 203	NA	NA	484121	General Freight Trucking, Long Distance	HW Mgmt WAH000034000 - Active	10
12467128	American Technical Coatings Inc.	666 S Fidalgo Street	9999	Nonclassifiable Establishments	NA	NA	HWG WAD103354833 - Inactive	11
61212661	Argo Blower & Mfg Co Inc	5400 E Marginal Way S	NA	NA	333412	Industrial and Commercial Fan Blowers	HWG WAD988492120 - Active	13
18398858	Argo TOFC	4th Avenue S & Dawson Street	NA	NA	NA	NA	UST ID 7803 - Inactive	14
9399901	AT&T Wireless Marginal Way & Alaskan	4797 1st Avenue S	4812	Radiotelephone Communications	NA	NA	Tier 2 CRK000056560 - Inactive	17
14379672	Battery Systems, Inc.	105 S Brandon Street	5013	Motor Vehicle Supplies & New Parts	42112 42312	Motor Vehicle Supplies & New Parts Motor Vehicle Supplies & New Parts	HWG WAH000015073 - Inactive HW Mgmt WAH000015073 - Inactive Tier 2 CRK000047150 - Active	19
96937296	Beckwith Kuffel Inc	5930 1st Avenue S	9999	Nonclassifiable Establishments	NA	NA	UST ID 9853 - Inactive HWG WAD988511127 - Inactive	20
91823668	Berg Evans Chain Co	217 S Findlay Street	5084 5085	Industrial Machinery & Equipment Industrial Supplies	NA	NA	HWG WAD988523486 - Inactive	21
32698478	Big Johns Truck Repair Inc Seattle	5622-1/2 1st Avenue S	9999	Nonclassifiable Establishments	NA	NA	HWG WAD988509329 - Inactive	22
86499282	Bindery	215 S Bennett Street	NA	NA	323121	Tradebinding & Related Work	HWG WAD980983969 - Inactive	23
415282	Blue Nile Inc.	5907 4th Avenue S	NA	NA	NA	NA	No interaction information is available	25
47157762	Bob's Texaco Service	5304 1st Avenue S	NA	NA	NA	NA	UST ID 4734 - Active LUST ID 1959 - Active	26
63627615	Branom Instrument Co Inc	5500 4th Avenue S	9999	Nonclassifiable Establishments	NA	NA	HWG WAD001938877 - Inactive	27
37332122	Burlington Env Philip Services Corp	402 S Dawson Up Tracks	NA	NA	562212	Solid Waste Landfill	HW Transfer WAH000013698 - Inactive	29
46161728	BYG Cooperative	74 S Hudson Street Warehouse	NA	NA	48849	Other Support Activities for Road Transportation	HWG WAD988511473 - Active	30
77372687	Byrne Specialty Gases, Inc. MEAD	118 S Mead Street	5169	Chemicals & Allied Products, NEC	NA	NA	Tier 2 CRK000033870 - Inactive	31
99747798	Cenveo Graphic Arts Center	832 S Fidalgo Street	NA	NA	32311	Printing	HWG WAD009244609 - Active HW Planner WAD009244609 - Active	34
9361279	Charles H Lilly Co	5200 Denver Avenue S	2875 2879	Fertilizers, Mixing Only Argicultural Chemicals, NEC	NA	NA	HWG WAD009615956 - Inactive Tier 2 WAD009615956 - Inactive	37
74478588	Charles H Lilly Co	6000 East Marginal Way S	5191	Farm Supplies	NA	NA	Tier 2 CRK000034110 - Inactive	36

Table C-9
SIC and NAICS Codes for Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database and Not Included in Another Source Control Area or Discussed in the King County Lease Parcels Data Gaps Report

Facility/ Site ID	Facility Name	Facility Address	SIC Code	SIC Description	NAICS Code	NAICS Description	Ecology Interaction(s)	Map ID[1]
1792892	Chevron 90636	5940 East Marginal Way S	5541	Gasoline Service Stations	44711	Gasoline Service Stations with Convenience Store	UST ID 5061 - Active LUST ID 393280 - Active HWG WAD982654006 - Active HW Mgmt WAD982654006 - Inactive Tier 2 WAD982654006 - Inactive	38
83494216	Clough Equipment Co S Front S	515 S Front Street	9999	Nonclassifiable Establishments	NA	NA	HWG WAD009264367 - Inactive	39
21759322	Continental Industries	222 S Orcas Street	NA	NA	NA	NA	HWG WAD027421494 - Inactive	41
2363	Craig Taylor Equipment	5030 1st Avenue S	3479 5015 7538	Coating, Engraving, & Allied Service Motor Vehicle Parts, Used General Automotive Repair Shops	NA	NA	SCS (no ID listed) - Inactive LUST ID 200514 - Inactive UST ID 200514 - Active IRAP - Inactive	42
53625878	Dawson Street Land Co	56 S Dawson Street	6519	Real Property Lessors, NEC	NA	NA	HWG WAD988520136 - Active	43
343781	Denco Sales Co	711 S Fidalgo Street	NA	NA	NA	NA	HWG WAH000019224 - Active	44
99894694	Don's Radiator	5626 1st Avenue S	9999	Nonclassifiable Establishments	NA	NA	HWG WAR000005595 - Inactive HW Planner WAR000005595 - Inactive	45
36961494	Dow Chemical USA Michigan Div	4th Avenue S & Dawson Street	9999	Nonclassifiable Establishments	NA	NA	HWG WAD980981740 - Inactive	46
74936217	Dresser Rand	225 S Lucile Street	NA	NA	45321	Office Suplies & Stationary Store	HWG WAD981764152 - Inactive HW Mgmt WAD981764152 - Active	48
2521	Drive Line Services of Seattle Inc	108 S Brandon Street	3714 7537 9999	Motor Vehicle Parts & Accessories Automotive Transmission Repair Shop Nonclassifiable Establishments	336399	All Other Motor Vehicle Parts Manufacturers	HWG WAD988517884 - Active IRAP - Inactive	49
87626746	Eagle Systems, Inc.	53 S Dawson Street	4212 7538	Local Trucking, without Storage General Automotive Repair Shops	NA	NA	UST ID 4258 - Inactive	51
78563473	Emerald City Freight Distribution	6003 6th Avenue S	NA	NA	484121	General Freight Trucking, Long Distance	HWG WAD981765258 - Inactive	53
62393528	Fray Equipment Co	5821 1st Avenue S	7359 7699	Equipment Rental & Leasing, NEC Repair Services, NEC	NA	NA	UST ID 3150 - Inactive HWG WAD027430735 - Inactive	57
78676691	Fred Hutchinson Cancer Research Center	4755 1st Avenue S	5051	Metals Service Centers & Offices	NA	NA	SCS (no ID listed) - Inactive VCP (no ID listed) - Inactve LUST ID 543770 - Inactive UST ID 543770 - Inactive HWG WA0000085266 - Inactive	58
15892877	Fryer Knowles Inc	211 S Dawson Street	NA	NA	23521 23731	Painting & Wall Covering Contractors Highway, Street, & Bridge Construction	HWG WAH000000257 - Inactive HW Mgmt WAH000000257 - Inactive	59
73183189	Furniture Spa Inc	126 S Findlay Street	7641	Reupholstery & Furniture Repair	81142	Reupholstery & Furniture Repair	UST ID 2448 - Inactive HWG WAH000014282 - Active HW Planner WAH000014282 - Active	60
83552111	GE Aircraft Engines	637 S Lucile Street	NA	NA	NA	NA	HWG WAD980725006 - Inactive HW Planner WAD980725006 - Inactive	61
95662832	GE Aircraft Engines Front St	540 S Front Street	3724	Aircraft Engines & Engine Parts	NA	NA	HWG WAD980979645 - Inactive	62
31535274	GE Lighting Seattle Distribution Center	549 S Dawson Street	4214 4225	Local Trucking with Storage General Warehousing & Storage	NA	NA	HWG WA0000861187 - Active	63
96679259	Georgetown Center	NW Corner of Corson Avenue S & S Michigan Street	NA	NA	NA	NA	VCP (no ID listed) - Inactive	65
35148584	Greater Seattle Floors	5517 6th Avenue S	NA	NA	23552 23833	Floor Laying & Other Floor Contractors Flooring Contractors	HWG WAD981768740 - Active	67

Table C-9
SIC and NAICS Codes for Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database and Not Included in Another Source Control Area or Discussed in the King County Lease Parcels Data Gaps Report

Facility/ Site ID	Facility Name	Facility Address	SIC Code	SIC Description	NAICS Code	NAICS Description	Ecology Interaction(s)	Map ID[1]
6878135	Kettells	5800 4th Avenue S	NA	NA	NA	NA	UST ID 619229 - Active	69
96377286	Leone VanValkenburg Trust	5200 4th Avenue S	5013 5063	Motor Vehicle Supplies & New Parts Electrical Apparatus & Equipment	NA	NA	HWG WAH000016196 - Inactive Tier 2 CRK000022220 - Active	71
71277652	Lockwood Marine Inc	6502 East Marginal Way S	9999	Nonclassifiable Establishments	NA	NA	HWG WAD980975437 - Inactive	72
13593282	Mail Dispatch, Inc.	917 S Nebraska	NA	NA	NA	NA	UST ID 899 - Active	75
2254	Master Builders	64 S Lucile Street	NA	NA	NA	NA	SCS (no ID listed) - Inactive	77
87686611	McKinstry Co	4975 A 3rd Avenue S	1711	Plumbing, Heating, Air-Conditioning	23511 23821	Plumbing, Heating, and Air-Conditioning Electrical Contractors	HWG WAD988472890 - Active	78
61127232	McKinstry Co 215 Hudson St	215 S Hudson Street	1711	Plumbing, Heating, Air-Conditioning	23511 23821	Plumbing, Heating, and Air-Conditioning Electrical Contractors	HWG WA0000230490 - Active	79
85743277	McKinstry Co 5005	5005 3rd Avenue S	1711	Plumbing, Heating, Air-Conditioning	23511 23821	Plumbing, Heating, and Air-Conditioning Electrical Contractors	HWG WAD980725477 - Inactive	80
28755278	McKinstry Co Ste B	4975 B 3rd Avenue S	1711	Plumbing, Heating, Air-Conditioning	23511 23821	Plumbing, Heating, and Air-Conditioning Electrical Contractors	HWG WA0000470773 - Inactive	81
36652818	Mesher Supply	5001 1st Avenue S	NA	NA	NA	NA	UST ID 529431 - Inactive	82
91681677	Michigan Properties	5035 1st Avenue S	9999	Nonclassifiable Establishments	NA	NA	HWG WA0000932632 - Inactive	83
96851494	Mobile Crane Co Inc	5900 2nd Avenue S	7353	Heavy Construction Equipment Rental	532412	Construction, Mining, and Forestry Machinery	VCP NW0821 - Inactive LUST ID 10209 - Inactive UST ID 10209 - Active HWG WAD988492823 - Active	84
46977612	Moore Data Mgmt Svcs Div	725 S Fidalgo Street	9999	Nonclassifiable Establishments	NA	NA	HWG WAD991304437 - Inactive	85
74398946	NAPA Auto Parts Seattle	5201 4th Avenue S	5013 9999	Motor Vehicle Supplies & New Parts Nonclassifiable Establishments	44131	Automotive Parts & Accessories Stores	HWG WAD096764196 - Inactive Tier 2 WAD096764196 - Inactive	86
19371183	Nivas Business Corp	6100 6th Avenue S	5044	Office Equipment	NA	NA	HWG WAD981761687 - Inactive HW Planner WAD981761687 - Inactive	88
61549757	North Coast Refrigeration Inc	5047 Colorado Avenue S	1711 3446 7623	Plumbing, Heating, Air-Conditioning Architectural Metal Work Refrigeration Service & Repair	NA	NA	UST ID 101495 - Active HWG WAD988511085 - Inactive Tier 2 WAD988511085 - Active	89
44927387	Northwest Corporate Park Building U	520 S Brandon Street	NA	NA	NA	NA	UST ID 485916 - Inactive	90
59769876	Northwest Sign Supply	5300 4th Avenue S	NA	NA	54189	Other Services Related to Advertising	HWG WAH000010520 - Active	91
57957617	Olympic Medical Corp 1st Ave S	5900 1st Avenue S	NA	NA	339112	Surgical & Medical Instrument Manufacturing	HWG WAD988497228 - Active	92
29775533	Orcas Business Park LLC	650 S Orcas Street	NA	NA	53112	Lessors of Nonresidential Buildings	HWG WAH000013367 - Active	93
12545978	Ostex Intl Inc 5955 Airport Way	5955 Airport Way S	NA	NA	325413	In-Vitro Diagnostic Substance Manufacturing	HWG WAH000014365 - Active	94
17634	Ott Real Estate Property	5903 1st Avenue S	NA	NA	NA	NA	IRAP - Inactive	95
63721371	Pacific Marine Testing Co	5807 4th Avenue S	NA	NA	54138	Testing Laboratories	HWG WAD988478046 - Inactive	96
91919568	Proliance International Inc	115 S Dawson Street	3714	Motor Vehicle Parts & Accessories	336399	All Other Motor Vehicle Parts Manufacturers	VCP NW1549 - Inactive HWG WAD980977755 - Inactive HW Mgmt WAD980977755 - Inactive HW Planner WAD980977755 - Inactive Tier 2 WAD980977755 - Active TRI WAD980977755 - Active	98

Table C-9
SIC and NAICS Codes for Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database and Not Included in Another Source Control Area or Discussed in the King County Lease Parcels Data Gaps Report

Facility/ Site ID	Facility Name	Facility Address	SIC Code	SIC Description	NAICS Code	NAICS Description	Ecology Interaction(s)	Map ID[1]
73466467	Rental Service Corporation 565	5421 1st Avenue S	7353 9999	Heavy Construction Equipment Rental Nonclassifiable Establishments	23499 532412	All Other Heavy Construction Construction, Mining, and Forestry Machinery	UST ID 100566 - Active HWG WAD086256989 - Inactive HW Mgmt WAD086256989 - Active Tier 2 WAD086256989 - Active	100
59148337	Seacast Inc Seattle	207 S Bennett Street	NA	NA	331512 334514	Steel Investment Foundries Totalizing Fluid Meter & Counting	HWG WAD988492906 -Active HW Planner WAD988492906 - Inactive	105
44186982	Sears Roebuck & Co UST 7837	4786 1st Avenue S	NA	NA	NA	NA	UST ID 7837 - Inactive	106
18582122	SES Inc West Pac Environmental	74 S Hudson Street	4953 8744	Refuse Systems Facilities Support Services	NA	NA	HWG WAD980981963 - Active HW Planner WAD980981963 - Active	108
23243637	Simon Golub & Sons Inc	5506 6th Avenue S	NA	NA	42394	Jewelry, Watch, Precious Stone, & Precious Metal Merchant Wholesalers	HWG WAD988479390 - Active	110
85783156	Smith Williston	201 S Bennett Street	3599 3728	Industrial Machinery, NEC Aircraft Parts & Equipment, NEC	NA	NA	HWG WAD009248519 - Active	111
5184	St Vincent De Paul Council Seattle	5972 4th Avenue S	NA	NA	NA	NA	Revised Site Visit Program Local Source Control	131
41677496	Sudden Printing	571 S Michigan Street	9999	Nonclassifiable Establishments	NA	NA	HWG WAD051240307 - Inactive	112
47666565	TW Express	7901 1st Avenue S	9999	Nonclassifiable Establishments	NA	NA	HWG WAD980974588 - Inactive	113
74589256	Union Pacific Motor	420 S Dawson Street	NA	NA	NA	NA	LUST ID 2920 - Active UST ID 9146 - Active	114
44577768	Union Pacific Railroad Co. Dawson Street	402 S Dawson Street	4011	Railroads, Line-Haul Operating	482111	Line-Haul Railroads	WATQUAL - SO3001155 HWG WAH000016659 - Inactive HW Mgmt WAH000016659 - Active Tier 2 CRK000015610 - Active	115
33482323	UPS Seattle Export	500 S Front Street	NA	NA	49221	Local Messengers & Local Delivery	HWG WA0000380295 - Active	117
21503	U.S. Starcraft	5210 Utah Avenue S	NA	NA	332323	Ornamental and Architectural Metal Works	HWG WAH000035512 - Active Local Source Control Revised Site Visit Program	130
21468652	Valco Graphics Inc Seattle	674 S Orcas Street	9999	Nonclassifiable Establishments	NA	NA	HWG WAD982659906 - Inactive	118
3258153	Washington Machine Works	5211 1st Avenue S, Unit C, Door 4	3449	Miscellaneous Metal Work	NA	NA	HWG WAD988467213 - Active	119
72999973	Wear Cote Northwest Inc	5811 4th Avenue S	9999	Nonclassifiable Establishments	NA	NA	HWG WAD137698049 - Inactive	120
39473625	Western Cartage Inc	5050 1st Avenue S	4212	Local Trucking, without Storage	48411	General Freight Trucking, Local	UST ID 101949 - Inactive HWG WAD009503699 - Inactive	123
33942516	Western Union Telephone Co. UST 97407	808 S Fidalgo Street	NA	NA	NA	NA	UST ID 97407 - Inactive	125
56533162	Westmar Services Inc	5930 6th Avenue S	9999	Nonclassifiable Establishments	NA	NA	UST ID 11537 - Active HWG WAH000005322 - Inactive Tier 2 CRK000043630 - Inactive	126
49738534	WW Grainger Inc, Seattle	4930 3rd Avenue S	5063	Electrical Apparatus & Equipment	NA	NA	Tier 2 CRK000048960 - Inactive	127

[1] - See Appendix C-2, Maps C-1 through C-6. Map ID number identifies the facility.

CSO - Combined sewer overflow
NA - Not Available
NAICS - North American Industry Classification System
SIC - Standard Industrial Classification system

Table C-9
SIC and NAICS Codes for Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database and Not Included in Another Source Control Area or Discussed in the King County Lease Parcels Data Gaps Report

Facility/ Site ID	Facility Name	Facility Address	SIC Code	SIC Description	NAICS Code	NAICS Description	Ecology Interaction(s)	Map ID[1]

Ecology Hazardous Waste Programs

HWG - Facilities that generate any quantity of a dangerous waste. They may be classified as SQG, MQG, or LQG depending on hazardous waste generated for a given month.
HW Mgmt - Facilities that are required to have a RCRA Site ID# but who do not generate and/or manage hazardous waste (XQG generator status). This includes transporters, used oil recycler's, and dangerous waste fuel marketers and burners.
HW Planner - Under Chapter 173-307 WAC, facilities that report under Section 313 of the Emergency Planning/Community Right-To-Know Act (EPCRA), or that generate more than 2,640 pounds of hazardous waste per year, must prepare Pollution Prevention Plans.
HW Transfer - Transfer facility is a site, owned, leased or operated by a transporter of regulated hazardous waste shipments where any of the following occurs: 1) receives wastes from another transporter, 2) transfers wastes from one transport vehicle to another, 3) transfers waste from one container to another, and 4) stores waste within a vehicle or on property for 10 days or less. Examples of transfer facilities include a parking lot, warehouse, truck terminal, barge or steamship loading and unloading facility, or railroad spur loading or unloading facility.
Tier 2 - Businesses that store 10,000 pounds or more of a hazardous chemical or 500 pounds or less, depending on the chemical, of an extremely hazardous chemical on site at any one time must report annually. Reports are sent to the State Emergency Response Commission.
TRI - Facilities in specific industries that manufacture, process or use more than the threshold amount of one or more of 600 listed toxic chemicals. Most threshold amounts are 10,000 or 25,000 pounds per year. Some chemicals have much lower thresholds.

Ecology Toxics Programs

IRAP - Independent Remedial Action Program
LUST - Leaking Underground Storage Tank
SCS - State Cleanup Site
UST - Underground Storage Tank
VCP - Voluntary Cleanup Program

Table C-10
Facilities within the S Brandon Street CSO Basin that are Included in Another Source Control Area

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]
23766347	80 S Hudson Street Site	SES Seattle	80 S Hudson Street						●	●			1
27632327	AR Torrico Sons Shipping Inc	Seattle Biodiesel LLC	6335 1st Avenue S										12
55897213	Art Brass Plating	None	5815 4th Avenue S										15
88531932	Art Brass Plating Inc Seattle	Helen V. Warner	5516 3rd Avenue S		●	●		●					16
63217123	Bank & Office Interiors	Ener-G Foods Inc.,	5990 1st Avenue S		●								18
7118747	Blaser Die Casting Co.	Blaser Tool & Mold Co., Scougal Rubber Corporation	5700 3rd Avenue S			●							24
65697348	Burgess Enterprises	Duwamish Marine Center, Samson Tug & Barge, Ray Burgess Co.	6361 1st Avenue S							●			28
11598755	Capital Industries Inc	None	5801 3rd Avenue S		●	●							33
2253	Certainteed Gypsum Manufacturing	BPB Gypsum, James Hardie Gypsum, Certainteed Gypsum, Lone Star Northwest, Norwest Gypsum	5931 East Marginal Way S		●		●		●	●	●		35
54757868	Consolidated Freightways Seattle	Shippers Transport Express, Consolidated Freightways UST 11012	6050 East Marginal Way S		●	●			●	●			40
21945598	Duwamish Marine Center	Samson Tug & Barge, Burgess Enterprises	6365 1st Avenue S			●							50
7307167	Ener-G Foods Inc.	Bank & Office Interiors	5960 1st Avenue S		●							♦	54
2337	Frank's Used Cars	None	6309 East Marginal Way S			●							56
95534411	Glacier Northwest East Marginal Way	Kaiser Cement, Lone Star Cement, CEMEX, Slip 2 Duwamish Bank Stabilization	5975 East Marginal Way S		●		●		●	●			66
2226	Longview Fibre Paper & Packaging Inc	Longview Fibre Company	5901 East Marginal Way S		●	●	●	●	●	●		♦	73
80333167	Manson Construction	Manson Construction & Engineering	5209 E Marginal Way S	■	●					●			76
55698119	Riveretzs Auto Care	Winters Investment LP, Former Georgetown Gasco/Tesoro	6185 4th Avenue S						●	●			101
94925241	Saint Gobain Containers Inc	Ball Glass, Ball-Foster Glass, Ball-Incon, Northwestern Glass Company, Incon Packaging	5801 East Marginal Way S		●		●	●	●	●		♦	103
1020256	Samson Tug & Barge Co Inc Transporter	Duwamish Marine Center, Burgess Enterprises	6365 1st Avenue S		●							♦	104
5023482	Seattle Biodiesel LLC	AR Torrico Sons Shipping Inc, General Biodiesel Seattle	6333 1st Avenue S		●		●			●			107

[1] - See Appendix C-2, Map C-7. Map ID number identifies the facility.

Table C-10
Facilities within the S Brandon Street CSO Basin that are Included in Another Source Control Area

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID[1]

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

- EAA-1 RM 0.1 to 0.9 East, Duwamish/Diagonal Way
- RM 0.9 to 1.0 East, Slip 1
- RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest
- RM 1.7 to 2.0 East, Slip 2 to Slip 3

■ - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the KC Lease Parcels Data Gaps Report.

● - Additional information regarding this facility is available on the accompanying tables.

♦ - EPA has sent a CERCLA Section 104(e) Request for Information Letter to this facility or property owner.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CSCSL - Confirmed or Suspected Contaminated Sites List
CSO - Combined Sewer Overflow
EAA - Early Action Area
EPA - U.S. Environmental Protection Agency
KCIW - King County Industrial Waste
KCLP - King County Lease Parcels
LUST - Leaking Underground Storage Tank
NFA - No Further Action
NPDES - National Pollutant Discharge Elimination System
RM - River Mile
UST - Underground Storage Tank

Table C-11
SPU and Ecology Inspections from January 2008 to July 2009

Facility/ Site ID	Facility Name	Facility Address	Lead Agency	Date Inspected	Findings	Map ID[1]	Reference
61212661	Argo Blower & Manufacturing Inc.	5400 E Marginal Way S	SPU	1/29/2008	Complete spill plan, obtain spill containment and clean-up materials, train employees Improper disposal of solvent rags Need to clean two catch basins located in the south parking lot Improve housekeeping Possibly need to register with PSCAA due to spray-system	13	Jeffers 2008 [3129]; SPU 2008 [5642,5643]
			SPU	5/8/2008	Achieved Compliance		SPU 2008 [5645]
6346940	American Motor Freight LLC	5700 6th Avenue S, Suite 203	Ecology	4/15/2009	No issues	10	Jeffers 2009 [4101]
14379672	Battery Systems, Inc.	105 S Brandon Street	Ecology	March 2008	Issued a compliance action letter to ensure company complies with WAC 173-303-520 Special Requirements for Reclaiming Spent Lead Acid Battery Waste	19	Jeffers 2008 [3402]
7118747	Blaser Die Casting Co.	5700 3rd Avenue S	Ecology	4/15/09	Speculative accumulation of by-product may elevate to LQG status Need PSCAA permit for waste collant evaporator Need KCIW discharge authorization for debur wastewater Need to clean storm drain catch basin	24	Jeffers 2009 [4101]
415282	Blue Nile Inc.	5907 4th Avenue S	Ecology	5/28/2008	Approximately 1 liter of rhodium plating waste discharged to sewer on a daily basis. Ecology suggested that the waste could be drummed for off-property disposal or evaporated in a beaker on a hot plate.	25	Jeffers 2008 [3404]
63627615	Branom Instrument Co Inc	5500 4th Avenue S	Ecology	6/25/2008	Obtain spill supplies and develop spill response plan Need to clean catch basins Improve outdoor housekeeping	27	Jeffers 2008 [3404]
			Ecology	7/23/2008	Follow-up Inspection: Further actions needed		Jeffers 2008 [3406]
			Ecology	8/8/2008	Achieved Compliance		Jeffers 2008 [4059]
	CleanScapes, Inc.	5939 4th Avenue S	SPU	8/14/2008	Complete spill plan, obtain spill containment and clean-up materials, train employees Improve housekeeping Sweep loading area after each waste transfer Implement catch basin check and cleaning schedule Clean up leaks and spills as they occur	5	SPU 2008 [5646, 5647, 5648]
			SPU	11/13/2008	Achieved Compliance *Note this facility is at the same address as Aleutian Constructors, Facility/Site ID 26737544		
74936217	Dresser Rand	225 S Lucile Street	Ecology	6/25/2008	Obtain spill supplies and develop spill response plan Properly designate unknown waste Properly store non-containerized material (i.e. scrap metal)	48	Jeffers 2008 [3404]
None	Duwamish Metal Fabricators	16 S Michigan Street	SPU	7/23/2008	Obtain coverage under the ISGP Create spill plan, obtain spill containment and clean-up materials, train employees Clean catch basins		Jeffers 2008 [3406]; SAIC 2009 [4076]
			SPU	10/23/2008	Achieved compliance		

Table C-11
SPU and Ecology Inspections from January 2008 to July 2009

Facility/ Site ID	Facility Name	Facility Address	Lead Agency	Date Inspected	Findings	Map ID[1]	Reference
15892877	Fryer Knowles Inc	211 S Dawson Street	Ecology	4/6/2009	Clean storm drain catch basin and maintain cleaning records Sweep paved areas	59	Jeffers 2009 [4101]
80333167	Manson Construction	5209 E Marginal Way S	Ecology	6/10/2009	Need to submit 2008 Dangerous Waste Annual Report Properly store waste Outside repair and storage causing extensive oil spills near storm drains Unidentified stormwater drainage system Improve prevention of equipment oil leaks and drips in storage yard	76	Jeffers 2009 [4101]
96851494	Mobile Crane Co Inc	5900 2nd Avenue S	SPU SPU	7/15/2008 9/11/2008	Create spill plan Educate employees with regard to spill plan Label spill materials and store in an easily accessible location Achieved Compliance	84	SPU 2008 [5638] SPU 2008 [5639]
None	Natus Medical Inc.	5900 1st Avenue S	Ecology	4/22/2009	Obtain spill supplies and develop spill response plan, train employees Properly designate dangerous wastes Clarify HW generator status - likely MQG Clean storm drain catch basins *Note this facility is at the same address as Olympic Medical Corp, Facilit/Site ID 57957617	92	Jeffers 2009 [4101]
1020256	Samson Tug & Barge Co Inc Transporter	6365 1st Avenue S	SPU	7/28/2008	Obtain coverage under the ISGP Improve or create spill response procedures Clean storm drains and catch basins Properly dispose of waste sludge in a parts cleaner Properly label containers Register as a dangerous waste transfer facility	104	Jeffers 2008 [3406]; SAIC 2009 [4076]
59148337	Seacast Inc Seattle	207 S Bennett Street	Ecology Ecology	March 2008 January 2009	Equipment leaked a few gallons of oil to standing water off the facility's property. Equipment was moved indoors and the spilled oil was cleaned up. Seacast completed compliance certificates, not reinspected	105	Jeffers 2008 [3402] Jeffers 2009 [4083]
5184	St. Vincent de Paul	5950/5972 4th Avenue S	Ecology	4/15/2009	Properly store electronic products Implement proper housekeeping, including sweeping and cleaning catch basins Improve or create spill response procedures Propery store Moderate Risk Waste in accordance with WAC 173-350-360 *Note a portion of this facility is at the same address as Sahlberg Equipment, Facility/Site ID 2450	131	Ecology 2009 [5651]

Table C-11
SPU and Ecology Inspections from January 2008 to July 2009

Facility/ Site ID	Facility Name	Facility Address	Lead Agency	Date Inspected	Findings	Map ID[1]	Reference
21503	U.S. Starcraft	5210 Utah Avenue S	Ecology	6/9/2009	Obtain proper permit for discharge to the sanitary sewer Obtain a EPA/State RCRA Identification Number Properly store accumulated wastes Properly designate and label wastes Properly dispose of solvent wastes Properly dispose of paint rags and booth filters Properly dispose of waste and document disposal Create spill response procedures and control spills Cease release of wastes to soil	130	Ecology 2009 [5652]

[1] - See Appendix C-2, Maps C-1 through C-6. Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

- RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest
- RM 1.7 to 2.0 East, Slip 2 to Slip 3

HW - hazardous waste
ISGP - Industrial Stormwater General Permit
KCIW - King County Industrial Waste
LQG - large quantity generator
MQG - medium quantity generator
PSCAA - Puget Sound Clean Air Agency
WAC - Washington Administrative Code

Table C-12
Facilities Incorrectly Plotted in Ecology's Facility/Site Database GIS Shapefile

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	Ecology Facility/Site Database Coordinates		Proposed Coordinates	
				Latitude	Longitude	Latitude	Longitude
41213352	301 Drum	None	301 2nd Avenue S	47.55432	122.33377	47.60002	122.33162
73415363	Allied Battery Co Inc Main St	Allied Battery Yakima	3007 Main Street, Union Gap	47.54867	122.32277	46.55824	120.47529
61437393	Hussmann Corp	Hussman Corp First Ave	7272 1st Avenue S	47.54540	122.33593	47.54028	122.33447
73263954	PTL Partnership	None	6314 7th Avenue S	47.54624	122.32627	47.54559	122.32452
44784762	Pump Station 49 Manchester	None	6975 E Van Buren Street, Manchester	47.54802	122.32576	47.55385	122.54584
49423263	Seadrunar Recycling	National Transfer Inc	28 S Brandon Street	47.92762	122.62785	47.55417	122.33623

Appendix C-2

S Brandon Street CSO Drainage Maps

Appendix C-2
List of Figures

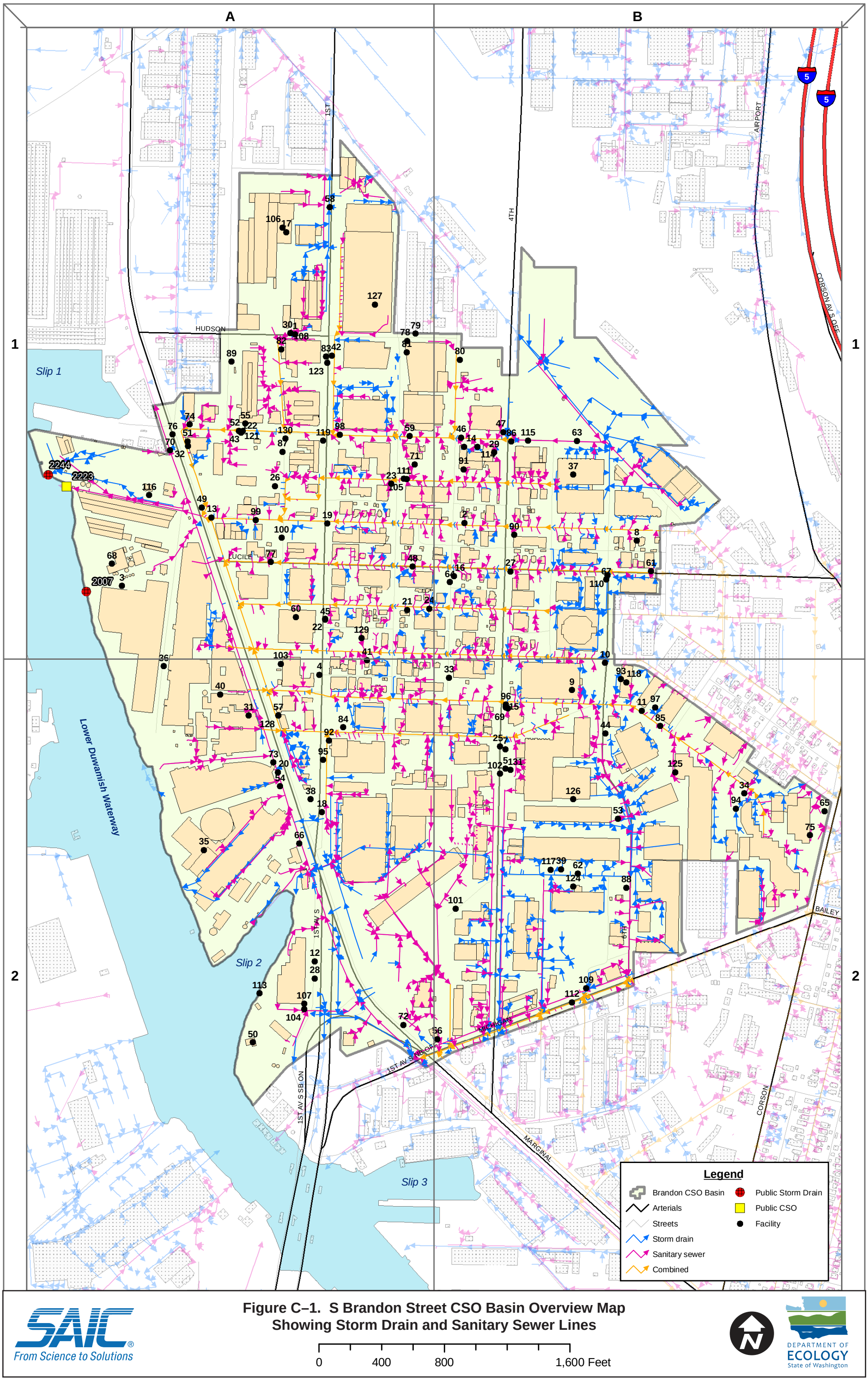

Figure C–1. S Brandon Street CSO Basin Overview Map Showing Storm Drain and Sanitary Sewer Lines

0 400 800 1,600 Feet

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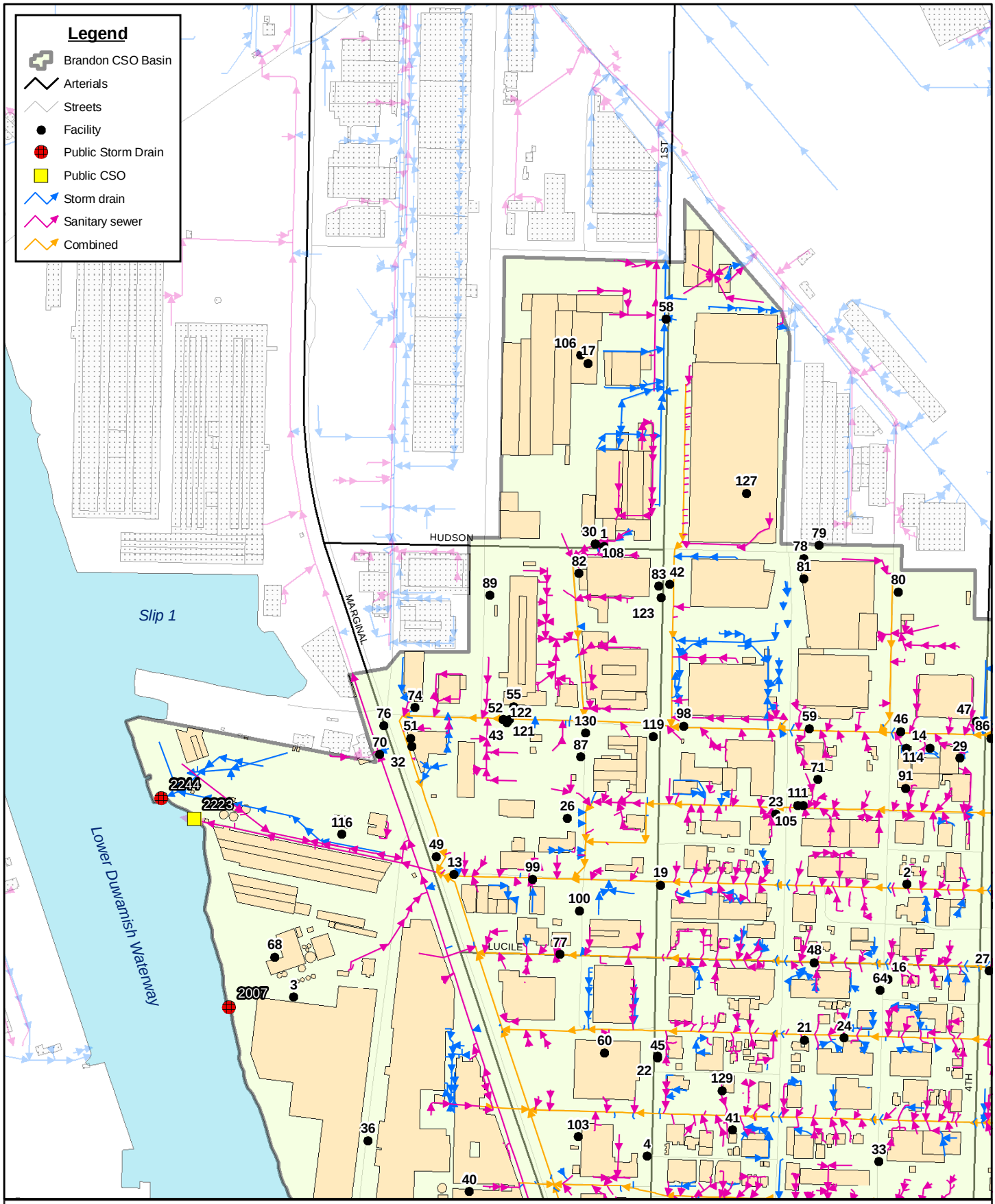

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Figure C–1.1. Quadrant A1, Northwest Portion of the S Brandon Street CSO Basin

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A1

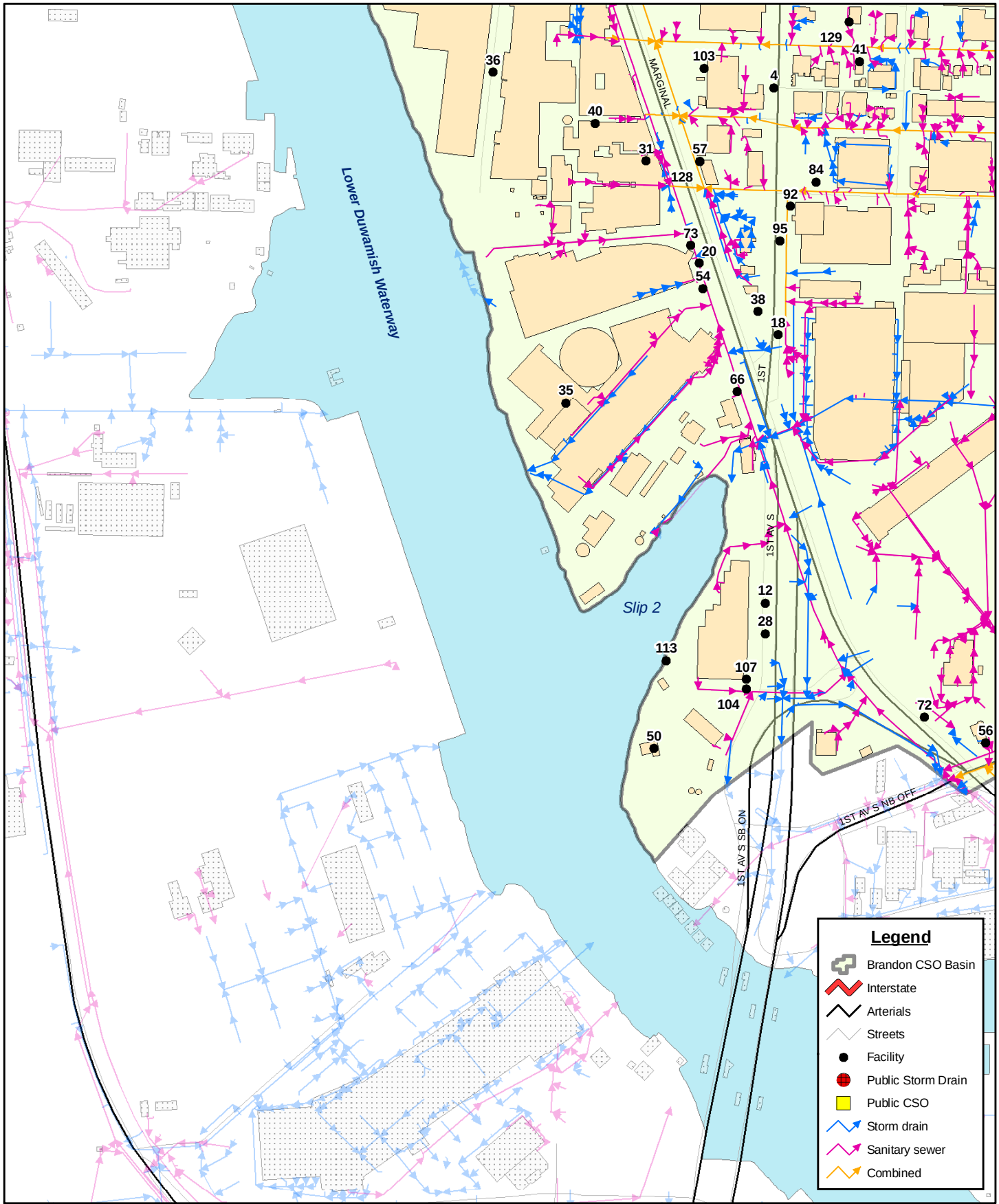

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Figure C–1.2. Quadrant A2, Southwest Portion of the S Brandon Street CSO Basin

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A2

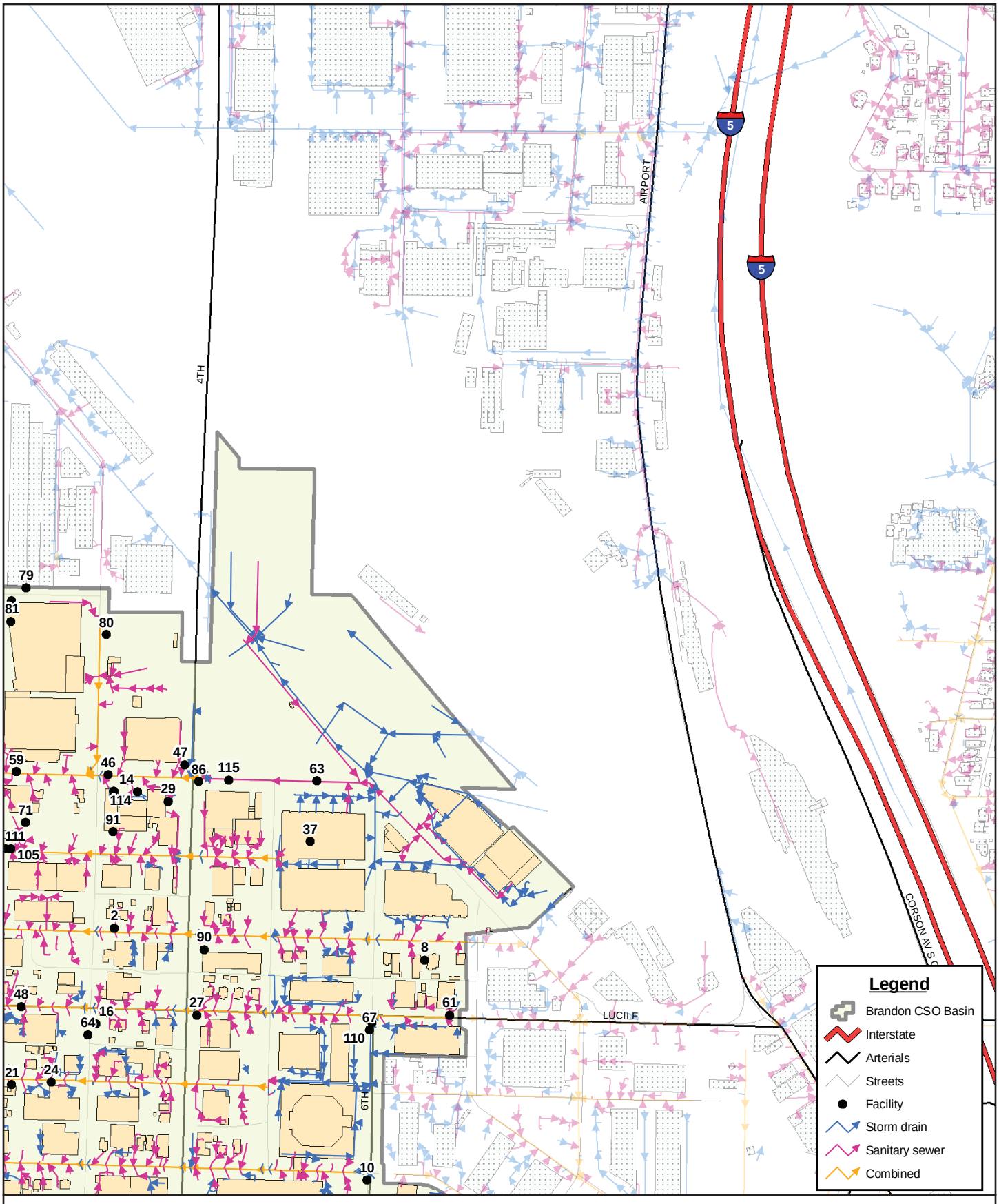

Figure C–1.3. Quadrant B1, Northeast Portion of the S Brandon Street CSO Basin

B1

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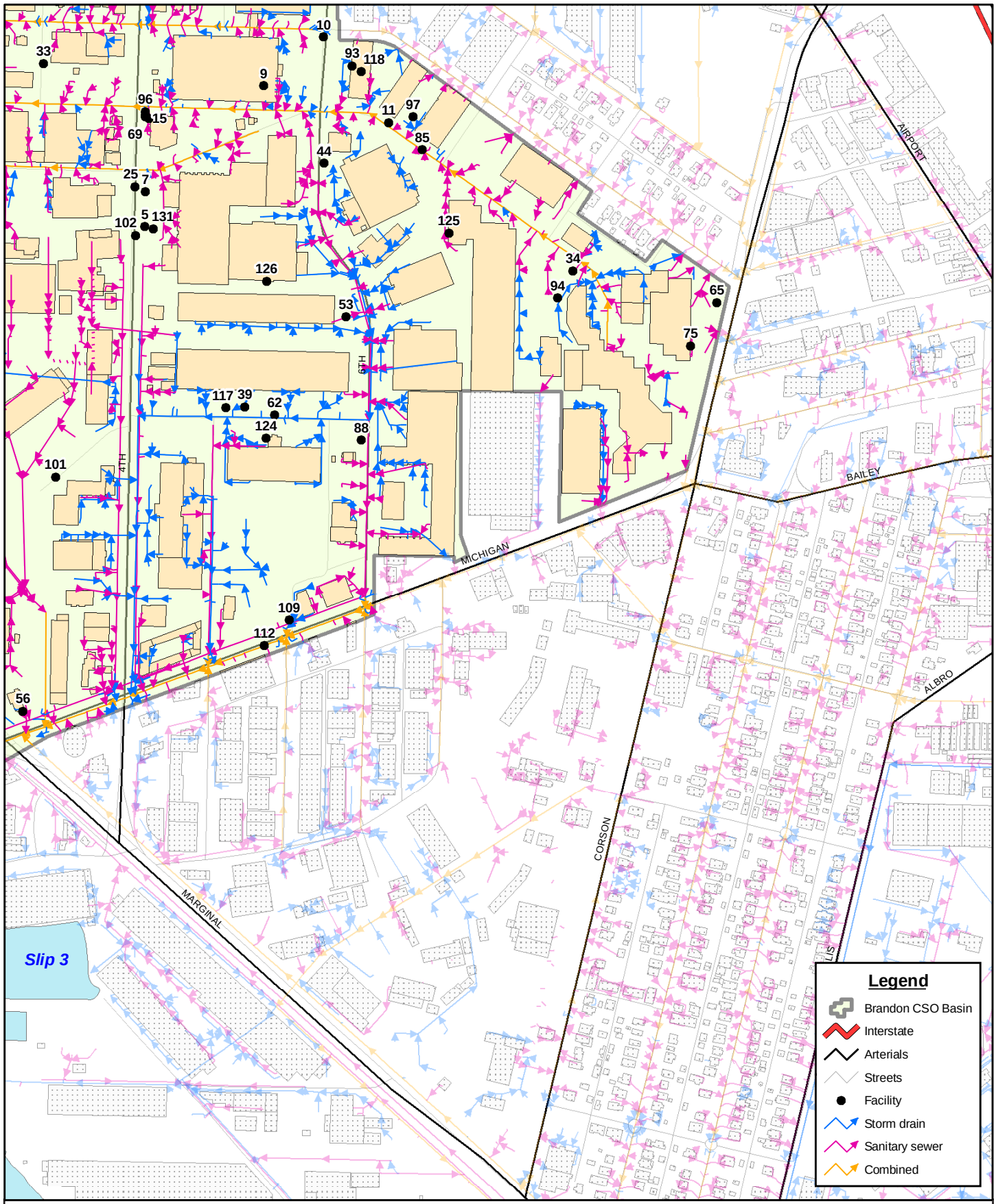

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Figure C–1.4. Quadrant B2, Southeast Portion of the S Brandon Street CSO Basin

0 250 500 1,000 Feet

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B2

Figure C–2. CSCSL Facilities in the S Brandon Street CSO Basin

0 400 800 1,600 Feet

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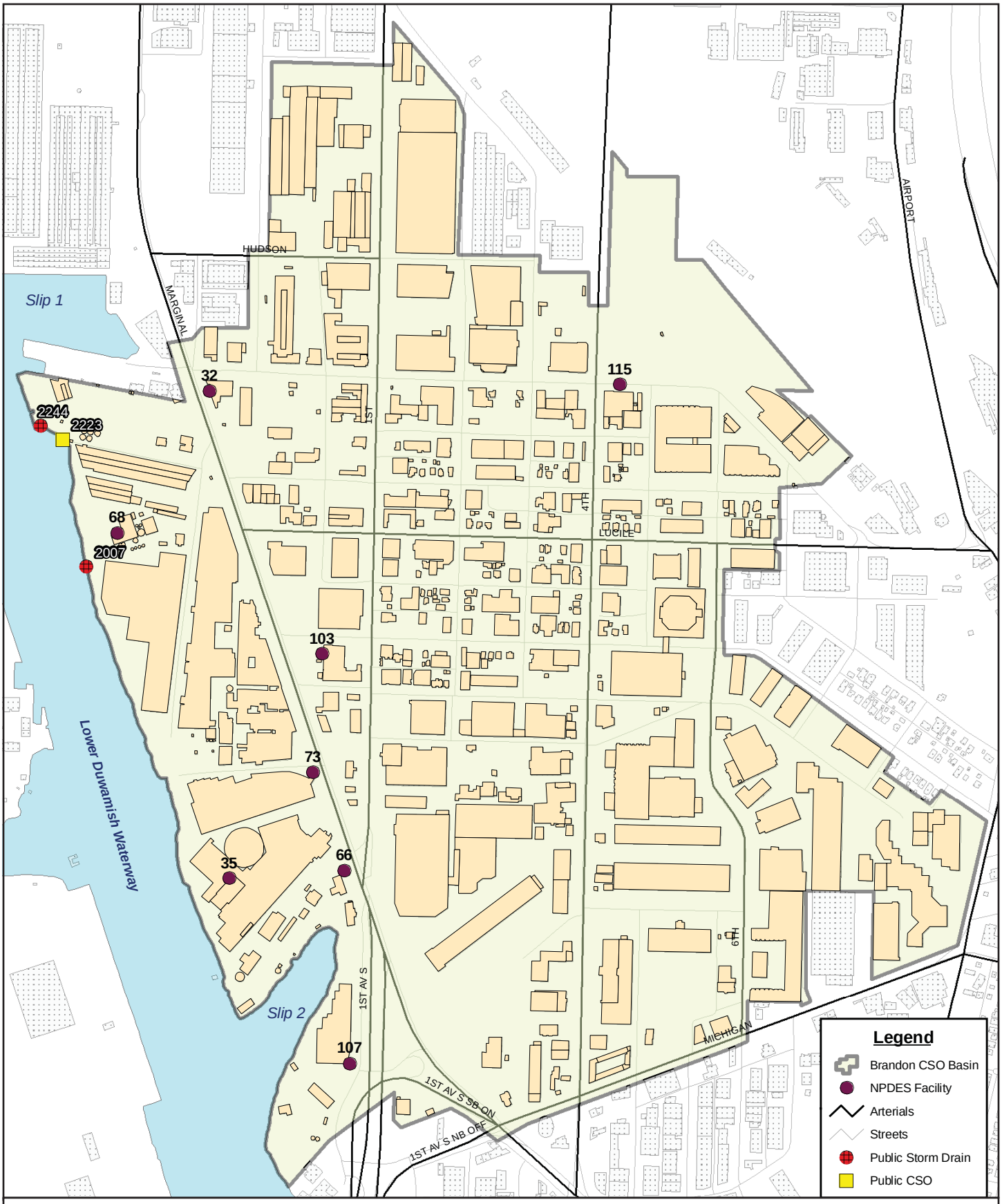

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Figure C–3. NPDES Facilities in the S Brandon Street CSO Basin

0 400 800 1,600 Feet

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Figure C–4. KCIW Facilities in the S Brandon Street CSO Basin

0 400 800 1,600 Feet

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Figure C–5. LUST Facilities in the S Brandon Street CSO Basin

0 400 800 1,600 Feet

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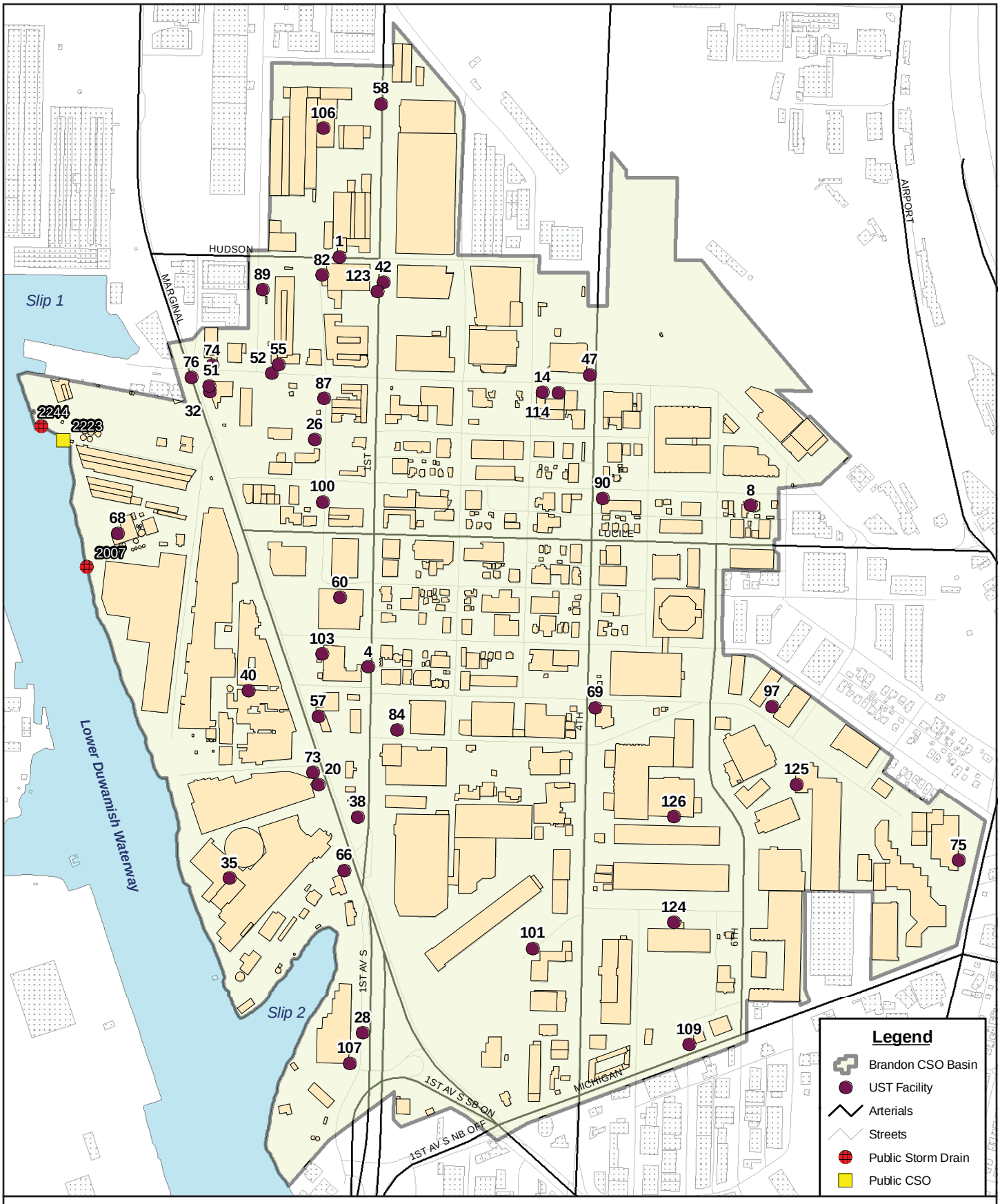

Figure C–6. UST Facilities in the S Brandon Street CSO Basin

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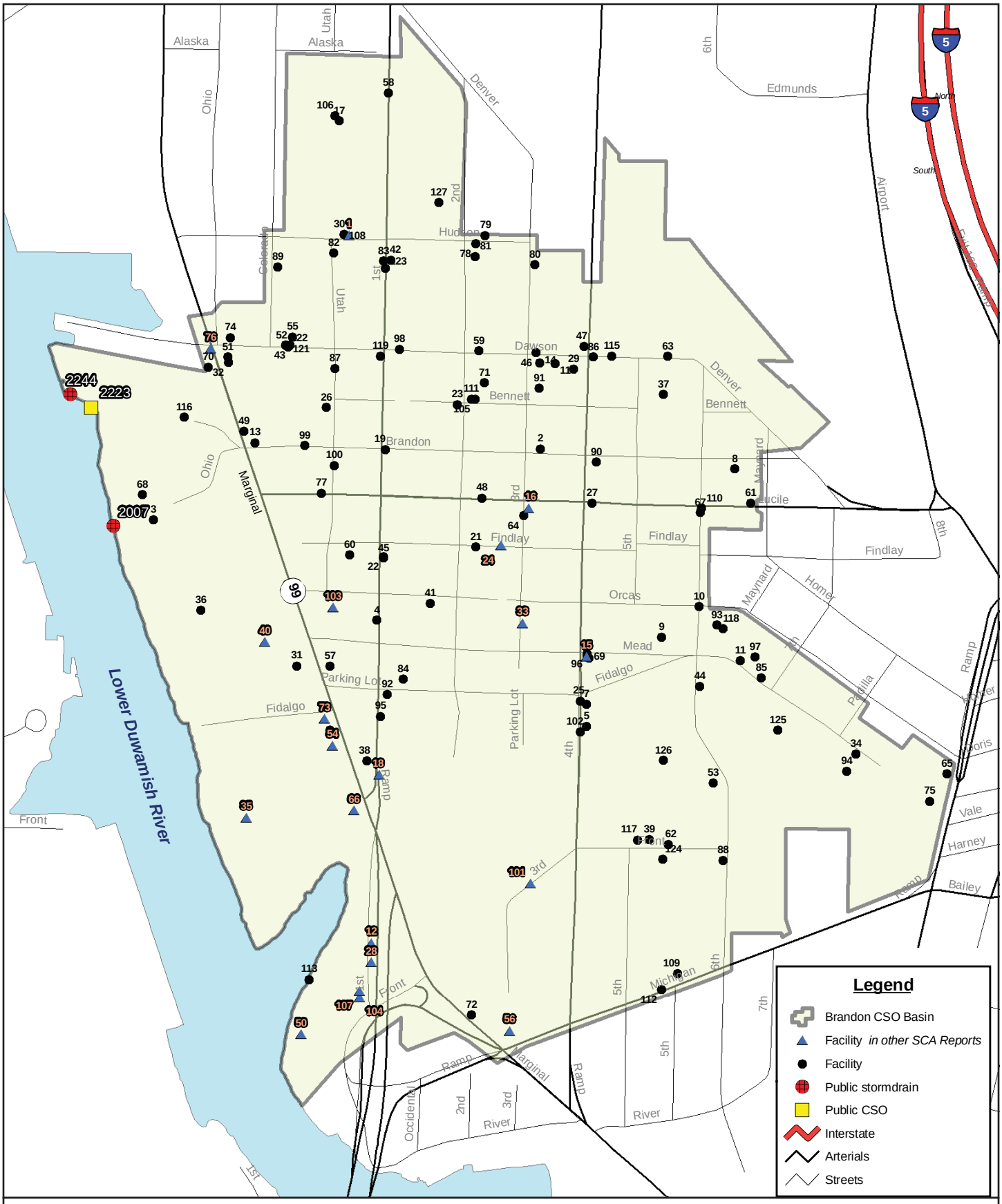

Figure C–7. Facilities in the S Brandon Street CSO Basin that are Included in Another Source Control Area

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Appendix C-3

Confirmed or Suspected Contaminated Sites and Leaking Underground Storage Tank Properties within the S Brandon Street CSO Basin

Appendix C-3
Table of Contents

List of Figures

List of Tables

Appendix C-3

Confirmed or Suspected Contaminated Sites and Leaking Underground Storage Tank Properties within the S Brandon Street CSO Basin

Industrial and commercial facilities within the S Brandon Street CSO basin have been identified as follows:

- 128 facilities within the Michigan Street CSO basin have been assigned Ecology Facility/Site ID numbers (Table C-1).
- 11 of these facilities are listed on Ecology's CSCSL.
- 52 of these facilities have active EPA ID numbers.
- 8 of the facilities hold NPDES permits.
- 5 of these facilities have KCIW discharge authorizations or permits[1], allowing them to discharge industrial wastes to the sanitary sewer.
- 18 of these facilities are listed on Ecology's LUST list.
- 43 of these facilities are listed on Ecology's UST list.

These facilities are listed by category in Appendix C-1 and their locations are shown on Figure C-1. Three of the facilities with KCIW discharge authorizations or permits are also listed on the CSCSL. As discussed in Section 3.0 of the *Data Gaps Report*, facilities listed on the CSCSL, LUST facilities, and facilities discharging industrial wastes to the sanitary/combined sewer may represent potential sources which may recontaminate sediment associated with the KC Lease Parcels source control area from the S Brandon Street CSO.

The S Brandon Street CSO serves an area of approximately 380 acres. During periods of heavy rainfall, when the combined wastewater and stormwater flow exceeds system capacity, the excess flow is discharged to the S Brandon Street CSO structure. CSO discharges contain a mixture of wastewater and stormwater, with stormwater generally comprising the majority of the flow. Wastewater may carry concentrations of sediment COCs, particularly from those facilities that are permitted to discharge industrial wastes to the sanitary sewer (Art Brass Plating, Cadman, Longview Fibre Paper & Packaging, and St. Gobain). Chemical residues present in catch basins on these properties or on adjacent roadways may become dissolved and suspended in stormwater. Contaminants suspended in the combined sewer discharge (if any) may be conveyed to the KC Lease Parcels source control area during a CSO event.

Due to the distance between these facilities and the LDW (Figure C-2), the potential for sediment recontamination via soil and groundwater is very low. Soil and/or groundwater contamination has been confirmed at Air Tec Co., Parcel C, General Electric Aviation Division, Sahlberg Equipment, and Shell 121430. Contaminated groundwater may infiltrate to the combined sewer system, contributing to potential contaminant loads in the combined sewer discharge. Additional

[1] Note two additional facilities with KCIW discharge authorizations that have not been assigned Ecology Facility/Site ID numbers have been identified, see Table C-5.

information regarding contamination at these facilities is included in the facility-specific sections below.

Soil and groundwater at LUST facilities may be contaminated with VOCs or petroleum hydrocarbons. While these contaminants are not sediment COCs, at sites where VOCs and petroleum products are present in the subsurface, naturally occurring arsenic in soil can be mobilized and migrate into groundwater (Harter and Rollins 2008). Arsenic is a COC for LDW sediments. Due to the distance between the LUST facilities within the S Brandon Street CSO basin and the LDW (Figure C-5), the potential for sediment recontamination via soil and groundwater is very low.

Chemical concentrations in the combined sewer discharge are likely to be heavily diluted prior to discharge to the LDW. Therefore, the potential for sediment recontamination via this pathway is likely to be lower than for direct discharges from adjacent facilities and the stormwater drainage basin. However, given the frequency of discharge from the S Brandon Street CSO (approximately 23 times per year with an average discharge of 31.6 mgy), the cumulative effects of CSO discharges could contribute to recontamination of sediments associated with the KC Lease Parcels source control area.

C-3.1 Data Gaps Common to All S Brandon Street CSO Basin Properties

Information needed to assess the potential for ongoing releases and sediment recontamination associated with current operations at each of the facilities in the S Brandon Street CSO Basin is listed below. This information can be obtained during the facility inspections currently performed by SPU, KCIW, and Ecology.

- Information regarding any ongoing industrial activities is needed to verify that these facilities are in compliance with all applicable regulations and BMPs.
- Information on how and where any hazardous materials, chemicals, or hazardous wastes are stored or used at these facilities is needed to evaluate the potential for spills to commingle with wastewater and stormwater.
- Facility plans showing the locations of floor drains, catch basins, sewer connections, and storm drains (if any) are needed to evaluate the potential for contaminants suspended in wastewater and stormwater (if any) to be transported to the LDW via combined sewer discharges.
- Information regarding any containment systems at these properties is needed to evaluate the adequacy of the systems and determine the potential for spills to commingle with wastewater and stormwater.

C-3.2 CSCSL Facilities

Data gaps and source control actions have been identified previously for all but four CSCSL facilities (see Table C-3). These four facilities are:

- Air Tec Co., Parcel C,
- General Electric Aviation Division,
- Sahlberg Equipment, and
- Shell 121430.

Information regarding current and historical operations, regulatory history, and environmental investigations at these facilities is included in this section of the Data Gaps Report. Because these facilities are not adjacent to the LDW, surface runoff directly to the waterway, bank erosion, and spills directly to the waterway are not potential sediment recontamination pathways and therefore are not discussed further in this section. The locations of these facilities are shown on Figure C-2.

C-3.2.1 Air Tec Co. Parcel C

Facility Summary: Air Tec Co. Parcel C	
Tax Parcel No.	1722802460, 1722802465, 1722802470
Address	2460: 5701 1st Avenue S 2465: 85 S Orcas Street 2470: 71 S Orcas Street
Property Owner	2460: Viking Community Bank 2465 & 2470: Willie Shoe LLC
Parcel Size	2460: 0.37 acre (16,165 sq ft) 2465: 0.49 acre (21,526 sq ft) 2470: 0.53 acre (23,163 sq ft)
Facility/Site ID	57633623
SIC Code(s)	None
EPA ID No.	None
NPDES Permit No.	None
UST/LUST ID No.	97435 (UST) 532723 (LUST release)

Air Tec Co., shown on Figure C-2 as Facility 4, historically operated on three parcels near the LDW. The parcels are bound on the north by S Orcas Street, on the west by East Marginal Way S, to the south by S Mead Street, and to the east by 1st Avenue S. The former Air Tec Co., Parcel C (Parcel 2470) is located on East Marginal Way S between S Orcas Street and S Mead Street. King County Tax Assessor records describe parcel 2470 as a "vacant, contaminated storage lot." The current property owner is Willie Shoe LLC.

Willie Shoe LLC currently also owns parcel 2465 (aka Parcel B). A 25,716 sq ft warehouse, constructed in 1962, is present on parcel 2465. Parcel 2460 (aka Parcel A) is owned by Viking Community Bank; a 10,170 sq ft bank is present on the property. The bank was constructed in 2004. Environmental investigations performed on Parcels A and B have shown that soil and groundwater contamination are not present on these parcels (URS 2002b). Parcels A and B are not included on the CSCSL.

The property is underlain by 5 to 12.5 feet of silty sand. The silty sand layer is underlain by a unit of sand that is approximately 8 feet in thickness. Organic silty clay is present beneath the sand unit. Groundwater is encountered at approximately 10 feet bgs (Dames & Moore 1994). Groundwater flow direction is west-northwest towards the LDW and is tidally influenced (URS 2002a).

Historical Operations

The property has been used for commercial and light industrial purposes since approximately 1914. A warehouse was built on the property in 1922. The address of the warehouse was 203 West Orcas Street. In 1927, a Texaco service station opened on the property using 5701 1st Avenue S as its operating address. Two USTs were present on the property. By the late 1940s, Truck Equipment, an auto wrecking facility, occupied the property. Four buildings and two additional USTs (up to 4,999-gallon capacity) were present on the property by 1970. Tool Crib Company occupied the buildings at this time. In 1974, the building at 5701 1st Avenue S was remodeled to accommodate rental equipment and a repair garage and two 1,500-gallon lube oil USTs were installed on the property. Tool Crib Company obtained permits from the Seattle Fire Department to store flammable liquids and petroleum products at the property in 1975. By 1977, Alaska Western Industries, a construction equipment and tool rental business, became a tenant at the property. Case Power and Equipment Supplies occupied the property in 1985 (Dames & Moore 1989).

In 1988, five USTs were removed from the property and a concrete lined truck service pit on the west side of the property was cleaned, backfilled, and paved over (Dames & Moor 1989).

By 1989, six businesses operated at the property, all using 5701 1st Avenue S as their operating address. Buildings were present on parcels 2460 and 2470, and parcel 2465 was used as a storage area. The six businesses were Air Tec Company, Tenino Wood Preservatives, Earl's Restaurant Supply, Kawanan Imports, MacDonald Miller Service Company, and a small woodworking shop (Dames & Moore 1989).

Air Tec (1987 to approximately 2002) was a wholesale distributor of heating, ventilating, and air-conditioning (HVAC) equipment. Air Tec handled lubricating oils and small quantities of paint used for building maintenance on the property. Air Tec did not perform maintenance on the HVAC equipment or sell lubricants or refrigerants at the property (Dames & Moore 1989, URS 2002a).

Tenino Wood Preservatives manufactured three products at the property. Copper naphthenate and zinc naphthenate were individually mixed with fuel oil and packaged into polypropylene pads and plastic bottles. These products were mixed in an AST, which was located in a partially enclosed area adjacent to the office building. The mixtures were piped into the office building and dispensed into the pads or bottles. Lithium-based grease was mixed with copper naphthenate and packaged in 5-gallon buckets. The grease was mixed in the warehouse area (Dames & Moore 1989).

MacDonald Miller Service maintained HVAC equipment at customer locations. The company stored stock tools and parts for its service trucks at the property. **Earl's Restaurant Supply** sold

dishes, cookware, large and small appliances, and small packages of cleaning agents. **Kawanan Imports** stored wicker and rattan furniture at the warehouse. The small woodworking shop manufactured window blinds (Dames & Moore 1989).

Historical owners of parcel 2460 included Willie Shoe LLC, PB Investments LP, and Leavitt Shay Real Estate Company (Leavitt Shay). Leavitt Shay is an alternative name for this property.

Hazardous Materials Used In Operations

Small quantities of routine maintenance products, such as bathroom cleaners and paint, were used at Air Tec and Earl's Restaurant Supply. Methyl ethyl ketone (MEK), shell turbo grease, and other compounds were used at the small woodworking shop. Oil was used in a processing machine inside the woodworking shop. No hazardous materials appeared to have been used at Kawanan Imports (Dames & Moore 1989).

Tenino Wood Preservatives used copper naphthenate, zinc napththenate, lithium grease, and mineral spirits in its operations. The bulk products were stored in 55-gallon drums in the warehouse (Dames & Moore 1989).

Waste Streams

Waste oil and discarded compressor motors were generated by MacDonald Miller Service (Dames & Moore 1989).

Regulatory History

In October 2002, Ecology required Leavitt Shay to file a Restrictive Covenant for the property (Parcels A, B, C) with the King County Assessor's or Recorder's office prior to issuing a No Further Action (NFA) determination. Ecology also required Leavitt Shay to conduct groundwater monitoring and submit a Groundwater Quality Compliance Monitoring Plan for Ecology's review and approval (Ecology 2002b). In January 2003, Ecology determined that groundwater monitoring was required for Parcel C only (Ecology 2003a).

In March 2007, Ecology determined that further actions were necessary at Parcel C because diesel- and gasoline-range hydrocarbons and benzene were present in soil above Model Toxics Control Act (MTCA) Method A cleanup levels, gasoline-range hydrocarbons and benzene were present in groundwater above MTCA Method A cleanup levels, and there was a lack of cleanup activities within the previous 12 months. Additionally Ecology indicated that a Restrictive Covenant may be required at the property (Ecology 2007a).

Environmental Investigations and Cleanups

Several environmental investigations have been conducted at the former Air Tec property. Sampling locations are shown on Figures C-8 and C-9. Chemical data are presented in Tables C-13 and C-14.

Phase I Property Transfer Assessment and Update (1989 and 1994)

A Phase I Property Transfer Assessment was performed in 1989 prior to the sale of the property. In the Phase I Report, the property refers to parcels 2460, 2465, and 2470. At least seven historical USTs were identified on the property. Five USTs were removed from the property in May 1988 including two 1,000-gallon lube oil tanks, two 1,500-gallon fuel tanks (one diesel and one gasoline), and one 3,000-gallon waste oil UST. No evidence of leaks from the USTs was observed and no soil samples were collected from the UST excavations. No records were found to determine the disposition of two USTs that were installed on the property in 1927 (Dames & Moore 1989, 1994).

The concrete-lined truck service pit was also decommissioned in May 1988. Approximately 30 cubic yards of petroleum-contaminated sludge were removed from the pit and disposed of at Cedar Hills Landfill (Dames & Moore 1994).

In the Tenino Wood Preservatives warehouse, grease spatters were noted on walls, drums, and storage racks near the area where the lithium-based grease product was mixed. Cardboard was used in the drum storage area to absorb spills; extensive spills were noted during the Phase I assessment (Dames & Moore 1989).

Inside the woodworking shop, oil was observed leaking from the processing machine onto the shop floor. Sawdust was used to absorb the oil. The concrete floor appeared to be free of cracks (Dames & Moore 1989).

Phase II Soil and Groundwater Investigation (1994)

Ten soil borings and four groundwater monitoring wells were installed on the property in 1994. The soil borings were located around the former USTs, truck service pit, the former service station area at the northeast corner of the property, and the western property line. A concrete surface was encountered in borings B-5 and B-6 at 8.5 feet bgs. Nineteen soil samples were collected for laboratory analysis of petroleum hydrocarbons and one sample was also analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX). Concentrations of gasoline-, diesel-, and heavy oil-range hydrocarbons, ethylbenzene, toluene, and/or xylenes exceeding the MTCA Method A cleanup levels were detected in soil near the former waste oil USTs, former lube oil USTs, and former service pit (Dames & Moore 1994).

Four groundwater samples were collected for laboratory analysis of petroleum hydrocarbons and BTEX. Gasoline-, diesel-, and heavy oil-range hydrocarbons, benzene, ethylbenzene and xylenes were detected in well MW-1 and benzene was detected in well MW-2. All concentrations exceeded the MTCA Method A cleanup levels. Groundwater contamination appeared to be limited to the vicinity of the former waste oil UST. Petroleum hydrocarbons and BTEX were not detected in wells MW-3 and MW-4 (Dames & Moore 1994).

A geophysical survey was performed to identify subsurface features that may have been associated with the former service station. The survey did not detect the presence of USTs or other anomalies indicative of buried metal objects (Dames & Moore 1994).

Voluntary Cleanup Action (2000 to 2001)

Groundwater samples were collected from the onsite monitoring wells and analyzed for total petroleum hydrocarbons (TPH) and BTEX. Gasoline- and diesel-range hydrocarbons and BTEX concentrations exceeded MTCA Method A cleanup levels in well MW-1. TPH was detected below cleanup levels and BTEX was not detected in the remaining wells (Dames & Moore 2000).

In April 2000, approximately 50 to 60 cubic yards of petroleum-contaminated soil were excavated from the former 3,000-gallon waste oil UST area and removed from the property. Groundwater was encountered at 10 feet bgs in the excavation and a sheen was observed on the north and west sides. The excavation extended to approximately 12 feet bgs. Three sidewall samples and one bottom sample were collected from the excavation for laboratory analysis of TPH and BTEX. TPH and BTEX were present at the southern side and northwest corner of the excavation (Dames & Moore 2000).

Ecology determined that there was potential for the residual contaminated soil to come in contact with seasonal fluctuations in groundwater. An additional 50 to 60 cubic yards of petroleum-contaminated soil was removed from the northwest corner of the 2000 excavation in April 2001. Three additional soil samples were collected for laboratory analysis. Diesel-range hydrocarbons were present up to 29,000 milligrams per kilogram (mg/kg) (URS 2002a).

Groundwater monitoring well MW-1 was removed during the 2000 excavation (Dames & Moore 2000). A replacement well was installed in September 2000 (Eco Compliance Corporation 2000).

Groundwater Monitoring (2000 to 2002)

Seven groundwater monitoring events were performed on a quarterly basis from October 2000 to August 2002. Groundwater samples were analyzed for TPH and BTEX. TPH and BTEX were not detected in wells MW-2 through MW-4 during the last five monitoring events. In well MW-1, benzene concentrations exceeded the MTCA Method A cleanup level. TPH, ethylbenzene, toluene, and total xylenes were present in the well below the MTCA Method A cleanup level (URS 2002a).

Potential for Sediment Recontamination

Air Tec is included in this Data Gaps Report because contaminated groundwater associated with the facility may become part of combined sewer discharge to the S Brandon Street CSO by infiltrating the combined sewer system.

Sediment COCs have not been detected at this facility, with the exception of a single detection of lead in soil. No exceedances of soil-to-sediment or groundwater-to-sediment screening levels have been observed. Therefore, the potential that contaminants from this property will impact sediments associated with the KC Lease Parcels source control area is very low.

Data Gaps

No facility-specific data gaps were identified for this property.

C-3.2.2 General Electric Aviation Division

Facility Summary: General Electric Aviation Division	
Tax Parcel No.	3573700330
Address	220 S Dawson Street
Property Owner	Key Mac LLC
Parcel Size	1.74 acres (75,609 sq ft)
Facility/Site ID	2522
SIC Code(s)	3724 Aircraft Engines & Engine Parts 3812 Search & Navigation Equipment
EPA ID No.	WAD009278706
NPDES Permit No.	None
UST/LUST ID No.	None

The General Electric (GE) Aviation Division Property, identified on Figure C-2 as Facility 64, is located on the north side of S Dawson Street between 2nd Avenue S and 3rd Avenue S. A 53,620 sq ft office and warehouse building, constructed in 1948, is present on the property. Permits to remodel the building were issued in November 2008 and April 2009.

McKinstry Company currently occupies the building (AECOM 2009). General Electric Co. Dawson Street is an alternative name for this facility.

The property is underlain by interbedded silt and silty sand to a depth of 65 feet bgs (the maximum depth explored). Groundwater is encountered between 7 and 11 feet bgs. Groundwater generally flows to the west (ENSR 2008).

Historical Operations

GE operated at this facility from 1949 to 1996. From 1959 to 1994, GE manufactured and repaired aircraft equipment at the property. After 1994, GE used the building for office and warehouse space until the property was sold in 1996. Since the property sale, various owners and tenants have used the property for warehousing operations (ENSR 2008).

GE used petroleum products and chlorinated solvents during the manufacture and repair operations from 1959 to 1994. Trichloroethylene (TCE), 1,1,1-trichloroethane (TCA), and tetrachloroethene (PCE) were used for parts cleaning (ENSR 2008).

Regulatory History

Initial investigations and cleanups at the property were performed as a Resource Conservation and Recovery Act (RCRA) closure of the Dangerous Waste Management Unit. In April 1995,

Ecology accepted clean closure of the former GE storage unit and GE agreed to conduct additional corrective actions for the former dangerous waste storage facilities (ENSR 2008).

In 1997, GE performed an independent investigation and interim cleanup at the property in cooperation with Ecology to support Consent Decree negotiations. Ecology required additional work prior to continuing with the Consent Decree. Agreed Order DE02HWTRNR-4686 between Ecology and GE was executed on November 13, 2002, implementing an Interim Action which included groundwater extraction and continued quarterly groundwater monitoring at the property (RETEC 2008).

In 2007, Agreed Order DE 4258 was executed to address issues related to subslab vapor and indoor air pathways. In May 2008, Agreed Order DE 5477 was executed between Ecology and GE. The 2008 Agreed Order required GE to complete a Focused Feasibility Study (ENSR 2008). The final Focused Feasibility Study was finalized in December 2009. The remedial technology for the property and the groundwater plume will be in situ chemical oxidation with optimized hydraulic controls (Ecology 2009i). The remedial objectives are to achieve compliance with soil and groundwater cleanup levels that are protective of MTCA Method B cleanups levels for indoor air and surface water (Yasuda 2010).

Environmental Investigations and Cleanups

Environmental investigations and cleanups have been ongoing at the GE Aviation property since 1987. TCE is the primary COC at this property (ENSR 2008).

In 1995 and 1996, over 3,000 tons of petroleum hydrocarbon and chlorinated VOC-contaminated soil (concentrations exceeding MTCA Method B) were excavated and removed from 12 areas on the property. GE estimated that approximately 100 cubic yards of contaminated soil remained in areas beneath the building, a transformer, and electrical poles (Figure C-10) (ENSR 2008).

Groundwater monitoring wells have been installed on the former GE property, on the Liberty Ridge Building (former Western Cartage) property, and downgradient of 1st Avenue S (Figure C-11). Groundwater monitoring has been performed on a monthly to quarterly basis since 1996. Groundwater samples are analyzed for PCE, TCE, cis-1,2-dichloroethene (DCE), 1,1-DCE, 1,1-dichloroethane (DCA), 1,1,1-TCA, and vinyl chloride. Samples were analyzed for total and dissolved metals in 2003, 2004, and 2008; dissolved arsenic is the only metal that has been detected at concentrations exceeding the MTCA Method A cleanup level. In 2004 and 2008, the wells were sampled for 1,4-dioxane. Over 850 groundwater samples have been collected (ENSR 2008).

A groundwater recovery system was installed in August 1996 and has operated on a nearly continuous basis for the past 13 years. Chlorinated VOC concentrations have remained stable or decreased since system startup. Groundwater is extracted from two recovery wells. Approximately 113,900,000 gallons of water were extracted during the first 12 years[2] of operation (ENSR 2008). Extracted groundwater is discharged to the sanitary sewer under KCIW Discharge Authorization 543 (RETEC 2008).

[2] Groundwater extraction data from 2009 were not yet available for review.

The most recent groundwater monitoring results available for review are from February 2009. TCE exceeded the MTCA Method B cleanup level in nine wells and PCE exceeded the MTCA Method B cleanup level in two wells. GE planned to sample groundwater again in May 2009 (General Electric 2009). Groundwater monitoring data from February 2007 to February 2009 are presented on Table C-15.

Subslab vapor sampling was performed in December 2005 and indoor air samples were collected from 2000 to 2007 at the former GE facility, the Liberty Ridge Building, and the building at the northwest corner of 1st Avenue S and S Dawson Street. A subslab depressurization system was installed beneath the former GE building in June 2007 (ENSR 2008).

Potential for Sediment Recontamination

GE Aviation is included in this Data Gaps Report because contaminated groundwater associated with the former GE facility may become part of combined sewer discharge to the S Brandon Street CSO in two ways:

- GE extracts contaminated groundwater from the subsurface, which is treated and then discharged to the sanitary sewer under KCIW discharge authorization 543. A treatment system failure may result in the release of contaminated groundwater to the combined sewer system.
- Contaminated groundwater may infiltrate the combined sewer system.

Sediment COCs have not been detected at this facility, with the exception of arsenic in groundwater. No exceedances of groundwater-to-sediment screening levels have been observed. Therefore, the potential that contaminants from this property will impact sediments associated with the KC Lease Parcels source control area is very low.

According to the 2008 Focused Feasibility Study, chemical concentrations in the groundwater plume decrease to below detection levels approximately 690 feet east of the LDW; thus, the groundwater-to-sediment pathway is likely to be incomplete (ENSR 2008).

Data Gaps

Additional environmental investigation and cleanup activities are currently being performed at GE under the direction of Ecology. For this reason, no facility-specific data gaps regarding soil and groundwater contamination and the potential for contaminated groundwater to infiltrate the combined sewer system have been identified.

C-3.2.3 Former Sahlberg Equipment

Facility Summary: Former Sahlberg Equipment	
Tax Parcel No.	5367204735
Address	5950 4th Avenue S
Property Owner	Society of Saint Vincent de Paul
Parcel Size	1.02 acres (44,388 sq ft)
Facility/Site ID	2450
SIC Code(s)	3531 Construction Machinery 7538 General Automotive Repair Shops 7699 Repair Services, Not Elsewhere Classified
EPA ID No.	WAD988490496
NPDES Permit No.	None
UST/LUST ID No.	None

The former Sahlberg Equipment property, shown on Figure C-2 as Facility 102, is located at the northeast corner of the intersection between 4th Avenue S and S Front Street. There are three buildings on the property: a 5,532 sq ft office constructed in 1954, a 15,904 sq ft retail store with basement constructed in 1941, and a 2,080 sq ft garage and storage building constructed in 1956. The buildings are currently vacant.

Soil beneath the property consists of silty fine- to medium-coarse sand. Groundwater is approximately 5 feet bgs and flows to the southwest (RZA AGRA 1992; Ecology 1993c). The area of the property between the office building and the warehouse is approximately 5 feet lower than the surrounding street elevation (Pacific Testing 1993a).

Society of Saint Vincent de Paul and U.S. Bank AJ Sahlberg Trust are alternative names for this facility.

Current Operations

Information regarding current operations at the former Sahlberg Equipment was not available in the files reviewed by SAIC.

Historical Operations

A sheet metal works and welding facility and a small machine shop were present on the property in 1929 (Ecology 1993c).

Anderson Blowpipe and Manufacturing Company, a sheet metal manufacturer, operated at the property in Building 2 from the early 1940s to the early- to mid-1960s. Joseph Conradi & Company, a machine shop, operated at the property from the early 1940s to the mid-1950s. By the mid-1950s, the Jack Sahlberg Equipment Company began operating north of Anderson Blowpipe. United Textile Company began operating on the site formerly occupied by Joseph Conradi & Company, followed shortly thereafter by Aero Electric Company at the same location (RZA 1991).

In 1951, Seattle Pacific Engineering and United Cleaners began operating on the property. United Cleaners reverted back to a residence the following year (RZA 1991).

In 1957, Western Processing Company was established south of Sahlberg Equipment and Anderson Blowpipe and operated until 1960 or 1961 before moving to its present site in Kent. Western Processing reprocessed animal byproducts and brewer's yeast (RZA 1991).

By the 1960s, Sahlberg Equipment was the sole operator on the property. Sahlberg Equipment was a wholesaler/retailer of new construction heavy equipment and safety supply equipment. The company prepared new heavy equipment and machinery for sale and delivery but did not conduct significant maintenance or repair activities at the property, aside from adding motor oil or hydraulic fluid to new machinery (RZA 1991). Sahlberg Equipment left the property in approximately 1992 (RZA AGRA 1992; Ecology 1992c).

An equipment wash area was present at the southeast corner of the property. The wash area contained a sump and a pump. An unpaved drum storage area was also present at the southeast corner. A waste oil AST was present at the southwest corner of the service department and shop building (Building 3). An open shed (Building 4) was used for storing drums and for equipment maintenance activities (Ecology 1993c). A heating oil UST was present at the northwest corner of the property (RZA 1991).

Two single-family homes were present at the southern end of the property from the 1940s to the 1960s (RZA 1991). No other information on historical operations at this location was identified.

Regulatory History

In 1991, a report was made to Ecology concerning Sahlberg Equipment pouring liquids down the storm drain at the southeast corner of the property (Ecology 1991).

Ecology performed a property inspection in November 1992. Sahlberg Equipment had already moved to Kent, Washington, at the time of the inspection. The Ecology inspector observed five drums at the southeast corner of the property and a polyvinyl chloride (PVC) pipe running along the eastern property line, between the back of one building to a catch basin in the right-of-way (Ecology 1992c). A property representative reported that sumps were present in the building and discharged to the sanitary sewer through the PVC pipe; however, METRO reported that a representative of Sahlberg Equipment had previously reported that the pipe drained runoff from a low point in the yard (O'Herron 1993a, 1993b). The drums were determined to contain soil cutting and purge water from an environmental assessment performed at the property (O'Herron 1993a).

Environmental Investigations and Cleanups

Several environmental investigations have been performed at the former Sahlberg Equipment property. Soil and groundwater analytical results are presented on Tables C-16 and C-17, respectively.

Level I Environmental Site Assessment (1991)

A Level I Environmental Site Assessment (ESA) was conducted in March 1991 by Rittenhouse-Zeman & Associates, Inc. (RZA). A 300-gallon heating oil UST was present at the northwest corner of the property (Figure C-12). The UST was taken out of service around 1970 when the building it served (Building 1) was renovated and the heating system was converted to natural gas. Heating oil was still present in the UST at the time of the ESA. RZA recommended that the UST be properly decommissioned (RZA 1991).

Several 55-gallon drums containing motor oil and hydraulic fluid were stored in the storage shed (Building 4); some minor staining was observed, but there was no evidence of severe product leakage or spillage. Open drums containing used antifreeze, solvents, and hydraulic fluid were stored on wooden pallets in an unpaved area at the southeast corner of the property. Stained soil was observed in the vicinity of these drums. RZA recommended that Sahlberg discontinue storing drums in the unpaved area. Additionally, RZA recommended sampling the soil for chemical analysis (RZA 1991).

Environmental Site Assessment (1992)

Two groundwater monitoring wells, MW-1 and MW-2, were installed on the property in April 1992 to evaluate soil and groundwater conditions at the southern end of the property (Figure C-13), where the soil had been exposed to potential contamination from antifreeze and solvents. Soil and groundwater samples were analyzed for diesel-range hydrocarbons and total recoverable petroleum hydrocarbons (TRPH), VOCs, and ethylene glycol. In soil, diesel-range hydrocarbons, TRPH, and VOCs were detected at concentrations up to 187 parts per million (ppm), 5,100 ppm, and 190 parts per billion (ppb), respectively. In groundwater, diesel-range hydrocarbons, TRPH, and VOCs were detected at concentrations up to 6,300 ppb, 42,000 ppb, and 1,200 ppb, respectively. TPH concentrations in soil exceeded the MTCA Method A cleanup levels. TPH, acetone, chlorobenzene, ethylbenzene, toluene, and total xylene concentrations in groundwater exceeded the MTCA Method A cleanup levels (RZA AGRA 1992).

Soil Remediation (1993)

Three soil borings (A, B, and C) were advanced in the property yard between the office building and the warehouse (Figure C-12). One soil sample from each boring was collected for laboratory analysis. Two groundwater monitoring wells (MW-A and MW-B) were installed. Six soil samples were collected from each well boring. Diesel-range hydrocarbons concentrations exceeded the MTCA Method A cleanup level only at well MW-A. Groundwater samples were collected from wells MW-1, MW-2, MW-A, and MW-B. TRPH and diesel-range hydrocarbon concentrations exceeded the MTCA Method A cleanup levels in wells MW-1 and MW-2. No analytes were detected in the groundwater samples collected from wells MW-A and MW-B (Pacific Testing 1993a).

Approximately 40 cubic yards of soil were excavated from the property. Twenty soil samples were collected from the excavated soil and excavation sidewalls. The final post-excavation samples did not contain concentrations of petroleum hydrocarbons above MTCA Method A

cleanup levels (Pacific Testing 1993a). Wells MW-1 and MW-2 were destroyed during the excavation (Pacific Testing 1993b).

Monitoring Well Installation and Monitoring (1993)

Groundwater monitoring wells SW and NE (replacements for wells MW-1 and MW-2, respectively) were installed and well MW-B was decommissioned in May 1993. Soil samples were not collected from the new well borings. Groundwater samples were collected from wells MW-1 and MW-2 and analyzed for diesel-range hydrocarbons and VOCs. Diesel-range hydrocarbon concentrations in both wells were equal to the MTCA Method A cleanup level of 1,000 ppb. Chlorobenzene exceeded the MTCA Method A cleanup level in wells MW-1 and MW-2. Xylenes exceeded the MTCA Method A cleanup level in well MW-2 (Pacific Testing 1993b).

A groundwater sample was collected from well MW-2/NE in July 1993 and analyzed for VOCs. Chlorobenzene and 1,4-dichlorobenzene exceeded MTCA Method B cleanup levels. Ethylbenzene and xylenes exceeded MTCA Method A cleanup levels (Pacific Testing 1993c).

Environmental Assessment (1993)

An environmental assessment was performed at the property by Applied Geotechnology, Inc. (AGI) in 1993 as part of a pre-purchase due diligence review. AGI reviewed historical property records and determined that the heating oil UST, identified during the Level I Environmental Site Assessment, had been removed in April 1992. Soil samples collected from the UST excavation indicated that no contamination was present. AGI indicated that the previous environmental studies did not fully define the source and extent of contamination at the Sahlberg property. AGI concluded that the most obvious sources of contamination would be spills and leakage from the drums stored in the unpaved area at the southeast corner of the site and indicated the equipment wash area was another possible source, due to the use of solvents in wash activities and the poor condition of the pavement. Solvents may have infiltrated the subsurface through cracks in the pavement. Additionally, AGI concluded that petroleum-contaminated soils below 1 foot bgs had not been removed during the 1993 remedial excavation (AGI 1993).

AGI installed two additional groundwater monitoring wells (AGI1 and AGI2) on the property (Figure C-13) and collected groundwater samples from wells MW-A, SW, and NE in May 1993. Soil and groundwater samples were collected and analyzed for diesel- and heavy oil-range hydrocarbons. The groundwater samples were also analyzed for aromatic and halogenated VOCs. In soil, heavy oil-range hydrocarbons exceeded the MTCA Method A cleanup level in the boring for well AGI1. In groundwater, diesel- and heavy oil-range hydrocarbons, chlorobenzene, 1,4-dichlorobenzene, 1,1-DCA, ethylbenzene, and xylenes exceeded the MTCA Method A cleanup levels. Diesel- and heavy oil-range hydrocarbons were detected below cleanup levels and VOCs were not detected in wells AGI1 and MW-A. AGI concluded that soil contamination may be coming from historical use of oil as dust control, asphalt tack coat application, or storage/maintenance of heavy equipment. Groundwater contamination may have come from the wash area and improper storage of drums on exposed soil (AGI 1993).

Potential for Sediment Recontamination

The former Sahlberg Equipment property is included in this Data Gaps Report because contaminated groundwater associated with the facility may become part of combined sewer discharge to the S Brandon Street CSO.

Sediment COCs have not been detected at this facility. No exceedances of soil-to-sediment or groundwater-to-sediment screening levels have been observed. Therefore, the potential that contaminants from this property will impact sediments associated with the KC Lease Parcels source control area is very low.

Data Gaps

No facility-specific data gaps have been identified for this property.

C-3.2.4 Shell 121430

Facility Summary: Shell 121430	
Tax Parcel No.	5367201160
Address	Operating: 600 S Michigan Street Parcel: 650 S Michigan Street
Property Owner	B&G Chandler LLC
Parcel Size	0.47 acre (20,563 sq ft)
Facility/Site ID	19688471
SIC Code(s)	5541 Gasoline Service Stations
EPA ID No.	WAD988504056
NPDES Permit No.	None
UST/LUST ID No.	4487 (UST) 309690 (LUST release)

The Shell 121430 property, shown as Facility 109 in Figure C-2, is located at the northeast corner of the intersection between 6th Avenue S and S Michigan Street. One building, a 1,914 sq ft convenience store constructed in 1968, is present on the triangular-shaped parcel.

Shell 600 Michigan, Texaco 121430, Texaco Station 632320400 UST 4487, and Texaco Station Michigan are alternative names for this facility.

The property is underlain by brown sandy fill to approximately 4 feet bgs and interbedded sandy clay and silty sand beneath the fill. Groundwater is encountered at approximately 8.5 feet bgs (ESE 1995).

Current Operations

A Shell service station currently operates at the property. Additional information on current operations at the facility was not available for review.

Historical Operations

In 1986, six USTs were installed on the property, including four 10,000-gallon USTs, one 1,000-gallon heating oil UST, and one 550-gallon waste oil UST (Tanknology 1991; NDE Environmental 1993). The 10,000-gallon USTs stored gasoline and diesel. The tanks were installed in 1986. All five tanks passed tightness testing performed in November 1991 (Tanknology 1991). The 10,000-gallon USTs passed tightness testing performed in November 1992 (Tanknology 1992), November 1993 (NDE Environmental 1993), September 2007, and August 2008 (Northwest Tank 2007, 2008). The 1,000-gallon heating oil UST also passed tightness testing in November 1993 (NDE Environmental 1993).

The 550-gallon waste oil UST was removed in March 1994 during station upgrade activities (ESE 1995).

Regulatory History

Ecology performed a UST inspection at the facility in June 2003. Only one item of non-compliance was noted: the overfill alarm was not set at 90% or audible to the delivery driver. Station employees arranged for the alarm to be repaired while the Ecology inspectors were at the facility (Ecology 2003b).

Ecology performed a UST inspection at the facility in October 2008. The USTs at the facility were determined to be in compliance (Ecology 2008c).

Environmental Investigations and Cleanups

One environmental investigation has been conducted at the Shell 121340 property. Soil sampling locations are presented on Figure C-14. Soil analytical results are presented in Table C-18.

UST Removal and Compliance Soil Sampling (1994)

Soil samples were collected during service station upgrades, including the removal of the 550-gallon waste oil UST, and installation of Stage II vapor recovery lines to the UST complex. The dispenser islands were removed prior to installing the vapor recovery lines. Seven soil samples were collected below the dispenser islands and in the new piping trenches between 2 and 4 feet bgs. The soil samples were analyzed for TPH and BTEX. Diesel- and gasoline-range hydrocarbons and BTEX concentrations exceeded the MTCA Method A cleanup level (ESE 1995).

The UST excavation extended to 7 feet bgs. Two sidewall samples and a bottom sample were collected from the excavation and analyzed for heavy oil-range hydrocarbons. Heavy oil-range hydrocarbons were not detected in the soil samples (ESE 1995).

Potential for Sediment Recontamination

Historical activities at the facility have resulted in soil contamination beneath the property. Soil and possibly groundwater have been contaminated by petroleum hydrocarbon constituents; these

contaminated media may infiltrate the combined sewer system and be discharged to the LDW via the combined sewer discharge pathway.

Sediment COCs have not been detected at this facility. No exceedances of soil-to-sediment levels have been observed. Therefore, the potential that contaminants from this property will impact sediments associated with the KC Lease Parcels source control area is very low.

Data Gaps

No facility-specific data gaps have been identified for this property.

C-3.3 LUST Facilities

Information regarding current and historical operations, regulatory history, and environmental investigations at the LUST facilities is included in this section of the Data Gaps Report. Because these facilities are not adjacent to the LDW, surface runoff directly to the waterway, bank erosion, and spills directly to the waterway are not potential sediment recontamination pathways and therefore are not discussed further in this section. The locations of these facilities are shown on Figure C-5.

C-3.3.1 Draper Machine Works, Inc.

Facility Summary: Draper Machine Works, Inc.	
Tax Parcel No.	3573700255
Address	5055 4th Avenue S
Property Owner	Draper Associates
Parcel Size	2.21 acres (96,165 sq ft)
Facility/Site ID	75459442
SIC Code(s)	6726 Investment Offices, Not Elsewhere Classified
EPA ID No.	WAD982657959 (Inactive)
NPDES Permit No.	None
UST/LUST ID No.	3876 (UST) 1630 (LUST Release ID)

The Draper Machine Works parcel, shown on Figure C-5 as Facility 47, is located on the north side of S Dawson Street between 3rd and 4th Avenues S. The GE Aviation property (Section C-3.2.2) is west of the property and the UPRR Dawson Street property is east of Draper Machine. There is one building on the property, a 28,500 sq ft warehouse, constructed in 1949.

The property is underlain by approximately 4 feet of gravelly sand followed by fine- to medium-grain sand to 10.5 feet bgs. Groundwater is encountered at approximately 10.5 feet bgs (Hart Crowser 1991).

Current Operations

Information on current operations at this property was not available for review.

Historical Operations

Between 1950 and 1979, Howard Cooper operated a construction equipment maintenance, parking, and storage facility. A 1,000-gallon waste oil UST was installed on the property in 1960 and a 1,500-gallon diesel UST was installed on the property in 1965 (Hart Crowser 1991).

Regulatory History

In November 1991, Hart Crowser, on behalf of the property owner, notified Ecology that a petroleum hydrocarbon release had occurred on the property (Hart Crowser 1991).

Environmental Investigations and Cleanups

Two environmental investigations and cleanups have been performed at the former Draper Machine property. Soil sample locations are shown on Figure C-15. Soil analytical data are presented in Table C-19.

Underground Storage Tank Removal and Assessment (1989)

A waste oil UST and a diesel UST were removed from the property in March 1989 (Draper Machine 1990). Soil samples were collected from the UST excavations and analyzed for TPH and BTEX. TPH concentrations exceeded the MTCA Method A cleanup levels in both excavations (Hart Crowser 1991).

Underground Storage Tank Soil Assessments (1989 and 1991)

In April 1989 one test pit and four hand auger borings were advanced around the former diesel UST excavation and five test pits were excavated around the former waste oil UST excavation. Nine soil samples (18 samples total) were collected from each area, nine soil samples were analyzed for TPH, and one soil sample was analyzed for chlorinated solvents. Hydrocarbon contamination above the MTCA Method A cleanup levels was present approximately 0.5 to 6 feet around the former diesel UST excavation and approximately 1 to 15 feet around the former waste oil UST at a depth of 10.5 feet bgs (Hart Crowser 1991).

In July 1989, petroleum-contaminated soils were removed from the former UST excavations. Following these excavations, TPH concentrations exceeding the MTCA Method A cleanup levels remained on the north and west sidewalls of the former waste oil UST excavation and on the south and east sidewalls of the former diesel UST excavation. In August, an additional excavation was performed to remove the petroleum-contaminated soil from the south and east sidewalls of the former diesel UST excavation (Hart Crowser 1991).

In February 1991, an additional excavation was performed to remove petroleum-contaminated soil from the north, east, and west sidewalls and the bottom of the former waste oil UST excavation. Soil removal from the eastern sidewall extended 25 feet east of the initial investigation. TPH concentrations remaining in soil following the excavation were below the MTCA Method A cleanup levels (Hart Crowser 1991).

Approximately 300 tons of petroleum-contaminated soil were removed from the UST excavations. The soil was treated on the property.

Potential for Sediment Recontamination

Historical activities at the facility have resulted in soil contamination beneath the property. Soil and possibly groundwater have been contaminated by petroleum hydrocarbon constituents; these contaminated media may infiltrate the combined sewer system and be discharged to the LDW via the combined sewer discharge pathway.

Sediment COCs have been detected in soil at this facility; however, no exceedances of soil-to-sediment levels have been observed. Therefore, the potential that contaminants from this property will impact sediments associated with the KC Lease Parcels source control area is very low.

Data Gaps

No facility-specific data gaps were identified for the former Draper Machine.

C-3.3.2 Environmental Transport Inc.

Facility Summary: Environmental Transport Inc.	
Tax Parcel No.	5263301179, 3573200845
Address	54 and 55 S Dawson Street
Property Owner	Dawson Street Land Company
Parcel Size	0845: 3.37 acres (146,773 sq ft) 1179: 0.94 acre (40,880 sq ft)
Facility/Site ID	22245293 (Emerald City Disposal Dawson St) 28825715 (West Pac Environmental Inc) 36716241 (Environmental Transport Inc.) 4961762 (West Pac Environmental)
SIC Code(s)	4212 Local Trucking, without Storage 4953 Refuse Systems 7699 Repair Services, Not Elsewhere Classified 8744 Facility Support Services
EPA ID No.	WAD007943194 (Emerald City Disposal Dawson St) WAD980982532 (Environmental Transport Inc.) (Inactive) WAD988518031 (West Pac Environmental) (Inactive) WAH000001271 (West Pac Environmental Inc.) (Inactive)
NPDES Permit No.	None
UST/LUST ID No.	Emerald City Disposal Dawson Street 101485 (UST) Environmental Transport Inc. 7423 (UST) 3568 (LUST Release ID)

Environmental Transport Inc. is located on two parcels located near the intersection of Utah Avenue S and S Dawson Street. It is shown as Facility 55 on Figure C-5. Parcel 0845 is located at the northwest corner of the intersection and is bordered by Colorado Avenue S to the west, S Hudson Street to the north, Utah Avenue S to the east, and S Dawson Street to the south. Three buildings are present on parcel 0845: a 9,229 sq ft warehouse and office; a 42,984 sq ft warehouse with loading docks; and a 6,234 sq ft service garage. All three buildings were constructed in 1950.

Parcel 1179 is located at the southwest corner of the intersection. Eagle Systems Inc. (Facility/Site ID 87626746) is immediately west of the parcel, S Dawson Street borders the parcel to the north, Utah Avenue S borders the parcel to the east, and the SEA-DRU-NAR Recycling property (Section C-3.3.4) is immediately south of the parcel. Parcel 1179 is vacant.

Alternate names for the property include: Allied Waste Services, Emerald City Disposal Dawson St, NW Waste Emerald City Disposal, Seattle Disposal, and West Pac Environmental.

Current and Historical Operations

No information regarding current or historical operations at the Environmental Transport Inc. property was available for review.

Regulatory History

According to the ISIS database, eight USTs have been removed from the property and three USTs have been closed-in-place on the property.

Environmental Investigations and Cleanups

Two environmental investigations have been performed at the Environmental Transport Inc. property. Environmental sampling locations are shown on Figure C-16.

UST Removal (1991)

In November 1991, a 5,000-gallon diesel UST was removed from the property at 55 S Dawson Street (parcel 1179). Three soil samples and one groundwater sample were collected from the UST excavation. Groundwater was encountered at 10.5 feet bgs. The samples were analyzed for diesel-range hydrocarbons. Diesel-range hydrocarbons were detected in one soil sample at a concentration of 56 ppm; diesel-range hydrocarbons were not detected in the groundwater sample (Benz 1991).

UST Removal (1992)

In July 1992, nine USTs were removed from the property, including two 8,000-gallon and one 20,000-gallon waste oil USTs, four 10,000-gallon diesel USTs, one 500-gallon heating oil UST, and one 3,500-gallon heating oil UST (Benz 1992). The tank removal checklist indicates that no releases from the USTs were confirmed; however, handwritten notes indicate that a UST closure

report was prepared and the results of the site check/site assessment were to be forwarded to Ecology. The report and results indicated on the checklist were not available for review.

Potential for Sediment Recontamination

Historical activities at the facility may have resulted in soil and groundwater contamination beneath the property. Soil and groundwater may have been contaminated by petroleum hydrocarbon constituents; these contaminated media may infiltrate the combined sewer system and be discharged to the LDW via the combined sewer discharge pathway.

Sediment COCs have not been detected at this facility. No exceedances of soil-to-sediment or groundwater-to-sediment screening levels have been observed. Therefore, the potential that contaminants from this property will impact sediments associated with the KC Lease Parcels source control area is very low.

Data Gaps

No facility-specific data gaps were identified for the Environmental Transport Inc. property.

C-3.3.3 Loomis Fargo & Company

Facility Summary: Loomis Fargo & Company	
Tax Parcel No.	1924049001
Address	5200 East Marginal Way S
Property Owner	Loomis Fargo & Co.
Parcel Size	0.91 acres (39,578 sq ft)
Facility/Site ID	67737549
SIC Code(s)	9999 Nonclassifiable Establishments 56163 Armored Car Services (NAICS Code)
EPA ID No.	WAR000004580 (Inactive)
NPDES Permit No.	None
UST/LUST ID No.	12101 (UST) 1979 (LUST Release ID)

The Loomis & Fargo Company (Loomis) property, shown on Figure C-5 as Facility 74, is located at the southeast corner of the intersection between East Marginal Way S and S Dawson Street. The property is bordered by East Marginal Way S to the west and S Dawson Street to the north. Eagle Systems, Inc. (Facility/Site ID 87626746) is immediately to the east and SEA-DRU-NAR Recycling (Section C-3.3.4) is immediately south of the property.

According to King County Tax Assessor records, one building is present on the property, an 11,839 sq ft industrial light manufacturing building, constructed in 1953. The property name is listed as Loomis Armored Car Service.

Groundwater is encountered at 12 feet bgs (EMCON 1991).

Current Operations

Loomis provides armored transport services for the cash handling services industry from its location at 5200 East Marginal Way S (Loomis 2009). An administrative and dispatch building is located at the northwest corner of the property. A maintenance shop is attached to the south side of the building (EMCON 1991). No additional information regarding current operations at the facility was available for review.

Historical Operations

No information regarding historical operations at the Loomis property was available for review.

Regulatory History

In January 1990 Ecology received a complaint regarding UST removal operations at Loomis. Apparently, Loomis planned to use contaminated soil as backfill in the UST excavation (Ecology 1990a).

Environmental Investigations and Cleanups

One environmental investigation and one cleanup have been performed at the Loomis property. Soil sample locations are shown on Figure C-17. Soil sample analytical data are presented on Table C-20.

UST Removal (1990)

In January 1990, three USTs and a dispenser island were removed from the property. Product lines were drained and abandoned in place. The three USTs included one 550-gallon waste oil UST, one 6,000-gallon gasoline UST, and one 7,500-gallon diesel UST. The gasoline and diesel USTs were removed in a single excavation. Neither tank showed evidence of leakage. Petroleum odors and staining were observed in soil on the northern side of the gasoline and diesel UST excavation area. Approximately 165 cubic yards of petroleum-contaminated soil was removed from the property. Four soil samples were collected from the excavation sidewalls and analyzed for TRPH, gasoline-range hydrocarbons, and BTEX. Gasoline-range hydrocarbons were detected in one sample at a concentration of 2,070 ppm. Benzene concentrations ranged from 0.12 ppm to 36 ppm, toluene concentrations ranged from 0.056 ppm to 250 ppm, ethylbenzene concentrations ranged from 0.14 ppm to 80 ppm, and xylenes concentrations ranged from 0.84 ppm to 540 ppm. Excavated soil that was designated as “clean” using field-screening methods was used as backfill in the excavation (EMCON 1991).

The 550-gallon waste oil UST was removed in a separate excavation. The UST did not show any signs of leakage when removed. The bottom of the UST had been supported by a concrete cradle. Excavated soils did not show any signs of petroleum contamination. The excavation was lined with plastic and backfilled with the excavated soil. One composite soil sample was collected from the north and south sidewalls of the excavation. The sample was analyzed for TRPH, VOCs, and heavy metals. Arsenic, chromium, copper, lead, magnesium, zinc, and VOCs were detected in the sample (EMCON 1991).

The dispenser island area was excavated until field screening indicated the absence of petroleum hydrocarbons. Approximately 2 cubic yards of soil were impacted by petroleum hydrocarbons in this area (EMCON 1991).

Soil Vapor Extraction (1990)

A soil venting system was installed in the gasoline and diesel UST excavation in January 1990, prior to backfilling the excavation. The system consisted of five vertical vapor extraction wells; three wells were placed in the petroleum-contaminated soil and two wells were placed in the "clean" soil. At system startup, BTEX concentrations were 506 ppb and declined to nondetectable after four months of continuous operation (EMCON 1991).

Verification soil samples were collected in the northern half of the former UST complex. The four soil samples were analyzed for BTEX and TRPH. BTEX was not detected in any of the soil samples. TRPH was detected below MTCA Method A cleanup levels in all four samples (EMCON 1991).

Potential for Sediment Recontamination

Historical activities at the facility have resulted in soil contamination beneath the property. Soil and possibly groundwater have been contaminated by petroleum hydrocarbon constituents; these contaminated media may infiltrate the combined sewer system and be discharged to the LDW via the combined sewer discharge pathway.

Sediment COCs have not been detected at this facility, with the exception of single detections of arsenic, chromium, copper, and lead in soil. The arsenic concentration exceeded the MTCA Method B cleanup level. No exceedances of soil-to-sediment have been observed. Therefore, the potential that contaminants from this property will impact sediments associated with the KC Lease Parcels source control area is very low.

Data Gaps

No facility-specific data gaps were identified for the Loomis property.

C-3.3.4 Former National Transfer Inc. Seattle

Facility Summary: Former National Transfer Inc. Seattle	
Tax Parcel No.	0005000001, 1924049119, 5263301245, 5263301280
Address	Operating: 5265 Utah Avenue S 0001: 28 S Brandon Street 1245 & 1280: None 9119: 5810 East Marginal Way S
Property Owner	SEA-DRU-NAR Recycling
Parcel Size	0001: 1.23 acres (53,600 sq ft) 1245: 0.74 acre (32,333 sq ft) 1280: 0.44 acre (19,005 sq ft) 9119: 0.31 acre (13,606 sq ft)
Facility/Site ID	49423263 (SEA-DRU-NAR Recycling) 73845797 (National Transfer Inc.)
SIC Code(s)	4212 Local Trucking without Storage 4214 Local Trucking with Storage
EPA ID No.	WAD988523205 (SEA-DRU-NAR Recycling)
NPDES Permit No.	None
UST/LUST ID No.Text	10267 (UST) 1844 (LUST Release ID)

The former National Transfer Inc. (National Transfer) property, shown on Figure C-5 as Facility 87, is located at the northwest corner of the intersection between East Marginal Way S and S Brandon Street. The property is bordered by East Marginal Way S to the west, S Brandon Street to the south, and Utah Avenue to east. Loomis (Section C-3.3.3) and Eagle Systems, Inc. (Facility/Site ID 87626746) are immediately to the north of the property.

According to King County Tax Assessor records, parcels 1245, 1280, and 9119 are vacant. The present use of parcel 1280 is listed as Terminal (Auto/Bus/Other). The SEA-DRU-NAR Training building is on parcel 0001. The Training building consists of a 7,460 sq ft industrial light manufacturing building constructed in 1961, and a 46,340 sq ft warehouse constructed in 2001.

Current Operations

SEA-DRU-NAR Recycling is the current operator at the property, using 28 S Hudson Street as its operating address. SEA-DRU-NAR Recycling specializes in recycling office paper and also accepts cardboard, newspapers, magazines, and aluminum cans. The company sorts, bales, and ships recyclable materials nationally and internationally for repulping. SEA-DRU-NAR Recycling provides recycling containers, pick-up services, and document destruction services to businesses throughout the Puget Sound region. SEA-DRU-NAR also buys clean paper, aluminum cans, and PET bottles from the public and sells baled products. Proceeds are used to support the Seattle Drug and Narcotics Center (SEA-DRU-NAR), a long-term drug and alcohol treatment center (SEA-DRU-NAR Recycling 2009).

Historical Operations

National Transfer Inc. historically operated at the property, using 5265 Utah Avenue S as its operating address. National Transfer was a trucking company. National Transfer performed truck maintenance and washing activities on the property. A 6-foot-deep by 12-foot-long steam pit was used in these activities (Ecology 1993a). A 500-gallon diesel UST was present at the northwest corner of the property and a 1,000-gallon diesel UST was present at the southeast corner of the property (Eco-Tec 1995).

Regulatory History

National Transfer notified Ecology that contaminated soil was found on the property during UST removal activities performed in May 1990 (National Transfer 1990). In October 1990, Ecology determined that remediation performed to address the petroleum-contaminated soil met Ecology's cleanup standards (Ecology 1990b).

In August 1993, Ecology received a complaint that during truck maintenance activities, National Transfer drained all fluids to a steam pit and then cleaned the trucks over the steam pit. Fluids and wash water were allowed to accumulate in the steam pit for approximately 15 years. When the steam pit was drained, the fluids and wash water were allegedly pumped to a sump in the right-of-way. A representative of National Transfer reported that wastes from the steam pit are drained to an OWS prior to discharge to the sanitary sewer. Ecology referred the complaint to METRO (Ecology 1993a).

Ecology inspected the National Transfer facility in October 1992. Drums and containers of new oil and waste oil were stored in an uncontrolled outdoor area (Ecology 1992b). The inspector noted the need for better BMPs for container storage and indicated that runoff from the facility drains to an OWS which discharged to the sanitary sewer (Ecology 1992a).

Environmental Investigations and Cleanups

Two environmental investigations and cleanups have been performed at the former National Transfer property.

UST Removal and Remedial Action (1990)

The 500-gallon diesel UST and 1,000-gallon diesel UST were removed in May 1990. Contaminated soil was observed in the UST excavation, apparently resulting from a leak in the diesel UST. Four soil samples were collected and analyzed for TRPH and BTEX. All samples contained concentrations of TRPH (maximum 40,000 ppm) exceeding the MTCA Method A cleanup levels for petroleum hydrocarbons. Toluene, ethylbenzene, and xylenes concentrations in soil were below the MTCA Method A cleanup levels (Eco-Tec 1995). Soil sample locations and names were not available for review.

In-situ treatment was performed to remediate petroleum-contaminated soil (Eco-Tec 1990). Post-treatment soil samples indicated concentrations of TPH below cleanup levels (Eco-Tec 1995).

Subsurface Sediment and Groundwater Assessment (1995)

In September 1995, three monitoring wells were installed on the property (Figure C-18). Soil and groundwater samples were analyzed for hydrocarbon identification (soil only), gasoline- and diesel-range hydrocarbons (groundwater only), BTEX, eight RCRA metals, and halogenated VOCs. Hydrocarbons were not identified in soil. Gasoline-range hydrocarbons were the only analyte detected in groundwater; the concentration was 470 ppb (Eco-Tec 1995). This concentration exceeded the MTCA Method A cleanup level by an exceedance factor of 5.

Potential for Sediment Recontamination

Historical activities at the facility have resulted in groundwater contamination beneath the property. Groundwater has been contaminated by petroleum hydrocarbon constituents; these contaminated media may infiltrate the combined sewer system and be discharged to the LDW via the combined sewer discharge pathway.

Sediment COCs have not been detected at this facility. No exceedances of soil-to-sediment or groundwater-to-sediment screening levels have been observed. Therefore, the potential that contaminants from this property will impact sediments associated with the KC Lease Parcels source control area is very low.

Data Gaps

No facility-specific data gaps have been identified for the former National Transfer property.

C-3.3.5 PNB Building

Facility Summary: PNB Building	
Tax Parcel No.	1722800985
Address	Operating: 707 S Orcas Street Parcel: 5815 Padilla Place S
Property Owner	King County
Parcel Size	1.80 acres (78,357 sq ft)
Facility/Site ID	27585467
SIC Code(s)	None
EPA ID No.	None
NPDES Permit No.	None
UST/LUST ID No.	200597 (UST) 3034 (LUST Release ID)

The PNB building property is located in the Georgetown area of Seattle. It is shown on Figure C-5 as Facility 97. The property is bordered by 7th Avenue S to the northwest, S Orcas Street to the northeast and residential properties, Padilla Place S to the southeast, and S Fidalgo Street to the southwest. King County purchased the property from Broadacres LLC in January 2006. A 27,680 sq ft office building and warehouse, constructed in 1968, is present on the property.

The property is underlain by 4 feet of interbedded silty sand and clayey sand, followed by dark grey to black sand to 13 feet bgs (maximum depth explored). Groundwater is encountered between 12 and 13 feet bgs (SEACOR 1990). Groundwater flows to the west (ENSR 1991b).

Current Operations

King County Fleet Administration appears to be the current operator at the property. Information on the current operations at the property was not available for review.

Historical Operations

Boeing Computer Services occupied the building and U.S. West used the secured parking area for its telephone repair vehicles in 1991 and 1992 (ENSR 1991b; Diagnostic Engineering 1992). Additional information regarding historical operations at the property was not available for review.

Regulatory History

In January 1992, Diagnostic Engineering notified Ecology that petroleum hydrocarbons had been released to the subsurface from the former dispenser island and product lines. In March 1992, Ecology indicated that proper procedures had been followed to fulfill the requirements for tank closure and remediation of potential releases of petroleum (Diagnostic Engineering 1992).

Environmental Investigations and Cleanups

Three environmental investigations have been performed at the property. Soil and groundwater sample locations are shown on Figures C-19 and C-20, respectively. Chemical data for soil and groundwater samples are presented on Tables C-21 and C-22, respectively.

Underground Storage Tank Removal (1990)

Three USTs and the associated pipelines and dispenser island were removed from the property in 1990. The USTs consisted of a 5,000-gallon and an 8,000-gallon UST, both used to store gasoline, and a 300-gallon UST used to store heating oil. Two stub outs for dispensers were present in the island, but dispensers were not present. No evidence of leakage was observed when the USTs were removed from the subsurface. The USTs and dispenser islands were removed in four separate excavations. Moderate to strong hydrocarbon odors were observed at 12 feet bgs in the 8,000-gallon UST excavation and in the dispenser island excavation. Five soil samples were collected from each of the excavations; 18 samples were submitted for laboratory analysis for TPH and BTEX. Gasoline-range hydrocarbons and BTEX concentrations exceeded the MTCA Method A cleanup levels in one sample, PI-1, collected from the dispenser island excavation (SEACOR 1990). Approximately 175 to 200 cubic yards of contaminated soil were removed from the property (Diagnostic Engineering 1992).

Remedial Excavation and Confirmation Sampling (1991)

In March 1991, 25 cubic yards of soil were removed from the base of the pump island excavation. Four soil samples were collected from the sidewalls of the excavation. Two grab groundwater samples were collected after groundwater had infiltrated the excavation. Soil and groundwater samples were analyzed for gasoline-range hydrocarbons, BTEX, and lead. Gasoline-range hydrocarbons and xylenes were detected in soil at concentrations below the MTCA Method A cleanup levels. In groundwater, gasoline-range hydrocarbons, xylenes, and total lead were present above MTCA Method A cleanup levels (ENSR 1991a).

Groundwater Investigation (1991)

In April 1991, three groundwater monitoring wells, MW-1 through MW-3, were installed on the property. Soil samples were not collected from the well borings. Groundwater samples were collected from the wells in May 1991 and analyzed for BTEX and total lead. BTEX was not detected in the groundwater samples. Total lead was detected in only one well, at a concentration of 31.8 micrograms per liter (μg/L), which exceeded the MTCA Method A cleanup level (ENSR 1991b).

In October 1991, all three groundwater monitoring wells were sampled. The groundwater samples were analyzed for organic and total lead. Neither organic nor total lead were detected in the groundwater samples (Diagnostic Engineering 1992).

Potential for Sediment Recontamination

Historical activities at the facility have resulted in soil and groundwater contamination beneath the property. Groundwater has been contaminated by petroleum hydrocarbon constituents; these contaminated media may infiltrate the combined sewer system and be discharged to the LDW via the combined sewer discharge pathway.

Sediment COCs, with the exception of lead, have not been detected at this facility. No exceedances of soil-to-sediment have been observed. Lead concentrations in groundwater have exceeded the groundwater-to-sediment screening levels; however, these data are 19 years old. Additionally, this facility is over 3,000 feet east of the LDW. Therefore, the potential that contaminants from this property will impact sediments associated with the KC Lease Parcels source control area is very low.

Data Gaps

No facility-specific data gaps have been identified for the former PNB Building property.

C-3.3.6 Former Western Parcel Express Seattle

Facility Summary: Western Parcel Express Seattle	
Tax Parcel No.	5367200820
Address	525 S Front Street
Property Owner	Hirao Otani Enterprises LLC
Parcel Size	2.20 acres (95,880 sq ft)
Facility/Site ID	39473625
SIC Code(s)	4215 Courier Services, except by air
EPA ID No.	WAD988468518 (Inactive)
NPDES Permit No.	None
UST/LUST ID No.	97775 (UST) 491225 (LUST Release ID)

The property, shown on Figure C-5 as Facility 124, is located at the southeast corner of the intersection between 5th Avenue S and S Front Street. A 44,476 sq ft warehouse, constructed in 1960, is the only building on the property. Air Data Express, Inc. is an alternate name for the facility.

The property is underlain by approximately 11 feet of medium sand. Clay is present at 12 feet bgs. Groundwater is encountered at approximately 10 feet bgs (NW Construction 1999). Groundwater flow direction is to the north northeast (Treadwell & Rollo 2000).

Current Operations

Current operations at the property are unknown.

Historical Operations

Western Parcel operated at the property until 1999 or 2000 (NW Construction 1999; Treadwell & Rollo 2000). No additional information regarding historical operations at the property was available for review.

Regulatory History

No records of regulatory actions regarding the property were available for review.

Environmental Investigations and Cleanups

Several environmental investigations have occurred at the former Western Parcel property. Soil and groundwater sample locations are shown on Figures C-21 and C-22, respectively. Analytical results for soil and groundwater samples are presented in Tables C-23 and C-24, respectively.

Underground Storage Tank Removal and Remedial Excavation (1999)

A 6,000-gallon diesel UST and a 10,000-gallon gasoline UST were removed from the property in March 1999. Soil contaminated with gasoline was discovered at the western end of the gasoline UST excavation and beneath the UST. Groundwater within the excavation was contaminated with petroleum. Approximately 326 tons of petroleum-contaminated soil was removed from the property and sent to the LaFarge Corporation for recycling and 1,500 gallons of petroleum-contaminated groundwater was removed from the property. Ten soil samples were collected from the sidewalls and bottom of the excavation. Contaminated soil remained at the southern side of the excavation, adjacent to the building. Additional soil could not be removed without damaging the building (NW Construction 1999; Treadwell & Rollo 2000). Fuel pumps and associated piping and an OWS was also removed (Treadwell & Rollo 2000).

Groundwater Monitoring Well Installation (2000)

Three groundwater monitoring wells, MW-1 through MW-3, were installed on the property in February 2000. Low concentrations of gasoline-range hydrocarbons and BTEX were present in well MW-1. Diesel- and heavy oil-range hydrocarbons were detected in the well at concentrations exceeding the MTCA Method A cleanup level. Well MW-1 was installed in the UST excavation backfill. In groundwater, gasoline and diesel-range hydrocarbons and BTEX concentrations exceeded the MTCA Method A cleanup levels (ATC 2000).

Soil and Groundwater Investigation (2000)

In May 2000, eleven soil borings (TR-1 through TR-11) were advanced on the property to define the extent of residual petroleum hydrocarbons in soil and petroleum hydrocarbons in groundwater. Soil samples and a grab groundwater sample were collected from each boring. Groundwater samples were also collected from wells MW-1 through MW-3. Two soil samples and 14 groundwater samples were analyzed for TPH and BTEX. No analytes were detected in soil. Gasoline-range hydrocarbons and BTEX were detected in groundwater. Benzene and xylenes concentrations in one groundwater sample exceeded the MTCA Method A cleanup levels (Treadwell & Rollo 2000).

Monitoring Well Installation (2000)

One groundwater monitoring well, MW-4, was installed on the property, and groundwater monitoring wells MW-1 through MW-4 were sampled in November 2000. Soil samples were not collected for laboratory analysis during the installation of well MW-4. Groundwater samples were analyzed for TPH and BTEX. TPH-g and BTEX concentrations exceeded the MTCA Method A cleanup levels. No analytes were detected in well MW-4 (Treadwell & Rollo 2001a).

Groundwater Monitoring (2001)

Two groundwater monitoring events were performed in February and June 2001. Wells MW-1 through MW-4 were sampled during each event. Groundwater samples were analyzed for TPH and BTEX. Analytical results were consistent with historical groundwater data: TPH-g and

BTEX concentrations exceeded the MTCA Method A cleanup levels in wells MW-1 and MW-3 (note that toluene was not detected in well MW-3, which was consistent with previous results). No analytes were detected in wells MW-2 and MW-4 (Treadwell & Rollo 2001b, 2001c).

Potential for Sediment Recontamination

Historical activities at the facility have resulted in soil and groundwater contamination beneath the property. Groundwater has been contaminated by petroleum hydrocarbon constituents; these contaminated media may infiltrate the combined sewer system and be discharged to the LDW via the combined sewer discharge pathway.

Sediment COCs have not been detected at this facility. No exceedances of soil-to-sediment or groundwater-to-sediment screening levels have been observed. Therefore, the potential that contaminants from this property will impact sediments associated with the KC Lease Parcels source control area is very low.

Data Gaps

No facility-specific data gaps have been identified for the former Western Parcel property.

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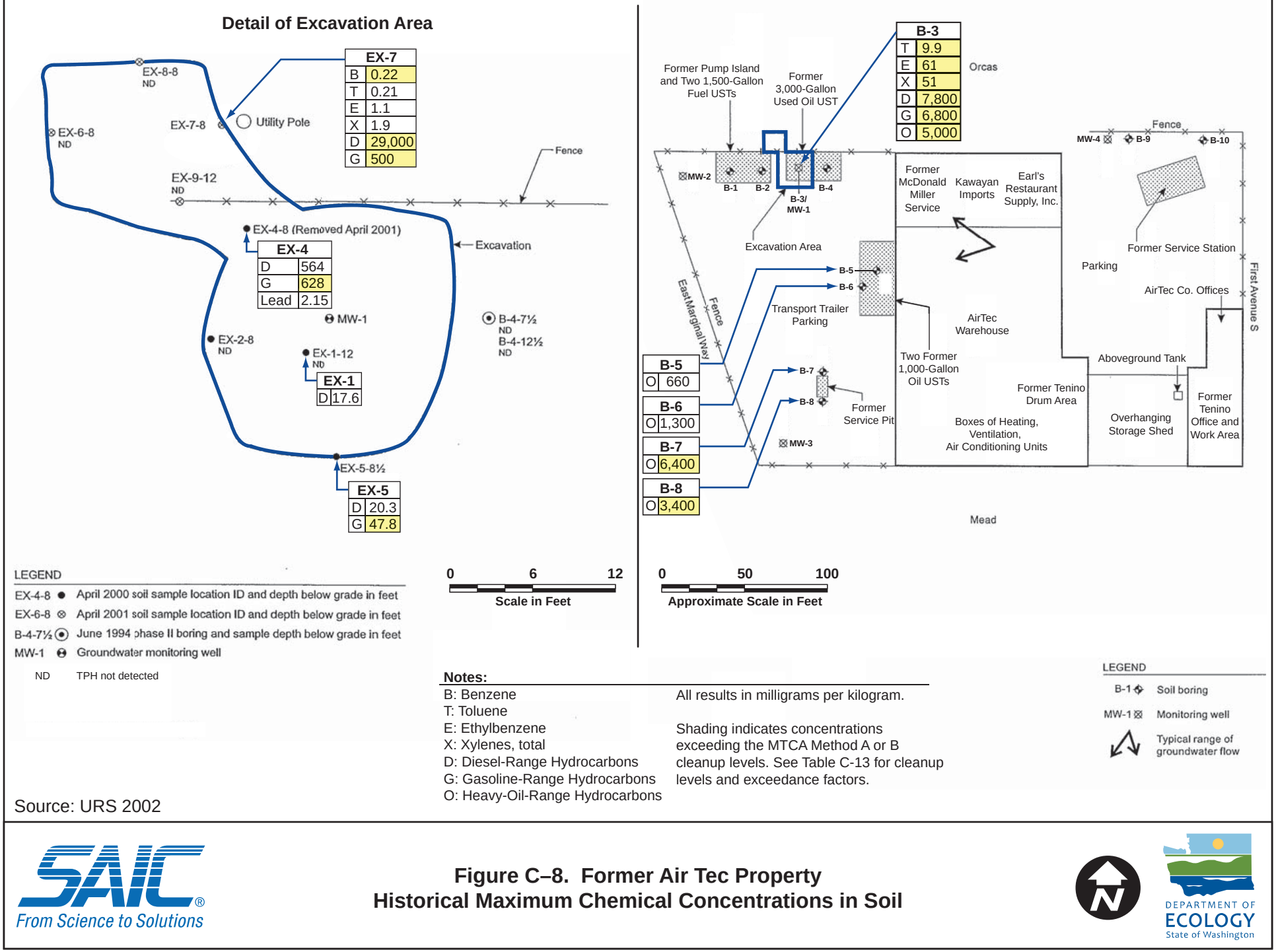


Notes:

B: Benzene
T: Toluene
E: Ethylbenzene
X: Xylenes, total
D: Diesel-Range Hydrocarbons
G: Gasoline-Range Hydrocarbons
O: Heavy-Oil-Range Hydrocarbons

All results in milligrams per kilogram.

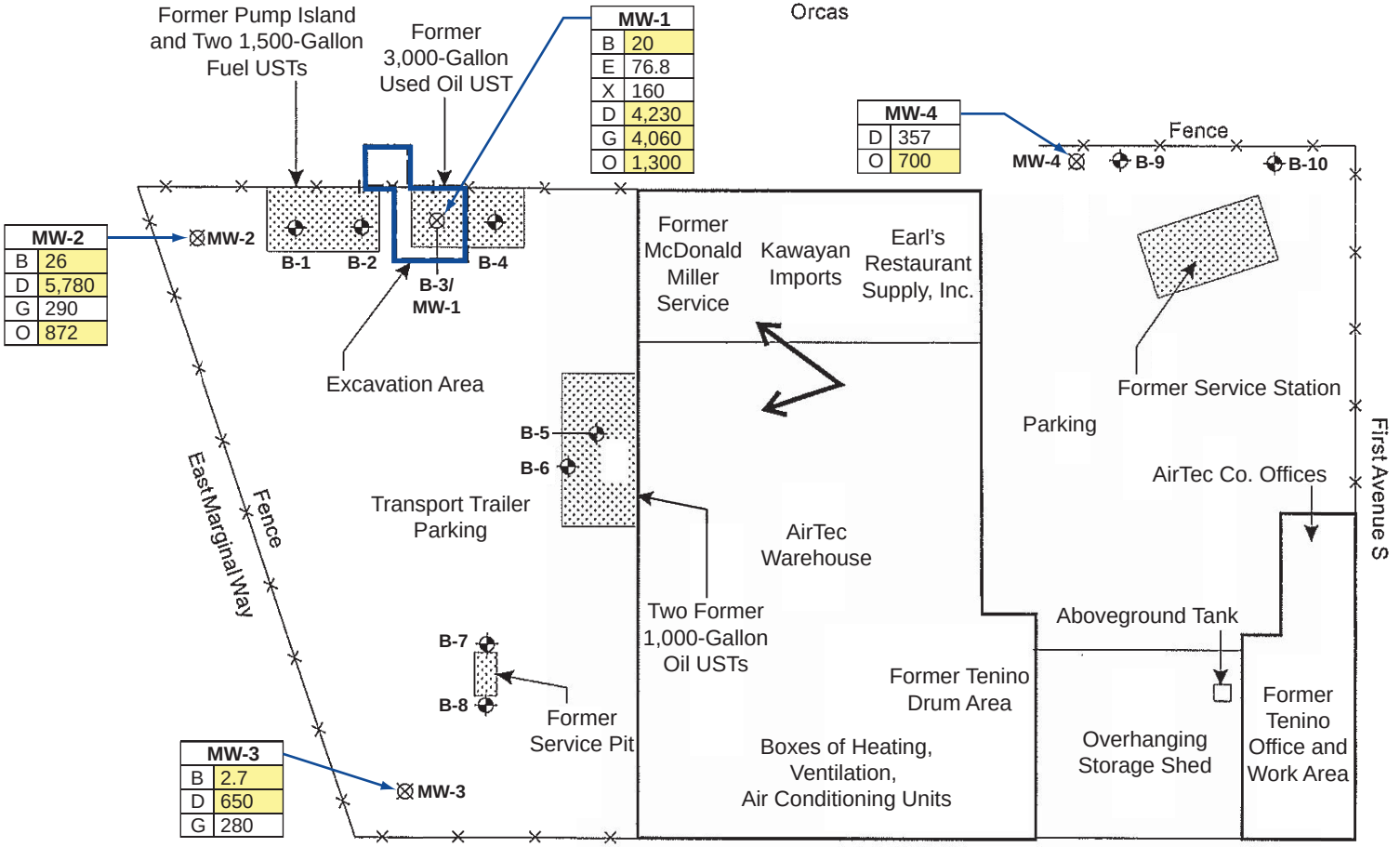
Shading indicates concentrations exceeding the MTCA Method A or B cleanup levels. See Table C-13 for cleanup levels and exceedance factors.

Source: URS 2002

SAIC From Science to Solutions

Figure C–8. Former Air Tec Property
Historical Maximum Chemical Concentrations in Soil

DEPARTMENT OF ECOLOGY State of Washington



Notes:

B: Benzene	All results in micrograms per liter.
E: Ethylbenzene	
X: Xylenes, total	Shading indicates concentrations exceeding the MTCA Method A or B cleanup levels. See Table C-14 for cleanup levels and exceedance factors.
D: Diesel-Range Hydrocarbons	
G: Gasoline-Range Hydrocarbons	
O: Heavy-Oil-Range Hydrocarbons	

LEGEND

B-1	Soil boring
MW-1	Monitoring well
	Typical range of groundwater flow

0 50 100

Approximate Scale in Feet

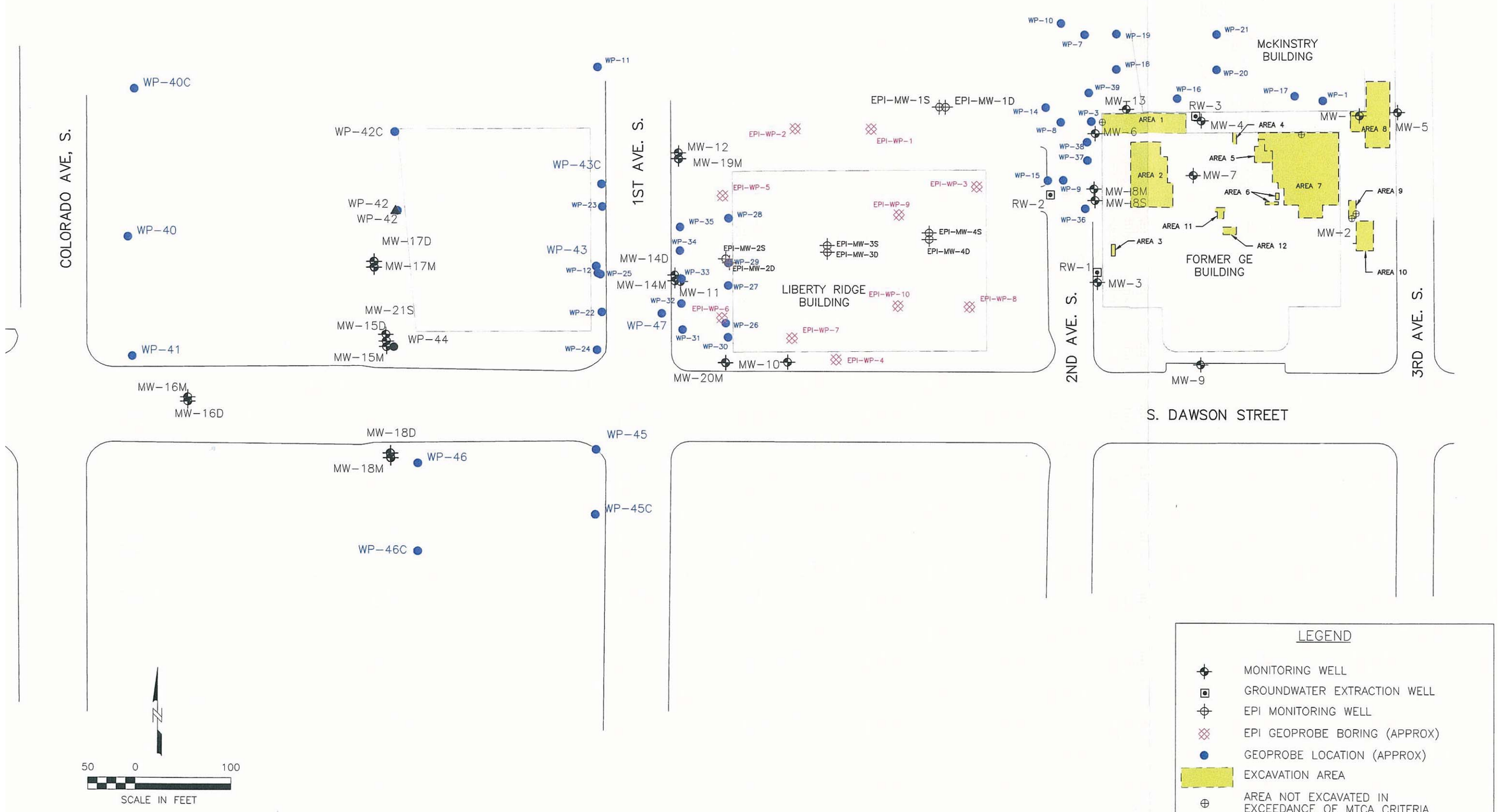
Source: URS 2002

SAIC From Science to Solutions

Figure C–9. Former Air Tec Property
Historical Maximum Chemical Concentrations in Groundwater

N

DEPARTMENT OF ECOLOGY State of Washington



Source: ENSR 2008

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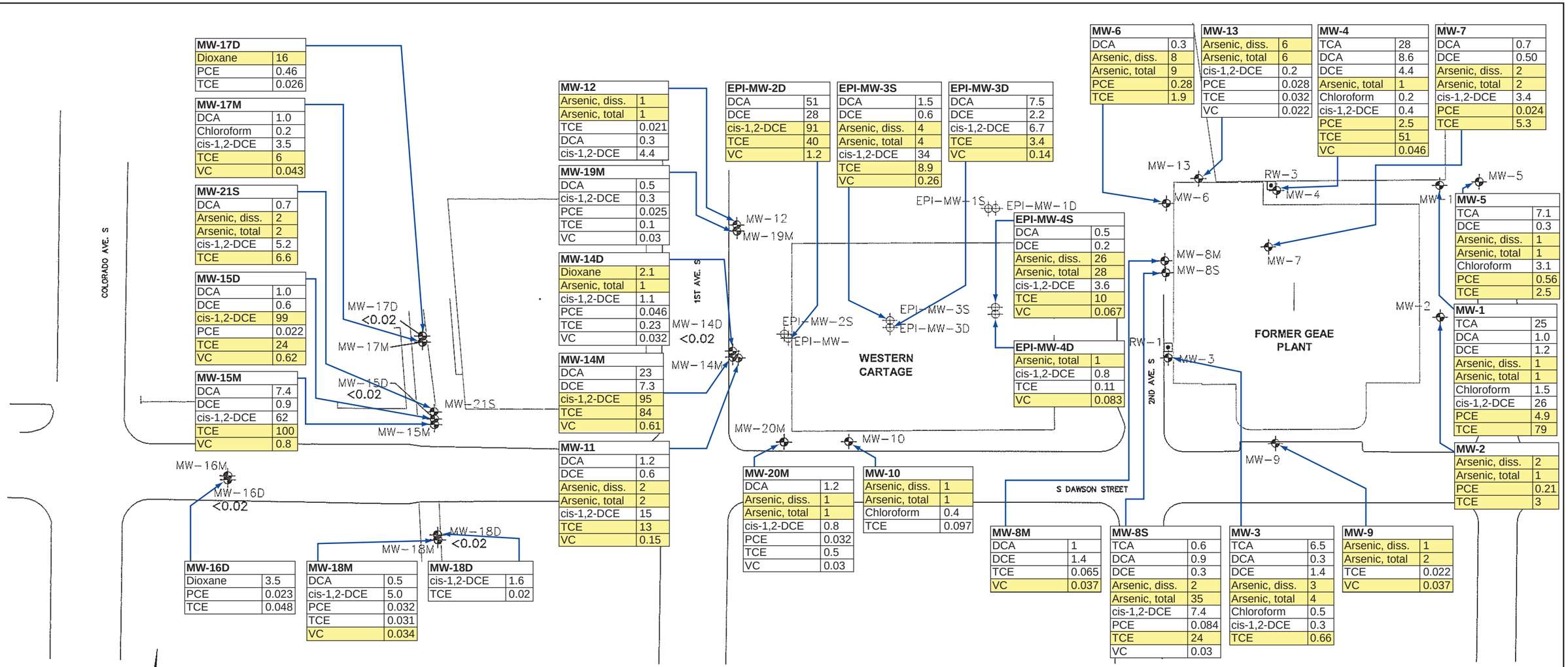
Figure C-10. Former General Electric Aviation Division Property
Historical Soil Sampling Locations

DEPARTMENT OF ECOLOGY State of Washington



Notes:

PCE: Tetrachloroethene	All results in milligrams per kilogram.
TCE: Trichloroethene	
DCE: Dichloroethene	Shading indicates concentrations
TCA: Trichloroethane	exceeding the MTCA Method A or B
DCA: Dichloroethane	cleanup levels. See Table C-15 for cleanup
VC: Vinyl Chloride	levels and exceedance factors.

NOTES:

1. MONITORING WELLS MW-8, MW-14S, MW-15S, AND MW-16S HAVE BEEN RENAMED MW-8S, MW-14M, MW-15M, AND MW-16M.
2. LOCATIONS ARE APPROXIMATE.

LEGEND

- MONITORING WELL
- GROUNDWATER EXTRACTION WELL
- <0.02 GROUNDWATER CONCENTRATION (µg/L)

Source: AECOM 2009

AECOM

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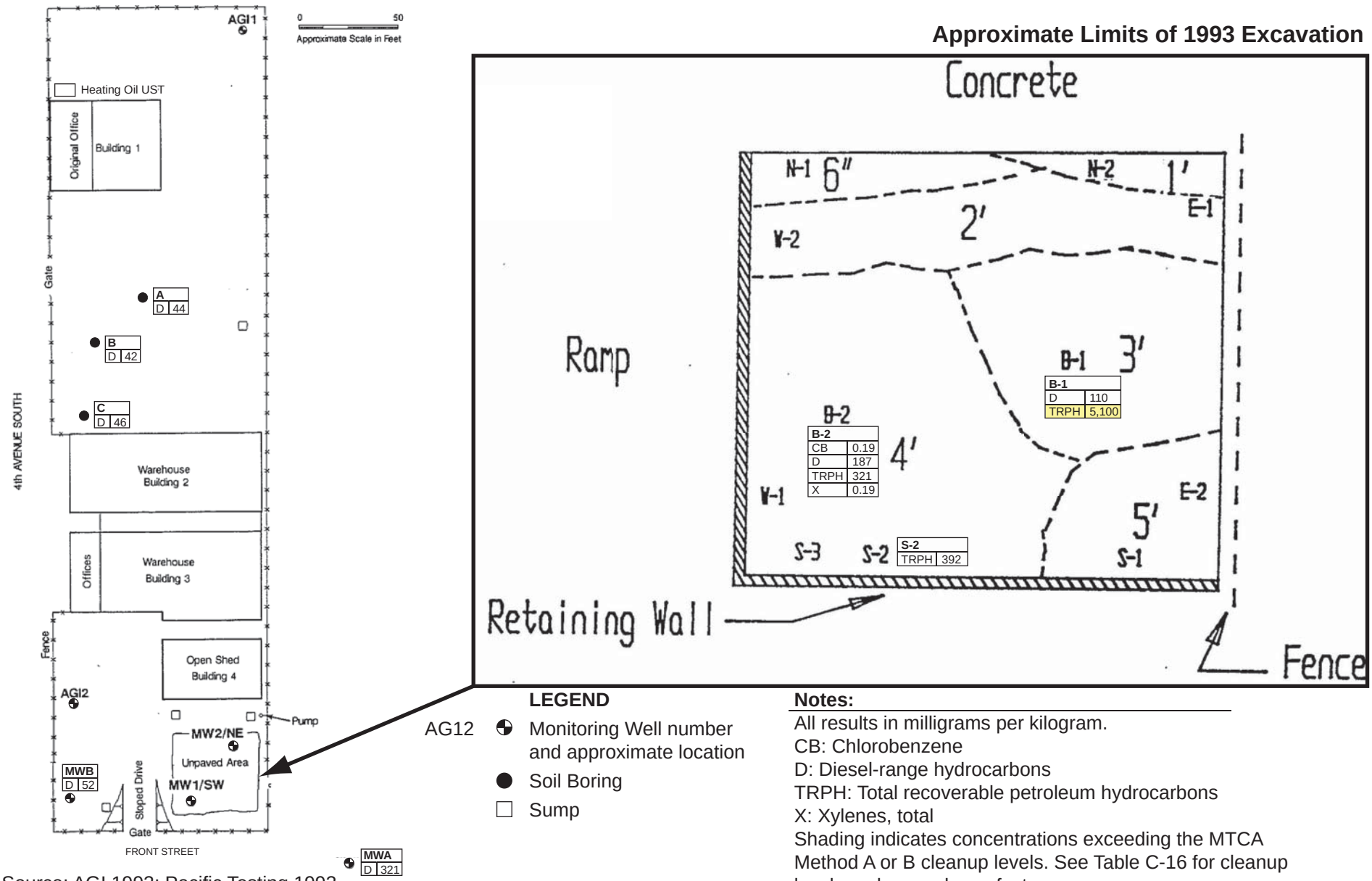
Figure C–11. General Electric Aviation Division Property Maximum Chemical Concentrations in Groundwater February 2007 to February 2009

DEPARTMENT OF ECOLOGY State of Washington



Source: AGI 1993; Pacific Testing 1993

LEGEND

AG12 ⊕ Monitoring Well number and approximate location

● Soil Boring

□ Sump

Notes:

All results in milligrams per kilogram.
CB: Chlorobenzene
D: Diesel-range hydrocarbons
TRPH: Total recoverable petroleum hydrocarbons
X: Xylenes, total
Shading indicates concentrations exceeding the MTCA Method A or B cleanup levels. See Table C-16 for cleanup levels and exceedance factors.

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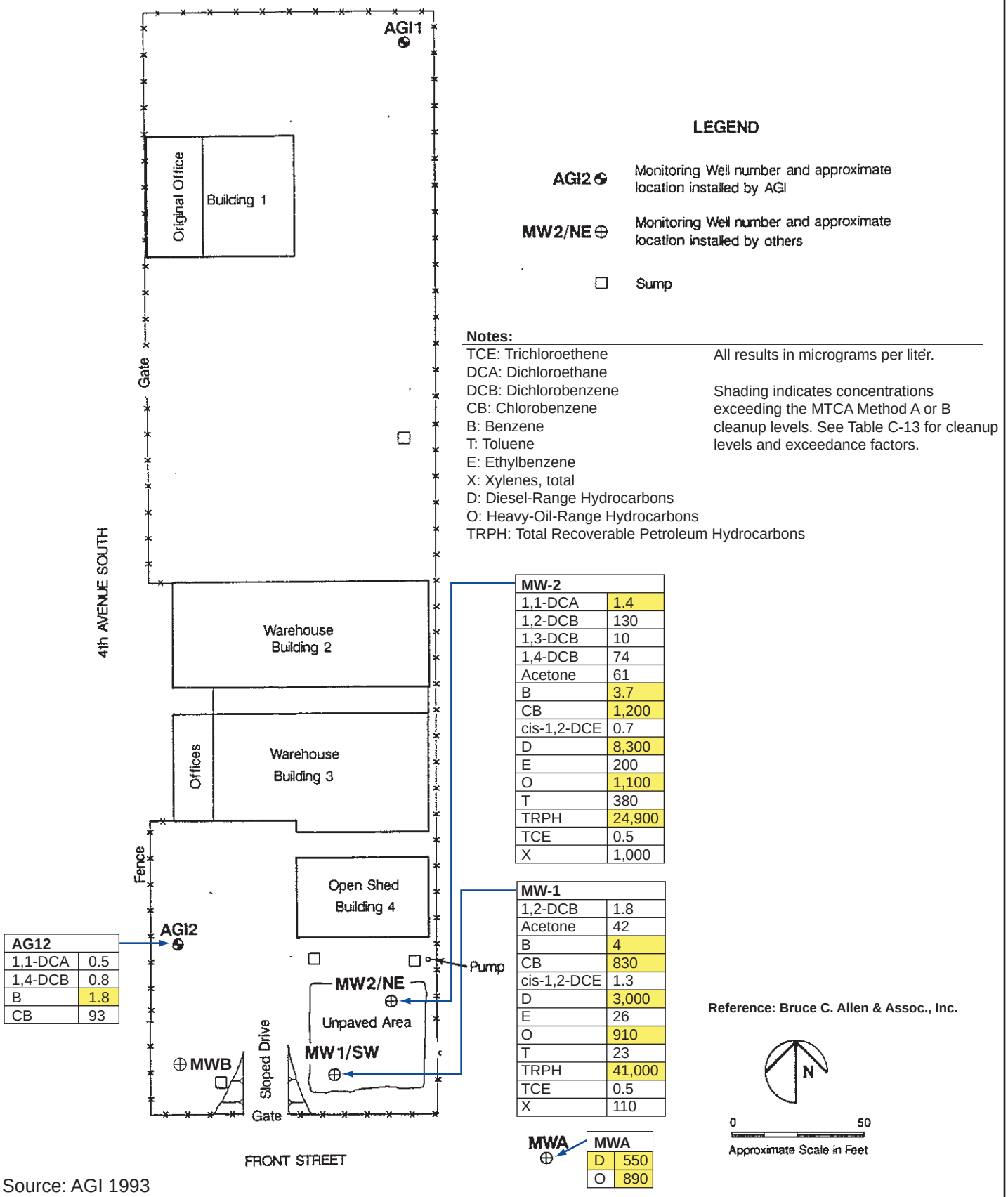
Figure C–12. Former Sahlberg Equipment Property
Historical Maximum Chemical Concentrations in Soil

DEPARTMENT OF ECOLOGY State of Washington



MW-2	
1,1-DCA	1.4
1,2-DCB	130
1,3-DCB	10
1,4-DCB	74
Acetone	61
B	3.7
CB	1,200
cis-1,2-DCE	0.7
D	8,300
E	200
O	1,100
T	380
TRPH	24,900
TCE	0.5
X	1,000

MW-1	
1,2-DCB	1.8
Acetone	42
B	4
CB	830
cis-1,2-DCE	1.3
D	3,000
E	26
O	910
T	23
TRPH	41,000
TCE	0.5
X	110

AG12	
1,1-DCA	0.5
1,4-DCB	0.8
B	1.8
CB	93

MWA	
D	550
O	890

Source: AGI 1993

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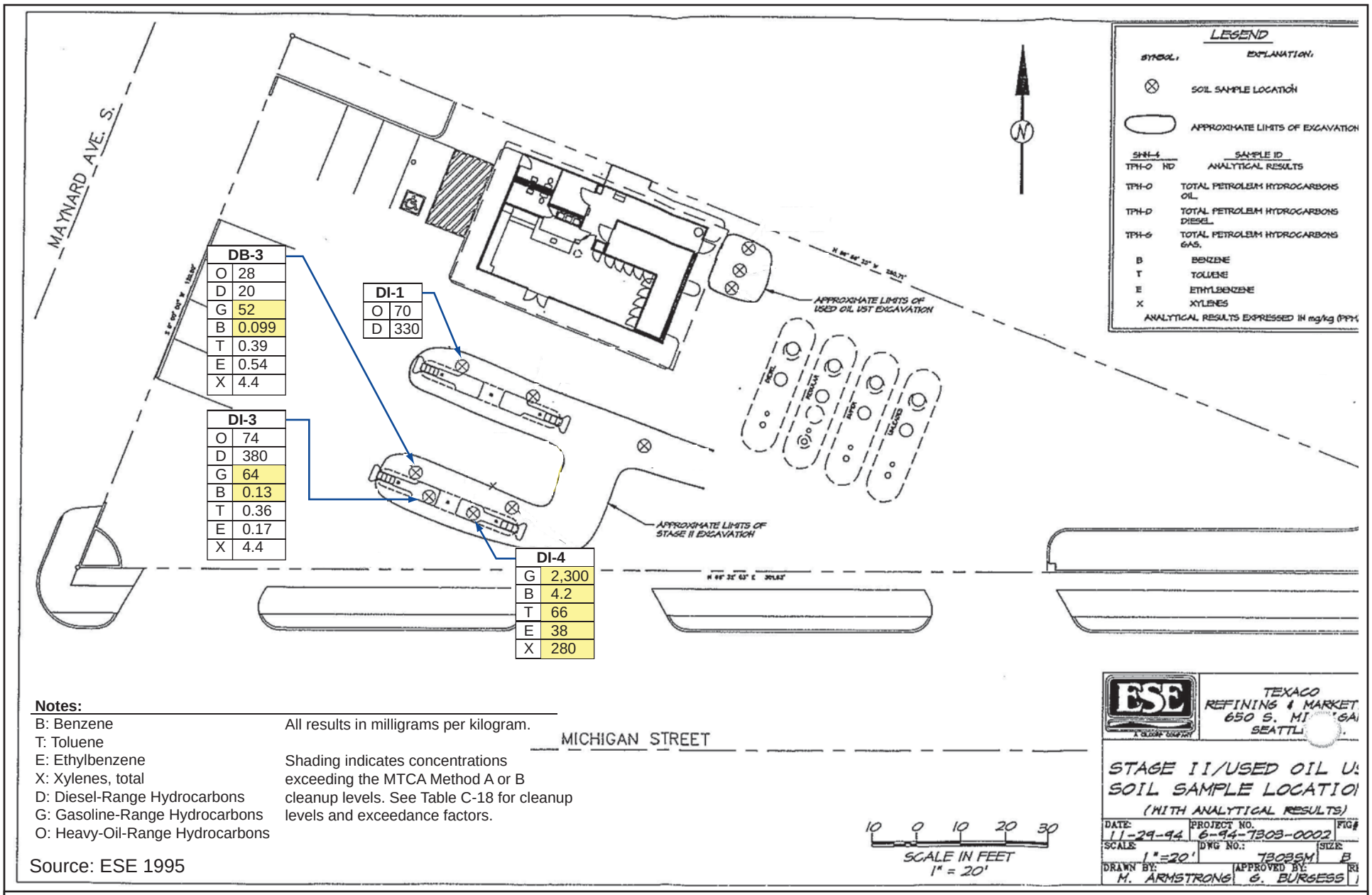
Figure C–13. Former Sahlberg Equipment Property Historical Maximum Chemical Concentrations in Groundwater

DEPARTMENT OF ECOLOGY State of Washington



Notes:

B: Benzene	All results in milligrams per kilogram.
T: Toluene	
E: Ethylbenzene	Shading indicates concentrations exceeding the MTCA Method A or B cleanup levels. See Table C-18 for cleanup levels and exceedance factors.
X: Xylenes, total	
D: Diesel-Range Hydrocarbons	
G: Gasoline-Range Hydrocarbons	
O: Heavy-Oil-Range Hydrocarbons	

Source: ESE 1995

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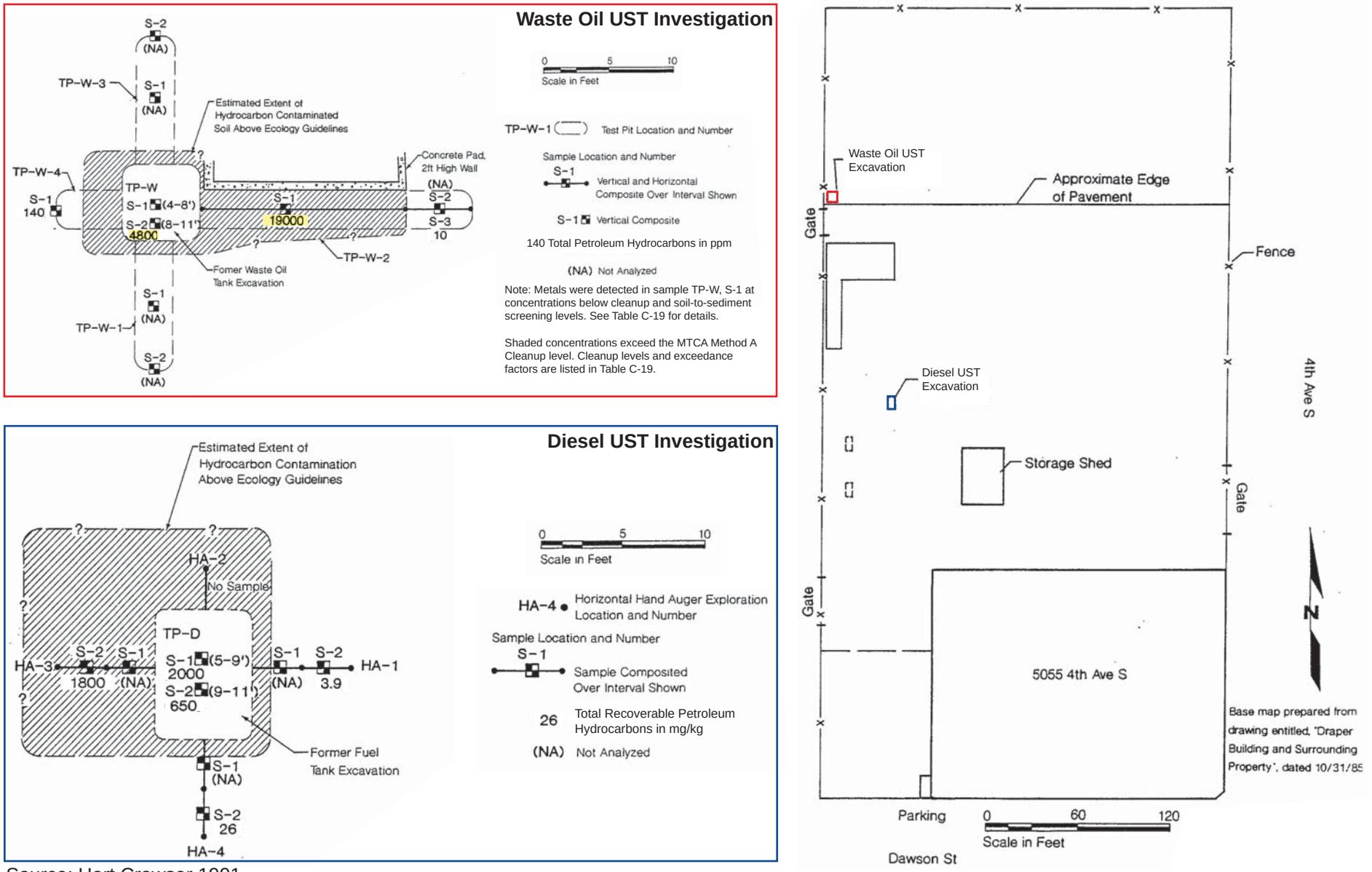
Figure C–14. Shell 121430
Historical Maximum Chemical Concentrations in Soil

DEPARTMENT OF ECOLOGY State of Washington



Source: Hart Crowser 1991

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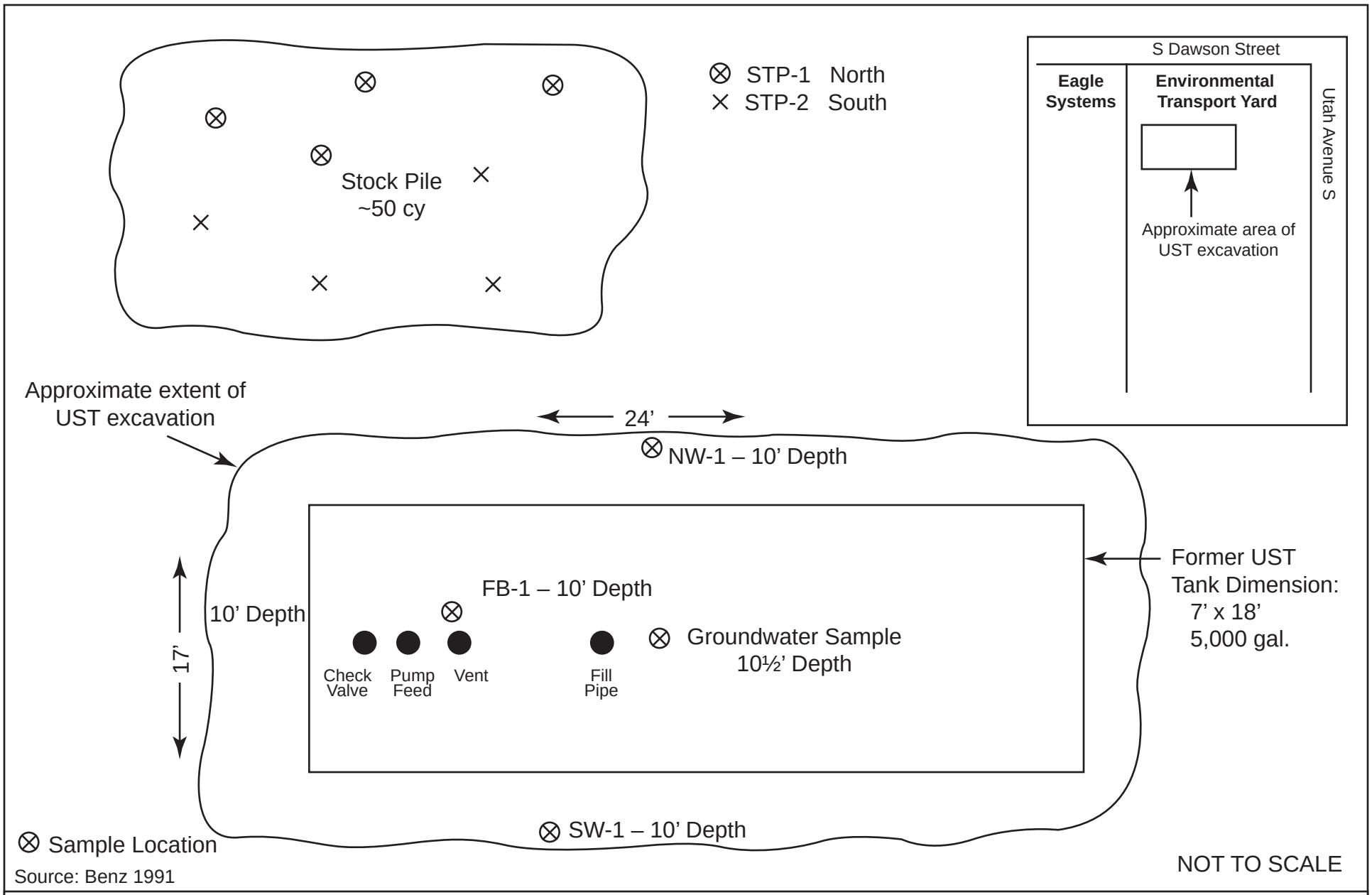
Figure C–15. Draper Machine, Inc.
Historical Maximum Chemical Concentrations in Soil

DEPARTMENT OF ECOLOGY State of Washington



Source: Benz 1991

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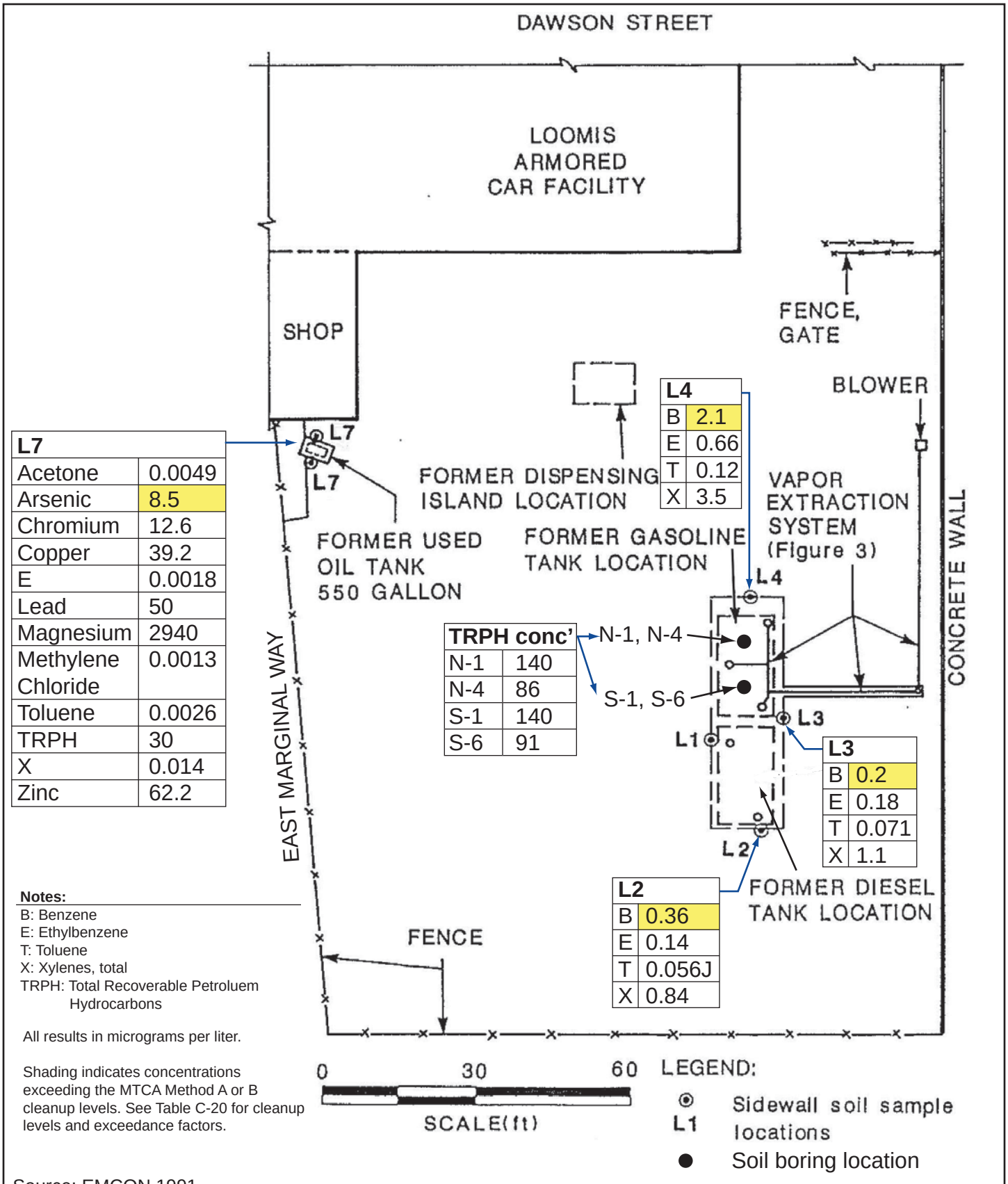
Figure C–16. Environmental Transport, Inc.
Historical Sampling Locations

DEPARTMENT OF ECOLOGY
State of Washington



L7	
Acetone	0.0049
Arsenic	8.5
Chromium	12.6
Copper	39.2
E	0.0018
Lead	50
Magnesium	2940
Methylene Chloride	0.0013
Toluene	0.0026
TRPH	30
X	0.014
Zinc	62.2

L4	
B	2.1
E	0.66
T	0.12
X	3.5

TRPH conc'	
N-1	140
N-4	86
S-1	140
S-6	91

L3	
B	0.2
E	0.18
T	0.071
X	1.1

L2	
B	0.36
E	0.14
T	0.056J
X	0.84

Notes:
B: Benzene
E: Ethylbenzene
T: Toluene
X: Xylenes, total
TRPH: Total Recoverable Petroluem Hydrocarbons

All results in micrograms per liter.

Shading indicates concentrations exceeding the MTCA Method A or B cleanup levels. See Table C-20 for cleanup levels and exceedance factors.

Source: EMCON 1991

Figure C–17. Loomis & Fargo
Historical Maximum Chemical Concentrations in Soil

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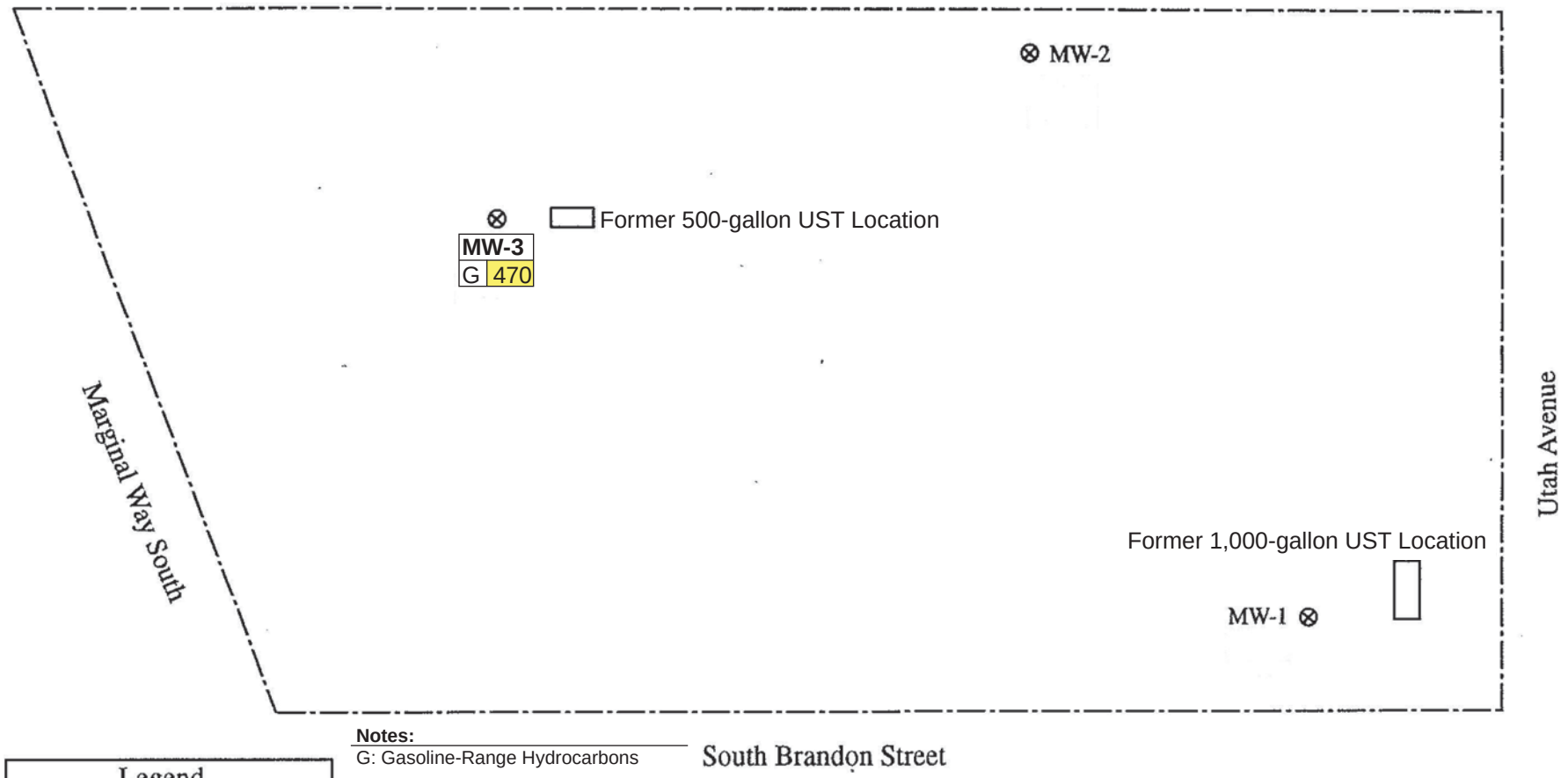
DEPARTMENT OF ECOLOGY State of Washington



Source: Eco-Tec 1995

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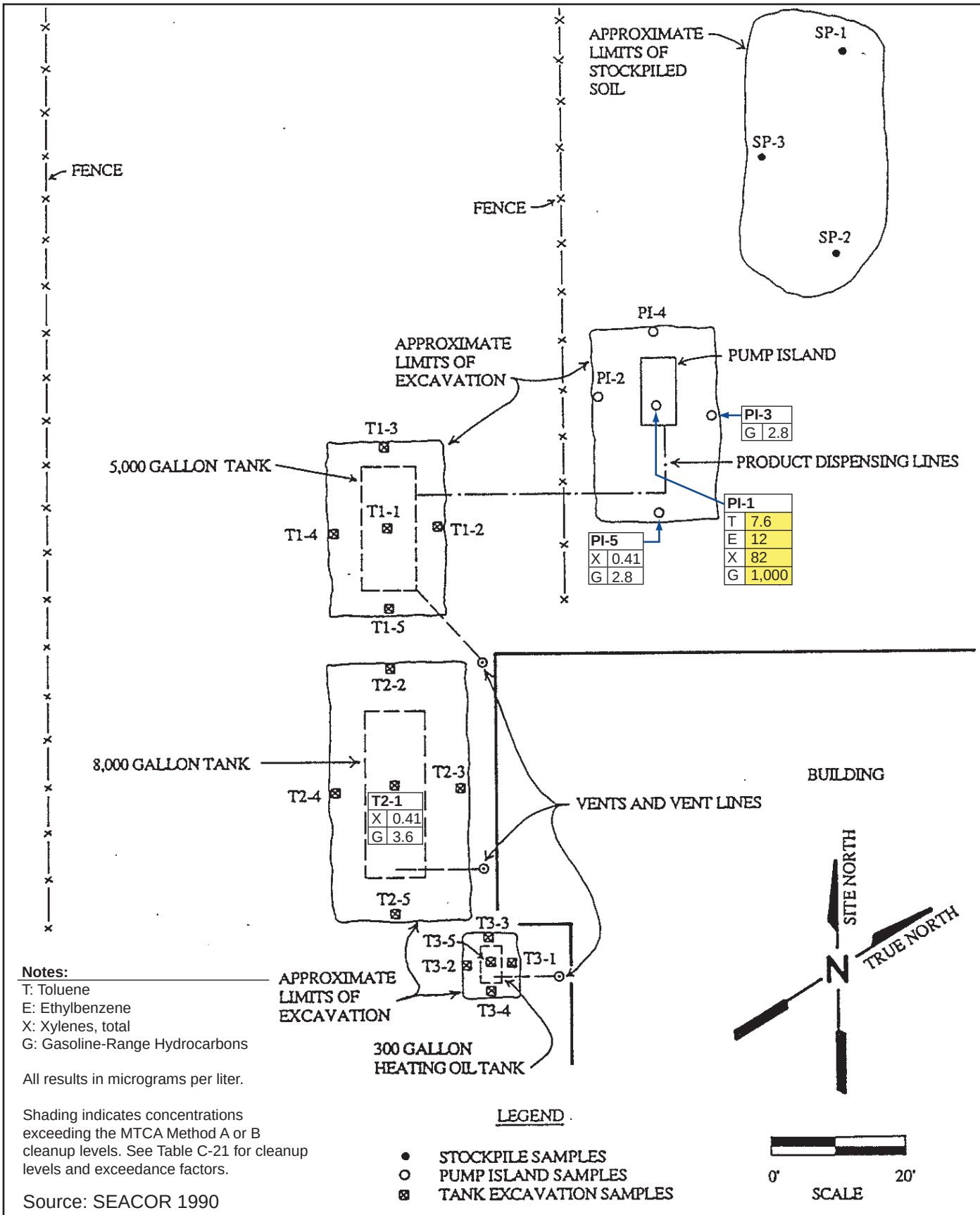
Figure C–18. Former National Transfer Property
Historical Maximum Chemical Concentrations in Groundwater

DEPARTMENT OF ECOLOGY
State of Washington



Notes:
T: Toluene
E: Ethylbenzene
X: Xylenes, total
G: Gasoline-Range Hydrocarbons

All results in micrograms per liter.

Shading indicates concentrations exceeding the MTCA Method A or B cleanup levels. See Table C-21 for cleanup levels and exceedance factors.

Source: SEACOR 1990

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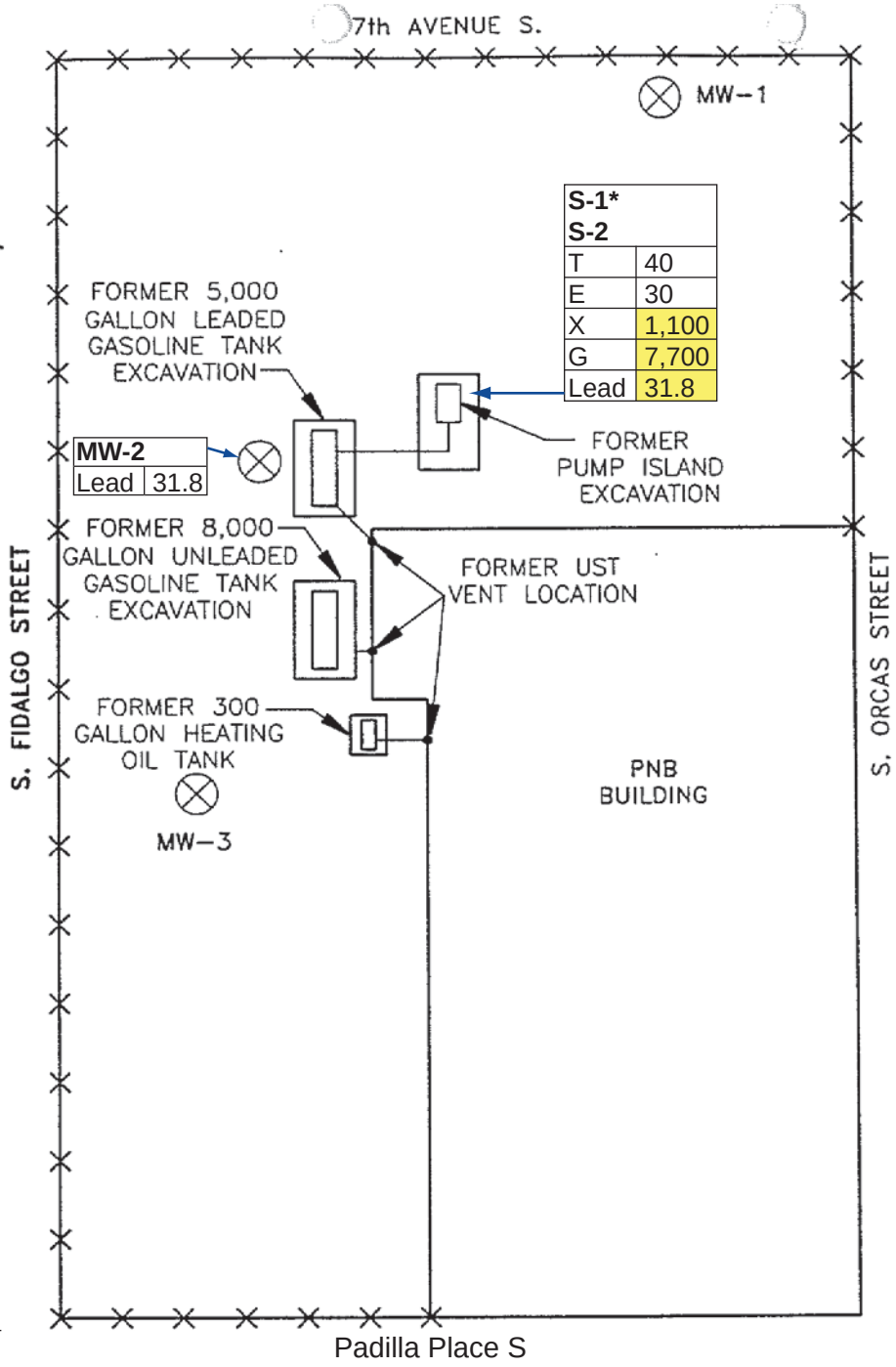
Figure C–19. Former PNB Building
Historical Maximum Chemical Concentrations in Soil

DEPARTMENT OF ECOLOGY
State of Washington



Notes:

T: Toluene
E: Ethylbenzene
X: Xylenes, total
G: Gasoline-Range Hydrocarbons

All results in micrograms per liter.

Shading indicates concentrations exceeding the MTCA Method A or B cleanup levels. See Table C-22 for cleanup levels and exceedance factors.

EXPLANATION

FORMER FUEL & UST VENT LINES

GROUNDWATER MONITORING WELL LOCATION

APPROXIMATE SCALE: 1"=40'

* S-1 and S-2 were grab groundwater samples collected from the dispenser island excavation. Sample locations were not depicted on the facility maps available for review.

Source: ENSR 1991

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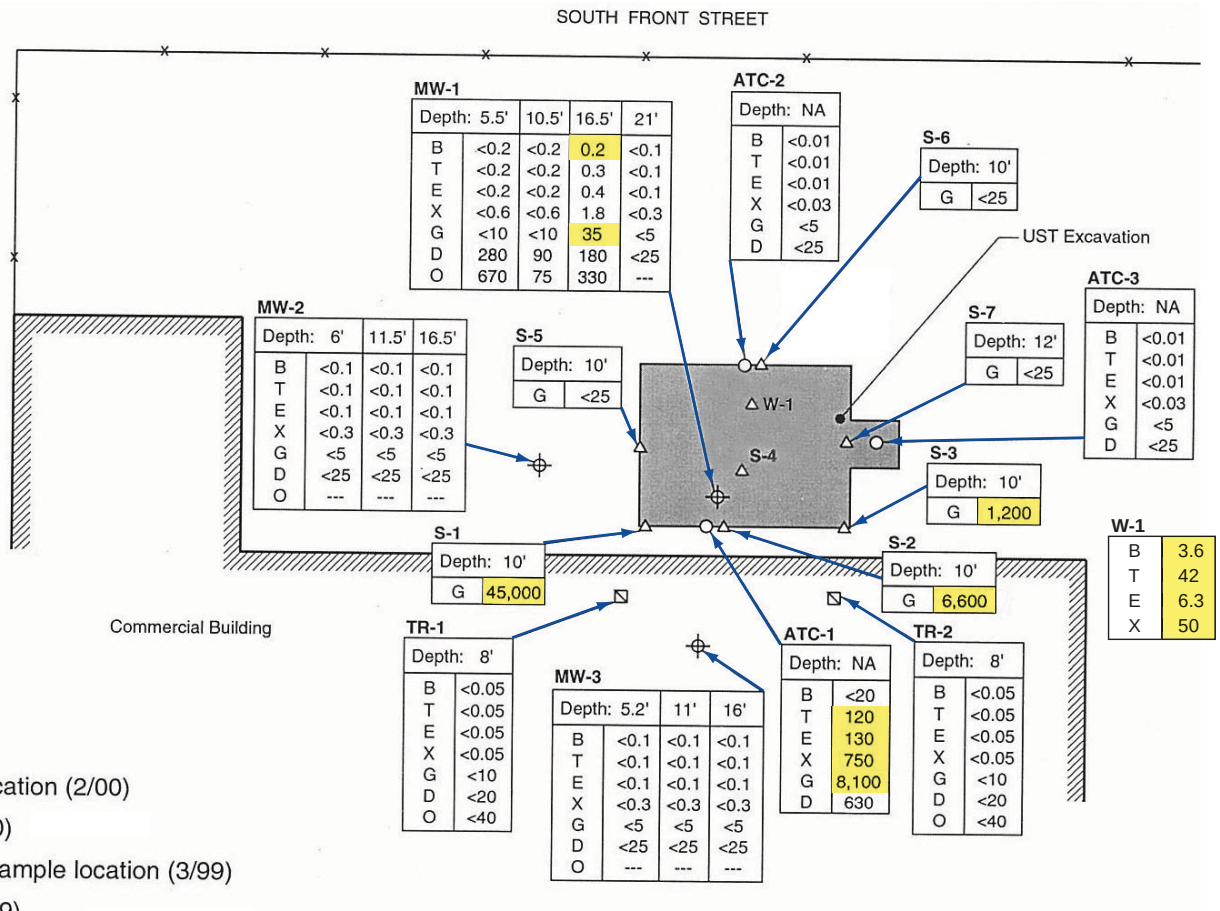
Figure C–20. Former PNB Building Historical Maximum Chemical Concentrations in Groundwater

DEPARTMENT OF ECOLOGY State of Washington



EXPLANATION

MW-1 ⌖ Soil boring and monitoring well location (2/00)

TR-1 ▨ Stratprobe sampling location (5/00)

S-1 △ Northwest Construction sidewall sample location (3/99)

ATC-1 ○ ATC sidewall sample location (3/99)

Exceeds cleanup level

Depth: NA	
B	<0.2
T	<0.2
E	<0.2
X	<0.6
G	<5
D	280
O	670

Notes:

B: Benzene
T: Toluene
E: Ethylbenzene
X: Xylenes, total
D: Diesel-Range Hydrocarbons
G: Gasoline-Range Hydrocarbons
O: Heavy-Oil-Range Hydrocarbons

All results in milligrams per kilogram.

Shading indicates concentrations exceeding the MTCA Method A or B cleanup levels. See Table C–23 for cleanup levels and exceedance factors.

0 30 Feet

Approximate scale

Source: Treadwell & Rollo 2000

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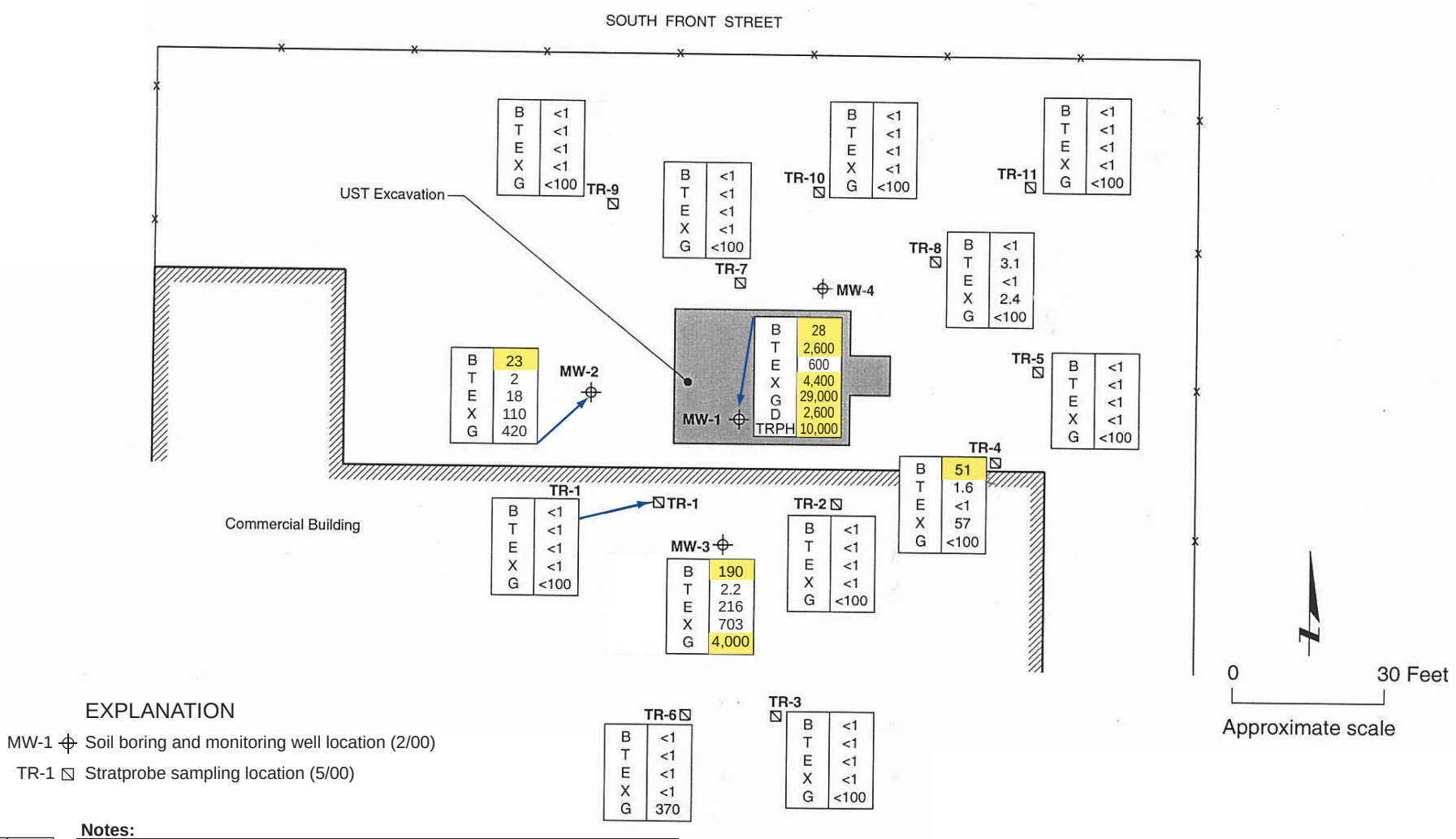
Figure C–21. Former Western Parcel Express
Historical Maximum Chemical Concentrations in Soil

DEPARTMENT OF ECOLOGY State of Washington



B	<1
T	<1
E	<1
X	<1
G	370

Notes:

B: Benzene
T: Toluene
E: Ethylbenzene
X: Xylenes, total
G: Gasoline-Range Hydrocarbons

All results in milligrams per kilogram.

Shading indicates concentrations exceeding the MTCA Method A or B cleanup levels. See Table C-24 for cleanup levels and exceedance factors.

Source: Treadwell & Rollo 2000

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Figure C–22. Former Western Parcel Express
Historical Maximum Chemical Concentrations in Groundwater

DEPARTMENT OF ECOLOGY State of Washington

Table C-13
Chemicals Detected in Soil
Former Air Tec Co. Property

Source	Sample Date	Sample Location	Sample Depth (ft)	Chemical	Soil Conc'n (mg/kg DW)	MTCA Cleanup Level[a] (mg/kg)	Soil-to-Sediment Screening Level (Based on CSL)[b] (mg/kg)	Exceedance Factor
URS 2002a	Apr-01	EX-7	8	Benzene	0.22	0.03		7.3
URS 2002a	Apr-01	EX-7	8	Diesel-Range Hydrocarbons	29000	2000		15
Dames & Moore 1994	Jun-94	B-3	7.5	Diesel-Range Hydrocarbons	7800	2000		3.9
Dames & Moore 2000	Apr-00	Ex-4	8	Diesel-Range Hydrocarbons	564	2000		<1
Dames & Moore 2000	Apr-00	Ex-5	8.5	Diesel-Range Hydrocarbons	20.3	2000		<1
Dames & Moore 2000	Apr-00	Ex-1	12	Diesel-Range Hydrocarbons	17.6	2000		<1
Dames & Moore 1994	Jun-94	B-3	7.5	Ethylbenzene	61	6		10
URS 2002a	Apr-01	EX-7	8	Ethylbenzene	1.1	6		<1
Dames & Moore 1994	Jun-94	B-3	7.5	Gasoline-Range Hydrocarbons	6800	30		227
Dames & Moore 2000	Apr-00	Ex-4	8	Gasoline-Range Hydrocarbons	628	30		21
URS 2002a	Apr-01	EX-7	8	Gasoline-Range Hydrocarbons	500	30		17
Dames & Moore 2000	Apr-00	Ex-5	8.5	Gasoline-Range Hydrocarbons	47.8	30		1.6
Dames & Moore 1994	Jun-94	B-7	2.5	Heavy Oil-Range Hydrocarbons	6400	2000		3.2
Dames & Moore 1994	Jun-94	B-3	7.5	Heavy Oil-Range Hydrocarbons	5000	2000		2.5
Dames & Moore 1994	Jun-94	B-8	2.5	Heavy Oil-Range Hydrocarbons	3400	2000		1.7
Dames & Moore 1994	Jun-94	B-6	7.5	Heavy Oil-Range Hydrocarbons	1300	2000		<1
Dames & Moore 1994	Jun-94	B-5	7.5	Heavy Oil-Range Hydrocarbons	660	2000		<1
Dames & Moore 2000	Apr-00	Ex-1	12	Heavy Oil-Range Hydrocarbons	76.2	2000		<1
Dames & Moore 1994	Jun-94	B-7	12.5	Heavy Oil-Range Hydrocarbons	22	2000		<1
Dames & Moore 2000	Apr-00	Ex-4	8	Lead	2.15	250	1300	<1
Dames & Moore 1994	Jun-94	B-3	7.5	Toluene	9.9	7		1.4
URS 2002a	Apr-01	EX-7	8	Toluene	0.21	7		<1
Dames & Moore 1994	Jun-94	B-3	7.5	Xylenes, total	51	9		5.7
URS 2002a	Apr-01	EX-7	8	Xylenes, total	1.9	9		<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or soil-to-sediment screening level, whichever is lower.

mg/kg - Milligram per kilogram
DW - Dry weight
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Soil-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-14
Chemicals Detected in Groundwater
Former Air Tec Co. Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)	MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
Dames & Moore 1994	Aug-94	MW-2	Benzene	26	0.8		33
Dames & Moore 1994	Aug-94	MW-1	Benzene	20	0.8		25
Dames & Moore 2000	Mar-00	MW-1	Benzene	11.3	0.8		14
URS 2002a	Jun-01	MW-1	Benzene	10	0.8		13
URS 2002a	Nov-01	MW-1	Benzene	8.8	0.8		11
URS 2002a	Aug-02	MW-1	Benzene	6.3	0.8		7.9
URS 2002a	Feb-02	MW-3	Benzene	2.7	0.8		3.4
URS 2002a	Jan-01	MW-1	Benzene	1.2	0.8		1.5
URS 2002a	Mar-00	MW-2	Diesel-Range Hydrocarbons	5780	500		12
Dames & Moore 2000	Mar-00	MW-1	Diesel-Range Hydrocarbons	4230	500		8.5
Dames & Moore 1994	Aug-94	MW-1	Diesel-Range Hydrocarbons	3000	500		6.0
URS 2002a	Jan-01	MW-1	Diesel-Range Hydrocarbons	890	500		1.8
Dames & Moore 1994	Aug-94	MW-3	Diesel-Range Hydrocarbons	650	500		1.3
URS 2002a	Jan-01	MW-2	Diesel-Range Hydrocarbons	630	500		1.3
Dames & Moore 2000	Mar-00	MW-4	Diesel-Range Hydrocarbons	357	500		<1
Dames & Moore 2000	Mar-00	MW-3	Diesel-Range Hydrocarbons	299	500		<1
Dames & Moore 2000	Mar-00	MW-1	Ethylbenzene	76.8	700		<1
Dames & Moore 2000	Mar-00	MW-1	Gasoline-Range Hydrocarbons	4060	800		5.1
Dames & Moore 1994	Aug-94	MW-1	Gasoline-Range Hydrocarbons	3800	800		4.8
URS 2002a	Jan-01	MW-2	Gasoline-Range Hydrocarbons	290	800		<1
URS 2002a	Jan-01	MW-1	Gasoline-Range Hydrocarbons	280	800		<1
URS 2002a	Jan-01	MW-3	Gasoline-Range Hydrocarbons	280	800		<1
URS 2002a	Jun-01	MW-3	Gasoline-Range Hydrocarbons	250	800		<1
URS 2002a	Jun-01	MW-3	Gasoline-Range Hydrocarbons	200	800		<1
URS 2002a	Jun-01	MW-2	Gasoline-Range Hydrocarbons	150	800		<1
Dames & Moore 2000	Mar-00	MW-2	Gasoline-Range Hydrocarbons	130	800		<1
Dames & Moore 1994	Aug-94	MW-1	Heavy-Oil Range Hydrocarbons	1300	500		2.6
URS 2002a	Mar-00	MW-2	Heavy-Oil Range Hydrocarbons	872	500		1.7
Dames & Moore 2000	Mar-00	MW-1	Heavy-Oil Range Hydrocarbons	795	500		1.6
Dames & Moore 1994	Aug-94	MW-4	Heavy-Oil Range Hydrocarbons	700	500		1.4
Dames & Moore 1994	Aug-94	MW-1	Xylenes, total	160	1000		<1
URS 2002a	Jun-01	MW-1	Xylenes, total	2	1000		<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or groundwater-to-sediment screening level, whichever is lower.

ug/L - Microgram per Liter
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Groundwater-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Feb-08	MW-4	1,1,1-Trichloroethane	28		200		<1
General Electric 2009	Feb-08	MW-1	1,1,1-Trichloroethane	25		200		<1
General Electric 2009	Feb-08	MW-4	1,1,1-Trichloroethane	25		200		<1
General Electric 2009	Aug-07	MW-1	1,1,1-Trichloroethane	22		200		<1
General Electric 2009	Feb-07	MW-1	1,1,1-Trichloroethane	17		200		<1
General Electric 2009	Aug-08	MW-1	1,1,1-Trichloroethane	17		200		<1
General Electric 2009	Aug-08	MW-1	1,1,1-Trichloroethane	17		200		<1
General Electric 2009	May-08	MW-4	1,1,1-Trichloroethane	16		200		<1
General Electric 2009	Nov-07	MW-4	1,1,1-Trichloroethane	15		200		<1
General Electric 2009	Aug-08	MW-4	1,1,1-Trichloroethane	11		200		<1
General Electric 2009	Feb-09	MW-4	1,1,1-Trichloroethane	11		200		<1
General Electric 2009	Feb-09	MW-4	1,1,1-Trichloroethane	11		200		<1
General Electric 2009	Aug-07	MW-4	1,1,1-Trichloroethane	9.1		200		<1
General Electric 2009	Nov-08	MW-4	1,1,1-Trichloroethane	8.3	J	200		<1
General Electric 2009	Feb-07	MW-5	1,1,1-Trichloroethane	7.1		200		<1
General Electric 2009	Feb-09	MW-3	1,1,1-Trichloroethane	6.5		200		<1
General Electric 2009	Feb-09	MW-1	1,1,1-Trichloroethane	6.4	J	200		<1
General Electric 2009	Feb-07	MW-4	1,1,1-Trichloroethane	6.4		200		<1
General Electric 2009	May-07	MW-4	1,1,1-Trichloroethane	5.4		200		<1
General Electric 2009	Feb-08	MW-5	1,1,1-Trichloroethane	4.1		200		<1
General Electric 2009	Aug-07	MW-5	1,1,1-Trichloroethane	1.7		200		<1
General Electric 2009	Feb-09	MW-5	1,1,1-Trichloroethane	1.4		200		<1
General Electric 2009	Aug-08	MW-5	1,1,1-Trichloroethane	1.2		200		<1
General Electric 2009	Feb-07	MW-8S	1,1,1-Trichloroethane	0.6		200		<1
General Electric 2009	May-07	MW-8S	1,1,1-Trichloroethane	0.6		200		<1
General Electric 2009	Feb-09	MW-8S	1,1,1-Trichloroethane	0.3		200		<1
General Electric 2009	Feb-08	EPI-MW-2D	1,1-Dichloroethane	51		1600		<1
General Electric 2009	Feb-07	EPI-MW-2D	1,1-Dichloroethane	45		1600		<1
General Electric 2009	Aug-08	EPI-MW-2D	1,1-Dichloroethane	44		1600		<1
General Electric 2009	Feb-09	EPI-MW-2D	1,1-Dichloroethane	37		1600		<1
General Electric 2009	Aug-07	EPI-MW-2D	1,1-Dichloroethane	27		1600		<1
General Electric 2009	Nov-08	MW-14M	1,1-Dichloroethane	23		1600		<1
General Electric 2009	Aug-08	MW-14M	1,1-Dichloroethane	20		1600		<1
General Electric 2009	Nov-07	MW-14M	1,1-Dichloroethane	18		1600		<1
General Electric 2009	Feb-09	MW-14M	1,1-Dichloroethane	15		1600		<1
General Electric 2009	Feb-08	MW-14M	1,1-Dichloroethane	14		1600		<1
General Electric 2009	May-08	MW-14M	1,1-Dichloroethane	12		1600		<1
General Electric 2009	Aug-07	MW-14M	1,1-Dichloroethane	11		1600		<1
General Electric 2009	Nov-08	MW-4	1,1-Dichloroethane	8.6	J	1600		<1

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Aug-08	EPI-MW-3D	1,1-Dichloroethane	7.5		1600		<1
General Electric 2009	Feb-08	MW-15M	1,1-Dichloroethane	7.4		1600		<1
General Electric 2009	May-07	MW-14M	1,1-Dichloroethane	6.7		1600		<1
General Electric 2009	Aug-07	MW-4	1,1-Dichloroethane	6.6		1600		<1
General Electric 2009	Feb-09	EPI-MW-3D	1,1-Dichloroethane	6.2		1600		<1
General Electric 2009	Aug-08	MW-4	1,1-Dichloroethane	6.1		1600		<1
General Electric 2009	Feb-08	MW-4	1,1-Dichloroethane	5.9	J	1600		<1
General Electric 2009	Dec-08	MW-15M	1,1-Dichloroethane	5.9		1600		<1
General Electric 2009	Feb-07	MW-4	1,1-Dichloroethane	5.4		1600		<1
General Electric 2009	Nov-07	MW-4	1,1-Dichloroethane	4.9		1600		<1
General Electric 2009	Feb-09	MW-4	1,1-Dichloroethane	4.9		1600		<1
General Electric 2009	Feb-09	MW-4	1,1-Dichloroethane	4.8		1600		<1
General Electric 2009	Feb-07	MW-14M	1,1-Dichloroethane	4.5		1600		<1
General Electric 2009	Apr-08	MW-15M	1,1-Dichloroethane	4.5		1600		<1
General Electric 2009	May-07	MW-4	1,1-Dichloroethane	4.4		1600		<1
General Electric 2009	Aug-08	MW-15M	1,1-Dichloroethane	4.4		1600		<1
General Electric 2009	Aug-07	EPI-MW-3D	1,1-Dichloroethane	4.4		1600		<1
General Electric 2009	Feb-08	MW-4	1,1-Dichloroethane	4.3	J	1600		<1
General Electric 2009	Nov-07	MW-15M	1,1-Dichloroethane	4.3		1600		<1
General Electric 2009	Feb-09	MW-15M	1,1-Dichloroethane	4.3		1600		<1
General Electric 2009	Feb-08	EPI-MW-3D	1,1-Dichloroethane	4		1600		<1
General Electric 2009	May-08	MW-4	1,1-Dichloroethane	3.8		1600		<1
General Electric 2009	Feb-07	EPI-MW-3D	1,1-Dichloroethane	3.4		1600		<1
General Electric 2009	May-07	MW-15M	1,1-Dichloroethane	3.2		1600		<1
General Electric 2009	Aug-07	MW-15M	1,1-Dichloroethane	3.1		1600		<1
General Electric 2009	Feb-07	MW-15M	1,1-Dichloroethane	2		1600		<1
General Electric 2009	Feb-08	EPI-MW-3S	1,1-Dichloroethane	1.5		1600		<1
General Electric 2009	Aug-08	EPI-MW-3S	1,1-Dichloroethane	1.5		1600		<1
General Electric 2009	Aug-07	EPI-MW-3S	1,1-Dichloroethane	1.3		1600		<1
General Electric 2009	Nov-07	MW-11	1,1-Dichloroethane	1.2		1600		<1
General Electric 2009	Feb-08	MW-20M	1,1-Dichloroethane	1.2		1600		<1
General Electric 2009	Feb-07	MW-20M	1,1-Dichloroethane	1.1		1600		<1
General Electric 2009	Nov-07	MW-20M	1,1-Dichloroethane	1.1		1600		<1
General Electric 2009	Feb-07	EPI-MW-3S	1,1-Dichloroethane	1.1		1600		<1
General Electric 2009	Feb-09	MW-1	1,1-Dichloroethane	1.0	J	1600		<1
General Electric 2009	Feb-08	MW-8M	1,1-Dichloroethane	1		1600		<1
General Electric 2009	Feb-08	MW-8M	1,1-Dichloroethane	1		1600		<1
General Electric 2009	Feb-08	MW-15D	1,1-Dichloroethane	1.0		1600		<1
General Electric 2009	Feb-08	MW-17M	1,1-Dichloroethane	1.0		1600		<1

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Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	May-07	MW-20M	1,1-Dichloroethane	1.0		1600		<1
General Electric 2009	Feb-08	MW-8S	1,1-Dichloroethane	0.9		1600		<1
General Electric 2009	May-08	MW-8M	1,1-Dichloroethane	0.9		1600		<1
General Electric 2009	May-07	MW-17M	1,1-Dichloroethane	0.9		1600		<1
General Electric 2009	May-08	MW-8M	1,1-Dichloroethane	0.8		1600		<1
General Electric 2009	Feb-07	MW-17M	1,1-Dichloroethane	0.8		1600		<1
General Electric 2009	Aug-08	MW-17M	1,1-Dichloroethane	0.8		1600		<1
General Electric 2009	Nov-08	MW-17M	1,1-Dichloroethane	0.8	J	1600		<1
General Electric 2009	Aug-07	MW-20M	1,1-Dichloroethane	0.8		1600		<1
General Electric 2009	Aug-08	MW-20M	1,1-Dichloroethane	0.8		1600		<1
General Electric 2009	Feb-09	MW-20M	1,1-Dichloroethane	0.8		1600		<1
General Electric 2009	Feb-08	MW-7	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Nov-07	MW-8M	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Feb-08	MW-11	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Feb-08	MW-11	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Nov-08	MW-11	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Nov-08	MW-11	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Aug-08	MW-15D	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Dec-08	MW-15D	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Aug-07	MW-17M	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	May-08	MW-17M	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Nov-08	MW-20M	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Nov-07	MW-21S	1,1-Dichloroethane	0.7		1600		<1
General Electric 2009	Feb-08	MW-1	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	May-07	MW-8S	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	Aug-07	MW-8S	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	Aug-08	MW-8S	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	Nov-08	MW-8S	1,1-Dichloroethane	0.6	J	1600		<1
General Electric 2009	Aug-08	MW-8M	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	Nov-08	MW-8M	1,1-Dichloroethane	0.6	J	1600		<1
General Electric 2009	Feb-07	MW-11	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	Feb-07	MW-11	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	Aug-07	MW-11	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	Aug-08	MW-11	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	Feb-09	MW-15D	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	Feb-09	MW-17M	1,1-Dichloroethane	0.6		1600		<1
General Electric 2009	Aug-08	MW-7	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	May-08	MW-8S	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	May-07	MW-8M	1,1-Dichloroethane	0.5		1600		<1

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Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Aug-07	MW-8M	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	Aug-07	MW-8M	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	May-07	MW-11	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	May-08	MW-11	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	Apr-08	MW-15D	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	Nov-08	MW-18M	1,1-Dichloroethane	0.5	J	1600		<1
General Electric 2009	May-07	MW-19M	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	Nov-07	MW-19M	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	Feb-07	EPI-MW-4S	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	Aug-07	EPI-MW-4S	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	Feb-08	EPI-MW-4S	1,1-Dichloroethane	0.5		1600		<1
General Electric 2009	Aug-07	MW-7	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-09	MW-8S	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-07	MW-8M	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-07	MW-8M	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-09	MW-8M	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Aug-07	MW-11	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-09	MW-11	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	May-07	MW-15D	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-08	MW-18M	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-08	MW-18M	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-07	MW-19M	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	May-07	MW-19M	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-08	MW-19M	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Aug-08	MW-19M	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Nov-08	MW-19M	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Aug-08	EPI-MW-4S	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-09	EPI-MW-4S	1,1-Dichloroethane	0.4		1600		<1
General Electric 2009	Feb-09	MW-1	1,1-Dichloroethane	0.3	J	1600		<1
General Electric 2009	Feb-09	MW-3	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Feb-07	MW-6	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Aug-07	MW-6	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Feb-08	MW-6	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Aug-08	MW-6	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Feb-09	MW-7	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Feb-07	MW-8S	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Feb-09	MW-12M	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Feb-07	MW-18M	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	May-07	MW-18M	1,1-Dichloroethane	0.3		1600		<1

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Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	May-07	MW-18M	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Aug-07	MW-18M	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Feb-09	MW-19M	1,1-Dichloroethane	0.3		1600		<1
General Electric 2009	Aug-08	MW-1	1,1-Dichloroethane	0.2		1600		<1
General Electric 2009	Aug-08	MW-1	1,1-Dichloroethane	0.2		1600		<1
General Electric 2009	Feb-07	MW-7	1,1-Dichloroethane	0.2		1600		<1
General Electric 2009	Feb-09	EPI-MW-2D	1,1-Dichloroethene	28		400		<1
General Electric 2009	Feb-08	EPI-MW-2D	1,1-Dichloroethene	23		400		<1
General Electric 2009	Aug-08	EPI-MW-2D	1,1-Dichloroethene	22		400		<1
General Electric 2009	Feb-07	EPI-MW-2D	1,1-Dichloroethene	20		400		<1
General Electric 2009	Aug-07	EPI-MW-2D	1,1-Dichloroethene	10		400		<1
General Electric 2009	Nov-08	MW-14M	1,1-Dichloroethene	7.3		400		<1
General Electric 2009	Feb-09	MW-4	1,1-Dichloroethene	4.4		400		<1
General Electric 2009	Feb-09	MW-14M	1,1-Dichloroethene	4.4		400		<1
General Electric 2009	Feb-09	MW-4	1,1-Dichloroethene	4.2		400		<1
General Electric 2009	Aug-08	MW-14M	1,1-Dichloroethene	4.2		400		<1
General Electric 2009	Nov-08	MW-4	1,1-Dichloroethene	3.9	J	400		<1
General Electric 2009	Feb-07	MW-4	1,1-Dichloroethene	3.2		400		<1
General Electric 2009	May-07	MW-4	1,1-Dichloroethene	3.2		400		<1
General Electric 2009	Nov-07	MW-14M	1,1-Dichloroethene	3.2		400		<1
General Electric 2009	Aug-07	MW-4	1,1-Dichloroethene	3.1		400		<1
General Electric 2009	Feb-08	MW-4	1,1-Dichloroethene	2.9		400		<1
General Electric 2009	May-08	MW-14M	1,1-Dichloroethene	2.7		400		<1
General Electric 2009	Feb-08	MW-4	1,1-Dichloroethene	2.4		400		<1
General Electric 2009	Aug-08	MW-4	1,1-Dichloroethene	2.3		400		<1
General Electric 2009	May-08	MW-4	1,1-Dichloroethene	2.2		400		<1
General Electric 2009	Feb-07	EPI-MW-3D	1,1-Dichloroethene	2.2		400		<1
General Electric 2009	Aug-07	EPI-MW-3D	1,1-Dichloroethene	2.2		400		<1
General Electric 2009	Nov-07	MW-4	1,1-Dichloroethene	2.1		400		<1
General Electric 2009	Feb-08	MW-14M	1,1-Dichloroethene	2.1		400		<1
General Electric 2009	Feb-08	EPI-MW-3D	1,1-Dichloroethene	2		400		<1
General Electric 2009	Aug-08	EPI-MW-3D	1,1-Dichloroethene	2		400		<1
General Electric 2009	Feb-09	EPI-MW-3D	1,1-Dichloroethene	1.9		400		<1
General Electric 2009	Aug-07	MW-14M	1,1-Dichloroethene	1.5		400		<1
General Electric 2009	Feb-09	MW-3	1,1-Dichloroethene	1.4		400		<1
General Electric 2009	Feb-08	MW-8M	1,1-Dichloroethene	1.4		400		<1
General Electric 2009	May-07	MW-14M	1,1-Dichloroethene	1.4		400		<1
General Electric 2009	Feb-08	MW-8M	1,1-Dichloroethene	1.3		400		<1
General Electric 2009	Feb-09	MW-1	1,1-Dichloroethene	1.2	J	400		<1

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Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	May-08	MW-8M	1,1-Dichloroethene	1.2		400		<1
General Electric 2009	May-08	MW-8M	1,1-Dichloroethene	1.2		400		<1
General Electric 2009	Feb-07	MW-14M	1,1-Dichloroethene	1.1		400		<1
General Electric 2009	Nov-07	MW-8M	1,1-Dichloroethene	1		400		<1
General Electric 2009	Aug-08	MW-8M	1,1-Dichloroethene	1		400		<1
General Electric 2009	Nov-08	MW-8M	1,1-Dichloroethene	1	J	400		<1
General Electric 2009	Dec-08	MW-15M	1,1-Dichloroethene	0.9		400		<1
General Electric 2009	May-07	MW-8M	1,1-Dichloroethene	0.8		400		<1
General Electric 2009	Aug-07	MW-8M	1,1-Dichloroethene	0.8		400		<1
General Electric 2009	Aug-07	MW-8M	1,1-Dichloroethene	0.8		400		<1
General Electric 2009	Feb-07	MW-8M	1,1-Dichloroethene	0.7		400		<1
General Electric 2009	Feb-07	MW-8M	1,1-Dichloroethene	0.7		400		<1
General Electric 2009	Feb-08	MW-15M	1,1-Dichloroethene	0.7		400		<1
General Electric 2009	Apr-08	MW-15M	1,1-Dichloroethene	0.7		400		<1
General Electric 2009	Feb-09	MW-8M	1,1-Dichloroethene	0.6		400		<1
General Electric 2009	Nov-07	MW-11	1,1-Dichloroethene	0.6		400		<1
General Electric 2009	May-07	MW-15M	1,1-Dichloroethene	0.6		400		<1
General Electric 2009	Aug-08	MW-15M	1,1-Dichloroethene	0.6		400		<1
General Electric 2009	Feb-09	MW-15M	1,1-Dichloroethene	0.6		400		<1
General Electric 2009	Feb-08	MW-15D	1,1-Dichloroethene	0.6		400		<1
General Electric 2009	Aug-07	EPI-MW-3S	1,1-Dichloroethene	0.6		400		<1
General Electric 2009	Feb-08	EPI-MW-3S	1,1-Dichloroethene	0.6		400		<1
General Electric 2009	Aug-08	EPI-MW-3S	1,1-Dichloroethene	0.6		400		<1
General Electric 2009	Feb-09	MW-1	1,1-Dichloroethene	0.5	J	400		<1
General Electric 2009	Feb-08	MW-7	1,1-Dichloroethene	0.50		400		<1
General Electric 2009	Nov-08	MW-11	1,1-Dichloroethene	0.5	J	400		<1
General Electric 2009	Nov-08	MW-11	1,1-Dichloroethene	0.5	J	400		<1
General Electric 2009	Aug-07	MW-15M	1,1-Dichloroethene	0.5		400		<1
General Electric 2009	Feb-08	MW-11	1,1-Dichloroethene	0.4		400		<1
General Electric 2009	Feb-08	MW-11	1,1-Dichloroethene	0.4		400		<1
General Electric 2009	May-07	MW-15D	1,1-Dichloroethene	0.4		400		<1
General Electric 2009	Apr-08	MW-15D	1,1-Dichloroethene	0.4		400		<1
General Electric 2009	Dec-08	MW-15D	1,1-Dichloroethene	0.4		400		<1
General Electric 2009	Feb-09	MW-15D	1,1-Dichloroethene	0.4		400		<1
General Electric 2009	Feb-09	MW-5	1,1-Dichloroethene	0.3		400		<1
General Electric 2009	Feb-08	MW-8S	1,1-Dichloroethene	0.3		400		<1
General Electric 2009	Feb-07	MW-11	1,1-Dichloroethene	0.3		400		<1
General Electric 2009	Feb-07	MW-11	1,1-Dichloroethene	0.3		400		<1
General Electric 2009	May-07	MW-11	1,1-Dichloroethene	0.3		400		<1

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Aug-07	MW-11	1,1-Dichloroethene	0.3		400		<1
General Electric 2009	May-08	MW-11	1,1-Dichloroethene	0.3		400		<1
General Electric 2009	Aug-08	MW-11	1,1-Dichloroethene	0.3		400		<1
General Electric 2009	Aug-08	MW-15D	1,1-Dichloroethene	0.3		400		<1
General Electric 2009	Aug-07	MW-7	1,1-Dichloroethene	0.20		400		<1
General Electric 2009	Aug-08	MW-7	1,1-Dichloroethene	0.20		400		<1
General Electric 2009	Nov-08	MW-8S	1,1-Dichloroethene	0.2	J	400		<1
General Electric 2009	Aug-07	MW-11	1,1-Dichloroethene	0.2		400		<1
General Electric 2009	Feb-09	MW-11	1,1-Dichloroethene	0.2		400		<1
General Electric 2009	Feb-08	EPI-MW-4S	1,1-Dichloroethene	0.2		400		<1
General Electric 2009	Apr-08	MW-17D	1,4-Dioxane	16		4		4.0
General Electric 2009	Apr-08	MW-17D	1,4-Dioxane	15		4		3.8
General Electric 2009	Aug-08	MW-16D	1,4-Dioxane	3.5		4		<1
General Electric 2009	Apr-08	MW-16D	1,4-Dioxane	3.0		4		<1
General Electric 2009	Aug-08	MW-14D	1,4-Dioxane	2.1		4		<1
General Electric 2009	Aug-08	EPI-MW-4S	Arsenic, dissolved	26		0.058	370	448
General Electric 2009	Apr-08	EPI-MW-4S	Arsenic, dissolved	23		0.058	370	397
General Electric 2009	May-08	MW-6	Arsenic, dissolved	8		0.058	370	138
General Electric 2009	Aug-08	MW-6	Arsenic, dissolved	7		0.058	370	121
General Electric 2009	May-08	MW-13	Arsenic, dissolved	6		0.058	370	103
General Electric 2009	Aug-08	MW-13	Arsenic, dissolved	6		0.058	370	103
General Electric 2009	Aug-08	EPI-MW-3S	Arsenic, dissolved	4		0.058	370	69
General Electric 2009	Apr-08	MW-3	Arsenic, dissolved	3		0.058	370	52
General Electric 2009	Aug-08	MW-3	Arsenic, dissolved	3		0.058	370	52
General Electric 2009	May-08	MW-2	Arsenic, dissolved	2		0.058	370	34
General Electric 2009	Aug-08	MW-2	Arsenic, dissolved	2		0.058	370	34
General Electric 2009	Aug-08	MW-7	Arsenic, dissolved	2		0.058	370	34
General Electric 2009	May-08	MW-8S	Arsenic, dissolved	2		0.058	370	34
General Electric 2009	May-08	MW-11	Arsenic, dissolved	2		0.058	370	34
General Electric 2009	Apr-08	MW-21S	Arsenic, dissolved	2		0.058	370	34
General Electric 2009	Apr-08	EPI-MW-3S	Arsenic, dissolved	2		0.058	370	34
General Electric 2009	Apr-08	MW-1	Arsenic, dissolved	1		0.058	370	17
General Electric 2009	Aug-08	MW-1	Arsenic, dissolved	1		0.058	370	17
General Electric 2009	May-08	MW-5	Arsenic, dissolved	1		0.058	370	17
General Electric 2009	May-08	MW-7	Arsenic, dissolved	1		0.058	370	17
General Electric 2009	Aug-08	MW-8S	Arsenic, dissolved	1		0.058	370	17
General Electric 2009	Apr-08	MW-9	Arsenic, dissolved	1		0.058	370	17
General Electric 2009	May-08	MW-10	Arsenic, dissolved	1		0.058	370	17
General Electric 2009	Aug-08	MW-11	Arsenic, dissolved	1		0.058	370	17

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	May-08	MW-12	Arsenic, dissolved	1		0.058	370	17
General Electric 2009	May-08	MW-20M	Arsenic, dissolved	1		0.058	370	17
General Electric 2009	Aug-08	MW-21S	Arsenic, dissolved	1		0.058	370	17
General Electric 2009	Aug-08	MW-8S	Arsenic, total	35		0.058	370	603
General Electric 2009	Aug-08	EPI-MW-4S	Arsenic, total	28		0.058	370	483
General Electric 2009	Apr-08	EPI-MW-4S	Arsenic, total	24		0.058	370	414
General Electric 2009	May-08	MW-8S	Arsenic, total	16		0.058	370	276
General Electric 2009	May-08	MW-6	Arsenic, total	9		0.058	370	155
General Electric 2009	Aug-08	MW-6	Arsenic, total	8		0.058	370	138
General Electric 2009	May-08	MW-13	Arsenic, total	6		0.058	370	103
General Electric 2009	Aug-08	MW-13	Arsenic, total	6		0.058	370	103
General Electric 2009	Aug-08	MW-3	Arsenic, total	4		0.058	370	69
General Electric 2009	Aug-08	EPI-MW-3S	Arsenic, total	4		0.058	370	69
General Electric 2009	Apr-08	MW-3	Arsenic, total	3		0.058	370	52
General Electric 2009	Aug-08	MW-7	Arsenic, total	2		0.058	370	34
General Electric 2009	Apr-08	MW-9	Arsenic, total	2		0.058	370	34
General Electric 2009	May-08	MW-11	Arsenic, total	2		0.058	370	34
General Electric 2009	Apr-08	MW-21S	Arsenic, total	2		0.058	370	34
General Electric 2009	Aug-08	MW-21S	Arsenic, total	2		0.058	370	34
General Electric 2009	Apr-08	EPI-MW-3S	Arsenic, total	2		0.058	370	34
General Electric 2009	Apr-08	MW-1	Arsenic, total	1		0.058	370	17
General Electric 2009	Aug-08	MW-1	Arsenic, total	1		0.058	370	17
General Electric 2009	May-08	MW-2	Arsenic, total	1		0.058	370	17
General Electric 2009	Aug-08	MW-2	Arsenic, total	1		0.058	370	17
General Electric 2009	May-08	MW-4	Arsenic, total	1		0.058	370	17
General Electric 2009	Aug-08	MW-4	Arsenic, total	1		0.058	370	17
General Electric 2009	May-08	MW-5	Arsenic, total	1		0.058	370	17
General Electric 2009	Aug-08	MW-5	Arsenic, total	1		0.058	370	17
General Electric 2009	May-08	MW-7	Arsenic, total	1		0.058	370	17
General Electric 2009	Aug-08	MW-10	Arsenic, total	1		0.058	370	17
General Electric 2009	Aug-08	MW-11	Arsenic, total	1		0.058	370	17
General Electric 2009	May-08	MW-12	Arsenic, total	1		0.058	370	17
General Electric 2009	Aug-08	MW-12	Arsenic, total	1		0.058	370	17
General Electric 2009	May-08	MW-14D	Arsenic, total	1		0.058	370	17
General Electric 2009	May-08	MW-20M	Arsenic, total	1		0.058	370	17
General Electric 2009	Aug-08	EPI-MW-4D	Arsenic, total	1		0.058	370	17
General Electric 2009	Feb-07	MW-5	Chloroform	3.1		7.2		<1
General Electric 2009	Aug-07	MW-1	Chloroform	1.5		7.2		<1
General Electric 2009	Feb-08	MW-1	Chloroform	1.2		7.2		<1

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Aug-08	MW-1	Chloroform	0.9		7.2		<1
General Electric 2009	Aug-08	MW-1	Chloroform	0.9		7.2		<1
General Electric 2009	Feb-09	MW-3	Chloroform	0.5		7.2		<1
General Electric 2009	Feb-09	MW-1	Chloroform	0.4		7.2		<1
General Electric 2009	Feb-08	MW-5	Chloroform	0.4		7.2		<1
General Electric 2009	Feb-07	MW-10	Chloroform	0.4		7.2		<1
General Electric 2009	Aug-07	MW-10	Chloroform	0.3		7.2		<1
General Electric 2009	Feb-08	MW-10	Chloroform	0.3		7.2		<1
General Electric 2009	Feb-08	MW-4	Chloroform	0.2		7.2		<1
General Electric 2009	Aug-07	MW-5	Chloroform	0.2		7.2		<1
General Electric 2009	Aug-08	MW-10	Chloroform	0.2		7.2		<1
General Electric 2009	Nov-07	MW-17M	Chloroform	0.2		7.2		<1
General Electric 2009	Feb-08	MW-15D	cis-1,2-Dichloroethene	99		80		1.2
General Electric 2009	Feb-08	MW-14M	cis-1,2-Dichloroethene	95		80		1.2
General Electric 2009	Feb-08	EPI-MW-2D	cis-1,2-Dichloroethene	91		80		1.1
General Electric 2009	Aug-08	MW-14M	cis-1,2-Dichloroethene	85		80		1.1
General Electric 2009	Feb-09	EPI-MW-2D	cis-1,2-Dichloroethene	80		80		1.0
General Electric 2009	Feb-09	MW-14M	cis-1,2-Dichloroethene	79		80		<1
General Electric 2009	Feb-07	EPI-MW-2D	cis-1,2-Dichloroethene	78		80		<1
General Electric 2009	Aug-08	EPI-MW-2D	cis-1,2-Dichloroethene	77		80		<1
General Electric 2009	Nov-07	MW-14M	cis-1,2-Dichloroethene	70		80		<1
General Electric 2009	May-08	MW-14M	cis-1,2-Dichloroethene	70		80		<1
General Electric 2009	May-07	MW-15D	cis-1,2-Dichloroethene	63		80		<1
General Electric 2009	Feb-08	MW-15M	cis-1,2-Dichloroethene	62		80		<1
General Electric 2009	Aug-08	MW-15D	cis-1,2-Dichloroethene	58		80		<1
General Electric 2009	Apr-08	MW-15D	cis-1,2-Dichloroethene	56		80		<1
General Electric 2009	Dec-08	MW-15D	cis-1,2-Dichloroethene	56		80		<1
General Electric 2009	May-07	MW-14M	cis-1,2-Dichloroethene	53		80		<1
General Electric 2009	Aug-07	MW-14M	cis-1,2-Dichloroethene	53		80		<1
General Electric 2009	Feb-09	MW-15D	cis-1,2-Dichloroethene	52		80		<1
General Electric 2009	Feb-07	MW-15D	cis-1,2-Dichloroethene	47		80		<1
General Electric 2009	Aug-07	MW-15D	cis-1,2-Dichloroethene	47		80		<1
General Electric 2009	Nov-07	MW-15D	cis-1,2-Dichloroethene	47		80		<1
General Electric 2009	Apr-08	MW-15M	cis-1,2-Dichloroethene	45		80		<1
General Electric 2009	Dec-08	MW-15M	cis-1,2-Dichloroethene	44		80		<1
General Electric 2009	Aug-08	MW-15M	cis-1,2-Dichloroethene	42		80		<1
General Electric 2009	Feb-09	MW-15M	cis-1,2-Dichloroethene	40		80		<1
General Electric 2009	Feb-07	MW-14M	cis-1,2-Dichloroethene	38		80		<1
General Electric 2009	Aug-07	EPI-MW-2D	cis-1,2-Dichloroethene	38		80		<1

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Nov-07	MW-15M	cis-1,2-Dichloroethene	36		80		<1
General Electric 2009	May-07	MW-15M	cis-1,2-Dichloroethene	35	J	80		<1
General Electric 2009	Feb-08	EPI-MW-3S	cis-1,2-Dichloroethene	34		80		<1
General Electric 2009	Aug-08	EPI-MW-3S	cis-1,2-Dichloroethene	31		80		<1
General Electric 2009	Aug-07	MW-15M	cis-1,2-Dichloroethene	30		80		<1
General Electric 2009	Feb-07	MW-15M	cis-1,2-Dichloroethene	28		80		<1
General Electric 2009	Feb-09	MW-1	cis-1,2-Dichloroethene	26	J	80		<1
General Electric 2009	Feb-07	EPI-MW-3S	cis-1,2-Dichloroethene	24		80		<1
General Electric 2009	Aug-07	EPI-MW-3S	cis-1,2-Dichloroethene	20		80		<1
General Electric 2009	Nov-07	MW-11	cis-1,2-Dichloroethene	15		80		<1
General Electric 2009	Nov-08	MW-11	cis-1,2-Dichloroethene	14		80		<1
General Electric 2009	Nov-08	MW-11	cis-1,2-Dichloroethene	14		80		<1
General Electric 2009	Feb-08	MW-11	cis-1,2-Dichloroethene	13		80		<1
General Electric 2009	Feb-08	MW-11	cis-1,2-Dichloroethene	12		80		<1
General Electric 2009	Feb-07	MW-11	cis-1,2-Dichloroethene	11		80		<1
General Electric 2009	Feb-07	MW-11	cis-1,2-Dichloroethene	11		80		<1
General Electric 2009	Aug-08	MW-11	cis-1,2-Dichloroethene	11		80		<1
General Electric 2009	Aug-07	MW-11	cis-1,2-Dichloroethene	8.2		80		<1
General Electric 2009	May-07	MW-11	cis-1,2-Dichloroethene	7.8		80		<1
General Electric 2009	Feb-09	MW-11	cis-1,2-Dichloroethene	7.8		80		<1
General Electric 2009	Feb-08	MW-8S	cis-1,2-Dichloroethene	7.4		80		<1
General Electric 2009	Aug-07	MW-11	cis-1,2-Dichloroethene	7.1		80		<1
General Electric 2009	Nov-08	MW-14M	cis-1,2-Dichloroethene	7		80		<1
General Electric 2009	May-08	MW-11	cis-1,2-Dichloroethene	6.9		80		<1
General Electric 2009	Feb-09	EPI-MW-3D	cis-1,2-Dichloroethene	6.7		80		<1
General Electric 2009	Aug-08	EPI-MW-3D	cis-1,2-Dichloroethene	6.4		80		<1
General Electric 2009	Feb-07	EPI-MW-3D	cis-1,2-Dichloroethene	5.3		80		<1
General Electric 2009	Feb-08	EPI-MW-3D	cis-1,2-Dichloroethene	5.3		80		<1
General Electric 2009	Feb-07	MW-21S	cis-1,2-Dichloroethene	5.2		80		<1
General Electric 2009	Feb-08	MW-18M	cis-1,2-Dichloroethene	5.0		80		<1
General Electric 2009	Aug-07	EPI-MW-3D	cis-1,2-Dichloroethene	5		80		<1
General Electric 2009	Aug-08	MW-18M	cis-1,2-Dichloroethene	4.9		80		<1
General Electric 2009	Nov-08	MW-18M	cis-1,2-Dichloroethene	4.7	J	80		<1
General Electric 2009	Nov-08	MW-8S	cis-1,2-Dichloroethene	4.6	J	80		<1
General Electric 2009	Feb-07	MW-18M	cis-1,2-Dichloroethene	4.6		80		<1
General Electric 2009	May-07	MW-8S	cis-1,2-Dichloroethene	4.4		80		<1
General Electric 2009	Feb-09	MW-12M	cis-1,2-Dichloroethene	4.4		80		<1
General Electric 2009	Aug-07	MW-8S	cis-1,2-Dichloroethene	4.3		80		<1
General Electric 2009	May-07	MW-18M	cis-1,2-Dichloroethene	4.2		80		<1

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

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General Electric 2009	May-08	MW-8S	cis-1,2-Dichloroethene	4.1		80		<1
General Electric 2009	May-07	MW-18M	cis-1,2-Dichloroethene	4.1		80		<1
General Electric 2009	Aug-08	MW-8S	cis-1,2-Dichloroethene	4		80		<1
General Electric 2009	Aug-07	MW-18M	cis-1,2-Dichloroethene	3.8		80		<1
General Electric 2009	Aug-08	EPI-MW-4S	cis-1,2-Dichloroethene	3.6		80		<1
General Electric 2009	Nov-07	MW-17M	cis-1,2-Dichloroethene	3.5		80		<1
General Electric 2009	Feb-08	MW-7	cis-1,2-Dichloroethene	3.4		80		<1
General Electric 2009	Aug-08	MW-7	cis-1,2-Dichloroethene	3.3		80		<1
General Electric 2009	Feb-09	EPI-MW-4S	cis-1,2-Dichloroethene	2.8		80		<1
General Electric 2009	Feb-08	EPI-MW-4S	cis-1,2-Dichloroethene	2.6		80		<1
General Electric 2009	Feb-08	MW-21S	cis-1,2-Dichloroethene	2.5		80		<1
General Electric 2009	Feb-09	MW-8S	cis-1,2-Dichloroethene	2.4		80		<1
General Electric 2009	Aug-07	MW-21S	cis-1,2-Dichloroethene	2.4		80		<1
General Electric 2009	Aug-08	MW-21S	cis-1,2-Dichloroethene	2.1		80		<1
General Electric 2009	Aug-07	MW-7	cis-1,2-Dichloroethene	2.0		80		<1
General Electric 2009	Apr-08	MW-21S	cis-1,2-Dichloroethene	1.9		80		<1
General Electric 2009	Feb-07	EPI-MW-4S	cis-1,2-Dichloroethene	1.9		80		<1
General Electric 2009	Feb-09	MW-7	cis-1,2-Dichloroethene	1.8		80		<1
General Electric 2009	Feb-07	MW-18D	cis-1,2-Dichloroethene	1.6		80		<1
General Electric 2009	May-07	MW-18D	cis-1,2-Dichloroethene	1.6		80		<1
General Electric 2009	Nov-08	MW-21S	cis-1,2-Dichloroethene	1.6	J	80		<1
General Electric 2009	Feb-08	MW-18D	cis-1,2-Dichloroethene	1.5		80		<1
General Electric 2009	Aug-08	MW-18D	cis-1,2-Dichloroethene	1.5		80		<1
General Electric 2009	Aug-07	EPI-MW-4S	cis-1,2-Dichloroethene	1.5		80		<1
General Electric 2009	Feb-07	MW-8S	cis-1,2-Dichloroethene	1.4		80		<1
General Electric 2009	Nov-07	MW-18M	cis-1,2-Dichloroethene	1.4		80		<1
General Electric 2009	Feb-07	MW-18D	cis-1,2-Dichloroethene	1.4		80		<1
General Electric 2009	Nov-07	MW-18D	cis-1,2-Dichloroethene	1.4		80		<1
General Electric 2009	Feb-09	EPI-MW-3S	cis-1,2-Dichloroethene	1.4		80		<1
General Electric 2009	Feb-07	MW-14D	cis-1,2-Dichloroethene	1.1		80		<1
General Electric 2009	Feb-08	MW-14D	cis-1,2-Dichloroethene	1.1		80		<1
General Electric 2009	Aug-07	MW-18D	cis-1,2-Dichloroethene	1.1		80		<1
General Electric 2009	Nov-07	MW-14D	cis-1,2-Dichloroethene	1		80		<1
General Electric 2009	May-08	MW-14D	cis-1,2-Dichloroethene	1		80		<1
General Electric 2009	May-08	MW-14D	cis-1,2-Dichloroethene	1		80		<1
General Electric 2009	Aug-08	MW-14D	cis-1,2-Dichloroethene	1		80		<1
General Electric 2009	Aug-07	MW-18D	cis-1,2-Dichloroethene	1		80		<1
General Electric 2009	Feb-09	MW-18D	cis-1,2-Dichloroethene	1		80		<1
General Electric 2009	May-07	MW-14D	cis-1,2-Dichloroethene	0.9		80		<1

Table C-15
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Former GE Aviation Property

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General Electric 2009	Nov-07	MW-14D	cis-1,2-Dichloroethene	0.9		80		<1
General Electric 2009	Nov-08	MW-14D	cis-1,2-Dichloroethene	0.9	J	80		<1
General Electric 2009	Feb-07	MW-7	cis-1,2-Dichloroethene	0.8		80		<1
General Electric 2009	Aug-07	MW-14D	cis-1,2-Dichloroethene	0.8		80		<1
General Electric 2009	Aug-08	MW-14D	cis-1,2-Dichloroethene	0.8		80		<1
General Electric 2009	Nov-08	MW-14D	cis-1,2-Dichloroethene	0.8	J	80		<1
General Electric 2009	Feb-09	MW-14D	cis-1,2-Dichloroethene	0.8		80		<1
General Electric 2009	Feb-09	MW-14D	cis-1,2-Dichloroethene	0.8		80		<1
General Electric 2009	May-07	MW-20M	cis-1,2-Dichloroethene	0.8		80		<1
General Electric 2009	Feb-09	EPI-MW-4D	cis-1,2-Dichloroethene	0.8		80		<1
General Electric 2009	Feb-07	MW-20M	cis-1,2-Dichloroethene	0.7		80		<1
General Electric 2009	Nov-07	MW-20M	cis-1,2-Dichloroethene	0.7		80		<1
General Electric 2009	May-07	MW-21S	cis-1,2-Dichloroethene	0.7		80		<1
General Electric 2009	Feb-07	EPI-MW-4D	cis-1,2-Dichloroethene	0.7		80		<1
General Electric 2009	Feb-07	MW-17M	cis-1,2-Dichloroethene	0.6		80		<1
General Electric 2009	Feb-08	MW-20M	cis-1,2-Dichloroethene	0.6		80		<1
General Electric 2009	Feb-09	MW-20M	cis-1,2-Dichloroethene	0.6		80		<1
General Electric 2009	Aug-08	EPI-MW-4D	cis-1,2-Dichloroethene	0.6		80		<1
General Electric 2009	May-07	MW-17M	cis-1,2-Dichloroethene	0.5		80		<1
General Electric 2009	Feb-08	MW-17M	cis-1,2-Dichloroethene	0.5		80		<1
General Electric 2009	Aug-07	MW-20M	cis-1,2-Dichloroethene	0.5		80		<1
General Electric 2009	Aug-08	MW-20M	cis-1,2-Dichloroethene	0.5		80		<1
General Electric 2009	Feb-08	MW-1	cis-1,2-Dichloroethene	0.4		80		<1
General Electric 2009	Feb-08	MW-4	cis-1,2-Dichloroethene	0.4	J	80		<1
General Electric 2009	May-08	MW-17M	cis-1,2-Dichloroethene	0.4		80		<1
General Electric 2009	Aug-08	MW-17M	cis-1,2-Dichloroethene	0.4		80		<1
General Electric 2009	Nov-07	MW-21S	cis-1,2-Dichloroethene	0.4		80		<1
General Electric 2009	Feb-09	MW-3	cis-1,2-Dichloroethene	0.3		80		<1
General Electric 2009	Aug-07	MW-17M	cis-1,2-Dichloroethene	0.3		80		<1
General Electric 2009	Nov-08	MW-17M	cis-1,2-Dichloroethene	0.3	J	80		<1
General Electric 2009	Feb-07	MW-19M	cis-1,2-Dichloroethene	0.3		80		<1
General Electric 2009	Nov-07	MW-19M	cis-1,2-Dichloroethene	0.3		80		<1
General Electric 2009	Aug-07	EPI-MW-4D	cis-1,2-Dichloroethene	0.3		80		<1
General Electric 2009	Feb-08	EPI-MW-4D	cis-1,2-Dichloroethene	0.3		80		<1
General Electric 2009	Feb-09	MW-1	cis-1,2-Dichloroethene	0.2	J	80		<1
General Electric 2009	May-08	MW-4	cis-1,2-Dichloroethene	0.2		80		<1
General Electric 2009	Aug-08	MW-4	cis-1,2-Dichloroethene	0.2		80		<1
General Electric 2009	Feb-09	MW-4	cis-1,2-Dichloroethene	0.2		80		<1
General Electric 2009	Feb-09	MW-4	cis-1,2-Dichloroethene	0.2		80		<1

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Nov-08	MW-13	cis-1,2-Dichloroethene	0.2	J	80		<1
General Electric 2009	Nov-08	MW-13	cis-1,2-Dichloroethene	0.2	J	80		<1
General Electric 2009	Feb-09	MW-17M	cis-1,2-Dichloroethene	0.2		80		<1
General Electric 2009	May-07	MW-19M	cis-1,2-Dichloroethene	0.2		80		<1
General Electric 2009	Aug-07	MW-19M	cis-1,2-Dichloroethene	0.2		80		<1
General Electric 2009	Feb-08	MW-19M	cis-1,2-Dichloroethene	0.2		80		<1
General Electric 2009	Nov-08	MW-20M	cis-1,2-Dichloroethene	0.2		80		<1
General Electric 2009	Feb-07	MW-1	Tetrachloroethene	4.9		0.081		60
General Electric 2009	Feb-08	MW-1	Tetrachloroethene	2.6		0.081		32
General Electric 2009	Aug-07	MW-1	Tetrachloroethene	2.5		0.081		31
General Electric 2009	Feb-08	MW-4	Tetrachloroethene	2.5		0.081		31
General Electric 2009	Feb-08	MW-4	Tetrachloroethene	2.4		0.081		30
General Electric 2009	Feb-09	MW-1	Tetrachloroethene	1.9		0.081		23
General Electric 2009	May-08	MW-4	Tetrachloroethene	1.9	J	0.081		23
General Electric 2009	Aug-08	MW-1	Tetrachloroethene	1.8		0.081		22
General Electric 2009	Feb-09	MW-1	Tetrachloroethene	1.8		0.081		22
General Electric 2009	Aug-08	MW-1	Tetrachloroethene	1.7		0.081		21
General Electric 2009	Nov-07	MW-4	Tetrachloroethene	1.7		0.081		21
General Electric 2009	Feb-09	MW-4	Tetrachloroethene	1.5		0.081		19
General Electric 2009	Feb-07	MW-4	Tetrachloroethene	1.4		0.081		17
General Electric 2009	Aug-07	MW-4	Tetrachloroethene	1.3	J	0.081		16
General Electric 2009	Aug-08	MW-4	Tetrachloroethene	1.3		0.081		16
General Electric 2009	Feb-09	MW-4	Tetrachloroethene	1.3		0.081		16
General Electric 2009	May-07	MW-4	Tetrachloroethene	1.2		0.081		15
General Electric 2009	Nov-08	MW-4	Tetrachloroethene	0.96		0.081		12
General Electric 2009	Feb-07	MW-5	Tetrachloroethene	0.56		0.081		6.9
General Electric 2009	Aug-07	MW-5	Tetrachloroethene	0.3		0.081		3.7
General Electric 2009	Feb-09	MW-5	Tetrachloroethene	0.28		0.081		3.5
General Electric 2009	Feb-08	MW-6	Tetrachloroethene	0.28		0.081		3.5
General Electric 2009	Feb-07	MW-2	Tetrachloroethene	0.21		0.081		2.6
General Electric 2009	Feb-08	MW-2	Tetrachloroethene	0.16		0.081		2.0
General Electric 2009	Aug-08	MW-5	Tetrachloroethene	0.15		0.081		1.9
General Electric 2009	Feb-09	MW-2	Tetrachloroethene	0.14		0.081		1.7
General Electric 2009	Feb-07	MW-8S	Tetrachloroethene	0.084		0.081		1.0
General Electric 2009	May-07	MW-8S	Tetrachloroethene	0.084		0.081		1.0
General Electric 2009	Feb-09	MW-8S	Tetrachloroethene	0.063		0.081		<1
General Electric 2009	May-08	MW-14D	Tetrachloroethene	0.046	J	0.081		<1
General Electric 2009	Feb-07	MW-6	Tetrachloroethene	0.032		0.081		<1
General Electric 2009	May-07	MW-18M	Tetrachloroethene	0.032		0.081		<1

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	May-07	MW-20M	Tetrachloroethene	0.032		0.081		<1
General Electric 2009	May-08	MW-14D	Tetrachloroethene	0.031	J	0.081		<1
General Electric 2009	May-07	MW-13	Tetrachloroethene	0.028		0.081		<1
General Electric 2009	May-07	MW-18M	Tetrachloroethene	0.027		0.081		<1
General Electric 2009	May-07	MW-19M	Tetrachloroethene	0.025		0.081		<1
General Electric 2009	Feb-07	MW-7	Tetrachloroethene	0.024		0.081		<1
General Electric 2009	Feb-08	MW-8S	Tetrachloroethene	0.024		0.081		<1
General Electric 2009	May-07	MW-16D	Tetrachloroethene	0.023		0.081		<1
General Electric 2009	Aug-08	MW-6	Tetrachloroethene	0.022		0.081		<1
General Electric 2009	May-07	MW-15D	Tetrachloroethene	0.022		0.081		<1
General Electric 2009	May-07	MW-14D	Tetrachloroethene	0.02		0.081		<1
General Electric 2009	May-07	MW-15M	Trichloroethene	100	J	0.49		204
General Electric 2009	Apr-08	MW-15M	Trichloroethene	97		0.49		198
General Electric 2009	Dec-08	MW-15M	Trichloroethene	97		0.49		198
General Electric 2009	Feb-09	MW-15M	Trichloroethene	94		0.49		192
General Electric 2009	Aug-07	MW-15M	Trichloroethene	90		0.49		184
General Electric 2009	Aug-08	MW-15M	Trichloroethene	90		0.49		184
General Electric 2009	Feb-08	MW-15M	Trichloroethene	85	J	0.49		173
General Electric 2009	Nov-08	MW-14M	Trichloroethene	84		0.49		171
General Electric 2009	Feb-07	MW-1	Trichloroethene	79		0.49		161
General Electric 2009	Feb-09	MW-14M	Trichloroethene	79		0.49		161
General Electric 2009	Feb-07	MW-15M	Trichloroethene	79		0.49		161
General Electric 2009	Nov-07	MW-15M	Trichloroethene	79		0.49		161
General Electric 2009	May-07	MW-14M	Trichloroethene	70		0.49		143
General Electric 2009	Feb-08	MW-14M	Trichloroethene	70	J	0.49		143
General Electric 2009	May-08	MW-14M	Trichloroethene	69		0.49		141
General Electric 2009	Aug-08	MW-14M	Trichloroethene	69		0.49		141
General Electric 2009	Nov-07	MW-14M	Trichloroethene	62		0.49		127
General Electric 2009	Aug-07	MW-14M	Trichloroethene	61		0.49		124
General Electric 2009	Feb-07	MW-14M	Trichloroethene	53		0.49		108
General Electric 2009	Feb-08	MW-4	Trichloroethene	51		0.49		104
General Electric 2009	Feb-08	MW-1	Trichloroethene	50	J	0.49		102
General Electric 2009	Feb-08	MW-4	Trichloroethene	47	J	0.49		96
General Electric 2009	Aug-07	MW-1	Trichloroethene	40		0.49		82
General Electric 2009	Feb-07	EPI-MW-2D	Trichloroethene	40		0.49		82
General Electric 2009	Feb-09	MW-1	Trichloroethene	32	J	0.49		65
General Electric 2009	May-08	MW-4	Trichloroethene	32		0.49		65
General Electric 2009	Nov-07	MW-4	Trichloroethene	29		0.49		59
General Electric 2009	Aug-08	EPI-MW-2D	Trichloroethene	28		0.49		57

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Feb-09	EPI-MW-2D	Trichloroethene	28		0.49		57
General Electric 2009	Feb-08	EPI-MW-2D	Trichloroethene	27	J	0.49		55
General Electric 2009	Aug-08	MW-1	Trichloroethene	24		0.49		49
General Electric 2009	May-07	MW-8S	Trichloroethene	24		0.49		49
General Electric 2009	Feb-08	MW-15D	Trichloroethene	24	J	0.49		49
General Electric 2009	Aug-08	MW-1	Trichloroethene	23		0.49		47
General Electric 2009	Feb-09	MW-4	Trichloroethene	23		0.49		47
General Electric 2009	Feb-09	MW-4	Trichloroethene	22		0.49		45
General Electric 2009	Aug-07	EPI-MW-2D	Trichloroethene	22		0.49		45
General Electric 2009	Feb-07	MW-4	Trichloroethene	20		0.49		41
General Electric 2009	Aug-08	MW-4	Trichloroethene	20		0.49		41
General Electric 2009	Feb-07	MW-8S	Trichloroethene	20		0.49		41
General Electric 2009	Feb-09	MW-15D	Trichloroethene	19		0.49		39
General Electric 2009	Feb-09	MW-8S	Trichloroethene	18		0.49		37
General Electric 2009	May-07	MW-4	Trichloroethene	17		0.49		35
General Electric 2009	Aug-07	MW-4	Trichloroethene	17		0.49		35
General Electric 2009	Apr-08	MW-15D	Trichloroethene	16	J	0.49		33
General Electric 2009	Nov-08	MW-4	Trichloroethene	15	J	0.49		31
General Electric 2009	May-07	MW-15D	Trichloroethene	15		0.49		31
General Electric 2009	Feb-07	MW-15D	Trichloroethene	14		0.49		29
General Electric 2009	Aug-07	MW-15D	Trichloroethene	14		0.49		29
General Electric 2009	Nov-07	MW-11	Trichloroethene	13		0.49		27
General Electric 2009	Nov-08	MW-11	Trichloroethene	12		0.49		24
General Electric 2009	Dec-08	MW-15D	Trichloroethene	12		0.49		24
General Electric 2009	Feb-08	MW-8S	Trichloroethene	11		0.49		22
General Electric 2009	Feb-08	MW-11	Trichloroethene	11		0.49		22
General Electric 2009	Nov-08	MW-11	Trichloroethene	11		0.49		22
General Electric 2009	Aug-08	MW-15D	Trichloroethene	11		0.49		22
General Electric 2009	Aug-07	MW-11	Trichloroethene	10		0.49		20
General Electric 2009	Aug-07	MW-11	Trichloroethene	10		0.49		20
General Electric 2009	Feb-08	EPI-MW-4S	Trichloroethene	10		0.49		20
General Electric 2009	Feb-08	MW-11	Trichloroethene	9.7	J	0.49		20
General Electric 2009	Feb-07	MW-11	Trichloroethene	9.1		0.49		19
General Electric 2009	Aug-08	MW-11	Trichloroethene	9.1		0.49		19
General Electric 2009	Feb-07	MW-11	Trichloroethene	8.9		0.49		18
General Electric 2009	Aug-07	EPI-MW-3S	Trichloroethene	8.9		0.49		18
General Electric 2009	May-07	MW-11	Trichloroethene	8.8		0.49		18
General Electric 2009	Feb-09	EPI-MW-4S	Trichloroethene	8.7		0.49		18
General Electric 2009	Feb-07	EPI-MW-4S	Trichloroethene	8.4		0.49		17

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Feb-09	MW-11	Trichloroethene	8.2		0.49		17
General Electric 2009	Aug-07	MW-8S	Trichloroethene	7.9		0.49		16
General Electric 2009	Feb-08	EPI-MW-3S	Trichloroethene	7.9	J	0.49		16
General Electric 2009	Aug-07	EPI-MW-4S	Trichloroethene	7.9		0.49		16
General Electric 2009	May-08	MW-11	Trichloroethene	7.8		0.49		16
General Electric 2009	Feb-07	EPI-MW-3S	Trichloroethene	7.8		0.49		16
General Electric 2009	Aug-08	EPI-MW-4S	Trichloroethene	7.5		0.49		15
General Electric 2009	Feb-09	MW-1	Trichloroethene	7.3	J	0.49		15
General Electric 2009	Aug-08	EPI-MW-3S	Trichloroethene	7.3		0.49		15
General Electric 2009	Feb-07	MW-21S	Trichloroethene	6.6		0.49		13
General Electric 2009	Nov-07	MW-17M	Trichloroethene	6		0.49		12
General Electric 2009	Aug-07	MW-21S	Trichloroethene	6		0.49		12
General Electric 2009	May-08	MW-8S	Trichloroethene	5.4	J	0.49		11
General Electric 2009	Aug-08	MW-7	Trichloroethene	5.3		0.49		11
General Electric 2009	Aug-08	MW-8S	Trichloroethene	5.2		0.49		11
General Electric 2009	Feb-08	MW-21S	Trichloroethene	5.2		0.49		11
General Electric 2009	Aug-07	MW-7	Trichloroethene	4.8		0.49		9.8
General Electric 2009	Aug-08	MW-21S	Trichloroethene	4.8		0.49		9.8
General Electric 2009	Nov-08	MW-8S	Trichloroethene	4.7	J	0.49		9.6
General Electric 2009	Feb-08	MW-7	Trichloroethene	4.6		0.49		9.4
General Electric 2009	Apr-08	MW-21S	Trichloroethene	4.6		0.49		9.4
General Electric 2009	Nov-07	MW-15D	Trichloroethene	4		0.49		8.2
General Electric 2009	Feb-09	EPI-MW-3S	Trichloroethene	4		0.49		8.2
General Electric 2009	Nov-08	MW-21S	Trichloroethene	3.7		0.49		7.6
General Electric 2009	Feb-09	MW-21S	Trichloroethene	3.7		0.49		7.6
General Electric 2009	Feb-09	MW-7	Trichloroethene	3.6		0.49		7.3
General Electric 2009	Feb-07	EPI-MW-3D	Trichloroethene	3.4		0.49		6.9
General Electric 2009	Aug-07	EPI-MW-3D	Trichloroethene	3.2		0.49		6.5
General Electric 2009	Feb-07	MW-7	Trichloroethene	3.1		0.49		6.3
General Electric 2009	Feb-07	MW-2	Trichloroethene	3		0.49		6.1
General Electric 2009	Aug-08	EPI-MW-3D	Trichloroethene	2.6		0.49		5.3
General Electric 2009	Feb-09	MW-2	Trichloroethene	2.5		0.49		5.1
General Electric 2009	Feb-07	MW-5	Trichloroethene	2.5		0.49		5.1
General Electric 2009	Feb-08	MW-2	Trichloroethene	2.4		0.49		4.9
General Electric 2009	Feb-08	EPI-MW-3D	Trichloroethene	2.4		0.49		4.9
General Electric 2009	Feb-09	EPI-MW-3D	Trichloroethene	2.1		0.49		4.3
General Electric 2009	Feb-07	MW-6	Trichloroethene	1.9		0.49		3.9
General Electric 2009	May-07	MW-21S	Trichloroethene	1.6		0.49		3.3
General Electric 2009	Aug-07	MW-6	Trichloroethene	1.2		0.49		2.4

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Feb-08	MW-6	Trichloroethene	1.2		0.49		2.4
General Electric 2009	Aug-08	MW-6	Trichloroethene	1.1		0.49		2.2
General Electric 2009	Feb-09	MW-5	Trichloroethene	0.83		0.49		1.7
General Electric 2009	Feb-09	MW-6	Trichloroethene	0.72		0.49		1.5
General Electric 2009	Aug-07	MW-5	Trichloroethene	0.7		0.49		1.4
General Electric 2009	Feb-07	MW-3	Trichloroethene	0.66		0.49		1.3
General Electric 2009	Feb-07	MW-20M	Trichloroethene	0.5		0.49		1.0
General Electric 2009	Aug-08	MW-5	Trichloroethene	0.47		0.49		<1
General Electric 2009	Aug-07	MW-17D	Trichloroethene	0.46		0.49		<1
General Electric 2009	Feb-08	MW-5	Trichloroethene	0.41		0.49		<1
General Electric 2009	Aug-08	MW-3	Trichloroethene	0.4		0.49		<1
General Electric 2009	May-07	MW-20M	Trichloroethene	0.4		0.49		<1
General Electric 2009	Feb-08	MW-20M	Trichloroethene	0.4		0.49		<1
General Electric 2009	Feb-09	MW-3	Trichloroethene	0.37		0.49		<1
General Electric 2009	Aug-07	MW-3	Trichloroethene	0.34		0.49		<1
General Electric 2009	Feb-09	MW-20M	Trichloroethene	0.34		0.49		<1
General Electric 2009	Nov-07	MW-20M	Trichloroethene	0.3		0.49		<1
General Electric 2009	Aug-08	MW-20M	Trichloroethene	0.3		0.49		<1
General Electric 2009	Aug-07	MW-20M	Trichloroethene	0.28		0.49		<1
General Electric 2009	Feb-07	MW-14D	Trichloroethene	0.23		0.49		<1
General Electric 2009	May-08	MW-14D	Trichloroethene	0.22		0.49		<1
General Electric 2009	Feb-08	MW-14D	Trichloroethene	0.2		0.49		<1
General Electric 2009	Aug-07	MW-14D	Trichloroethene	0.18		0.49		<1
General Electric 2009	May-08	MW-14D	Trichloroethene	0.18		0.49		<1
General Electric 2009	Nov-07	MW-14D	Trichloroethene	0.17		0.49		<1
General Electric 2009	Nov-07	MW-14D	Trichloroethene	0.16		0.49		<1
General Electric 2009	May-07	MW-14D	Trichloroethene	0.15		0.49		<1
General Electric 2009	Aug-08	MW-14D	Trichloroethene	0.15		0.49		<1
General Electric 2009	Nov-08	MW-14D	Trichloroethene	0.15		0.49		<1
General Electric 2009	Aug-08	MW-14D	Trichloroethene	0.14		0.49		<1
General Electric 2009	Nov-08	MW-14D	Trichloroethene	0.13		0.49		<1
General Electric 2009	Feb-09	MW-14D	Trichloroethene	0.13		0.49		<1
General Electric 2009	Feb-09	MW-14D	Trichloroethene	0.12		0.49		<1
General Electric 2009	Aug-07	MW-16M	Trichloroethene	0.11		0.49		<1
General Electric 2009	Feb-07	EPI-MW-4D	Trichloroethene	0.11		0.49		<1
General Electric 2009	Feb-07	MW-19M	Trichloroethene	0.1		0.49		<1
General Electric 2009	May-07	MW-19M	Trichloroethene	0.1		0.49		<1
General Electric 2009	Aug-07	MW-19M	Trichloroethene	0.1		0.49		<1
General Electric 2009	Nov-07	MW-19M	Trichloroethene	0.1		0.49		<1

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Feb-08	MW-19M	Trichloroethene	0.1		0.49		<1
General Electric 2009	Aug-08	MW-19M	Trichloroethene	0.1		0.49		<1
General Electric 2009	Nov-08	MW-19M	Trichloroethene	0.1		0.49		<1
General Electric 2009	Nov-08	MW-20M	Trichloroethene	0.1		0.49		<1
General Electric 2009	Aug-08	EPI-MW-4D	Trichloroethene	0.1		0.49		<1
General Electric 2009	Aug-08	MW-10	Trichloroethene	0.097		0.49		<1
General Electric 2009	Feb-09	EPI-MW-4D	Trichloroethene	0.09		0.49		<1
General Electric 2009	Aug-07	MW-17M	Trichloroethene	0.088		0.49		<1
General Electric 2009	Feb-09	MW-19M	Trichloroethene	0.08		0.49		<1
General Electric 2009	Aug-07	MW-10	Trichloroethene	0.078		0.49		<1
General Electric 2009	Feb-08	MW-8M	Trichloroethene	0.065	J	0.49		<1
General Electric 2009	May-08	MW-8M	Trichloroethene	0.064		0.49		<1
General Electric 2009	Aug-07	EPI-MW-4D	Trichloroethene	0.056		0.49		<1
General Electric 2009	Feb-08	EPI-MW-4D	Trichloroethene	0.05		0.49		<1
General Electric 2009	Aug-07	MW-16D	Trichloroethene	0.048		0.49		<1
General Electric 2009	Feb-08	MW-10	Trichloroethene	0.034		0.49		<1
General Electric 2009	Feb-08	MW-3	Trichloroethene	0.033		0.49		<1
General Electric 2009	Feb-07	MW-13	Trichloroethene	0.032		0.49		<1
General Electric 2009	Feb-07	MW-10	Trichloroethene	0.031		0.49		<1
General Electric 2009	Aug-07	MW-18M	Trichloroethene	0.031		0.49		<1
General Electric 2009	Aug-07	MW-8M	Trichloroethene	0.025		0.49		<1
General Electric 2009	May-07	MW-8M	Trichloroethene	0.024		0.49		<1
General Electric 2009	May-07	MW-13	Trichloroethene	0.023		0.49		<1
General Electric 2009	Feb-08	MW-13	Trichloroethene	0.023		0.49		<1
General Electric 2009	Feb-07	MW-8M	Trichloroethene	0.022	J	0.49		<1
General Electric 2009	Feb-07	MW-9	Trichloroethene	0.022		0.49		<1
General Electric 2009	Feb-08	MW-12	Trichloroethene	0.021		0.49		<1
General Electric 2009	May-08	MW-8M	Trichloroethene	0.02	J	0.49		<1
General Electric 2009	Aug-07	MW-13	Trichloroethene	0.02		0.49		<1
General Electric 2009	May-08	MW-18D	Trichloroethene	0.02		0.49		<1
General Electric 2009	Feb-09	EPI-MW-2D	Vinyl Chloride	1.2		0.029		41
General Electric 2009	Aug-08	EPI-MW-2D	Vinyl Chloride	0.99		0.029		34
General Electric 2009	Feb-08	MW-15M	Vinyl Chloride	0.8		0.029		28
General Electric 2009	Feb-08	EPI-MW-2D	Vinyl Chloride	0.76		0.029		26
General Electric 2009	Nov-07	MW-15M	Vinyl Chloride	0.66		0.029		23
General Electric 2009	Dec-08	MW-15D	Vinyl Chloride	0.62		0.029		21
General Electric 2009	Nov-08	MW-14M	Vinyl Chloride	0.61		0.029		21
General Electric 2009	Feb-08	MW-15D	Vinyl Chloride	0.57		0.029		20
General Electric 2009	Nov-07	MW-14M	Vinyl Chloride	0.56		0.029		19

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Nov-07	MW-15D	Vinyl Chloride	0.55		0.029		19
General Electric 2009	Feb-07	EPI-MW-2D	Vinyl Chloride	0.49		0.029		17
General Electric 2009	Aug-07	MW-15M	Vinyl Chloride	0.47		0.029		16
General Electric 2009	Feb-07	MW-15M	Vinyl Chloride	0.46		0.029		16
General Electric 2009	Aug-08	MW-14M	Vinyl Chloride	0.44		0.029		15
General Electric 2009	Dec-08	MW-15M	Vinyl Chloride	0.44		0.029		15
General Electric 2009	Apr-08	MW-15D	Vinyl Chloride	0.44		0.029		15
General Electric 2009	Feb-09	MW-15D	Vinyl Chloride	0.44		0.029		15
General Electric 2009	Aug-07	MW-14M	Vinyl Chloride	0.43		0.029		15
General Electric 2009	Feb-09	MW-14M	Vinyl Chloride	0.42		0.029		14
General Electric 2009	May-07	MW-15D	Vinyl Chloride	0.42		0.029		14
General Electric 2009	Aug-07	EPI-MW-2D	Vinyl Chloride	0.42		0.029		14
General Electric 2009	Apr-08	MW-15M	Vinyl Chloride	0.41	J	0.029		14
General Electric 2009	Aug-08	MW-15M	Vinyl Chloride	0.4	J	0.029		14
General Electric 2009	Feb-07	MW-15D	Vinyl Chloride	0.4		0.029		14
General Electric 2009	Feb-09	MW-15M	Vinyl Chloride	0.39		0.029		13
General Electric 2009	Aug-08	MW-15D	Vinyl Chloride	0.39		0.029		13
General Electric 2009	May-07	MW-15M	Vinyl Chloride	0.38		0.029		13
General Electric 2009	Aug-07	MW-15D	Vinyl Chloride	0.34		0.029		12
General Electric 2009	Feb-08	MW-14M	Vinyl Chloride	0.32		0.029		11
General Electric 2009	May-08	MW-14M	Vinyl Chloride	0.31	J	0.029		11
General Electric 2009	Feb-09	EPI-MW-3S	Vinyl Chloride	0.26		0.029		9.0
General Electric 2009	Feb-08	EPI-MW-3S	Vinyl Chloride	0.25		0.029		8.6
General Electric 2009	Aug-08	EPI-MW-3S	Vinyl Chloride	0.25		0.029		8.6
General Electric 2009	Feb-07	EPI-MW-3S	Vinyl Chloride	0.21		0.029		7.2
General Electric 2009	Aug-07	EPI-MW-3S	Vinyl Chloride	0.2		0.029		6.9
General Electric 2009	May-07	MW-14M	Vinyl Chloride	0.18		0.029		6.2
General Electric 2009	Feb-07	MW-14M	Vinyl Chloride	0.17		0.029		5.9
General Electric 2009	Nov-07	MW-11	Vinyl Chloride	0.15	J	0.029		5.2
General Electric 2009	Feb-08	MW-11	Vinyl Chloride	0.14		0.029		4.8
General Electric 2009	Feb-08	MW-11	Vinyl Chloride	0.14		0.029		4.8
General Electric 2009	Aug-08	EPI-MW-3D	Vinyl Chloride	0.14		0.029		4.8
General Electric 2009	Nov-08	MW-11	Vinyl Chloride	0.13		0.029		4.5
General Electric 2009	Feb-09	EPI-MW-3D	Vinyl Chloride	0.13		0.029		4.5
General Electric 2009	Nov-08	MW-11	Vinyl Chloride	0.12		0.029		4.1
General Electric 2009	Aug-07	MW-11	Vinyl Chloride	0.11	J	0.029		3.8
General Electric 2009	Aug-08	MW-11	Vinyl Chloride	0.11		0.029		3.8
General Electric 2009	Feb-08	EPI-MW-3D	Vinyl Chloride	0.11		0.029		3.8
General Electric 2009	Feb-07	MW-11	Vinyl Chloride	0.086		0.029		3.0

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	Feb-07	EPI-MW-4D	Vinyl Chloride	0.083		0.029		2.9
General Electric 2009	Aug-07	MW-11	Vinyl Chloride	0.073		0.029		2.5
General Electric 2009	Aug-08	EPI-MW-4D	Vinyl Chloride	0.073		0.029		2.5
General Electric 2009	May-07	MW-11	Vinyl Chloride	0.068		0.029		2.3
General Electric 2009	Feb-09	EPI-MW-4S	Vinyl Chloride	0.067		0.029		2.3
General Electric 2009	Feb-07	EPI-MW-3D	Vinyl Chloride	0.064		0.029		2.2
General Electric 2009	Aug-07	EPI-MW-4S	Vinyl Chloride	0.064		0.029		2.2
General Electric 2009	Aug-07	EPI-MW-3D	Vinyl Chloride	0.063		0.029		2.2
General Electric 2009	Aug-07	EPI-MW-4D	Vinyl Chloride	0.058		0.029		2.0
General Electric 2009	Feb-08	EPI-MW-4S	Vinyl Chloride	0.056		0.029		1.9
General Electric 2009	Feb-08	EPI-MW-4D	Vinyl Chloride	0.056		0.029		1.9
General Electric 2009	Feb-09	MW-11	Vinyl Chloride	0.054		0.029		1.9
General Electric 2009	Feb-07	EPI-MW-4S	Vinyl Chloride	0.047		0.029		1.6
General Electric 2009	Aug-08	MW-4	Vinyl Chloride	0.046		0.029		1.6
General Electric 2009	Feb-09	MW-4	Vinyl Chloride	0.043		0.029		1.5
General Electric 2009	Aug-07	MW-17M	Vinyl Chloride	0.043		0.029		1.5
General Electric 2009	Aug-08	EPI-MW-4S	Vinyl Chloride	0.042		0.029		1.4
General Electric 2009	Feb-09	MW-4	Vinyl Chloride	0.041		0.029		1.4
General Electric 2009	Nov-08	MW-4	Vinyl Chloride	0.038		0.029		1.3
General Electric 2009	Feb-08	MW-8M	Vinyl Chloride	0.037		0.029		1.3
General Electric 2009	Feb-08	MW-9	Vinyl Chloride	0.037		0.029		1.3
General Electric 2009	Aug-07	MW-8M	Vinyl Chloride	0.036		0.029		1.2
General Electric 2009	Feb-08	MW-8M	Vinyl Chloride	0.036		0.029		1.2
General Electric 2009	Aug-07	MW-18M	Vinyl Chloride	0.034		0.029		1.2
General Electric 2009	Aug-07	MW-4	Vinyl Chloride	0.032	J	0.029		1.1
General Electric 2009	Aug-07	MW-14D	Vinyl Chloride	0.032		0.029		1.1
General Electric 2009	May-08	MW-14D	Vinyl Chloride	0.032		0.029		1.1
General Electric 2009	Nov-07	MW-4	Vinyl Chloride	0.031		0.029		1.1
General Electric 2009	Feb-08	MW-14D	Vinyl Chloride	0.031		0.029		1.1
General Electric 2009	Feb-08	MW-8S	Vinyl Chloride	0.03		0.029		1.0
General Electric 2009	Feb-07	MW-18M	Vinyl Chloride	0.03		0.029		1.0
General Electric 2009	May-07	MW-18M	Vinyl Chloride	0.03		0.029		1.0
General Electric 2009	Feb-08	MW-18M	Vinyl Chloride	0.03		0.029		1.0
General Electric 2009	Aug-08	MW-18M	Vinyl Chloride	0.03		0.029		1.0
General Electric 2009	Nov-08	MW-18M	Vinyl Chloride	0.03		0.029		1.0
General Electric 2009	Aug-07	MW-19M	Vinyl Chloride	0.03		0.029		1.0
General Electric 2009	Feb-07	MW-20M	Vinyl Chloride	0.03		0.029		1.0
General Electric 2009	May-08	MW-14D	Vinyl Chloride	0.028		0.029		<1

Table C-15
Chemicals Detected in Groundwater
Former GE Aviation Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)		MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
General Electric 2009	May-07	MW-4	Vinyl Chloride	0.027		0.029		<1
General Electric 2009	Aug-07	MW-8M	Vinyl Chloride	0.027		0.029		<1
General Electric 2009	Nov-07	MW-14D	Vinyl Chloride	0.027		0.029		<1
General Electric 2009	Feb-09	MW-14D	Vinyl Chloride	0.026		0.029		<1
General Electric 2009	Aug-07	MW-17D	Vinyl Chloride	0.026		0.029		<1
General Electric 2009	Feb-07	MW-8M	Vinyl Chloride	0.025		0.029		<1
General Electric 2009	Aug-08	MW-14D	Vinyl Chloride	0.025		0.029		<1
General Electric 2009	May-08	MW-4	Vinyl Chloride	0.024	J	0.029		<1
General Electric 2009	Feb-07	MW-8M	Vinyl Chloride	0.024		0.029		<1
General Electric 2009	May-08	MW-8M	Vinyl Chloride	0.024		0.029		<1
General Electric 2009	Feb-07	MW-14D	Vinyl Chloride	0.024		0.029		<1
General Electric 2009	May-08	MW-8M	Vinyl Chloride	0.023		0.029		<1
General Electric 2009	Aug-08	MW-14D	Vinyl Chloride	0.023		0.029		<1
General Electric 2009	Feb-09	MW-14D	Vinyl Chloride	0.023		0.029		<1
General Electric 2009	Feb-09	MW-18M	Vinyl Chloride	0.023		0.029		<1
General Electric 2009	Feb-08	MW-4	Vinyl Chloride	0.022		0.029		<1
General Electric 2009	May-07	MW-8M	Vinyl Chloride	0.022		0.029		<1
General Electric 2009	May-07	MW-13	Vinyl Chloride	0.022		0.029		<1
General Electric 2009	Aug-07	MW-13	Vinyl Chloride	0.022		0.029		<1
General Electric 2009	Nov-07	MW-14D	Vinyl Chloride	0.022		0.029		<1
General Electric 2009	Nov-08	MW-14D	Vinyl Chloride	0.022		0.029		<1
General Electric 2009	Feb-08	MW-4	Vinyl Chloride	0.021		0.029		<1
General Electric 2009	May-07	MW-14D	Vinyl Chloride	0.021		0.029		<1
General Electric 2009	Nov-08	MW-14D	Vinyl Chloride	0.021		0.029		<1
General Electric 2009	May-07	MW-17M	Vinyl Chloride	0.021		0.029		<1
General Electric 2009	Aug-07	MW-8S	Vinyl Chloride	0.02		0.029		<1
General Electric 2009	Aug-08	MW-8M	Vinyl Chloride	0.02		0.029		<1
General Electric 2009	May-07	MW-18M	Vinyl Chloride	0.02		0.029		<1
General Electric 2009	May-07	MW-20M	Vinyl Chloride	0.02		0.029		<1
General Electric 2009	Feb-07	MW-11	Vinyl Chloride	0.0071		0.029		<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or groundwater-to-sediment screening level, whichever is lower.

ug/L - Microgram per Liter
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Groundwater-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-16
Chemicals Detected in Soil
Former Sahlberg Equipment Property

Source	Sample Date	Sample Location	Sample Depth (ft)	Chemical	Soil Conc'n (mg/kg DW)	MTCA Cleanup Level[a] (mg/kg)	Soil-to-Sediment Screening Level (Based on CSL)[b] (mg/kg)	Exceedance Factor
RZA AGRA 1992	Apr-92	B-2	4	Chlorobenzene	0.19	1600		<1
Pacific Testing 1993a	Dec-92	MW-A	10	Diesel-Range Hydrocarbons	321	2000		<1
Pacific Testing 1993a	Dec-92	MW-A	5	Diesel-Range Hydrocarbons	207	2000		<1
RZA AGRA 1992	Apr-92	B-2	4	Diesel-Range Hydrocarbons	187	2000		<1
RZA AGRA 1992	Apr-92	B-1	5	Diesel-Range Hydrocarbons	110	2000		<1
Pacific Testing 1993a	Dec-92	MW-B	5	Diesel-Range Hydrocarbons	52	2000		<1
Pacific Testing 1993a	Dec-92	MW-A	15	Diesel-Range Hydrocarbons	49	2000		<1
Pacific Testing 1993a	Dec-92	C	5	Diesel-Range Hydrocarbons	46	2000		<1
Pacific Testing 1993a	Dec-92	A	5	Diesel-Range Hydrocarbons	44	2000		<1
Pacific Testing 1993a	Dec-92	B	5	Diesel-Range Hydrocarbons	42	2000		<1
Pacific Testing 1993a	Dec-92	MW-B	15	Diesel-Range Hydrocarbons	42	2000		<1
Pacific Testing 1993a	Dec-92	MW-B	10	Diesel-Range Hydrocarbons	39	2000		<1
RZA AGRA 1992	Apr-92	B-1	5	Total Recoverable Petroleum Hydrocarbons	5100	2000		2.6
RZA AGRA 1992	Apr-92	B-2	4	Total Recoverable Petroleum Hydrocarbons	570	2000		<1
Pacific Testing 1993a	Jan-93	S-2		Total Recoverable Petroleum Hydrocarbons	392	2000		<1
RZA AGRA 1992	Apr-92	B-2	4	Xylenes, total	0.19	9		<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or soil-to-sediment screening level, whichever is lower.

mg/kg - Milligram per kilogram
DW - Dry weight
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Soil-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-17
Chemicals Detected in Groundwater
Former Sahlberg Equipment Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)	MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
AGI 1993	05/11/93	MW2/NE	1,1-Dichloroethane	1.4	1600		<1
AGI 1993	05/21/93	AGI-2	1,1-Dichloroethane	0.5	1600		<1
AGI 1993	05/11/93	MW2/NE	1,2-Dichlorobenzene	130	720		<1
AGI 1993	05/11/93	MW2/NE	1,2-Dichlorobenzene	120	720		<1
AGI 1993	05/11/93	MW1/SW	1,2-Dichlorobenzene	1.8	720		<1
AGI 1993	05/11/93	MW2/NE	1,3-Dichlorobenzene	10			
Pacific Testing 1993c	07/06/93	MW2/NE	1,4-Dichlorobenzene	74	1.8		41
AGI 1993	05/11/93	MW2/NE	1,4-Dichlorobenzene	33	1.8		18
AGI 1993	05/21/93	AGI-2	1,4-Dichlorobenzene	0.8	1.8		<1
AGI 1993	04/28/92	MW2/NE	Acetone	61	800		<1
AGI 1993	04/28/92	MW1/SW	Acetone	42	800		<1
Pacific Testing 1993b	05/14/93	MW1/SW	Benzene	4	0.8		5.0
AGI 1993	05/11/93	MW2/NE	Benzene	3.7	0.8		4.6
AGI 1993	05/11/93	MW2/NE	Benzene	3	0.8		3.8
Pacific Testing 1993b	05/14/93	MW2/NE	Benzene	3	0.8		3.8
AGI 1993	05/21/93	AGI-2	Benzene	1.8	0.8		2.3
AGI 1993	04/28/92	MW2/NE	Chlorobenzne	1200	160		7.5
Pacific Testing 1993b	05/19/92	MW2/NE	Chlorobenzne	1200	160		7.5
AGI 1993	05/11/93	MW2/NE	Chlorobenzne	860	160		5.4
Pacific Testing 1993b	05/14/93	MW2/NE	Chlorobenzne	860	160		5.4
Pacific Testing 1993b	05/14/93	MW1/SW	Chlorobenzne	830	160		5.2
AGI 1993	05/11/93	MW2/NE	Chlorobenzne	790	160		4.9
Pacific Testing 1993c	07/06/93	MW2/NE	Chlorobenzne	330	160		2.1
AGI 1993	05/21/93	AGI-2	Chlorobenzne	93	160		<1
AGI 1993	05/11/93	MW1/SW	Chlorobenzne	6.1	160		<1
AGI 1993	05/11/93	MW1/SW	cis-1,2-Dichloroethene	1.3	80		<1
AGI 1993	05/11/93	MW2/NE	cis-1,2-Dichloroethene	0.7	80		<1
AGI 1993	12/08/92	MW2/NE	Diesel-Range Hydrocarbons	8300	500		17
Pacific Testing 1993b	01/27/93	MW2/NE	Diesel-Range Hydrocarbons	8300	500		17
AGI 1993	04/28/92	MW2/NE	Diesel-Range Hydrocarbons	6300	500		13
Pacific Testing 1993b	05/19/92	MW2/NE	Diesel-Range Hydrocarbons	6300	500		13
AGI 1993	04/28/92	MW1/SW	Diesel-Range Hydrocarbons	3000	500		6.0
Pacific Testing 1993b	05/19/92	MW1/SW	Diesel-Range Hydrocarbons	3000	500		6.0
AGI 1993	01/08/92	MW1/SW	Diesel-Range Hydrocarbons	1800	500		3.6
Pacific Testing 1993a	12/08/92	MW1/SW	Diesel-Range Hydrocarbons	1800	500		3.6
Pacific Testing 1993b	01/27/93	MW1/SW	Diesel-Range Hydrocarbons	1800	500		3.6
AGI 1993	05/11/93	MW2/NE	Diesel-Range Hydrocarbons	1700	500		3.4

Table C-17
Chemicals Detected in Groundwater
Former Sahlberg Equipment Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)	MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
Pacific Testing 1993b	05/14/93	MW1/SW	Diesel-Range Hydrocarbons	1000	500		2.0
AGI 1993	05/11/93	MW2/NE	Diesel-Range Hydrocarbons	1000	500		2.0
Pacific Testing 1993b	05/14/93	MW2/NE	Diesel-Range Hydrocarbons	1000	500		2.0
AGI 1993	05/21/93	MWA	Diesel-Range Hydrocarbons	550	500		1.1
AGI 1993	05/11/93	MW1/SW	Diesel-Range Hydrocarbons	450	500		<1
AGI 1993	04/28/92	MW2/NE	Ethylbenzene	200	700		<1
Pacific Testing 1993b	05/19/92	MW2/NE	Ethylbenzene	200	700		<1
Pacific Testing 1993c	07/06/93	MW2/NE	Ethylbenzene	52	700		<1
AGI 1993	05/11/93	MW2/NE	Ethylbenzene	31	700		<1
Pacific Testing 1993b	05/14/93	MW1/SW	Ethylbenzene	26	700		<1
AGI 1993	05/11/93	MW2/NE	Ethylbenzene	26	700		<1
Pacific Testing 1993b	05/14/93	MW2/NE	Ethylbenzene	26	700		<1
AGI 1993	05/11/93	MW2/NE	Heavy Oil-Range Hydrocarbons	1100	500		2.2
AGI 1993	05/11/93	MW1/SW	Heavy Oil-Range Hydrocarbons	910	500		1.8
AGI 1993	05/21/93	MWA	Heavy Oil-Range Hydrocarbons	890	500		1.8
AGI 1993	04/28/92	MW2/NE	Toluene	380	640		<1
Pacific Testing 1993b	05/19/92	MW2/NE	Toluene	380	640		<1
Pacific Testing 1993c	07/06/93	MW2/NE	Toluene	35	640		<1
Pacific Testing 1993b	05/14/93	MW1/SW	Toluene	23	640		<1
AGI 1993	05/11/93	MW2/NE	Toluene	21	640		<1
AGI 1993	05/11/93	MW2/NE	Toluene	21	640		<1
Pacific Testing 1993b	05/14/93	MW2/NE	Toluene	21	640		<1
AGI 1993	04/28/92	MW1/SW	Total Recoverable Petroleum Hydrocarbons	41000	500		82
AGI 1993	04/28/92	MW2/NE	Total Recoverable Petroleum Hydrocarbons	24900	500		50
AGI 1993	12/08/92	MW2/NE	Total Recoverable Petroleum Hydrocarbons	1100	500		2.2
Pacific Testing 1993b	05/14/93	MW1/SW	Trichloroethene	0.5	0.49		1.0
AGI 1993	05/11/93	MW2/NE	Trichloroethene	0.5	0.49		1.0
AGI 1993	05/11/93	MW2/NE	Trichloroethene	0.5	0.49		1.0
Pacific Testing 1993b	05/14/93	MW2/NE	Trichloroethene	0.5	0.49		1.0
AGI 1993	04/28/92	MW2/NE	Xylenes, total	1000	1000		1.0
Pacific Testing 1993b	05/19/92	MW2/NE	Xylenes, total	1000	1000		1.0
AGI 1993	05/11/93	MW2/NE	Xylenes, total	130	1000		<1
Pacific Testing 1993b	05/14/93	MW1/SW	Xylenes, total	110	1000		<1
AGI 1993	05/11/93	MW2/NE	Xylenes, total	110	1000		<1
Pacific Testing 1993b	05/14/93	MW2/NE	Xylenes, total	110	1000		<1

Table C-17
Chemicals Detected in Groundwater
Former Sahlberg Equipment Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)	MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
Pacific Testing 1993c	07/06/93	MW2/NE	Xylenes, total	80	1000		<1
AGI 1993	04/28/92	MW1/SW	Xylenes, total	2.3	1000		<1
Pacific Testing 1993b	05/19/92	MW1/SW	Xylenes, total	2.3	1000		<1
AGI 1993	05/11/93	MW1/SW	Xylenes, total	1.6	1000		<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or groundwater-to-sediment screening level, whichever is lower.

ug/L - Microgram per Liter
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Groundwater-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-18
Chemicals Detected in Soil
Shell 121430 Property

Source	Sample Date	Sample Location	Sample Depth (ft)	Chemical	Soil Conc'n (mg/kg DW)	MTCA Cleanup Level[a] (mg/kg)	Soil-to-Sediment Screening Level (Based on CSL)[b] (mg/kg)	Exceedance Factor
ESE 1995	Mar-94	DI-4	2	Benzene	4.2	0.03		140
ESE 1995	Mar-94	DI-3	2	Benzene	0.13	0.03		4.3
ESE 1995	Mar-94	DB-3	4	Benzene	0.099	0.03		3.3
ESE 1995	Mar-94	DI-3	2	Diesel-Range Hydrocarbons	380	2000		<1
ESE 1995	Mar-94	DI-1	2	Diesel-Range Hydrocarbons	330	2000		<1
ESE 1995	Mar-94	DB-3	4	Diesel-Range Hydrocarbons	20	2000		<1
ESE 1995	Mar-94	DI-4	2	Ethylbenzene	38	6		6.3
ESE 1995	Mar-94	DB-3	4	Ethylbenzene	0.54	6		<1
ESE 1995	Mar-94	DI-3	2	Ethylbenzene	0.17	6		<1
ESE 1995	Mar-94	DI-4	2	Gasoline-Range Hydrocarbons	2300	30		77
ESE 1995	Mar-94	DI-3	2	Gasoline-Range Hydrocarbons	64	30		2.1
ESE 1995	Mar-94	DB-3	4	Gasoline-Range Hydrocarbons	52	30		1.7
ESE 1995	Mar-94	DI-3	2	Heavy Oil-Range Hydrocarbons	74	2000		<1
ESE 1995	Mar-94	DI-1	2	Heavy Oil-Range Hydrocarbons	70	2000		<1
ESE 1995	Mar-94	DB-3	4	Heavy Oil-Range Hydrocarbons	28	2000		<1
ESE 1995	Mar-94	DI-4	2	Toluene	66	7		9.4
ESE 1995	Mar-94	DB-3	4	Toluene	0.39	7		<1
ESE 1995	Mar-94	DI-3	2	Toluene	0.36	7		<1
ESE 1995	Mar-94	DI-4	2	Xylenes, total	280	9		31
ESE 1995	Mar-94	DI-3	2	Xylenes, total	4.4	9		<1
ESE 1995	Mar-94	DB-3	4	Xylenes, total	3.8	9		<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or soil-to-sediment screening level, whichever is lower.

mg/kg - Milligram per kilogram
DW - Dry weight
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Soil-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-19
Chemicals Detected in Soil
Former Draper Machine, Inc.

Source	Sample Date	Sample Location	Sample Depth (ft)	Chemical	Soil Conc'n (mg/kg DW)	MTCA Cleanup Level[a] (mg/kg)	Soil-to-Sediment Screening Level (Based on CSL)[b] (mg/kg)	Exceedance Factor
Hart Crowser 1991	Apr-89	TP-W	8	Arsenic	0.05	0.67	12000	<1
Hart Crowser 1991	Apr-89	TP-W	8	Barium	0.028	16000		<1
Hart Crowser 1991	Apr-89	TP-W	8	Cadmium	0.002	2	34	<1
Hart Crowser 1991	Apr-89	TP-W	8	Chromium	0.005	19	5400	<1
Hart Crowser 1991	Apr-89	TP-W	8	Lead	0.03	250	1300	<1
Hart Crowser 1991	Apr-89	TP-W	8	Mercury	0.0001	2	0.59	<1
Hart Crowser 1991	Apr-89	TP-W	8	Selenium	0.05	400		<1
Hart Crowser 1991	Apr-89	TP-W	8	Silver	0.003	400	12	<1
Hart Crowser 1991	Aug-89	VWO	Composite	Total Recoverable Petroleum Hydrocarbons	46351	2000		23
Hart Crowser 1991	Mar-89	890303-T	Composite	Total Recoverable Petroleum Hydrocarbons	35714	2000		18
Hart Crowser 1991	Apr-89	TP-W2	7	Total Recoverable Petroleum Hydrocarbons	19000	2000		9.5
Hart Crowser 1991	Mar-89	890303-P	Composite	Total Recoverable Petroleum Hydrocarbons	15982	2000		8.0
Hart Crowser 1991	Mar-89	890303-S	Composite	Total Recoverable Petroleum Hydrocarbons	11396	2000		5.7
Hart Crowser 1991	Mar-89	890303-R	Composite	Total Recoverable Petroleum Hydrocarbons	10402	2000		5.2
Hart Crowser 1991	Mar-89	890303-Q	Composite	Total Recoverable Petroleum Hydrocarbons	6786	2000		3.4
Hart Crowser 1991	Apr-89	TP-W	11	Total Recoverable Petroleum Hydrocarbons	4800	2000		2.4
Hart Crowser 1991	Aug-89	VSD	Composite	Total Recoverable Petroleum Hydrocarbons	2106	2000		1.1
Hart Crowser 1991	Apr-89	TP-D	9	Total Recoverable Petroleum Hydrocarbons	2000	2000		1.0
Hart Crowser 1991	Apr-89	HA3	6	Total Recoverable Petroleum Hydrocarbons	1800	2000		<1
Hart Crowser 1991	Aug-89	VNO	Composite	Total Recoverable Petroleum Hydrocarbons	917	2000		<1
Hart Crowser 1991	Apr-89	TP-D	11	Total Recoverable Petroleum Hydrocarbons	650	2000		<1
Hart Crowser 1991	Aug-89	VED	Composite	Total Recoverable Petroleum Hydrocarbons	492	2000		<1
Hart Crowser 1991	Apr-89	TP-W4	5	Total Recoverable Petroleum Hydrocarbons	140	2000		<1
Hart Crowser 1991	Aug-89	S-2	Composite	Total Recoverable Petroleum Hydrocarbons	106	2000		<1
Hart Crowser 1991	Aug-89	VSO	Composite	Total Recoverable Petroleum Hydrocarbons	91.3	2000		<1
Hart Crowser 1991	Aug-89	VWD	Composite	Total Recoverable Petroleum Hydrocarbons	35.4	2000		<1
Hart Crowser 1991	Aug-89	VND	Composite	Total Recoverable Petroleum Hydrocarbons	26.6	2000		<1
Hart Crowser 1991	Apr-89	HA-4	6	Total Recoverable Petroleum Hydrocarbons	26	2000		<1
Hart Crowser 1991	Aug-89	E-2	Composite	Total Recoverable Petroleum Hydrocarbons	25.1	2000		<1
Hart Crowser 1991	Apr-89	TP-W2	7	Total Recoverable Petroleum Hydrocarbons	10	2000		<1
Hart Crowser 1991	Apr-89	HA-1	6	Total Recoverable Petroleum Hydrocarbons	3.9	2000		<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or soil-to-sediment screening level, whichever is lower.

mg/kg - Milligram per kilogram
DW - Dry weight
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Soil-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-20
Chemicals Detected in Soil
Loomis & Fargo

Source	Sample Date	Sample Location	Sample Depth (ft)	Chemical	Soil Conc'n (mg/kg DW)	MTCA Cleanup Level[a] (mg/kg)	Soil-to-Sediment Screening Level (Based on CSL)[b] (mg/kg)	Exceedance Factor
EMCON 1991	Jan-90	L7	4	Acetone	0.0049	8000		<1
EMCON 1991	Jan-90	L7	4	Arsenic	8.5	0.67	12000	13
EMCON 1991	Jan-90	L4	7	Benzene	2.1	0.03		70
EMCON 1991	Jan-90	L2	8	Benzene	0.36	0.03		12
EMCON 1991	Jan-90	L3	7	Benzene	0.2	0.03		6.7
EMCON 1991	Jan-90	L7	4	Chromium	12.6	19	5400	<1
EMCON 1991	Jan-90	L7	4	Copper	39.2	3000	780	<1
EMCON 1991	Jan-90	L4	7	Ethylbenzene	0.66	6		<1
EMCON 1991	Jan-90	L3	7	Ethylbenzene	0.18	6		<1
EMCON 1991	Jan-90	L2	8	Ethylbenzene	0.14	6		<1
EMCON 1991	Jan-90	L7	4	Ethylbenzene	0.0018	6		<1
EMCON 1991	Jan-90	L7	4	Lead	50	250	1300	<1
EMCON 1991	Jan-90	L7	4	Magnesium	2940			
EMCON 1991	Jan-90	L7	4	Methylene Chloride	0.0013	0.02		<1
EMCON 1991	Jan-90	L4	7	Toluene	0.12	7		<1
EMCON 1991	Jan-90	L3	7	Toluene	0.071	7		<1
EMCON 1991	Jan-90	L2	8	Toluene	0.056 J	7		<1
EMCON 1991	Jan-90	L7	4	Toluene	0.0026	7		<1
EMCON 1991	May-90	S-1	1.5	Total Recoverable Petroleum Hydrocarbons	140	2000		<1
EMCON 1991	May-90	N-1	1	Total Recoverable Petroleum Hydrocarbons	140	2000		<1
EMCON 1991	May-90	S-6	6	Total Recoverable Petroleum Hydrocarbons	91	2000		<1
EMCON 1991	May-90	N-4	4	Total Recoverable Petroleum Hydrocarbons	86	2000		<1
EMCON 1991	Jan-90	L7	4	Total Recoverable Petroleum Hydrocarbons	30	2000		<1
EMCON 1991	Jan-90	L4	7	Xylenes, total	3.5	9		<1
EMCON 1991	Jan-90	L3	7	Xylenes, total	1.1	9		<1
EMCON 1991	Jan-90	L2	8	Xylenes, total	0.84	9		<1
EMCON 1991	Jan-90	L7	4	Xylenes, total	0.014	9		<1
EMCON 1991	Jan-90	L7	4	Zinc	62.2	24000	770	<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or soil-to-sediment screening level, whichever is lower.

mg/kg - Milligram per kilogram
DW - Dry weight
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Soil-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-21
Chemicals Detected in Soil
PNB Building Property

Source	Sample Date	Sample Location	Sample Depth (ft)	Chemical	Soil Conc'n (mg/kg DW)		MTCA Cleanup Level[a] (mg/kg)	Soil-to-Sediment Screening Level (Based on CSL)[b] (mg/kg)	Exceedance Factor
SEACOR 1990	Dec-91	PI-1	13	Ethylbenzene	12		6		2.0
ENSR 1991a	Mar-91	S4	12	Ethylbenzene	0.09		6		<1
SEACOR 1990	Dec-91	PI-1	13	Gasoline-Range Hydrocarbons	1000		100		10
ENSR 1991a	Mar-91	S4	12	Gasoline-Range Hydrocarbons	96		100		<1
SEACOR 1990	Dec-91	PI-5	11	Gasoline-Range Hydrocarbons	20		100		<1
SEACOR 1990	Dec-91	T2-1	13	Gasoline-Range Hydrocarbons	3.6		100		<1
SEACOR 1990	Dec-91	PI-3	10	Gasoline-Range Hydrocarbons	2.8		100		<1
ENSR 1991a	Mar-91	S2	12	Gasoline-Range Hydrocarbons	0.96		100		<1
SEACOR 1990	Dec-91	PI-1	13	Toluene	7.6		7		1.1
SEACOR 1990	Dec-91	PI-1	13	Xylenes, total	82		9		9.1
ENSR 1991a	Mar-91	S4	12	Xylenes, total	1.1		9		<1
SEACOR 1990	Dec-91	T2-1	13	Xylenes, total	0.41		9		<1
SEACOR 1990	Dec-91	PI-5	11	Xylenes, total	0.41		9		<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or soil-to-sediment screening level, whichever is lower.

mg/kg - Milligram per kilogram
DW - Dry weight
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Soil-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-22
Chemicals Detected in Groundwater
PNB Building Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)	MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
ENSR 1991a	Apr-91	S1	Ethylbenzene	30	700		<1
ENSR 1991a	Apr-91	S2	Ethylbenzene	30	700		<1
ENSR 1991a	Apr-91	S2	Gasoline-Range Hydrocarbons	7700	800		9.6
ENSR 1991a	Apr-91	S1	Gasoline-Range Hydrocarbons	7400	800		9.3
ENSR 1991b	May-91	MW-2	Lead	31.8	15	13	2.4
ENSR 1991a	Apr-91	S1	Lead	18	15	13	1.4
ENSR 1991a	Apr-91	S2	Lead	16	15	13	1.2
ENSR 1991a	Apr-91	S1	Toluene	40	640		<1
ENSR 1991a	Apr-91	S2	Toluene	31	640		<1
ENSR 1991a	Apr-91	S1	Xylenes, total	1100	1000		1.1
ENSR 1991a	Apr-91	S2	Xylenes, total	1100	1000		1.1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or groundwater-to-sediment screening level, whichever is lower.

ug/L - Microgram per Liter
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Groundwater-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-23
Chemicals Detected in Soil
Former Western Parcel Express Property

Source	Sample Date	Sample Location	Sample Depth (ft)	Chemical	Soil Conc'n (mg/kg DW)	MTCA Cleanup Level[a] (mg/kg)	Soil-to-Sediment Screening Level (Based on CSL)[b] (mg/kg)	Exceedance Factor
NW Construction 1999	Mar-99	W-1	12	Benzene	3.6	0.03		120
Treadwell & Rollo 2000	Feb-00	MW-1	16.5	Benzene	0.2	0.03		6.7
Treadwell & Rollo 2000	Mar-99	ATC-1		Diesel-Range Hydrocarbons	630	2000		<1
Treadwell & Rollo 2000	Feb-00	MW-1	5.5	Diesel-Range Hydrocarbons	280	2000		<1
Treadwell & Rollo 2000	Feb-00	MW-1	16.5	Diesel-Range Hydrocarbons	180	2000		<1
Treadwell & Rollo 2000	Feb-00	MW-1	10.5	Diesel-Range Hydrocarbons	90	2000		<1
Treadwell & Rollo 2000	Mar-99	ATC-1		Ethylbenzene	130	6		22
NW Construction 1999	Mar-99	W-1	12	Ethylbenzene	6.3	6		1.1
Treadwell & Rollo 2000	Feb-00	MW-1	16.5	Ethylbenzene	0.4	6		<1
Treadwell & Rollo 2000	Mar-99	S-1	10	Gasoline-Range Hydrocarbons	45000	30		1500
Treadwell & Rollo 2000	Mar-99	ATC-1		Gasoline-Range Hydrocarbons	8100	30		270
Treadwell & Rollo 2000	Mar-99	S-2	10	Gasoline-Range Hydrocarbons	6600	30		220
Treadwell & Rollo 2000	Mar-99	S-3	10	Gasoline-Range Hydrocarbons	1200	30		40
Treadwell & Rollo 2000	Feb-00	MW-1	16.5	Gasoline-Range Hydrocarbons	35	30		1.2
Treadwell & Rollo 2000	Feb-00	MW-1	5.5	Heavy Oil-Range Hydrocarbons	670	2000		<1
Treadwell & Rollo 2000	Feb-00	MW-1	16.5	Heavy Oil-Range Hydrocarbons	330	2000		<1
Treadwell & Rollo 2000	Feb-00	MW-1	10.5	Heavy Oil-Range Hydrocarbons	75	2000		<1
Treadwell & Rollo 2000	Feb-00	MW-1	16.5	PAHs, total carcinogenic	12.45			
ATC 1999	Feb-00	MW-1	5.5	PAHs, total carcinogenic	7.36			
Treadwell & Rollo 2000	Mar-99	ATC-1		Toluene	120	7		17
NW Construction 1999	Mar-99	W-1	12	Toluene	42	7		6.0
Treadwell & Rollo 2000	Feb-00	MW-1	16.5	Toluene	0.3	7		<1
Treadwell & Rollo 2000	Mar-99	ATC-1		Xylenes, total	750	9		83
NW Construction 1999	Mar-99	W-1	12	Xylenes, total	50	9		5.6
Treadwell & Rollo 2000	Feb-00	MW-1	16.5	Xylenes, total	1.8	9		<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or soil-to-sediment screening level, whichever is lower.

mg/kg - Milligram per kilogram
DW - Dry weight
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Soil-to-sediment screening level, based on sediment CSLs (from SAIC 2006).

Table C-24
Chemicals Detected in Groundwater
Former Western Parcel Express Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)	MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
Treadwell & Rollo 2000	11/14/00	MW-3	Benzene	190	0.8		238
Treadwell & Rollo 2000	05/04/00	MW-3	Benzene	150	0.8		188
Treadwell & Rollo 2000	05/04/00	MW-3	Benzene	140	0.8		175
Treadwell & Rollo 2000	02/20/01	MW-3	Benzene	100	0.8		125
Treadwell & Rollo 2000	06/08/01	MW-3	Benzene	76	0.8		95
Treadwell & Rollo 2000	05/04/00	TR-4	Benzene	51	0.8		64
Treadwell & Rollo 2000	05/04/00	MW-1	Benzene	28	0.8		35
Treadwell & Rollo 2000	02/23/00	MW-2	Benzene	23	0.8		29
Treadwell & Rollo 2000	02/23/00	MW-1	Benzene	20	0.8		25
Treadwell & Rollo 2000	02/23/00	MW-3	Benzene	10	0.8		13
Treadwell & Rollo 2000	06/08/01	MW-1	Benzene	8.9	0.8		11
Treadwell & Rollo 2000	02/20/01	MW-1	Benzene	6.2	0.8		7.8
Treadwell & Rollo 2000	02/23/00	MW-1	Diesel-Range Hydrocarbons	2600	500		5.2
Treadwell & Rollo 2000	11/14/00	MW-1	Ethylbenzene	600	700		<1
Treadwell & Rollo 2000	02/20/01	MW-1	Ethylbenzene	410	700		<1
Treadwell & Rollo 2000	11/14/00	MW-3	Ethylbenzene	216	700		<1
Treadwell & Rollo 2000	05/04/00	MW-1	Ethylbenzene	190	700		<1
Treadwell & Rollo 2000	02/23/00	MW-1	Ethylbenzene	170	700		<1
Treadwell & Rollo 2000	06/08/01	MW-1	Ethylbenzene	58	700		<1
Treadwell & Rollo 2000	05/04/00	MW-3	Ethylbenzene	54	700		<1
Treadwell & Rollo 2000	05/04/00	MW-3	Ethylbenzene	51	700		<1
Treadwell & Rollo 2000	02/20/01	MW-3	Ethylbenzene	51	700		<1
Treadwell & Rollo 2000	06/08/01	MW-3	Ethylbenzene	49	700		<1
Treadwell & Rollo 2000	02/23/00	MW-2	Ethylbenzene	18	700		<1
Treadwell & Rollo 2000	02/23/00	MW-3	Ethylbenzene	4	700		<1
Treadwell & Rollo 2000	02/20/01	MW-1	Gasoline-Range Hydrocarbons	29000	800		36
Treadwell & Rollo 2000	11/14/00	MW-1	Gasoline-Range Hydrocarbons	24000	800		30
Treadwell & Rollo 2000	06/08/01	MW-1	Gasoline-Range Hydrocarbons	24000	800		30
Treadwell & Rollo 2000	02/23/00	MW-1	Gasoline-Range Hydrocarbons	7400	800		9.3
Treadwell & Rollo 2000	05/04/00	MW-1	Gasoline-Range Hydrocarbons	7000	800		8.8
Treadwell & Rollo 2000	11/14/00	MW-3	Gasoline-Range Hydrocarbons	4000	800		5.0
Treadwell & Rollo 2000	02/20/01	MW-3	Gasoline-Range Hydrocarbons	3000	800		3.8
Treadwell & Rollo 2000	06/08/01	MW-3	Gasoline-Range Hydrocarbons	1700	800		2.1
Treadwell & Rollo 2000	02/23/00	MW-2	Gasoline-Range Hydrocarbons	420	800		<1
Treadwell & Rollo 2000	05/04/00	MW-3	Gasoline-Range Hydrocarbons	380	800		<1
Treadwell & Rollo 2000	05/04/00	TR-6	Gasoline-Range Hydrocarbons	370	800		<1
Treadwell & Rollo 2000	05/04/00	MW-3	Gasoline-Range Hydrocarbons	320	800		<1
Treadwell & Rollo 2000	11/14/00	MW-2	Gasoline-Range Hydrocarbons	150	800		<1
Treadwell & Rollo 2000	02/23/00	MW-3	Gasoline-Range Hydrocarbons	97	800		<1

Table C-24
Chemicals Detected in Groundwater
Former Western Parcel Express Property

Source	Sample Date	Sample Location	Chemical	GW Conc'n (ug/L)	MTCA Cleanup Level[a] (ug/L)	GW-to-Sediment Screening Level (Based on CSL)[b] (ug/L)	Exceedance Factor
Treadwell & Rollo 2000	11/14/00	MW-1	Toluene	2600	640		4.1
Treadwell & Rollo 2000	06/08/01	MW-1	Toluene	1500	640		2.3
Treadwell & Rollo 2000	05/04/00	MW-1	Toluene	1300	640		2.0
Treadwell & Rollo 2000	02/20/01	MW-1	Toluene	800	640		1.3
Treadwell & Rollo 2000	02/23/00	MW-1	Toluene	510	640		<1
Treadwell & Rollo 2000	05/04/00	TR-8	Toluene	3.1	640		<1
Treadwell & Rollo 2000	11/14/00	MW-3	Toluene	2.2	640		<1
Treadwell & Rollo 2000	02/23/00	MW-2	Toluene	2	640		<1
Treadwell & Rollo 2000	05/04/00	MW-3	Toluene	1.9	640		<1
Treadwell & Rollo 2000	05/04/00	MW-3	Toluene	1.8	640		<1
Treadwell & Rollo 2000	05/04/00	TR-4	Toluene	1.6	640		<1
Treadwell & Rollo 2000	06/08/01	MW-3	Toluene	1	640		<1
Treadwell & Rollo 2000	02/23/00	MW-1	Total Recoverable Petroleum Hydrocarbons	10000	500		20
Treadwell & Rollo 2000	11/14/00	MW-1	Xylenes, total	4400	1000		4.4
Treadwell & Rollo 2000	06/08/01	MW-1	Xylenes, total	3800	1000		3.8
Treadwell & Rollo 2000	02/20/01	MW-1	Xylenes, total	1700	1000		1.7
Treadwell & Rollo 2000	05/04/00	MW-1	Xylenes, total	1200	1000		1.2
Treadwell & Rollo 2000	02/23/00	MW-1	Xylenes, total	1100	1000		1.1
Treadwell & Rollo 2000	11/14/00	MW-3	Xylenes, total	700	1000		<1
Treadwell & Rollo 2000	02/20/01	MW-3	Xylenes, total	260	1000		<1
Treadwell & Rollo 2000	06/08/01	MW-3	Xylenes, total	220	1000		<1
Treadwell & Rollo 2000	02/23/00	MW-2	Xylenes, total	110	1000		<1
Treadwell & Rollo 2000	05/04/00	TR-4	Xylenes, total	57	1000		<1
Treadwell & Rollo 2000	05/04/00	MW-3	Xylenes, total	53	1000		<1
Treadwell & Rollo 2000	05/04/00	MW-3	Xylenes, total	50	1000		<1
Treadwell & Rollo 2000	02/23/00	MW-3	Xylenes, total	11	1000		<1
Treadwell & Rollo 2000	11/14/00	MW-2	Xylenes, total	3.8	1000		<1
Treadwell & Rollo 2000	05/04/00	MW-2	Xylenes, total	3.1	1000		<1
Treadwell & Rollo 2000	05/04/00	TR-8	Xylenes, total	2.4	1000		<1

Table presents detected chemicals only.
Exceedance factors are the ratio of the detected concentration to the MTCA cleanup level or groundwater-to-sediment screening level, whichever is lower.

ug/L - Microgram per Liter
MTCA - Model Toxics Control Act
CSL - SMS Cleanup Screening Level
SMS - Sediment Management Standard (Washington Administrative Code 173-204)

[a] - The lower of MTCA Method A or B cleanup levels was selected, from CLARC database.
[b] - Groundwater-to-sediment screening level, based on sediment CSLs (from SAIC 2006).