PHASE I ENVIRONMENTAL SITE ASSESSMENT & PRELIMINARY PHASE-II

Card-Lock Commercial Fueling Facility
Port of Seattle Lease - Terminal 115
6760 West Marginal Way
Seattle, Washington

ASSOCIATED PETROLEUM PRODUCTS

ENVIRONMENTAL
ASSOCIATES, INC.

1380 - 112th Avenue Northeast, Suite 300
Bellevue, Washington 98004
(425) 455-9025 Office
(888) 453-5394 Toll Free
(425) 455-2316 Fax

May 16, 2011 JN-31026

Ms. Taryn Miller
Associated Petroleum Products
2320 Milwaukee Way
Tacoma, Washington 98421

Subject: **PHASE I ENVIRONMENTAL SITE ASSESSMENT & PRELIMINARY PHASE-II**
Card Lock Fueling Facility
Port of Seattle Lease - Terminal 115
6760 West Marginal Way
Seattle, Washington

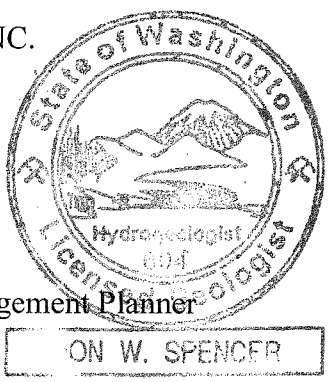
Dear Taryn Miller:

Environmental Associates, Inc. (EAI), has completed a combination Phase-I and preliminary Phase-II Environmental Site Assessment of the subject property located in Seattle, Washington. This report, prepared in accordance with the terms of our proposals dated January 28, 2011, and April 12, 2011 and in a manner consistent with the intent and methodologies of ASTM E 1527-05, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," summarizes our approach to the project along with results and conclusions.

The contents of this report are confidential and are intended solely for the use of Associated Petroleum Products (APP), along with Shultz Distributing Inc. (Shultz), and the Port of Seattle (Port). While the Phase-I findings are of particular interest to Associated Petroleum, both Shultz and the Port are named as users of this report given that the preliminary Phase-II findings, presented herein may be utilized by Shultz and the Port to close out Shultz's lease and initiate a new lease with APP. Consistent with this understanding, APP has reportedly entered into a separate cost sharing agreement with Shultz regarding the Phase-II work.

We appreciate the opportunity to be of service on this assignment. If you have any questions or if we may be of additional service, please do not hesitate to contact us.

Respectfully submitted,
ENVIRONMENTAL ASSOCIATES, INC.



Don W. Spencer, M.Sc., P.G., R.E.A.
Principal

EPA-Certified Asbestos Inspector/Management Planner
I.D. # AM 48151

EPA/HUD Certified Lead Inspector (Licensed)

Registered Site Assessor/Licensed UST Supervisor
State Certification #0878545-U7

License: 604	(Washington)
License: 11464	(Oregon)
License: 876	(California)
License: 5195	(Illinois)
License: 0327	(Mississippi)

PHASE- I ENVIRONMENTAL SITE ASSESSMENT & PRELIMINARY PHASE-II

Card Lock Fueling Facility
Port of Seattle Lease - Terminal 115
6760 West Marginal Way
Seattle, Washington

Prepared for:

Associated Petroleum Products
2320 Milwaukee Way
Tacoma, Washington 98421

Questions regarding this investigation, the conclusions reached and the recommendations given should be addressed to one of the following undersigned.

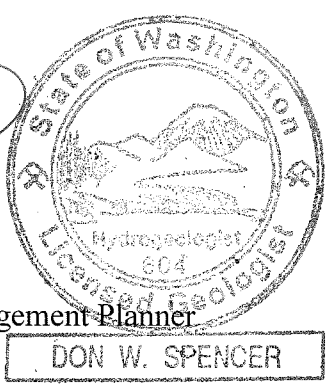
Robert B. Roe, M. Sc., LHG.
Hydrogeologist
License: 1125 (Washington)
EPA-Certified Building Inspector
I.D. #1018037

Don W. Spencer, M.Sc., P.G., R.E.A.
Principal

EPA-Certified Asbestos Inspector/Management Planner
I.D. # AM 48151

EPA/HUD Certified Lead Inspector (Licensed)

License: 604 (Washington)
License: 11464 (Oregon)
License: 876 (California)
License: 5195 (Illinois)
License: 0327 (Mississippi)



Reference Job Number: JN-31026 **May 13, 2011**

ENVIRONMENTAL ASSOCIATES, INC.

TABLE OF CONTENTS

TABLE OF CONTENTS - CONTINUED

PLATES

APPENDICES

METHODOLOGY/SCOPE OF WORK

Our study approach consisted of completing a series of investigative tasks intended to address the level of effort often referred to as due diligence in the context of the Superfund Amendment and Reauthorization Act of 1986 (SARA) and nearly identical requirements set forth in the Model Toxics Control Act (MTCA), Chapter 70.105 D (Section 040) RCW pertaining to standards of liability. The objective of a Phase I environmental site assessment is to reduce the risk of exposure to potential future liability for environmental problems by demonstrating that at the time of acquisition or refinancing, the owner, buyer, or lender had no knowledge or reason to know that any hazardous substance had been released or disposed of on, in, or at the property. Moreover, in defining the purpose of the Phase I environmental site assessment process, section 1.1.1 of ASTM E-1527 advises that the goal of a Phase I is to identify "recognized environmental conditions," and defines a recognized environmental condition as "the presence or likely presence of any hazardous substance...on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances...into structures on the property or into the ground, groundwater, or surface water of the property."

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in section 312.10 of 40 CFR, Part 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. EAI has performed all appropriate inquiries (AAI) in conformance with the standards and practices set forth in 40 CFR Part 312.

In an effort to evaluate condition and previous uses of the property in a manner consistent with good commercial and customary practice and in accordance with methods outlined under ASTM E 1527-05, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," our scope of work for this study included:

- Review of chronology of ownership and site history using the resources of the King County Assessor's Office, Seattle Public Library, business directories from several time periods, and aerial photography from several time periods as primary resources. This included an attempt to identify possible former industries or uses presenting some potential for generating waste that may have included dangerous or hazardous substances as defined by state and federal laws and regulations.

- Acquisition and review of readily available reports and other documentation pertaining to the subject site or nearby sites.

- Review of Washington Department of Ecology (WDOE) and King County Department of Public Health documents regarding current and abandoned landfills.

- Review of the current EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), the EPA National Priority List (NPL), the EPA Resource Conservation and Recovery Act (RCRA) Notifiers, RCRA Corrective Action Report (CORRACTS), and Emergency Response Notification System (ERNS) lists of sites that are potentially contaminated or which produce hazardous substances as a normal part of their commercial operation in the vicinity of the site.

- Review of the current Washington Department of Ecology (WDOE) listing of underground storage tanks (USTs) along with the WDOE's Leaking Underground Storage Tank (LUST) listing for WDOE-documented leaking USTs in the vicinity of the subject property.

- Review of the current WDOE Confirmed and Suspected Contaminated Sites (CSCS) list of potentially contaminated sites that have been the subject of hazardous waste investigation and/or cleanup activity in conjunction with the Washington Model Toxics Control Act (MTCA) Chapter 173-340 WAC.

- Review published documents from the Bonneville Power Administration (BPA) to evaluate the risk for naturally occurring radon.

- A reconnaissance of the subject property and neighboring areas to look for evidence of potential contamination in the form of soil stains, odors, asbestos, lead-based paint (LBP), vegetation stress, discarded drums, discolored water, careless manufacturing or industrial practices, etc.

- Interviews with property ownership, facility operator, and other knowledgeable parties.

- Preparation of a summary report that documents the environmental site assessment process and findings.

This report also presents findings developed through the completion of four (4) soil borings around the perimeter of existing card-lock fueling facility along with sampling and laboratory testing of groundwater from three (3) pre-existing on-site monitoring wells, corresponding to Phase-II Scope of Work, as outlined in our April 12, 2011 proposal.

FINDINGS

GENERAL DESCRIPTION

Subject Property

The subject site includes an area of land leased from the Port of Seattle as part of Terminal 115 at the approximate location depicted on Plate 1, Vicinity / Topographic Map. Terminal 115 is located to the west of the Duwamish Waterway, across from the Georgetown district of Seattle, Washington. The approximate area of the lease is presented graphically on Plate 2, Site Plan as deduced from other Port of Seattle documents and reports. An official survey or legal description of the lease area was not provided to EAI. Going forward, this report will simply refer to the lease area as the "subject site" or the "subject property."

The lease on the subject site is currently held by Shultz Distributing, Inc., which operate the existing card-lock commercial fuel sales facility on the lease-property. The subject property also includes a small commercial structure, currently housing a Subway restaurant and a drive-through coffee stand. The interiors of the Subway building and coffee stand were not of interest to Associated Petroleum Products (APP) and were therefore excluded from review for this Phase-I assignment.

A commercial "card-lock" fueling facility currently operated by Shultz Distributing exists east and adjacent to the Subway restaurant building. The card-lock fueling facility was completed in approximately 1996 and includes three (3) 10,000-gallon underground tanks (USTs) used to store diesel and gasoline along with several pump islands located under a covered canopy.

Plate 2 depicts the layout of the subject and adjacent parcels. Photographs reflecting the character of the subject and select adjacent parcels are provided on Plates 3 and 4. A brief description of land use on nearby parcels is provided below.

North: Port of Seattle Terminal 115 land continues to the north of the subject property and includes Port facility leased by SeaPac Transport Services and Northwest Container Services.

South: Southwest Front Street runs along the southern margin of the subject property. Port land operated by SeaFreeze Cold Storage lies south of Front Street.

East: Land directly east of the subject site is used by a tenant of the port to store old equipment and inter-modal shipping containers. Port property occupied by Northwest Container lies further east.

West: West Marginal Way adjoins the western side of the subject property. Land further west is undeveloped and steeply sloped.

According to the City of Seattle, the subject property is zoned industrial.

GEOLOGIC SETTING

The site is situated on a leveled parcel at an approximate elevation of 16 feet above mean sea-level.

During the Pleistocene epoch (2 million to 10,000 years before present), most of the Puget Sound was affected by intrusion of continental glaciation. The last period of glaciation, the Vashon Stade of the Fraser Glaciation, ended approximately 10,000 years ago. Many of the topographic features seen today are a result of scouring and overriding by glacial ice. During the Vashon period, the Puget Sound Region was overridden by more than 3,000 feet of ice thickness in places.

The subject site is situated in a section of town that is predominated by old tidelands that historically were subject to land filling and reclamation. Soil borings completed around the perimeter of the subject site card-lock fueling facility consistently encountered approximately 15 feet of fill soil comprised of variable layers of organic clay-silts, sandy-silts with some minor brick debris, and pea-gravel (tank excavation). Below the fill, a silty-fine sand with organic debris grades (with increasing depth) into a black silty fine sand, characteristic of the Duwamish basin.

Groundwater was encountered at a depth of approximately 6 feet below the ground surface. Other consultants monitoring a network of groundwater wells on the Port property (including three wells on the subject property) have reported a deduced southwesterly groundwater flow direction in the vicinity of the subject property. Regionally, groundwater is suspected to flow north-northeasterly following the Duwamish waterway drainage. Some tidal influences in flow direction may also occur.

Additional discussions regarding the sampling and laboratory analysis for select soil and groundwater samples for potential environmental contaminants are presented in the Preliminary Phase-II Soil and Groundwater Sampling section of this report.

Critical Areas - Flood Plains & Wetlands

According to King County's online critical areas map, the subject property is <u>not</u> within a designated 100-year flood plain or within a mapped county/city designated wetland.

Critical Areas - Landslide / Liquifaction / Seismic Hazard

A review of King County's online critical areas maps suggests that the subject parcel has not been identified by the County as existing in an area susceptible to seismic related ground failure by means of liquifaction and/or landslide.

DEVELOPMENT HISTORY AND LAND USE

Sources reviewed for information on site and area development and land use included the resources of the King County Assessor's Office, Seattle Department of Development and Planning (DPD), NW Regional Archives, and aerial photographs of the subject property and surrounding area from several time periods.

Fire Insurance Maps

Historic Sanborn Fire Insurance Maps between 1929 and 1950 included the general vicinity but did not appear to actually include the subject property. Earlier Sanborn maps did not include the subject property area.

King County Regional Archives

EAI viewed historic tax assessor records for the subject parcels at the King County Regional Archives.

A commercial building was constructed on the property in 1952. A ground level photograph of the building identified the business as Materials Reclamation Company. Additions to the building were added in 1965. The heat source for the building is listed as natural gas, though the assessor records also list an 8,000-gallon underground tank associated with the property. Materials Reclamation Company appears to be a recycled aluminum smelter.

Seattle Development and Planning Division (DPD)

Permits and building plans within the DPD's microfilm library collection confirmed that Materials Reclamation Company was smelting recycled aluminum metal. No information was found regarding the 8,000-gallon UST noted in the archived King County Assessor records, and/or any other underground tanks or hazardous materials storage areas.

Aerial Photographs

Aerial photographs of the area were reviewed for the years 1936, 1946, 1960, 1961, 1965, 1970, 1979, 1985, 1995, 1998, 2002, and 2007. The following paragraphs provide an interpretive summary of our observations in each photo. The time intervals between the various historic aerial photographs selected for this particular project are, in our opinion, entirely adequate for the intended purpose, which was to permit a general assessment of overall development and land use in the vicinity of the subject property.

1936 The property appears to be undeveloped. The former Duwamish waterway "turning basin" is present to the north-northeast. The "turning basin" was essentially a former "oxbow" in the river channel that was reconnected to the main Duwamish waterway to allow barges and ships to turn and maneuver. An area of land referred to as Foss Island existed in the center of the turning basin. West Marginal Way is present along the west side if the property. Front street does not currently exist. Small structures are visible farther to the south and east. Former Boeing Aircraft Plant #1 is present further to the east, coinciding with the current location of the SeaFreeze cold storage.

1946 The subject site appears to remain undeveloped. An increase in small structures (possible shacks / cabins), is evident to the south and east. The Boeing Plant remains further east. The turning basin between West Marginal Way and Foss Island has been partially filled in. A roadway (possibly unpaved) exists along the south end of the site, where Front Street currently resides.

1961-1965 A commercial building is now visible on the subject property. Redevelopment is occurring along the east side of West Marginal Way on the former turning basin land that had been filled in.

1970 Additions have been made to the north and northwest sides of the on-site commercial building. A dike has been constructed off the northeast corner of the Boeing Plant to segregate the last remnants of the former turning basin from the main channel of the Duwamish Waterway thus allowing it to be filled in.

1979 The commercial building continues to occupy the subject property. According to King County Assessor records the subject property land was sold to the Port of Seattle in 1971 and is now part of Terminal 115. Terminal 115 has been constructed on filled-in waterway. Boeing Plant #1 has been removed and is now occupied by the SeaFreeze building, which is also part of Terminal 115.

1985 No significant changes are noted on the subject property and/or the surrounding Port property.

1995 The subject parcel appears to be unchanged. The SeaFreeze building to the east-southeast has been expanded into its current configuration.

1998 The former commercial buildings have been removed with the exception of the western most office area, which was retained and is currently occupied by the Subway sandwich restaurant. The eastern half of the property appears to be concrete paved and occupied by a card-lock fuel sales facility. The card-lock includes a tank group south and center of the east-west oriented canopy covered pump islands.

2002-2007 No significant changes were noted for the subject or adjacent parcels.

Polk City Directories

EAI reviewed available Polk reverse city directories for the subject property area contained within the King County Archives collection. The volumes reviewed and the associated listings for various addresses historically associated with the subject property are presented in the table below:

Year	Listings For 6760 West Marginal Way
1951	No Listing
1954	Materials Reclamation Co. (Aluminum Smelter)
1960	Materials Reclamation Co. (Aluminum Smelter)
1967	Materials Reclamation Co. (Aluminum Smelter)
1970	Materials Reclamation Co. (Aluminum Smelter)
1975	Maralco Aluminum Smelters
1980	Maralco Aluminum Smelters
1985	Sea-Pac Service Company (Packing & Crating)
1989/90	Sea-Pac Service Company (Packing & Crating)
1994	Sea-Pac Service Company (Packing & Crating)

The existing Card-Lock facility was constructed on-site in 1996.

Summary

It appears that the first recorded commercial / industrial use of the subject property began in 1952 with the operation of a recycled aluminum smelter. Aluminum smelting appears to have continued on the property until approximately the early to mid 1980s at which time a shipping and packing company occupied the site. In 1995/96 the former site structures were removed except a small office area that was subsequently remodeled and is now occupied by Subway. The existing card-lock fueling facility was constructed in 1996 and is currently operating on the subject property.

The following historic land uses appear to constitute "recognized environmental conditions" (RECs) as defined by ASTM. These RECs' include:

- Operation of an aluminum smelter between 1952 through the mid 1980s. This REC also includes the apparent use of an 8,000 underground tank as noted in the King County tax records.

- Storage and commercial sales of gasoline and diesel fuel associated with the currently operational card-lock facility, which began operating in 1996.

- Though not specifically noted above, the general vicinity of the subject property, including large sections of Terminal 115 appears to have undergone several historic phases of land reclamation involving the importation of fill from unknown sources.

Additional discussions regarding the above RECs (tempered by the realization that the Client will only be leasing the facility from the Port of Seattle and not acquiring ownership of the real property) are provided in the Conclusions and Recommendations section of this report.

Borrowing from the jargon of ASTM, no "reasonably ascertainable" or "likely to be useful" information prior to 1936 was available. The absence of such information has no material effect upon the conclusions of this report.

PROPERTY CONVEYANCE/OWNERSHIP DATA

From the file resources of the King County Assessor's Office, the current listed taxpayer of the subject property is the Port of Seattle. The following additional subject property ownership data was developed through King County historic tax assessor records and resources of the Seattle Public Library.

INSTRUMENT/SOURCE	OWNER	DATE OF PURCHASE
King County Archives	Port of Seattle	9/14/1971
King County Archives	Thomas M. O'Brube	1/2/1958
King County Archives	O'Burbe	3/5/1952

PREVIOUS ENVIRONMENTAL WORK

EAI submitted a request to the Port of Seattle inquiring as to prior environmental work related to the card-lock facility and specifically a network of monitoring wells observed at the site. The Port of Seattle subsequently provided EAI with a copy of a summary environmental report for Terminal 115 that was commissioned by the Port to identify potential environmental issues associated with the terminal that could have a bearing on the designation of the lower Duwamish waterway as a Federal Superfund Site. The report titled Terminal 115 Environmental Conditions Report, was prepared by Sound Earth Strategies, of Seattle, Washington, on April 6, 2011.

That report included the following information that appeared to be specifically relevant to the subject property:

- The former operation of an aluminum smelter on the subject property is identified as an "issue of environmental concern (IEC).

- A geotechnical study encountered phase-separated petroleum (diesel fuel) floating on top of the shallow water table in 1995 on the lease parcel east of and adjacent to the current card-lock facility. According to the Port of Seattle, the current card-lock location was originally going to be further east until the petroleum contamination was discovered in the vicinity of monitoring well MW-12.

- The released diesel fuel was originally speculated by others to be from a 8,000-gallon heating oil UST that had been depicted on a set of building plans as being located along the east side of the former aluminum smelter building. That tank was removed in 1995 and was found to actually be a buried railroad tanker car that had been converted for use as an underground storage tank and was closer in capacity to 9,500 gallons. A cleanup action was initiated that involved over-excavation of petroleum-contaminated soil.

- Due to the proximity of the west adjacent smelter building, some diesel-contaminated soil was left in place to be removed at a later date following building demolition. The reports reviewed by SoundEarth, did not document any further removal of soil following building demolition.

- During the cleanup/ site redevelopment in 1995, a smaller 600-gallon heating oil UST was encountered and removed from the approximate location depicted on Plate 2, Site Plan. Approximately 25 cubic yards of petroleum contaminated soil was excavated and stockpiled for subsequent disposal by the Port. A site assessment by Columbia Environmental at the time of the tank removal advised that soils along the west sidewall of the tank excavation still contained diesel at concentrations above the current (2001) WDOE target compliance level. As with the case of the larger tank-car / UST, SoundEarth's report review does not document any additional follow-up soil excavation / remediation associated with the 600-gallon UST.

- As briefly alluded to earlier, a network of groundwater monitoring wells was installed between 1995 and 1998. Periodic groundwater monitoring has reportedly occurred between 1995 to 2009. This network of groundwater wells includes three (3) located on the subject lease property, which are designated MW-19, MW-21 and MW-22. Neither the SoundEarth Terminal 115 condition report nor other reports embedded as appendices to the SoundEarth report contained tabulated data tables for the monitoring well network. From a review of the available documentation, the following sub-points are offered:

  - Historically, phase-separated diesel "free-product" floating on the shallow water table had consistently been present at monitoring wells MW-12 and MW-18 on the east-adjacent site, with as much as 2 feet of free-product at MW-12. An early attempt was made in 1995 to recover free-product using a skimmer. This effort only recovered approximately 7.3 gallons of diesel. In 1998, another consultant installed five (5) product recovery wells (designated RW-1 through RW-5 on the attached site plan). A pilot study evaluating high vacuum extraction concluded that it would not be a reliable technology for product recovery. Additionally, a pilot study involving hydrogen peroxide did not appear to have a significant effect on dissolved diesel concentrations in groundwater. Although the "core" of the free product was reported to be proximal to former MW-12 and MW-18, according to SoundEarth, their review of more extensive well sampling data, monitoring wells MW-14 and MW-19 have <u>also</u> periodically exhibited the presence of free-product as have the five recovery wells. Based upon this information, the red tinting on Plate 2, Site Plan depicts a schematic depiction regarding the historical detection of diesel free-product on the shallow water table. It must be noted that this includes MW-19 located on the subject lease property.

- Early site investigators theorized that the source of the free-product might be a release from the former 8,000 (9,500-gallon) UST/rail car, however, as pointed out by subsequent consultants, "free-product" has not been detected to date in the vicinity of the former buried rail car. Without benefit of additional detail, it may be both reasonable and prudent to consider that the source of this release may not be completely resolved. The former 600 gallon UST that appears to have resided within the historical limits of discovered free-product may represent an alternative source mechanism.

- Groundwater samples collected from the three (3) on-site monitoring wells (MW-19, MW-21, and MW-22) have also historically contained diesel range petroleum at concentrations above WDOE target compliance levels. When MW-21 was drilled in January 1997, a soil sample collected at 6 feet below ground surface (approximate soil/groundwater interface) was analyzed and found to contain 9,600 parts per million (ppm) diesel, whereas the current WDOE target compliance level is 2,000 ppm. A subsequent groundwater sample from MW-21 in April 1997 yielded a dissolved diesel concentration of 616 ppb, which exceeds the WDOE's target level of 500 ppb. During the April 1997 sampling event, groundwater at on-site monitoring wells MW-19 and MW-22 contained 1,010 ppb and 570 ppm dissolved diesel, respectively. The results of more recent sampling data for the on-site wells was not included in the SoundEarth report.

- EAI sampled monitoring wells MW-19, MW-21, and MW-22 as part of the current due-diligence process. Those findings are presented in a later section of this report. Presently, the Port of Seattle is reportedly preparing to perform an updated round of groundwater monitoring of the entire network of monitoring wells.

In summary for this section, it would appear that a historic release of diesel range petroleum potentially associated with the former on-site aluminum smelting operation has lead to environmental impairments of soil and groundwater on both the east-adjacent lease parcel and, at least historically to some extent, the subject lease parcel as well. While some early phases of remediation and site assessment have occurred, no evidence has as yet been discovered or disclosed to suggest that this historic release/impairment of soil and groundwater has been mitigated to WDOE generally acceptable standards that would currently qualify for a determination of no further action. Currently, the Port appears to simply be monitoring the release through the periodic performance of groundwater sampling events. Additional discussions regarding this recognized environmental condition are presented in the Conclusions and Recommendations section of this report.

SITE RECONNAISSANCE

A Washington State Licensed Geologist / EPA-certified Asbestos Building Inspector from EAI visited the property on April 29, 2011, to review on-site conditions and land use practices in the surrounding area. Acknowledging that the Client is primarily interested in environmental conditions in the vicinity of the existing card-lock facility, an interior inspection of the Subway restaurant building and coffee stand was not requested or conducted.

The card-lock facility is self-service and is essentially unattended as operated by Shultz Distributing. The facility consists of a four (4) lane canopy covered pump island. Fuel is stored in three (3) 10,000-gallon underground storage tanks, two of which contain diesel fuel and one that contains unleaded gasoline. As depicted on Plate 2, Site Plan the three (3) USTs are located under a concrete pad south of the pump island. Of the numerous pumps, only one (located in the northwest corner) dispenses gasoline. All other pumps dispense diesel fuel.

A building located west of the pump islands is currently occupied by a Subway restaurant, who subleases the building from Shultz Distributing.

In addition to the fueling system, EAI observed three (3) on-site monitoring wells at the approximate locations depicted as MW-19, MW-21, and MW-22 on Plate 2, Site Plan. The locations of the wells essentially match the locations depicted in earlier environmental reports as reviewed in the Previous Environmental Work section of this report.

PRELIMINARY SOIL & GROUNDWATER SAMPLING & TESTING

Soil Boring & Sample Collection

On April 29, 2011, a total of four (4) soil borings were made by EAI around the perimeter of the card-lock facility. Borings B1 and B2 were positioned along the suspected down-gradient and cross-gradient sides of the UST excavation. Guided by ground penetrating radar(GPR), these borings were placed within approximately 5 feet from the sides / ends of the USTs. Boring B3 was placed proximal (within approximately 4 feet of the single gasoline dispenser), while Boring B4 was positioned adjacent to a diesel dispenser.

Borings B1 and B2 were advanced to depths of approximately 15 to 17 feet below the ground surface. Underlying approximately 3 to 4 feet of silty-gravelly, sand, the borings encountered pea-gravel extending to a depth of approximately 14 to 15 feet below the ground surface. The presence of pea-gravel is interpreted to suggest that borings B1 and B2 were completed within the tank cavity excavated to install the three (3) tanks in 1995). Below the pea-gravel, a silty fine black sand, interpreted to represent native soil was encountered.

Borings B3 and B4 were each completed to depths of approximately 12 feet below the ground surface. Soils encountered at B3 and B4 consisted of an upper 2 feet of sand gravel fill, overlying a brown clayey-silt interbedded with occasional silty-sand / fine sand stringers.

Groundwater was encountered between approximately 6 to 7 feet below the ground surface at all four (4) locations.

At each boring location, soil samples were recovered in 3 to 4 foot core intervals. Upon retrieval, each core was cut open and the soil sample was examined. Discrete soil samples were then collected from some of the cores. When sampled, the collection methodology was consistent with EPA guidance method 5035-A, intended to minimize the loss of volatile organic compounds.

Due to the extensive thickness of pea-gravel at B1 and B2, soil sample recovery was understandably very poor. Shallow soil samples (upper 3 to 4 feet) were too shallow to be of use and the pea-gravel sluff interfered with deeper soil sample recovery. A single sample from 16 to 17 feet below the ground surface was recovered from Boring B1 and was selected for laboratory analysis. At boring locations B3 and B4, both proximal to product lines and dispenser pumps, shallow soil samples from 3 to 4 feet below the ground surface were selected for analysis. In regard to groundwater, all four (4) groundwater samples from Borings B1 through B4 were selected for analysis. Additionally, EAI collected groundwater samples from monitoring wells MW-19, MW-21, and MW-22.

A peristaltic pump and temporary well screen was utilized to recover groundwater samples from each of the borings. The peristaltic pump was also used to micro-purge and sample the three (3) on-site groundwater monitoring wells MW-19, MW-21, and MW-22. EAI has also planned to collect a groundwater sample from the one tank cavity well that had been set during the station construction, however, acknowledging that both borings B1 and B2 appeared to be completed within the same tank excavation, it was decided that sampling the cavity well would be redundant.

EAI initially selected all seven (7) groundwater samples for laboratory analysis. Additionally, three (3) soil samples were also selected including the two shallow samples from pump island borings B3 and B4 and the one deeper soil sample recovered from boring B1, which appeared to be from native soil below the base of the tank excavation fill.

Laboratory Analysis & Results

The selected soil and groundwater samples were initially analyzed for petroleum hydrocarbons, including gasoline, diesel, and heavy oil total petroleum hydrocarbons (TPH) and BTEX (benzene, toluene, ethylbenzene, and xylene). Additionally, the groundwater samples from B1 and B3 were also initially analyzed for the fuel additive MTBE.

Appendix-C contains the tabulated initial laboratory data along with the laboratory reports.

Referencing Table 1 in Appendix-C, of the three (3) soil samples analyzed, only the deep sample from B1 (16-17 feet) produced a detection. Benzene was detected in the soil sample from B1 collected from suspected native soil below the base of the UST pea-gravel fill. Although the concentration of benzene at 0.17 parts per million (ppm) exceeds the WDOE's target compliance level of 0.03 ppm this detection may be a sampling "artifact" as overlying groundwater was found to contain significantly elevated petroleum concentrations, through which the sampling device obviously had to traverse to facilitate sample recovery. A trace detection of gasoline total petroleum hydrocarbon was present in the shallow soil sample collected at B3, adjacent to the unleaded gasoline dispenser. The detected concentration was 19 ppm which is below the WDOE's 30 ppm target compliance level established for gasoline when benzene is present at the site.

In regard to the groundwater samples, as presented in Table 2 in Appendix-C, the two (2) groundwater samples recovered from the existing UST tank hold cavity contained gasoline, diesel, and benzene at concentrations well above WDOE target compliance levels. Gasoline total petroleum hydrocarbons were also detected in the groundwater at monitoring well MW-19, but at a concentration below WDOE target compliance levels. The remaining groundwater samples did not contain gasoline, diesel, heavy oil, or BTEX at concentrations above laboratory detection limits.

Preliminary Phase-II Site Assessment Summary

In summary, the preliminary laboratory data appears to suggest that a petroleum release, primarily within the diesel range with some overlap into gasoline range, has occurred within the tank hold for the currently operating USTs. Acknowledging inferred gradient relationships the lack of significant impairment in groundwater at monitoring wells MW-19 and MW-21, the impacted groundwater within the tank hold does not appear to be an extension of a continuous or steady-state "plume" emanating from the known release on the east-adjoining lease parcel. The presence of benzene within the tank hold further suggests that the encountered release may be more modern ("unweathered') than the historic release that primarily resides on the east-adjacent parcel.

Additional discussions including recommendations for performing some forensic product identification / age dating along with performing system "tightness" test and inspection of the current fueling facility are offered in the Conclusions and Recommendations section of this report.

INTERVIEWS

Current Property Ownership

Current property ownership (Shultz Distributing) was represented by Mr. Hal Tiffany, who provided site access and background information regarding Shultz Distributing's occupancy of the property. Additionally, Mr. Tiffany advised that he was not aware of;

1. any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property;

2. any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property;

3. any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products; and

4. any existing or former underground storage tanks associated with the property other than the three 10,000-gallon USTs currently in operation.

Government Agency Interview

Information from public agencies was readily available through self-service automated systems and/or by means of submitting simple requests. As such, no in depth interviews with specific government agency personnel were deemed to be warranted to complete this assignment.

Government agencies interacted with in the above manner included, the Washington State Department of Ecology, King County Assessors Office, King County Recorders Office, Health Department, Seattle Fire Marshall's Office, and Department of Planning and Development.

CHECK FOR PCB-CONTAINING MATERIALS

Prior to 1979, polychlorinated biphenyls (PCBs) were widely used in electrical equipment such as transformers, capacitors, switches, fluorescent lights (ballasts) and voltage regulators owing to their excellent cooling properties. In 1976, the EPA initiated regulation of PCBs through issues pursuant to the Toxic Substances Control Act (TSCA). These regulations generally control the use, manufacturing, storage, documentation, and disposal of PCBs. EPA eventually banned PCB use in 1978, and adoption of amendments to TSCA under Public Law 94-469 in 1979 prohibited any further manufacturing of PCBs in the United States.

No on-site pad or pole-mounted electrical transformers were noted. An interior review of the service Subway restaurant and coffee stand was excluded from our scope of work, therefore it is unknown to EAI if the building's current electrical components have the potential to contain PCBs.

CHECK FOR ASBESTOS-CONTAINING MATERIALS

A review of the buildings was excluded from our scope of work, therefore no observations regarding suspect asbestos containing building materials were made.

REVIEW FOR LEAD-BASED PAINT

Again, a review of the buildings was excluded from our scope of work, therefore no observations regarding lead-based paint were made.

RADON EVALUATION

Occurrence

Radon is a naturally occurring, highly mobile, chemically inert radioactive gas created through radioactive decay of uranium and thorium. The potential for occurrence of radon varies widely and is dependent upon (1) the concentration of radioactive materials in the underlying bedrock; (2) the relative permeability of soils with respect to gases; and (3) the amount of fracturing or faulting in surficial materials (EPA, 1987).

Health Risks

The concern regarding radon and its potential effects upon humans arises from the results of studies (EPA, 1987) which suggest that approximately fifteen percent of all lung cancer mortalities in the United States may be attributable to exposure to radon.

The EPA has established a concentration of radon of four (4) picocuries per liter (pCi/l) as a maximum permissible concentration "action level". Concentrations above this value would signal a potential health threat. According to some studies, an average concentration in homes across the United States is on the order of 1.4 pCi/l.

Risk of Potential Exposure in the Seattle Area

The Bonneville Power Administration (BPA) recently published the results of measurements for radon made in residences throughout the region they serve which includes Washington, Oregon and Idaho. For the Seattle area in the immediate vicinity of the subject property 128 tests have been performed. The results of their work (BPA, 1993) suggest that radon levels over 4 pCi/l were detected in less than 1% of the monitored residences in the vicinity of the subject site. Additionally, the average listed radon reading in the subject site township was 1.07 pCi/l, well below the EPA threshold of concern.

On the basis of the findings presented in the cited BPA survey, we conclude that the potential for exposure to naturally occurring radon at the subject site is very low.

WATER SUPPLY, WASTE WATER AND SOLID WASTE MANAGEMENT

Information supplied by the King County Assessors Office revealed that water and sewer service is provided by municipal sources.

Solid waste service for the subject property is provided by Allied Waste. A fenced dumpster enclosure is located on the north side of the Subway restaurant building. The area around the dumpsters appeared to be relatively free of debris at the time of our visit. EAI did observe a fair amount of trash such as food wrappers, beverage cans and wax-paper cups. None of the debris appear to be of a hazardous nature nor would such constitute a REC for the property.

REVIEW OF WASHINGTON DOE LISTING OF UNDERGROUND STORAGE TANKS

Review of the current Washington Department of Ecology (WDOE) listing of underground storage tanks (USTs) (Appendix-D) suggests that four (4) facilities with registered USTs are located within a one-quarter mile radius of the subject property.

The **subject property** is one of the registered UST sites, listed as Shultz Distributing Inc at 6760 West Marginal Way SW. The database report lists three (3) operational USTs with capacities between 10,000-gallons and 19,999-gallons.

According to the most recent WDOE Leaking Underground Storage Tank (LUST) listing, five (5) registered tank facilities located within an approximately one-half mile radius of the subject property have reported accidental releases or leakage to the WDOE in the past.

None of the registered LUST facilities listed in the database report (Appendix-D) appear to be located on physically adjoining and/or directly up-gradient parcels. The subject property facility was not listed as a LUST site.

None of the remaining UST/LUST sites listed in the database report (Appendix-D) appeared to be located on adjoining and/or directly up-gradient parcels relative to the subject site.

On this basis of the above discussion, the potential for environmental impairment of the subject property from one or more of the registered UST/LUST off-site facilities appears to be low. As discussed at length in the Preliminary Soil and Groundwater Sampling and Testing section of this report, groundwater within the currently operation USTs tank cavity appears to exhibit conditions suggesting a potential release of some type or cause at the existing card-lock facility. Additional discussions regarding this REC are provided in the Conclusions and Recommendations section of this report.

The WDOE UST/LUST lists may not include tanks that are exempted from regulation such as heating oil tanks or tanks used for agricultural purposes and may not include USTs that were installed/removed/ or abandoned prior to the advent of modern environmental UST regulations. The two former USTs discovered and removed in 1995 from what is currently the east-adjoining lease parcel are representative of such older tanks. Historic and potentially ongoing impairments from those USTs have been discussed at length in the Previous Environmental Work section of this report. Additional discussions are also presented in the Conclusions and Recommendations section of this report.

EPA & STATE RECORDS OF POTENTIALLY HAZARDOUS SITES

Superfund, NPL, & Brownfields

Review of the current EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and National Priority List (NPL) listings revealed no CERCLIS, three (3) CERCLIS-NFRAP sites, and no de-listed NPL, or Federal Brownfields sites within a one-half mile distance from the subject site. One (1) NPL site within one mile of the subject property has been designated as potentially hazardous or eligible for participation in the Superfund cleanup or Brownfields programs.

The Lower Duwamish Waterway is a listed NPL site. The Port of Seattle is currently listed as a potentially liable party (PLP) along with a host of other entities. The Terminal 115 Environmental Conditions Report, provided by the Port for EAI's review was commissioned as means for the Port to assess potential contaminant transport pathways in which Port facilities may have contributed to the impairment of the waterway or present a potential future risk to the waterway. As discussed at length earlier, the historic diesel fuel release affecting both the east-adjoining lease parcel and the subject parcel was identified as one of several areas of concern for Port 115 that may require further evaluation. The currently operating card-lock facility was identified as only a potential risk, based solely on the nature and type of facility, given that no known releases associated with the card-lock had been known at the time of that report's preparation. If disclosed, the results of the preliminary soil and groundwater study completed as part of EAI's work on behalf of APP could conceivably trigger the need for further assessment and potential corrective action. At present, the preliminary data suggests that the extent of the groundwater impairment may possibly be limited to the immediate vicinity of the subject site tank hold cavity. If true, the risk for direct impairment of the Duwamish Waterway via groundwater migration would then appear to be low.

None of the listed CERCLIS-NFRAP facilities appear to be located on physically adjoining and/or directly up-gradient parcels and therefore appear to present a low risk to the subject site.

CORRACTS

Review of the current EPA Corrective Action Report (CORRACTS) listing revealed one (1) CORRACTS site located within one mile of the subject property that has been designated as having a potential release at the facility under RCRA.

Cascade Columbia at 6900 Fox Avenue South is located approximately 0.8 miles southeast. On that basis, the risk to the subject property from this off-site facility appears to be low.

MTCA / State Confirmed/Suspected Contaminated Sites List (CSCSL)

The Washington Department of Ecology (WDOE) hazardous waste cleanup and investigation program was launched in 1989 as a part of the Model Toxics Control Act (MTCA), Chapter 173-340 WAC, in order to evaluate potential and actual hazards at sites within the state. Fifty-five (55) MTCA / CSCSL sites and no State "Brownfields" sites are located within a one mile distance from the subject property. Two (2) facilities within a half-mile radius have entered the WDOE's Voluntary Cleanup Program (VCP). None of the VCP facilities appear to have received determinations of "no further action" (NFA).

None of the State sites listed in the database report (Appendix-D) appear to be located on physically adjoining parcels and or on parcels interpreted to be directly up-gradient hydrologically from the subject site. On that basis, the potential risk for environmental impairment from these off-site State-listed facilities presented in the database report (Appendix-D) appears to be low.

RCRA/ TSDs

Review of EPA's Treatment, Storage and Disposal (TSD) facilities listing for sites that treat, store, or dispose of potentially hazardous materials revealed that none are located within a one-half mile distance from the subject property.

Review of the EPA's RCRA Generator listing revealed, eight (8) hazardous waste generators, within a 1/4 mile radius of the property. The listing also included nine (9) former hazardous waste generators within a 1/4 mile radius of the subject property.

The subject property is not listed as either a current or former RCRA Generator. None of the remaining RCRA sites listed in Appendix-D appear to be located on adjoining and/or inferred to be directly up-gradient parcels from the subject site. On this basis, the risk posed to the subject property from these off-site facilities appears to be low.

ERNS

According to the Emergency Response Notification System (ERNS) database listing (Appendix-D) no hazardous spill responses have been filed for the subject property.

LANDFILLS

A review of WDOE and Seattle / King County Health Department documents regarding current and abandoned landfills revealed no officially documented abandoned landfills located within a ½ mile radius of the subject property. The subject site is, however situated in a section of town that was historically reclaimed with fill from multiple unknown sources. Prior site workers have documented up to approximately 14 to 15 feet of suspected fill soil in the vicinity of the subject site. To date, the localized fill appears to include natural woody debris and some minor amounts of brick. No putrescible waste and/or indications of industrial/commercial refuge disposal have been documented in the immediate vicinity of the subject site, nor were such conditions encountered within the depths explored by the four (4) borings recently completed by EAI.

CONCLUSIONS/RECOMMENDATIONS

In accordance with report language requirements of ASTM E-1527-2005, "Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process", and more specifically section 12.8 thereto, the following conclusory statements are made:

We (EAI) have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527-05 of the subject area located at the Port of Seattle - Terminal 115 in Seattle, Washington. Except as stipulated elsewhere in this report no exceptions to or deletions from this practice were made. This assessment has revealed the following evidence of a "recognized environmental conditions"(RECs) as defined by ASTM in connection with the property.

On-Site RECs

- Documented historical of aluminum smelting dating between 1952 and the mid 1980s.

- Historic release and discovery of diesel fuel on the former aluminum smelter parcel, which currently is represented by the subject lease parcel and the east-adjoining parcel. Historically and presently, the majority of the environmental impairment appears to exist on the east adjoining lease site. The source of the diesel has been attributed by prior site investigators to former heating oil USTs that were removed in 1995. A network of monitoring wells (including three on the subject site) exist and are periodically sampled by the Port. The three (3) on-site wells were sampled by EAI as part of the current due-diligence and groundwater at those locations were found to currently be in compliance with WDOE target levels for petroleum hydrocarbons. Current groundwater environmental conditions on the east-adjoining and reported up-gradient site are unknown, although the Port reportedly plans to sample the entire monitoring well network in the near future.

- Historic / ongoing operation of a retail fueling facility. A site assessment made as part of the current due-diligence process discovered that groundwater present within the operational UST tank cavity contains diesel and gasoline petroleum (including benzene) at concentrations well above WDOE target compliance levels. Presently this impairment appears to be localized to the tank hold which, combined with the benzene concentrations, may suggest some sort of release or tank overfill associated with the current card-lock facility.

Given the Client's desire to acquire the facility infrastructure from Shultz and negotiate a new lease with the Port of Seattle, it would appear that of the above identified REC's, the one most directly relevant to APP and Shultz may be the recent discovery of petroleum contaminated groundwater within the tank hold for the currently operational USTs. Further investigation would appear to be warranted for which the following recommendations are offered:

- Perform an immediate inspection of the current fueling system, including performing a current tightness test of tanks and lines and performing a visual inspection of the various release and spill prevention components, dispensers, turbine access ports, interstitial monitoring ports, etc, along with a review of past tightness testing data and tank monitoring alarm codes.

- Consider performing forensic chemistry on groundwater samples retained at the project laboratory. Such testing may provide a "finger print" that could then be compared to similar testing that could be performed on samples collected from the historical diesel release source area on the east adjoining parcel. Determination of approximate age of the release may also be possible. Such testing may help to determine if the encountered release is from the current facility or if it may be an artifact of an older release such as the one encountered on the east-adjoining parcel in 1995.

- Once the source of the postulated potential release is better evaluated additional actions may be warranted. If the impact remains limited to the confines of the tank hold, corrective action could involve a basic "pump and treat scenario" to remove contaminants, and/or application of chemical oxidants or bio-remediation products.

Further assessment of the other listed RECs would appear to be the primary responsibility of the Port and/or other parties and as such, no specific recommendations for follow-up assessment of those RECs on behalf of APP / Shultz are offered at this time.

LIMITATIONS

This report has been prepared for the exclusive use of Associated Petroleum Products along with Shultz Distributing, Inc., and the Port of Seattle, for specific application to this site. Our work for this project was conducted in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area, and in accordance with the terms and conditions set forth in our proposal (PR-18709) dated January 28, 2011 and April 12, 2011. The environmental condition of subsurface soil, groundwater, and/or subsurface appurtenances cannot typically be determined by visual examination of surficial conditions such as afforded by the scope of a Phase I audit such as performed here. Acknowledging that limitation, no warranty whatsoever in that regard is made. Comments presented herein with respect to the environmental condition of subsurface soil and groundwater rely solely upon the results of sampling and testing conducted at separated localities, and such conditions may vary between those localities or at other localities and/or depths. No other warranty, expressed or implied, is made. If new information is developed in future site work which may include excavations, borings, studies, etc., Environmental Associates, Inc., must be retained to reevaluate the conclusions of this report and to provide amendments as required.

REFERENCES

GENERAL

Bonneville Power Administration (BPA), January 1993, Radon Monitoring Results from BPA's Residential Conservation Program, Report No. 15, (with April 1993 Map).

Columbia Environmental, Inc., March 8, 1996, Hand Auger Sampling, Port of Seattle, Terminal 115, Southwest Front Street & West Marginal Way SW, Seattle, Washington.

Columbia Environmental, Inc., September 5, 1996, Soil Sampling, Port of Seattle, Terminal 115, Southwest Front Street & West Marginal Way SW, Seattle, Washington.

Columbia Environmental, Inc., January 13, 1997, Monitoring Well Installation, Soil, and Groundwater Sampling, Port of Seattle, Terminal 115, Southwest Front Street & West Marginal Way SW, Seattle, Washington.

Environmental Protection Agency (EPA), September 1987, Radon Reference Manual EPA 520/1-87-20.

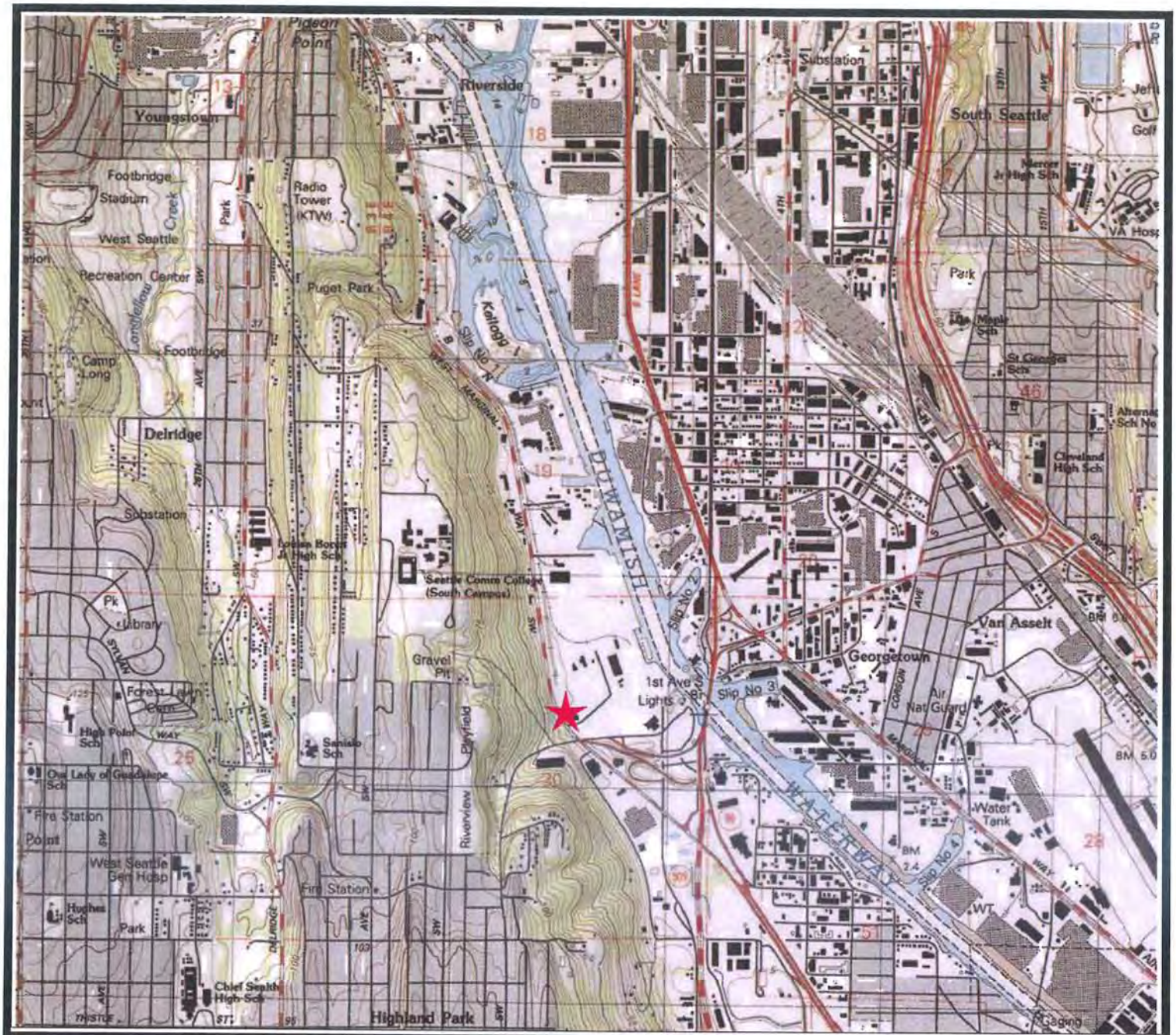
GeoScience Management, Inc., July 2, 1995, Subsurface Investigation, Port of Seattle Terminal 115 Property.

GeoScience Management, Inc., December 18, 1996, Letter Report Documenting Removal of 600-Gallon Fuel Oil Underground Storage Tank, Terminal 115, Seattle, Washington.

GeoScience Management, Inc., April 23, 1997, April 4, 1997 Groundwater Sampling Data, Port of Seattle Terminal 115, Seattle, Washington.

Jones, M.A., 1998, Geologic Framework for the Puget Sound Aquifer System, Washington & British Columbia. U.S. Geological Survey Professional Paper 1424-C, 18 plates, 9 figures, 2 tables.

Sound Earth Strategies, April 6, 2011, Terminal 115 Environmental Conditions Report, Port of Seattle Terminal 115, 6000 to 6700 West Marginal Way SW, Seattle, Washington , prepared for Port of Seattle.



USGS: 7.5 Minute Quadrangle: Seattle South, Washington
Contour Interval: 5-meter

Scale

0 — *1/2 Mile* — 1

N

Subject Property Location

Reported shallow groundwater flow direction based upon prior hydrologic studies by others. Regional groundwater flow may be north-northwesterly following the Duwammish drainage.

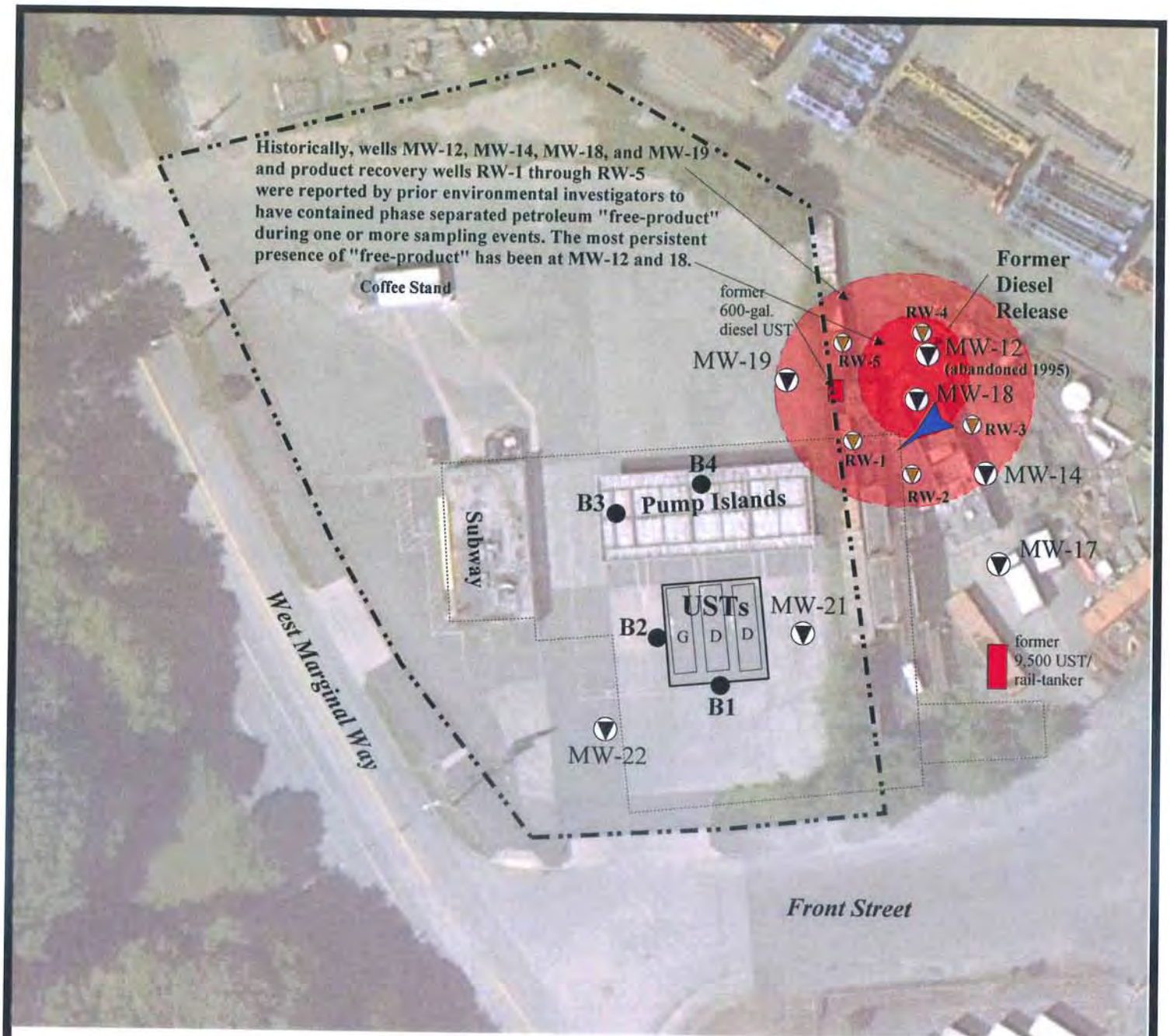
ENVIRONMENTAL ASSOCIATES, INC.

1380 - 112th Avenue NE, Suite 300
Bellevue, Washington 98004

VICINITY / TOPOGRAPHIC MAP

Card-Lock Commercial Fueling Facility
Port of Seattle Lease - Terminal 115
6760 West Marginal Way
Seattle, Washington

Job Number:	*Date:*		*Plate:*
JN-31026	April 2011		1



- Existing groundwater monitoring wells.
- "Free-product" recovery wells.
- Strataprobe borings completed by EAI in April 2011.
- Approximate boundary of the card-lock lease.
- Approximate outline of the former 1952/1965 aluminum smelter building.

N

ENVIRONMENTAL ASSOCIATES, INC.

1380 112th Avenue N.E., Ste. 300
Bellevue, Washington 98004

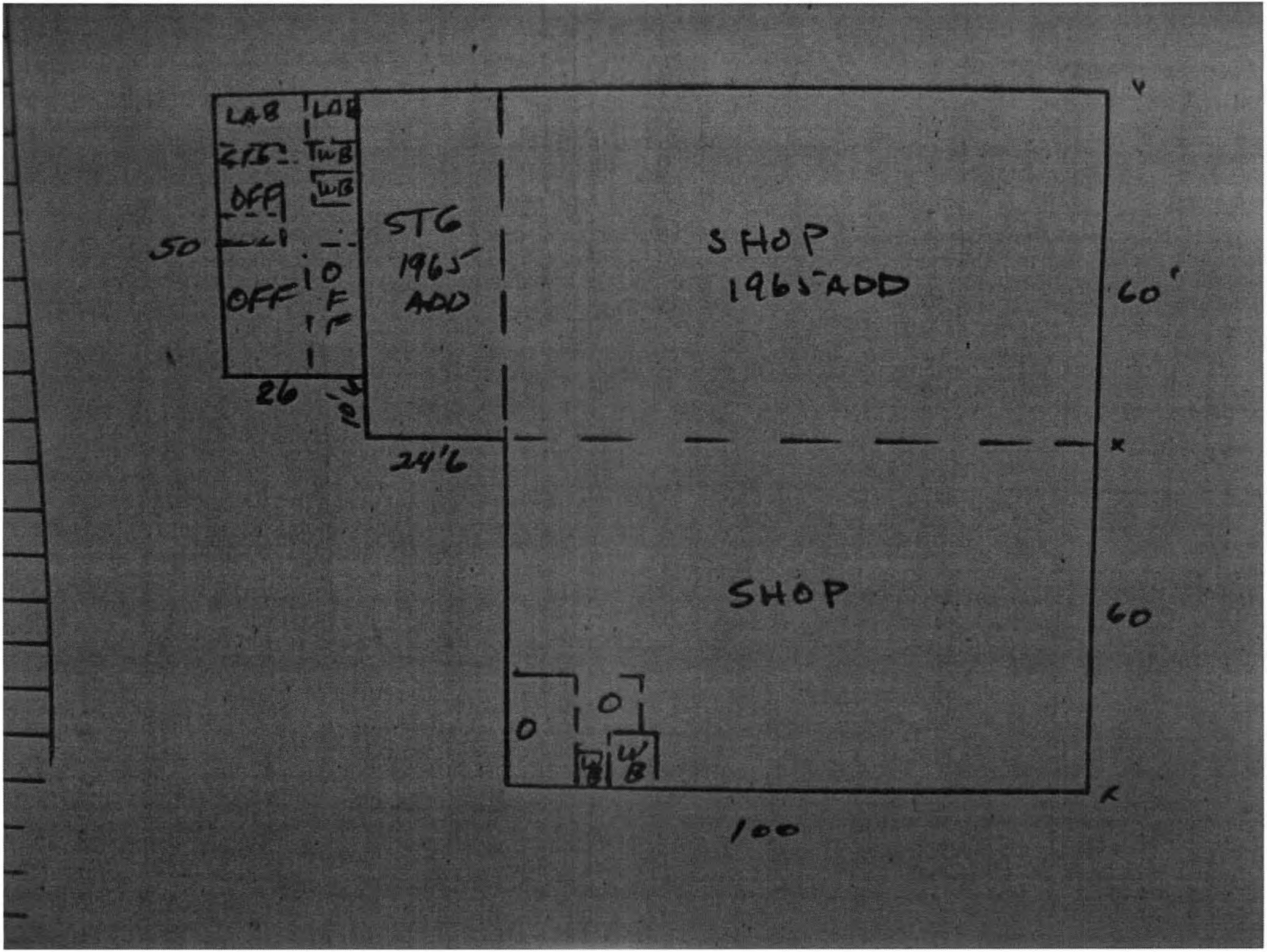
SITE PLAN

Card-Lock Commercial Fueling Facility
6760 West Marginal Way
Seattle, Washington

Job Number:	Date:	Scale:	Plate:
JN-31026	April 2011		2

APPENDIX A

Historic Tax Assessor & Archive Records


LAB
LOB
TWB
WB
OFF
OFF
STG
1965
ADD
SHOP
1965 ADD
SHOP
50
26
24'6
60'
60
100
Y
X
X

HT

Full ______ % Part.

Sub-Basement

Size ______

Garage [ ] No. Cars

Floors

Plastered [ ] Pl. Bd.

No. Apartments

Service Rooms

15
5
2
9
107

1338A

MISC. TANKS, Etc.

HOISTS: Elec. Hydr.

1- 8000 GAL

ELEVATORS

Pass. ____ F

Auto. ____ E

Man. ____ H

Doors-Auto ____ Man

Escalators

____ Stops ____ Sp

Cap'y. ______

ERIOR WALL CONST.

Single [X] Double

Stud Walls OFF

Brick ______ Pil. [ ]

Conc. ______ Pil. [ ]

Rein. Conc. Skeleton

Str. Stl. F...

	C. Hgt.	GRO
SB		TO
B		
1	8-22	

FOLIO 3389

PERMIT NO. 414834
~~513061~~

DATE 6-11-52
~~6-21-65~~

ADDITION ~~J.R.~~ McLAUGHLINS WA

Section NE 30 Twp 24 Range 4 EWM. Block

Tax Lot

Address 6760 - W. MARGINAL

Fee Owner MATERIALS RECLAMATION Co Architect

Zoning I. G. Condition of Exterior 6 Interior 6 Foundation 6 Floor F

USE SHOP & OFF

1	No. Stories	
	No. Stores	
10	No. Rooms	
	Basement	
7	No. Offices	Unit Sq. Ft.
	No. Apartmts	
	1 rm. ☐ 2 rm. ☐ 3 rm.	
	4 rm. ☐ 5 rm. ☐ 6 rm.	

ROOF CONSTRUCTION

X	Frame-Joist OFF	
	Mill-Deck	
	Rein. Conc.	GLB
	Steel Fr.	Metal Deck
8	Trusses 60'	Span (BOW)
X	Wood	Steel

FLOOR FINISHES

	Fir	☐ Maple		☐ Tile
	Oak	☐ 2x6TG		
	Lino	☐ 3x6TG		
X	Cement	☐ Lgtwgt. Conc.		
	Terrazzo			
X	Asphalt Tile	☐ Vinyl Tile		
or	OFF			

TYPE OF CONSTRUCTION

X	Frame OFF
	Metal-Prefab
X	Ordinary Masonry
	Mill Construction
	Class A Rein. Conc.
	Stru. Steel and Conc.

Date Built 1952 Date Add. Built 1965 ☒ Finished ☐ Unfinished

Effective Age Years Future Life

Dep. for Cond. Dep for Ob. Dep. for Es.

FAC


MATERIALS RECLAMATION CO.
Mc LAUGHLINS WATER F
L 53
B 33 L 19
90 6730 W. MARGINAL W

4727 VACANT
4734 CHAILANTE DOMINICK P * WE5-8486
4756 PFANKUCHE JOHN * WE7-9288
---SW EDMUNDS INTERSECTS
4805 CHAILANTE COSTANTINA MRS
4810 KLIER O V WAREHOUSE MASON CONTRS WE7-6840
4819 FOG-TITE METER SEAL CO
4822 A-1 AUTO PARTS YARD AUTO WRECKERS WE7-6334
4847 VACANT
---SW HUDSON INTERSECTS
5200 IDEAL CEMENT CO WHOL WE7-8025
PARTS H EVENSON BERNARD G * WE7-1350
5423 SEYMOUR ALISON T INC MATS MFRS WE5-5471
5430 CHEMITHON CORP THE CHEM MFRS WE7-9954
5500 GENERAL CONSTRUCTION CO (STGE YD)
KIEWIT PETER SONS CO (STGE YD)
5558 DUWAMISH SHIPYARDS INC BLDRS AND REPR RO7-4880
SEATTLE COPPER WORKS INC RO7-3883
SEATTLE MACHINE WORKS INC RO3-2710
5955 VACANT
6000 M & T CHEMICALS RO7-4337
6031 SANDGREN ESTHER *
6039 HAWKINS EUG G * PA2-1750
6301 ALUMINUM & BRONZE FABRICATORS RO7-4744
6394 IDEAL CEMENT CO (WHSE)
6560 SEATTLE READY MIX CONCRETE DIV BOISE CASCADE CONCRETE RO3-2250
6760 MATERIALS RECLAMATION CO INC ALUMINUM SMELTERS PA2-0133

986

---SW FRONT INTERSECTS
---SW MICHIGAN INTERSECTS
7126 CENTURY METAL WORKS INC STEEL FABRICATORS RO3-0560
---SW MYRTLE INTERSECTS

271

---S KENYON INTERSECTS
---S MONROE INTERSECTS
---S ELMGROVE INTERSECTS
---S BARTON INTERSECTS

393

WEST MONTLAKE PL E -FROM 2456 19TH AV E NORTHEAST

---ZIP CODE 98102
---19TH AV E INTERSECTS
2462 TUCKER JUANITA MRS * EA2-1132
---E MILLER INTERSECTS
2501 PITTS SPENCER * EA5-4774
2507 HENDER ALBERT * EA3-0249
2510 WALLACE FREEM H M * EA3-9043
2511 BURNS WM L * EA4-1311
2515 MAJEWSKI PETER A EA4-0886
2521 MEYER LEONIDAS M * EA5-3887
---E LOUISA INTERSECTS
2603 CHENBERG STEPH F * EA2-5236

West Marginal Way
6760
~~1951~~ ~~1957~~ ~~1960~~
1967

CALL MU 2-5633

FAIRVIEW AVE. N. ★ MAin 2-2900 ★ 910 W. SP

202

5465 Evenson Bernard G ⊕ △ WE 7-1350
5421 Riley Albert D △ WE 5-4751
5430 Chemithon Corp The chem mfrs △ WE 7-9454
5500 State Toll Bridge Authority
Morrison-Kaiser-Puget Sound-General bridge contrs △ WE 5-6542
5658 Duwamish Shipyards Inc bldrs and repr △ PA 2-1000
Seattle Mach Wks Inc △ PA 3-2710
McDougal Edgar
5900 Reichhold Chem Inc mfrs △ PA 3-6300
5901 Peterson A Edwin
5935 Cascade Gasket & Mfg Co Inc △ PA 3-0690
6039 Hawkins Eug G ⊕ △ PA 5-9656
6041 Sandgren Oscar ⊕
6313 Vacant
6343 Houser Albert C ⊕ △ PA 3-9224
6353 Morrison James T △ PA 3-9448
6373 Masterson Jas W
6560 Klinker Sand & Gravel Co △ PA 2-0780
Materials Reclamation Co Inc aluminum smelter △ PA 2-0133

205

W Michigan intersects
7126 Century Metal Wks steel fabricators △ PA 5-7500

271

Kenyon intersects
Monroe intersects
Elmgrove intersects
Barton intersects

227

MARGUERITE COURT — From 3400 63d av SW, northwest
6304 Rhoda Anne Mrs ⊕ △ WE 5-3658
6305 Vacant
6305½ Vacant
6307 Kotchen Albert C ⊕ △ WE 5-3485
6307½ Bjorklund Mary Mrs △ WE 5-0382
6308 O'Brien Walter J ⊕ △ WE 2-2194
6312 Titus Leonard V ⊕ △ WE 5-0415
6315 Waters Albert ⊕ △ WE 5-5823
Bell Mertie A Mrs ⊕ △ WE 3-9909
Clark Beryl A Mrs △ WE 7-4761

9716 Hahn Jas A ⊕ △ WE 5-1329
9750 Johnson Ernest R ⊕ △ WE 2-6887
SW 98th intersects
9810 Harwood Frank N ⊕ △ WE 5-1217
9816 Saltsman Walter F ⊕
9817 Johnson Laurel L ⊕ △ WE 2-2083
9824 Hammond Wm C ⊕ △ WE 2-8714
9825 Rogers Theo H ⊕ △ WE 2-3255
9831 McFarland Peter A ⊕ △ WE 2-1335
9834 Smith C Delmont ⊕ △ WE 5-5104
9835 Trucker Robt ⊕ △ WE 7-0118
9843 Cowles Donald A ⊕
10329 Diamond Chas E ⊕ △ WE 2-1871
10345 Kilbane Robt J

West Marginal Way
6760
~~1951~~ ~~1957~~ 1960

7201 Stewart Metals LA 8100
7210 Toppano's Auto Ct
Toppano Arth ⊕ LA 1139
7265 Layrite Concrete Prods RA 2631
7300 Markov Vic Tire Co MO 2115
7300-04½ Jack J A & Sons limestone flour LA 6540
7320 Wash Machy Co used RA 1123
7343 Northwest Precote Inc contrs RA 3173
7400 Grant & Rosberg used cars RA 0655
7501 Carpinito Angelo M ⊕ mkt gdnr LA 0341
7698 Brake & Motor Doctors auto repra RA 4240
7790 Aircraft Tool House hdw LA 6540
Campbell's Don Sta & U Drive No 2 LA 3212
Elites Tool & Sup hwd LA 3212
7755 Boeing Airplane Co MO 0333

West Marginal Way
6760
~~1951~~ 1954

5278 Vacant
5280 Vacant
5402 Vacant
5465 Evenson Bernard G HO 1350
5421 Henry Geo E AV 8890
5500 Genl Constr Co (whse)
5658 Duwamish Shipyards Inc RA 1000
Seattle Mach Wks LA 2710
5801 Vacant
5900 Reichhold Chems Inc mfrs LA 6300
5901 Peterson Edw
5935 Cascade Gasket & Mfg Co Inc LA 0690
6039 Swanson Jas E LA 5164
6041 Sandgren Esther M
6303 Vacant
6315 Vacant
6336 Vacant
6343 Houser Albert C ⊕ LA 9224
6353 Anderson Conrad LA 8733
6373 Vacant
6375 Vacant
6500 Klinker Sand & Gravel Co RA 0780
6714 Hendricks Geo H ⊕
6760 Materials Reclamation Co aluminum smelter RA 0133
7126 Century Mtl Wks Steel & Iron fabricators LA 0116
7301 Fehrenbach Jos J ⊕ RA 1441
5420 Vacant

MARGUERITE COURT—From 3400 63d av SW, northwest
6304 Rhodes David A ⊕ WE 2630
6305 Vager David AV 4804
6307 Brase Chas F ⊕ WE 8164
Watkins Fanny F Mrs AV 3269
6308 O'Brien Walter J ⊕ WE 2194
6312 Titus Leonard V ⊕ AV 0415
6313 Ferguson Harold ⊕ HO 2320
6315 Bell Chas M ⊕ AV 5869
6318 Teaserdall Geo E AV 8214
6321 ABC Window Clnrs
Barnhizen Jas ⊕ AV 3250
6322 Rhinney Mabel A Mrs AV 0071
6323 Fuller Alf D ⊕ AV 3195
6327 Gifford Rodney L HO 5454

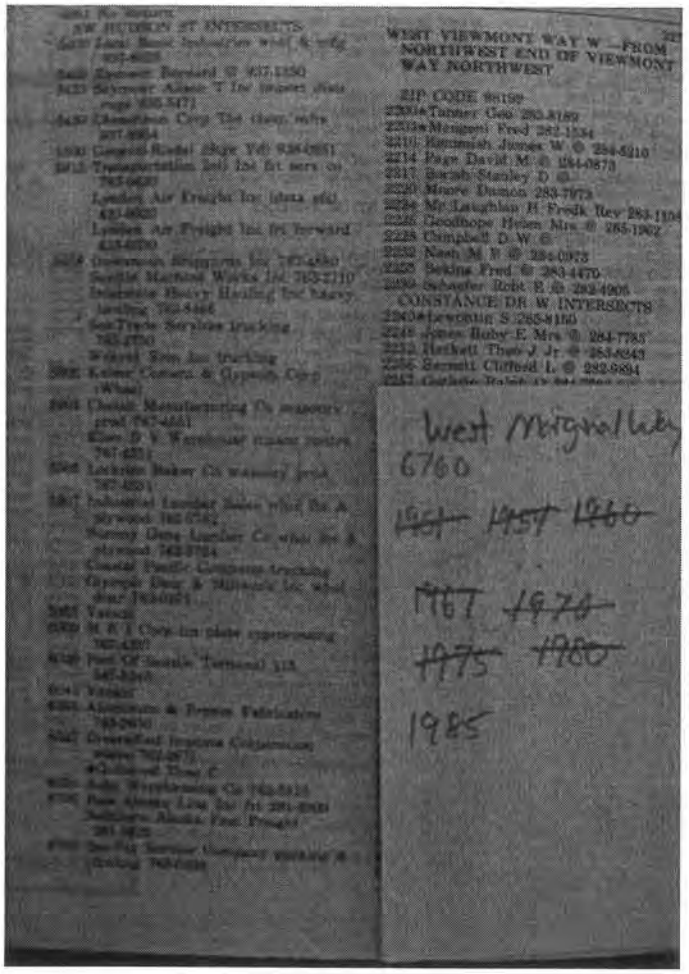
MARINE AV—From 2600 Alki av, south
2600 Wenzel Edwin
2604 Vacant
2608 Bern Jas B ⊕
2610 Ellingsen Reuben J ⊕ WE 1019
2613 Woodhouse John W ⊕ WE 1178
2615 Vacant
2616 Hedvall Edwin O ⊕ WE 7358
2619 Russell John R ⊕ WE 1689
2620 Dawn Truman A ⊕ HO 1775

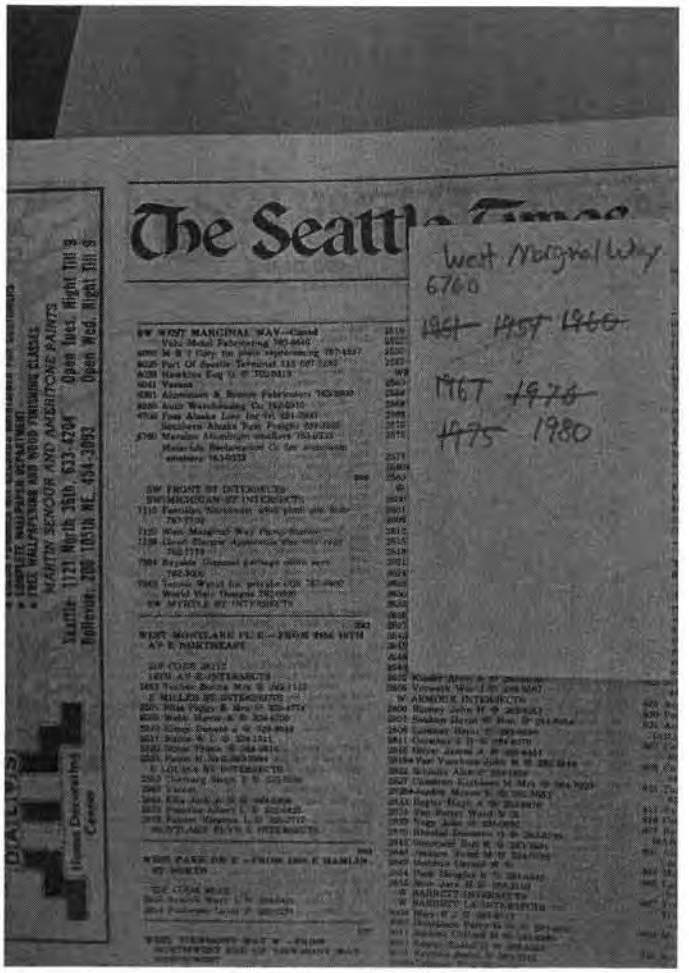
West Marginal Way
6760
1951

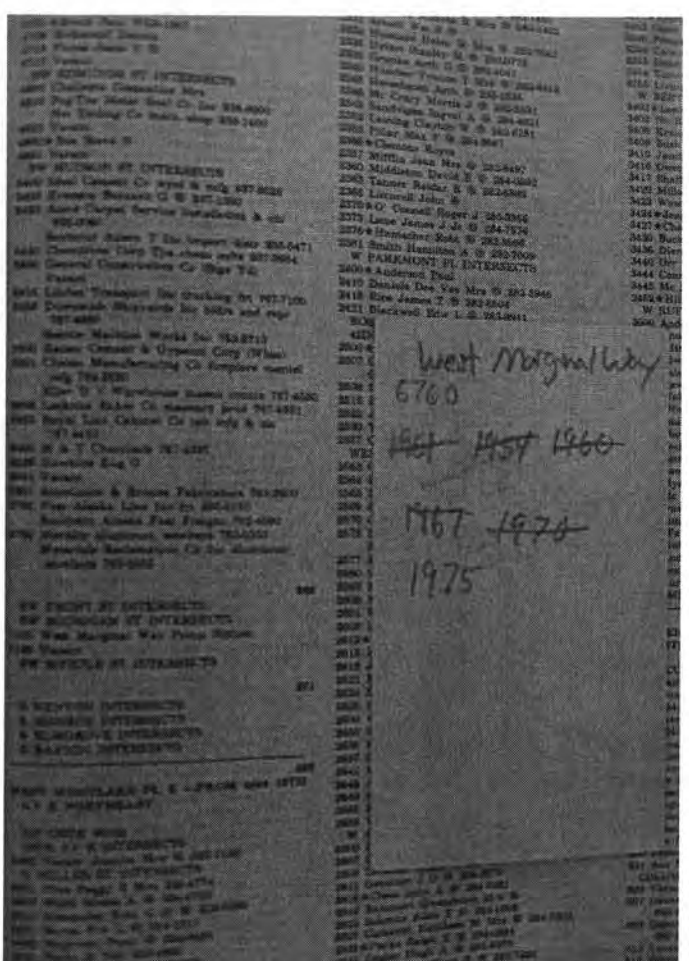
W Edmunds intersects
Marginal Way Co LA 4412
Duwamish Shipyard Inc RA 0901
Seattle Mach Wks LA 2710
Reichhold Chems Inc mfrs LA 6300
Peterson Edw
Sandgren O W ⊕
Vacant
Vacant
Vacant
West Marginal Timber Products Inc LA 1440
Houser A C ⊕ LA 9224
Klinker Sand & Gravel Co RA 0780
Century Mtl Wks LA 0116
Fehrenbach J J ⊕ RA 1441

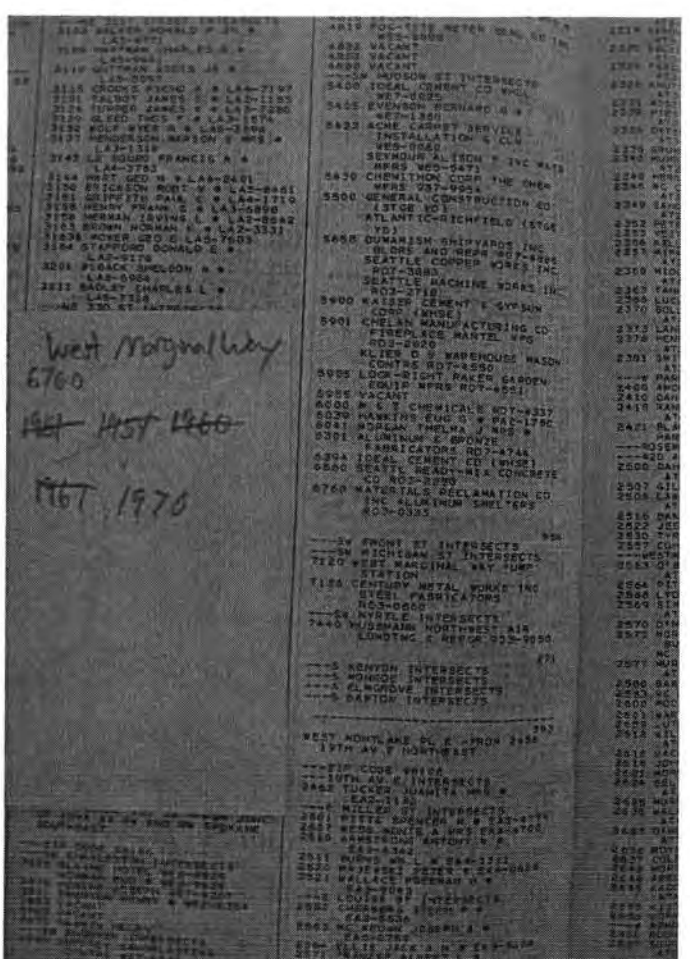
MARGUERITE COURT — From 3400 63d av SW, northwest
ABC Window Clnrs

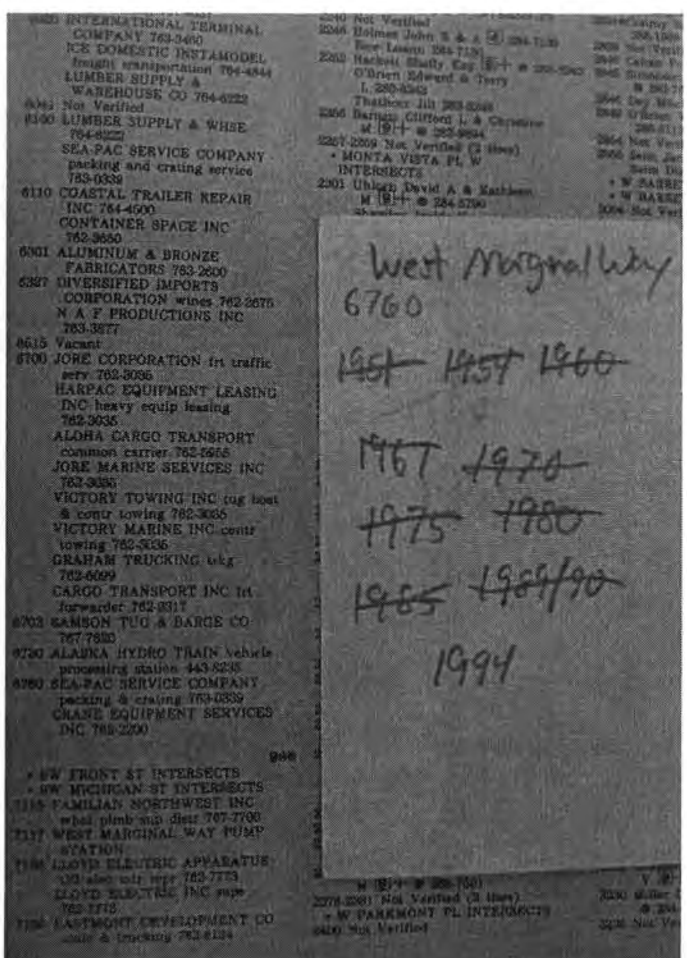
MARINE AV — From Alki av, south


WEST VIEWMONT WAY W —FROM NORTHWEST END OF VIEWMONT WAY NORTHWEST
West Marginal Way
6760
1967 1978
1975 1980
1985


The Seattle Times
West Marginal Way
6760
1967 1978
1975 1980

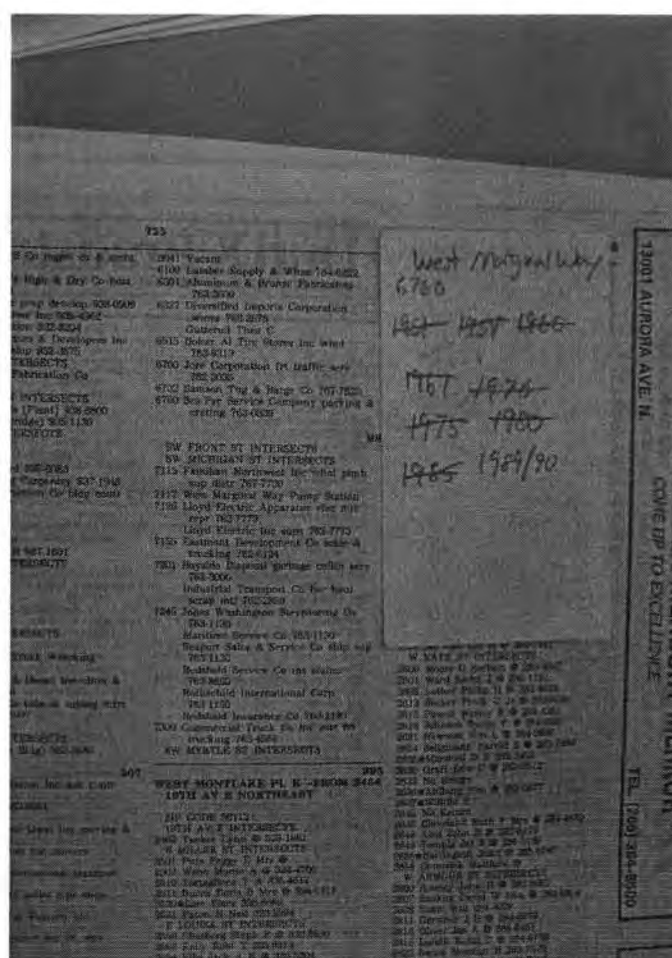

West Marginal Way
6760
1967 1978
1975


West Marginal Way
6760
1967 1970



INTERNATIONAL TERMINAL COMPANY 763-3460
ICE DOMESTIC INSTAMODEL freight transportation 764-4844
LUMBER SUPPLY & WAREHOUSE CO 764-6222
Not Verified
6100 LUMBER SUPPLY & WHSE 764-6222
SEA-PAC SERVICE COMPANY packing and crating service 763-0339
6110 COASTAL TRAILER REPAIR INC 764-4500
CONTAINER SPACE INC 762-3650
6301 ALUMINUM & BRONZE FABRICATORS 763-2600
6327 DIVERSIFIED IMPORTS CORPORATION wines 762-2675
N A F PRODUCTIONS INC 763-3877
6515 Vacant
6700 JORE CORPORATION frt traffic serv 762-3036
HARPAC EQUIPMENT LEASING INC heavy equip leasing 762-3036
ALOHA CARGO TRANSPORT common carrier 762-2955
JORE MARINE SERVICES INC 762-3036
VICTORY TOWING INC tug boat & contr towing 762-3036
VICTORY MARINE INC contr towing 762-3036
GRAHAM TRUCKING tckg 762-6099
CARGO TRANSPORT INC frt forwarder 762-2317
6703 SAMSON TUG & BARGE CO 767-7820
6730 ALASKA HYDRO TRAIN vehicle processing station 443-8245
6760 SEA-PAC SERVICE COMPANY packing & crating 763-0339
CRANE EQUIPMENT SERVICES INC 762-2200

• SW FRONT ST INTERSECTS
• SW MICHIGAN ST INTERSECTS
FAMILIAN NORTHWEST INC whsl plmb sup distr 767-7700
WEST MARGINAL WAY PUMP STATION
LLOYD ELECTRIC APPARATUS CO elec mtr repr 763-7773
LLOYD ELECTRIC INC supe 762-7773
EASTMONT DEVELOPMENT CO sale & trucking 762-6124



APPENDIX B

Previous Environmental Reports - Excerpts

SoundEarth Strategies, Inc.
2811 Fairview Avenue East, Suite 2000
Seattle, Washington 98102

TERMINAL 115 ENVIRONMENTAL CONDITIONS REPORT

Property:
Port of Seattle Terminal 115
6000 to 6700 West Marginal Way Southwest
Seattle, Washington

Prepared for:
Port of Seattle
2711 Alaskan Way
Seattle, Washington

Date:
April 6, 2011

Port of Seattle

Prepared for:

Port of Seattle
2711 Alaskan Way
Seattle, Washington 98121

Terminal 115 Environmental Conditions Report
Port of Seattle Terminal 115
6000 to 6700 West Marginal Way Southwest
Seattle, Washington 98106

SoundEarth Project No.: 0675-002-01

Prepared by:

Ryan M. Thompson
Project Scientist

Chris Carter
Senior Scientist

Reviewed by:

John Funderburk, MSPH
Principal

April 6, 2011

SoundEarth Strategies

Port of Seattle

TABLE OF CONTENTS

FIGURES

TABLE

APPENDICES

Port of Seattle

EXECUTIVE SUMMARY

SoundEarth Strategies, Inc. was commissioned by the Port of Seattle to complete an Environmental Conditions Report of Terminal 115 listed as 6000 to 6700 West Marginal Way Southwest in Seattle, Washington. The primary objective of this Environmental Conditions Report is to perform an independent review and evaluation of current and historical spills and releases, land development activities, and operations on and immediately adjacent to Terminal 115 to identify, to the extent feasible, issues of environmental concern that may have included the use, manufacture, storage, and/or disposal of hazardous or toxic substances that could affect the environmental quality of soil, groundwater, surface water, or sediment at and adjoining Terminal 115. Additionally, the report evaluates the pathways that may allow for the migration of the identified potential and confirmed releases of hazardous or toxic substances to the Lower Duwamish Waterway.

Terminal 115 is located on the western shore of the Lower Duwamish Waterway between river mile 1.6 and river mile 2.1 and has an extensive history of industrial and commercial use that began in 1909. During the course of several investigations conducted along the Lower Duwamish Waterway, Terminal 115 was identified by the Washington State Department of Ecology as a site of potential interest for source control. Terminal 115 North, which is located within the Terminal 115 property boundaries, is currently managed under an Agreed Order between the Port of Seattle and the Washington State Department of Ecology.

Site operations have included dredging and filling, Boeing Plant 1 operations, retail gasoline service stations, vehicle maintenance and salvage, gravel and concrete/cement production, and tin reclamation. Terminal 115 is currently occupied by a number of seafood facilities, cargo storage and transfer operations, vehicle maintenance facilities, and a commercial fleet vehicle refueling station. Upgrades and improvements to infrastructure at Terminal 115 have occurred with each change of operation, and several subsurface investigations and sediment sampling events have been conducted at the property to evaluate the potential for environmental impacts as a result of past and current operations.

This report documents readily available information relevant to potential issues of environmental concern at Terminal 115. This information will be considered in the formulation and implementation of an effective, long-term source control strategy to control potential sources of contaminants to the Lower Duwamish Waterway associated with the Terminal 115 property. Not all of the potential issues of environmental concern translate to a direct or indirect contamination pathway for the waterway. In some cases, an evaluation of contamination pathways impacting the portions of the Lower Duwamish Waterway along Terminal 115 cannot be completed until data gaps associated with potential pathways resulting from current and former operations at Terminal 115 have been assessed and characterized. Source control action items may be identified by the Washington State Department of Ecology to address the data gaps associated with the potential pathways in order to assess the potential for sediment recontamination.

Inspection Report dated December 5, 2006, and Outfall Verification Report dated September 18, 2007 (Phoinix 2006, 2007). Descriptions of the known and suspected subsurface drain infrastructure and outfalls are provided below, and significant features of the system are depicted on Figure 3.

Stormwater System

According to Phoinix's reports and a review of Seattle Public Utility records, the Terminal 115 stormwater system consists of approximately 366 structures, including 8 outfalls that discharge to the LDW and range in diameter from 12 to 48 inches. Based on POS, Metro King County, and City of Seattle data, POS outfalls 2128, 2127, and 2125 (Figure 3) are connected to City of Seattle storm drain features within the West Marginal Way Southwest ROW. The full extent of the upgradient storm drain infrastructure and contributing discharge sources to the outfalls located at Terminal 115 are discussed in the Ecology Lower Duwamish Waterway RM 1.6 to 2.1 West Data Gaps Report.

Sanitary Sewer System

Sewage is generated from several bathroom facilities on Terminal 115, and process water is generated at the following locations:

- Seafreeze and their subtenants' indoor and outdoor seafood processing areas.
- Northland's food storage container wash-out area.
- Northland's vehicle maintenance and wash facilities.
- Shultz Distributing's oil/water separator

Sewage and process water drain off the property through approximately 37 sewer structures within the Terminal 115 boundary to a 42-inch-diameter King County main line (the West Duwamish Interceptor) located beneath West Marginal Way Southwest. The main line routes wastewater to the West Point Treatment Plant located in Seattle, Washington, except when overflow events occur. Overflow events result in the discharge of combined sewer and storm drain (SD) effluents draining into the LDW from combined sewer overflow (CSO) lines which discharge into the LDW just south of Terminal 115 at the 36-inch-diameter West Michigan Regulator Station discharge pipeline (Discharge Serial Number 042), and on the northern property boundary at the Terminal 115 CSO/SD (Discharge Serial Number 038). The Terminal 115 CSO/SD is connected to the West Duwamish Interceptor through a 24-inch flap gate and discharges to a 48-inch-diameter storm drain on the Terminal 115 site.

2.4.3 Current Tenant Operations

A list of the current property tenants and subtenants, including a description of their operations, the location and approximate amount of space leased, origination of the lease, and stormwater permit information, is provided below. Tenant locations are presented on Figure 2, and stormwater features are presented on Figure 3.

The POS operates under a Phase I National Pollution Discharge Elimination System (NPDES) General Permit for Municipal Stormwater (GPMS), which was issued by Ecology under the Federal Clean Water Act. Three tenants and subtenants on Terminal 115 are required to operate under individual Industrial Stormwater General Permits (ISWGPs) in addition to the GPMS. The

POS requires Terminal 115 tenants to complete and maintain Stormwater Pollution Prevention Plans and implement measures to prevent and control the discharge of contaminated stormwater to surface water or groundwater within their operational footprint. Additionally, tenants and subtenants that operate under an ISWGP are also required to conduct quarterly stormwater sampling and submit discharge monitoring reports to Ecology. Current tenant operations are discussed in detail in Ecology's pending Terminal 115 Data Gaps Report.

Commercial Fence Corporation

Description of Operations: Construction contractor specializing in fences

Location: Terminal 115 North

Space Occupied: 28,152 square feet (sf) of land, and 8,374 sf of warehouse

Port Lease Dates: November 1, 2010 to October 31, 2013

Stormwater Permit: GPMS

Gene Summy Lumber Company

Description of Operations: Lumber yard

Location: Terminal 115 North

Space Occupied: 37,008 sf of land

Port Lease Dates: January 1, 2010 to December 31, 2014

Stormwater Permit: GPMS

Seafreeze Cold Storage

Description of Operations: Seafood processing and cold storage warehouse

Location: South end of Terminal 115

Space Occupied: 12.3 acres (817,429 sf of land and 17,254 sf of submerged land)

Lease Dates: November 1987 to November 21, 2027

Stormwater Permit: GPMS

Icicle Seafoods, Inc. (subtenant to Seafreeze)

Description of Operations: storage subtenant to Seafreeze, involved in seafood processing and cold storage

Location: Southeast corner of Terminal 115

Space Occupied: 5.8 acres

Port Lease Dates: Not applicable (N/A)

Stormwater Permit: ISWGP WAR010720 (formerly SO3010720A)

Shultz Distributing, Inc. (Cardlock Facility)

Description of Operations: Automated commercial vehicle fueling facility

Location: Southwest corner of Terminal 115

Space Occupied: 0.9 acre (40,894 sf of land and 1,560 sf building)

Lease Dates: August 10, 1994 to August 9, 2011

Stormwater Permit: GPMS

Subway Corporation (subtenant to Schultz Distributing)

Description of Operations: A fast food restaurant—a Subway sandwich shop franchise

Location: Southwest corner of Terminal 115

Space Occupied: 0.1 acre

Lease Dates: N/A

Stormwater Permit: N/A

Portside Coffee Company (subtenant to Schultz Distributing)

Description of Operations: A drive-through coffee stand

Location: Southwest corner of Terminal 115

Space Occupied: 0.1 acre

Lease Dates: N/A

Stormwater Permit: N/A

Sea-Pac Transport

Description of Operations: Cargo packaging and shipping

Location: West side of Terminal 115

Space Occupied: 1.26 acres (54,779 sf) land.

Lease Dates: January 1, 2011 to December 13, 2014

Stormwater Permit: GPMS (Formerly ISWGP SO3003983 with Certificate of No Exposure)

Northland Services, Inc.

Description of Operations: A marine shipping business that moves cargo to and from destinations in Alaska and Hawaii

Location: Central portion of Terminal 115

Space Occupied: 57.2 acres

Lease Dates: January 1, 2003 to present

Stormwater Permit: ISWGP WAR000471 (formerly SO3000471D)

Northwest Container Services, Inc. (subtenant to Northland Services, Inc.)

Description of Operations: Container and marine cargo handling

Location: West-central portion of Terminal 115

Space Occupied: 14.7 acres

Lease Dates: N/A

Stormwater Permit: ISWGP WAR003779 (formerly SO3003779C)

3.0 HISTORIC PROPERTY OWNERSHIP AND OPERATIONS

Prior to the 20th century, the Duwamish River valley was used for farming, pasture, logging, and subsistence gathering. After the channelization and dredging of the Duwamish River in the early 20th century, the areas surrounding the river were developed for large-scale industrial use. Seaports, factories, major utilities, and other heavy industrial uses were constructed along the Duwamish River and associated valley. Terminal 115 has been used extensively for commercial and industrial purposes from 1909 until the present. Based on the size and complexity of the site, not all property use and buildings historically present on Terminal 115 are explicitly identified below. Only those significant property uses that are considered Issues of Environmental Concern (IECs) are discussed in detail. An IEC is any current or historical property use that may have resulted in the release of hazardous or potentially hazardous substances to soil, air, groundwater, sediments, or surface water. An IEC is not necessarily considered or defined as potential source for recontamination of the adjacent waterway. The following is a discussion of relevant historical property uses that may be considered IECs, which are summarized in plan view on Figure 4; a timeline denoting significant changes in land use or IEC status is presented on Figure 7. Additional supporting information regarding each of the IECs is provided in Appendix B.

3.1 PRE-INDUSTRIAL HISTORY

The areas of the LDW were densely populated by the Duwamish Tribe, a Coast Salish people that inhabited many areas of King County and metropolitan Seattle prior to settlement in the 1850s by people of European descent. The Duwamish Tribe inhabited villages, practiced limited horticulture and land management, hunted game, and fished along the Duwamish River. Village sites located near the mouth of the Duwamish River and the current location of Terminal 107 (RM 0.5) indicate the former presence of Duwamish village sites consisting of midden piles and multiple longhouses that existed from the 6th century until the 19th century. No documented archeological sites have been recorded for the areas presently occupied by Terminal 115; however, the sources of the village site locations are reported from oral history (Washington State Department of Archeology and Historic Preservation 2010). No archeological evidence has been acquired for Terminal 115.

3.2 PRE-BOEING INDUSTRIAL DEVELOPMENT

As discussed earlier, the Duwamish River was channelized between 1914 and the early 1920s to provide a straight, engineered shipping lane for the industrial development of the Duwamish River Valley. The Terminal 115 property and east-adjoining waterway were channelized between 1915 and 1917. The channelization included the dredging of the bottom of the Duwamish River to an average depth of 20 to

operated by SAV-MOR gasoline in 1956. According to tax records, the original grease shed and repair facility built in 1930 were utilized for auto salvage through at least 1967; the auto salvage yard was visible in the 1950 Sanborn Map. Kroll Maps indicate that an additional building existed to the east of the service station building. No tax records associated with this structure were identified. Reverse directories indicate that the retail gasoline service station was in operation until 1963. After this date, the building was converted to a tavern. Tax records and aerial photographs indicate that the building was demolished in 1970.

In addition, an auto parts store, a tavern, and a single-family residence existed from the 1930s to the 1970s along the central stretch of Southwest Michigan Street. These structures were not associated with Boeing or the above auto service and wrecking companies. Multiple residences, as evidenced by tax records and historical photographs, existed along the western side of McAllister's Slough and the areas surrounding the intersection of West Marginal Way Southwest and Southwest Front Street. Records and historical photographs indicate these residences were present from the 1920s through the late 1960s, when all structures in the vicinity were demolished.

Archived tax records indicate that an aluminum smelter was constructed in 1952 (IEC No. 7). The structure was equipped with an 9,500-gallon UST (Tank No. 26; Figures 4 and 5). According to historical photographs and reverse directories, the aluminum smelter was operated by Materials Reclamation and Maralco Aluminum from 1952 through 1985. In 1985, the building was occupied by a crane services company. A POS site plan titled "Marine Facilities, Terminal 115, Lafarge Temporary Storage Silo MUP: Vicinity Map," Port of Seattle No. 115-9001-C-1, undated (POS 1994), indicates that the building, designated as Building W-4, was utilized as an aluminum warehouse, with an attached maintenance building and office. In 1994, in preparation for the future installation of a retail gasoline station (the existing Cardlock Facility), geotechnical borings were advanced at the property. Separate-phase hydrocarbons (SPH) as diesel-range petroleum hydrocarbons (DRPH) were observed in groundwater, and soil contamination was confirmed (GSM 1995a). In 1995, the UST, which was reported to have a capacity of 9,500 gallons and was confirmed to be a buried tanker rail car that had been altered to serve as a heating oil tank, was removed. Contamination was discovered in soil and groundwater along the floor and sidewalls of the excavation, as well as surrounding the product piping. With the exception of soil underlying the building structural supports, soil was overexcavated and disposed of off the property. Contaminated soil that was left in place was to be removed with the installation of the Cardlock Facility (Columbia 1995). During construction work, a 600-gallon heating oil UST (Tank No. 25) was discovered at the property and was subsequently removed, and contaminated soil was over-excavated (GSM 1996). Property records indicate that the current gasoline- and diesel-dispensing station was installed in 1996 (IEC No. 8). Groundwater monitoring has been conducted at the site from 1995 until 2009, the results of which are discussed further in Section 5.1.2. The site is currently occupied by a restaurant building, a drive-through coffee stand, and a commercial fleet refueling station containing seven fuel-dispensing pump islands and three 10,000-gallon USTs (Tank Nos. 22 through 24; Figure 5).

3.6 KLINKER SAND & GRAVEL COMPANY/READY-MIX GRAYSTONE DIVISION (1922–1970)

According to aerial photographs taken in 1922, what appears to be a gravel mining and mixing plant was in operation along West Marginal Way Southwest near the west-central portion of Terminal 115 (Appendix A: Photo A-1). Archived tax records and a 1930 USACE investigation indicated that Klinker Sand & Gravel Company (Klinker) operated a sand and gravel mining and cement mixing operation in this area (IEC No. 9, Figure 4) (USACE 1930). The company was named "Klinker" in reference to the

photographs and archived tax records, the Reichhold plant was located on the central portion of the north-adjoining property. Multiple instances of spills in connection to the chemical production activities at the site were recorded during Reichhold's use of the property. In 1948, drums of ammonia and 8,000 gallons of formalin were reported spilled into the LDW. In 1953, 500 pounds of glue product entered the LDW, and 8,000 gallons of formalin was allowed to enter the LDW through a waste ditch. Phenol, formaldehyde, urea, blood, and resins were reported present in on-site sumps at this time (Perkins Coie 2008). The State of Washington Pollution Control Commission 1955 study *An Investigation of Pollution in the Green-Duwamish River* (SWPCC 1955) indicated that "highly toxic conditions [existed] in the vicinities of the outfall sewers" of the Reichhold plant which "coincided with accidental slug discharges within the industry." Phenol concentrations of LDW water in the vicinity of the outfall were reported to be in excess of 18,000 parts per million (ppm), with a pH of 3.8 at this time (Perkins Coie 2008). Environmental reports (SWPCC 1955, Shaw 2008) indicate that a wastewater impoundment containing hydrochloric acid waste liquids was located on the central portion of the north-adjoining property, approximately 200 feet from the nearest property boundary, and that a pilot-scale pentachlorophenol (PCP) production facility was located on the central portion of the factory grounds. According to aerial photographs and previous reports (Shaw 2003, ERM 2009), waste ditches were located on the central portions of the north-adjoining property and near the southern boundary of the property. After 1958, Reichhold maintained only limited operations at the factory as a laboratory. Reichhold's lease expired in 1961. The factory facilities were demolished between 1964 and 1969.

4.4.2 Glacier NW (IEC No. 15.05)

The POS owned the north-adjoining property from 1964 until 1969. The POS leased the property and granted development rights to Kaiser Gypsum for the construction of buildings associated with cement and concrete production and shipping. A cement distribution terminal was built on the north-adjoining property in 1967. In 1969, the property was sold by the POS to Kaiser Gypsum. In 1987, Kaiser Gypsum sold the property to Lone Star Northwest, Inc., which through business acquisition was renamed Glacier NW. Cement silos, loading bays, processing equipment, and washing racks were installed on the property. The current dock located at the property was installed in 1980. The embayment created by the Terminal 115 apron and the former LDW shoreline located to the north of Terminal 115 has been recently dredged. The property is currently used as a cement distribution terminal. Areas directly north of the property are utilized as a parking lot for cement trucks. A large dock for cement loading is located to the northeast of the Terminal 115 piers.

5.0 ENVIRONMENTAL INVESTIGATION SUMMARIES

Since 1990, several source evaluation investigations have been conducted in five separate areas located on or adjoining Terminal 115, as shown on Figure 6. The investigations on Terminal 115 were primarily conducted in response to petroleum releases from former USTs located on southern portions of Terminal 115, and several investigations were conducted on Terminal 115 North to evaluate the environmental quality of soil and groundwater as a result of the former operations of M & T Chemical and MRI Corporation (MRI), as well as to evaluate catch basin solids, the presence of fill at the property, and any former operations at the property. In addition, sediment quality was evaluated within Berth 1,

located on the eastern portion of Terminal 115. These investigations have included sampling and analyses of soil, groundwater, stormwater outfalls and catch basins, and near-shore sediments.

The following sections provide an overview of previous sampling events completed at Terminal 115 and adjacent properties. Copies of selected portions of the investigation reports are included in Appendix C.

5.1 ON-PROPERTY INVESTIGATIONS

The following sections summarize previous subsurface investigations conducted on Terminal 115.

5.1.1 Seafreeze/Boeing USTs (IEC No. 5)

In 1994, EMCON conducted an environmental assessment following the removal of three abandoned 6,000-gallon USTs (Tank Nos. 10 through 12; Figure 5) encountered during construction activities near the southwest corner of the existing Seafreeze facility (Figures 6 and 6A; EMCON 1995). According to EMCON's report, seven soil samples collected at 4 and 8 feet below ground surface (bgs) from the excavation sidewalls contained concentrations of gasoline-range petroleum hydrocarbons (GRPH), DRPH, oil-range petroleum hydrocarbons (ORPH), and/or total xylenes that exceeded the current (2001) Washington State Model Toxics Control Act (MTCA) Method A cleanup levels (CULs) for soil. The sidewall samples were not analyzed for volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), RCRA 8 metals, or polychlorinated biphenyls (PCBs), and no floor samples were collected due to the presence of groundwater at the bottom of the excavation. According to the report, approximately 80 cy of soil were removed from the excavation area, but excavation activities were limited due to the proximity of construction activities.

A composite sample of sludge was collected from within the three USTs and analyzed for GRPH; DRPH; ORPH; benzene, toluene, ethylbenzene, and total xylenes (BTEX); VOCs; semivolatile organic compounds; RCRA 8 metals; and PCBs. The sludge sample contained concentrations of GRPH, DRPH, ORPH, naphthalene, ethylbenzene, and total xylenes that exceeded their respective 2001 MTCA Method A CULs for soil. Composite soil samples collected from the soil stockpiles generated during the removal of the USTs also contained concentrations of GRPH that exceeded the 2001 MTCA Method A CUL. SPH was observed floating on the groundwater within the UST excavation area at 9 feet bgs. Groundwater and SPH were removed from the excavation with a vacuum truck. Groundwater samples were not submitted for laboratory analysis during this investigation.

Additional subsurface investigations were performed at the site from 1994 until 1997. During the course of these investigations, four permanent monitoring wells were installed at the site, to the south, east, west, and within the 1994 UST excavation limits, as well as seven hand-augured temporary wells (EMCON 1995). Groundwater was identified in the course of these investigations to flow to the south. Groundwater samples were collected from the wells from 1994 until 1997. The samples collected from the monitoring wells contained concentrations of lead above the MTCA Method A CUL. In addition, groundwater samples collected from monitoring wells MW08 and MW09 contained concentrations of DRPH above the MTCA Method A CUL. Groundwater samples collected in 1994 from MW08 contained concentrations of vinyl chloride above the MTCA Method A CUL, and MW08 has not been tested for chlorinated volatile organic compounds (CVOCs) since that date. Groundwater samples collected from MW09 contained concentrations of benzene above the current MTCA Method A CUL from 1994 until

1997. No subsurface investigation or groundwater monitoring has been completed at the site since 1997.

5.1.2 Southwest Tank Yard/Cardlock Facility (IEC No. 8)

In July 1995, GeoScience Management, Inc. (GSM) conducted a subsurface investigation and identified the approximate location of an abandoned UST. Historical drawings indicated the presence of an 9,500-gallon heating oil UST (Tank No. 26; Figure 5) used for storing fuel oil to the east of the existing Cardlock Facility on Terminal 115 (Figures 6 and 6B; GSM 1995a). The UST was determined to be a buried tank rail car, with rudimentary fuel delivery systems. The investigation was prompted by the discovery of 2 feet of SPH floating on groundwater in monitoring well MW12. Monitoring well MW12 was installed by AGRA Earth and Environmental Technologies, Inc. on Terminal 115 in 1994 as part of a geotechnical evaluation prior to constructing the Cardlock Facility. The depth to groundwater in MW12 at the time of the initial investigation was approximately 8 feet bgs. At the time of the initial investigation, the current diesel-dispensing Cardlock Facility was not present at Terminal 115.

According to the GSM report, 12 hand-auger borings (HB-1 through HB-12) and seven hollow-stem auger borings (SB-3 and MW-13 through MW-18) were advanced to depths between 3.5 and 14 feet bgs to assess the extent of petroleum contamination in soil and groundwater at the Cardlock Facility site. According to the report, two of four soil samples analyzed contained concentrations of DRPH exceeding the 2001 MTCA Method A CUL for soil. In addition, groundwater samples collected from monitoring wells MW-14 through MW-17 contained concentrations of DRPH that exceeded the 2001 MTCA Method A CUL for groundwater. Groundwater samples were not collected from monitoring wells MW-12 and MW-18 due to the presence of SPH. The depth to groundwater in wells MW-13 through MW-18 ranged from approximately 4 to 8 feet bgs.

In June 1995, GSM conducted recovery of SPH from monitoring wells MW-12 and MW-18. A skimmer originally installed in well MW-12 was moved to MW-18 due to decreased thickness of SPH in MW-12. A total of approximately 7.3 gallons of SPH was removed from monitoring wells MW-12 and MW-18, and monitoring well MW-12 was subsequently abandoned in July 1995 due to "concerns regarding well construction" (GSM 1995b).

In August 1995, GSM collected groundwater samples from monitoring wells MW-13 through MW-17 (GSM 1995a). According to the groundwater monitoring report, the samples contained concentrations of DRPH ranging from 460 micrograms per liter (µg/L) in MW-16 to 180,000 µg/L in MW-14. Samples were not collected from monitoring wells MW-12 or MW-18 due to the presence of SPH (Figure 6B).

In September 1995, the above-mentioned abandoned UST was removed from the Cardlock Facility by Lee Morse General Contractor and the site assessment was conducted by Columbia Environmental Inc. (Columbia 1995). According to the Columbia report, the UST had a capacity of approximately 9,500 gallons and was corroded and generally in poor condition. The report noted that the product lines from the UST were running to the north in the area of previously confirmed petroleum-impacted soil and groundwater. The report concluded that, although only one soil sample collected during the investigation contained a concentration of DRPH exceeding the 2001 MTCA Method A CUL (soil sample S11, collected from the west sidewall at a depth of 9

feet bgs), "significant additional remediation" in the vicinity of the UST excavation may be warranted.

In March 1996, Columbia conducted a subsurface investigation to assess soil conditions prior to and during the construction of the existing Cardlock Facility (Figure 6 and 6B; Columbia 1996a). According to the report, soil samples collected at 4 to 7 feet bgs from three hand-auger borings (HA-1 through HA-3) did not contain concentrations of DRPH, GRPH, or BTEX that exceeded the laboratory reporting limits.

Columbia conducted an additional site assessment in September 1996 (Columbia 1996b). Soil samples were collected prior to the construction of the existing Cardlock Facility from the proposed locations of the new USTs (Tank Nos. 22 through 24), dispenser, catch basin, and oil/water separator. None of the soil samples contained concentrations of DRPH, GRPH, or BTEX in excess of their respective MTCA Method A CULs.

In September 1996, Lee Morse Construction, Inc. removed an abandoned 600-gallon UST (Tank No. 25; Figure 5) used for heating oil storage from the northeast corner of the proposed Cardlock Facility (Figure 6B). GSM conducted the site assessment during the UST removal (GSM 1996). According to the report, the UST was in poor condition with numerous holes observed on the ends and bottom of the tank. Soil samples were analyzed for DRPH and ORPH. Only one soil sample collected from the west excavation sidewall contained a concentration of DRPH that exceeded the 2001 MTCA Method A CUL. According to the report, approximately 25 cy of PCS was stockpiled and the excavation area was backfilled with clean imported fill. Groundwater was not encountered during excavation activities.

In January 1997, Columbia conducted a subsurface investigation to assess the soil and groundwater conditions prior to starting the operation of the Cardlock Facility (Columbia 1997). Four soil borings, completed as monitoring wells MW-19 through MW-22, were advanced to a maximum depth of 17 feet bgs. Soil samples were analyzed for DRPH and ORPH. A discrete soil sample collected from MW-21 at 6 feet bgs contained a concentration of DRPH that exceeded the MTCA Method A CUL. Composite soil samples collected from MW-19, MW-20, and MW-22 contained concentrations of DRPH that were below the MTCA Method A CUL.

Groundwater samples were analyzed for DRPH, ORPH, GRPH, and BTEX, none of which were detected in groundwater collected from wells MW-20 or MW-22. The concentration of DRPH detected in the groundwater sample collected from MW-21 was 908 µg/L, which exceeded the MTCA Method A CUL. Groundwater in monitoring well MW-19 was not sampled.

In April 1997, GSM conducted a groundwater sampling event at the site. Monitoring wells MW13 through MW22 were sampled during this event. The report indicated that concentrations of DRPH ranged from 308 µg/L (MW-17) to 1030 µg/L (MW-15) and monitoring wells MW-14 and MW-18 were not sampled due to the presence of SPH (GSM 1997).

In April 1998, GSM installed one groundwater monitoring well (MW-23) to evaluate soil and groundwater quality immediately downgradient of the former 9,500-gallon UST (Tank No. 26; Figure 5). GSM installed five extraction wells (RW-1 through RW-5) to the east of the Cardlock Facility and surrounding MW-18 in an effort to define the extent of SPH in groundwater. All six wells were advanced to a depth of 14 feet bgs. GSM conducted high-vacuum pilot testing and completed hydrogen peroxide treatments for groundwater. The report concluded that "high-vacuum extraction is not an appropriate remedial technology for the removal of free product

from the site," and that "hydrogen peroxide treatments did not have any significant effects in reducing dissolved hydrocarbon concentrations" in groundwater (GSM 1998).

Groundwater monitoring reports from 1995 until 2009, as well as POS groundwater monitoring data tables dated 2001 to 2008, indicated that measurable SPH was present in monitoring wells MW 14, MW-18, and MW-19 and extraction wells RW-1 through RW-5.

5.1.3 The Car Wash and Body Shop Buildings (Buildings C-1 and C-2, IEC No. 10)

In 1990, Harding Lawson Associates (HLA 1990) conducted a subsurface investigation at the existing Building C-1 following the removal of a 5,000-gallon UST (known as Tank 115E) (Tank No. 28, Figure 5) from the northeast portion of the building (Figure 6C) in 1989. The UST was used for the storage of kerosene. During the UST removal by Meridian Excavating, a 3-foot-thick concrete pad and PCS were observed within the excavation area. Meridian collected two soil samples from outside the margins of the concrete pad at 13 feet bgs; the samples were analyzed for total fuel hydrocarbons (TFH) by modified EPA Method 8015 and total petroleum hydrocarbons (TPH) by EPA Method 418.1. The TFH analysis characterized the petroleum as number 1 diesel fuel (equivalent to kerosene). According to the HLA report, a 2,000-gallon AST used for kerosene storage (Tank No. 27; Figure 5) and a kerosene/water separator were located adjacent to the south and west, respectively, of the former UST.

HLA's subsurface investigation included the advancement of eight soil borings, four of which were completed as groundwater monitoring wells MW-115-1 through MW-115-4, to a maximum depth of 22.5 feet bgs. Groundwater was observed between 10 and 13 feet bgs. All of the soil and groundwater samples that were submitted to the laboratory were analyzed for TFH, and selected soil samples were analyzed for TPH. TFH was not detected in any of the groundwater samples. According to HLA's report, 3 of 11 soil samples contained concentrations of TFH that exceeded Ecology's "soil guidance cleanup level." Two samples were subsequently analyzed for TPH; the highest concentration was 31,360 mg/kg TPH in boring B-115-7 at a depth of 13 feet. What appeared to be SPH was observed in soil samples collected from B-115-6 and B-115-7 at depths at and above the water table. The locations of these borings is shown on Figure 6C. HLA concluded that the approximate area of PCS was 50 by 30 feet and to a depth of approximately 13 feet bgs. No additional subsurface investigation reports were available for this area.

The body shop building was originally constructed to refuel and service imported cars at Terminal 115 and was equipped with a 10,000-gallon gasoline UST and dispensing equipment (Tank No. 30). The UST was operational from 1971 until 1978 and the UST system was removed in 1989 by Meridian Excavation & Wrecking and Northwest EnviroService (POS 1989c). A UST site assessment was completed at the time of excavation and no contamination was reportedly encountered. The UST was decommissioned prior to excavation, and 740 gallons of gasoline were removed from the UST. No evidence of corrosion was observed on the UST, and no staining was evident on any areas of the excavation. Five confirmation samples were collected from the excavation. None of the soil samples contained detectable concentrations of petroleum hydrocarbons, with the exception of the north sidewall sample, which contained a concentration of total petroleum hydrocarbons of 28 mg/kg. No further remedial activities were considered necessary at the site.

- **Acid Storage (Building 1-26, IEC No. 4.22).** The acid storage building contained waste acid and alkali materials that were stored in drums.
- **Hazardous Materials Storage (Building 1-27, IEC No. 4.23).** No data were available regarding the type or quantity of the materials stored within Building 1-27 or of the containers that were used to store the materials. However, various potentially hazardous chemicals have been listed in previous sections and were possibly stored in this building.
- **Paint Storage (Building 1-23, IEC No. 4.24).** A paint storage building (Building 1-23) was located to the west of Building 1-05. In the 1961 aerial photograph, Building 1-23 appears to have been demolished.
- **Seafreeze Tanks (Tank No. 9, IEC No. 5).** The Seafreeze building was constructed on the former site of Boeing Plant 1 in 1978. According to a 1980 Seafreeze blueprint, a 4,000-gallon diesel UST was installed at the southwest corner of the building. In 1994, EMCON conducted an environmental assessment following the removal of three abandoned 6,000-gallon USTs encountered during construction activities near the southwest corner of the Seafreeze facility. These three USTs are unrelated to the UST identified in the 1980 blueprint. Soil samples collected during the excavation activities contained concentrations of GRPH, DRPH, ORPH, and total xylenes that exceeded their respective 2001 MTCA Method A CULs. SPH was observed floating on the groundwater within the UST excavation.

6.3 SOUTHWEST TANK FARM AREAS AND FORMER KLINKER GRAVEL

The following IECs, which are located on the southwestern portion of Terminal 115, are summarized below and discussed in greater detail in Sections 3.5 and 3.6:

- **Former SAV-MOR Gas and Auto Salvage (IEC No. 6).** The historical repair facility, retail gasoline station, and auto salvage yard operated on the southwest portion of Terminal 115 between 1930 and 1967. The service station included two fuel dispensers and a service garage (grease shed) installed with a hydraulic lift. No subsurface investigations have been conducted in the vicinity of the site.
- **Material Reclamation Smelter (IEC No. 7).** Archived tax records indicate that an aluminum smelter equipped with an 8,000-gallon UST was constructed in 1952 at 6730 West Marginal Way. According to historical photographs and reverse directories, the site was occupied by Materials Reclamation and Maralco Aluminum as an aluminum smelter from 1952 through 1985. In 1994, in preparation for the installation of a fuel dispensing station, geotechnical borings were advanced at the property. SPH was observed in groundwater, and extensive soil contamination was confirmed. In 1995, the UST, which was reported to have a capacity of 9,500 gallons, was removed. Additionally, the tank was confirmed to be a buried tanker rail car that had been modified to serve as an underground heating oil tank. Soil and groundwater contamination was discovered in the floor and sidewalls of the excavation, as well as surrounding the product piping. Soil was overexcavated and disposed of off the property, with the exception of soil underlying the building structural supports. Contaminated soil that was left in place was to be removed with the installation of the fuel

dispensing facility; however, no subsequent evaluation of soil and groundwater quality as a result of the smelter operations has reportedly been conducted.

- **Cardlock Facility (IEC No. 8).** Property records indicate that the current gasoline- and diesel-dispensing station was installed in 1996. Groundwater monitoring has been conducted at the property since 1995, the results of which are discussed further in Section 5.1.2. The site is currently occupied by a restaurant building and a commercial fleet refueling station containing seven fuel-dispensing pump islands and three 10,000-gallon USTs. No information regarding surface water, soil, or groundwater impacts associated with the current use and storage of gasoline and diesel in association with the existing commercial fleet vehicle refueling station were observed. However, the risk for a release to the subsurface exists.
- **Klinker/Ready-Mix Graystone Division (IEC No. 9).** According to aerial photographs taken in 1922, what appears to be a sand and gravel mining and mixing plant was in operation along West Marginal Way Southwest near the west-central portion of Terminal 115. Water from the nearby slough was used as wash water for sluicing gravel and sand into a sorting box to be used as sanitary fill by the City of Seattle. The operation reportedly produced considerable amounts of fine silt that was discharged into Turning Basin No. 1. Aerial photographs taken between 1946 and 1965 indicate that the areas surrounding the Klinker site became increasingly silted and the shoreline expanded progressively to the east over time. The cement loading, mixing, and dock facilities were removed by 1971 after the infilling of Turning Basin No. 1.

6.4 CENTRALTERMINAL 115 FACILITIES

The following IECs are associated with current and former operations across Terminal 115. They are summarized below and discussed in greater detail in Section 3.7.

- **Car Wash Building (Building C-1, IEC No. 10).** This structure is currently present on Terminal 115 and is used as a repair and maintenance shop. The building was equipped with subsurface troughs and reclaiming pits for the catchment of gray water before the water was discharged to the sewer system. To the west of the building, a 2,000-gallon UST and a 5,000-gallon UST, both of which were used for the storage of kerosene, were installed at the property in 1971 to fuel a heating device in the car wash and to collect kerosene from a separator system. The 5,000-gallon UST (Tank No. 28) was removed in 1989. Soil samples collected during excavation activities contained concentrations of TPH that exceeded the MTCA Method A CULs. No investigations of the active AST (Tank No. 29) located at the facility have been conducted.
- **Body Shop Building (Building C-2, IEC No. 10).** The building initially was constructed with a 10,000-gallon UST (Tank No. 30) and fuel-dispensing pump island. The UST and fuel dispenser were removed in 1989. No evidence of petroleum contamination was discovered in the course of UST removal activities.
- **Maintenance Building (Building W-2, IEC No. 12).** The 1972-vintage structure was utilized for repair services and was equipped with a 6,000-gallon UST (Tank No. 33) that originally contained diesel. The UST was connected to a fuel dispenser located approximately 100 feet to the northeast of Building W-2. The UST contained diesel fuel in 1993 and was replaced in

- This potential pathway to LDW sediments is considered complete.

7.1.8 Atmospheric Deposition

Air pollution can enter the waterway directly or through stormwater, and become a potential source of sediment contamination. Air pollution can be localized, such as paint over-spray, sand-blasting, and fugitive dust and particulates from loading/unloading of raw materials such as sand, gravel, and concrete, or it can be widely-dispersed from vehicle emissions and industrial smokestacks.

Terminal 115 Applicability:

- Terminal 115 operations that may result in localized air pollution (e.g., sandblasting and painting) are very limited and performed within containments.
- Cargo loaded and unloaded at the facility is primarily containerized, and no known raw materials handling is performed as part of the current tenant operations.
- Terminal 115 does not have any industrial smokestacks, and vehicle emissions from vehicles operating at the property are not considered significant.
- Potential contaminants associated with exposed (non-paved) surfaces at Terminal 115 and surrounding properties can become airborne. Airborne particulates can migrate to the LDW via wind dispersion.
- Off-site-generated airborne contaminants collected on the paved surfaces at Terminal 115 can collect and migrate to the LDW via the stormwater system.
- This potential pathway to LDW sediments is considered complete.

7.2 PATHWAYS EVALUATION

The following section provides a preliminary evaluation of the potential for contaminants to migrate to the LDW via the applicable pathways as a result of conditions at the IECs discussed in Section 6.0. A summary of the IECs and the applicable pathways is presented in Table 1.

7.2.1 Southern Waterfront Blocks Petroleum Sites (IEC Nos. 1, 2, 3)

The IECs identified in association with the former Southern Waterfront Blocks Petroleum sites include the use, storage, and/or distribution of petroleum hydrocarbons. To date, no subsurface investigations have been conducted on this area of Terminal 115 to assess whether a release of petroleum hydrocarbons to the subsurface has occurred. If a release of petroleum hydrocarbons to soil and/or groundwater has occurred in this area, there is potential for contaminants to migrate to the LDW via the groundwater pathway.

7.2.2 Boeing Plant 1 (IEC No. 4)

The IECs identified in association with the former Boeing Plant 1 operations may have included the use and/or storage of materials including cyanide, chromates, industrial bases and acids, solvents, petroleum hydrocarbons (including jet fuel, avgas, gasoline, cutting oil, lubrication oil, diesel fuel, bunker fuel, and other distillates), PCBs, petroleum-based paints, and metals. To date, no subsurface investigations have been conducted on the former Boeing Plant 1 area of Terminal 115 to assess whether a release of hazardous materials to the subsurface has occurred,

with the exception of the former Boeing/Seafreeze UST removal and associated investigations, A release of petroleum hydrocarbons to subsurface soil and groundwater has been confirmed in the vicinity of the former Boeing/Seafreeze USTs, as well as a release of CVOCs and metals from an unknown source confirmed in groundwater samples collected from nearby monitoring wells (EMCON 1995). Contaminated soil and groundwater have the potential to migrate to the LDW via the groundwater and stormwater pathways. However, considering the distance of the Boeing/Seafreeze UST release from the LDW (1,068 feet) a release to the waterway via the groundwater pathway is considered unlikely. The extent of the Seafreeze UST release, or any other Boeing-related releases, has not been fully characterized and the potential risk of migration to the LDW has not been assessed.

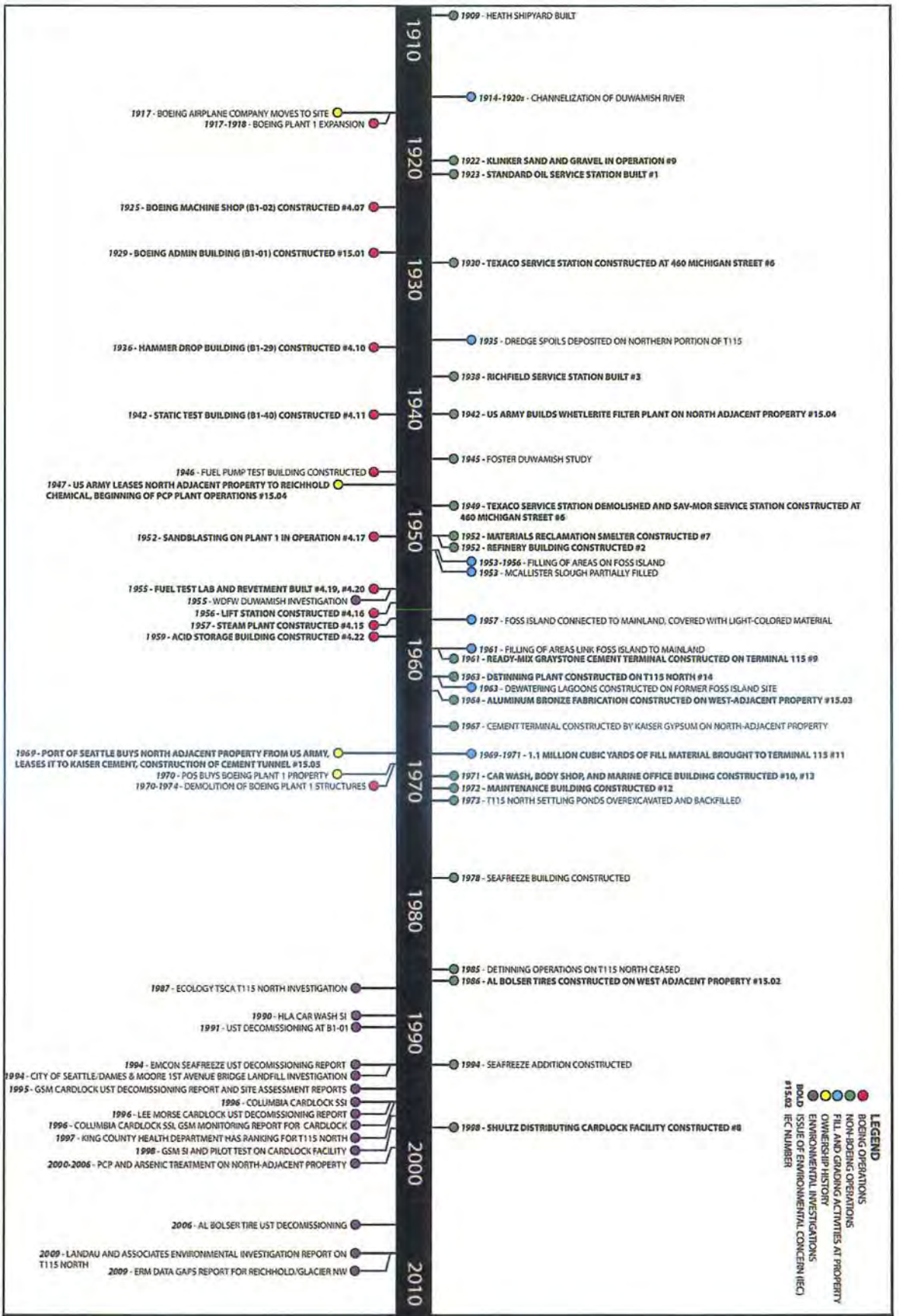
7.2.3 Southwest Tank Farm Areas and Former Klinker Gravel (IEC Nos. 8 and 9)

The former SAV-MOR retail gasoline station and auto salvage may have included the use, storage, and/or distribution of petroleum hydrocarbons and/or metals. To date, no subsurface investigations have been conducted on this area of Terminal 115 to evaluate whether a release of contaminants to the subsurface has occurred. If a release of contaminants to soil and/or groundwater has occurred in this area, there is potential for contaminants to migrate to the LDW via the groundwater and stormwater pathways. However, considering the distance of the SAV-MOR site from the LDW (1,406 feet) a release to the waterway via the groundwater pathway is considered unlikely.

The former material reclamation smelter may have used and/or stored metals and petroleum hydrocarbons. To date, no subsurface investigations have been conducted to evaluate the environmental quality of soil and groundwater as a result of the former smelter operations. However, investigations documenting the removal and closure of the former buried rail car and 600-gallon heating oil UST confirmed a release of petroleum hydrocarbons to subsurface soil and groundwater. Contaminants have the potential to migrate to the LDW via the groundwater pathway. Considering the distance of the release from the LDW (1,378 feet west), a majority of the site is capped by asphalt, and that stormwater infrastructure is unconnected with the contaminated zone, a release to the waterway via the groundwater, erosion/leaching, stormwater, and air pollution pathways is considered unlikely. However, additional site characterization and a formal evaluation of the potential risk of migration to the LDW is warranted, given the confirmed impacts associated with the site.

The operational Cardlock Facility uses, stores, and distributes petroleum hydrocarbons. While several investigations have confirmed a release of petroleum hydrocarbons to the subsurface in the vicinity of the facility as a result of former operations, no evaluation of the existing UST system has been conducted. Contaminated soil and groundwater have the potential to migrate to the LDW via the groundwater and stormwater pathways. Considering the distance of the release from the LDW (1,265 feet west) and the licensed UST facility is regularly tested for tightness, a release to the waterway via the groundwater pathway is considered unlikely.

The former Klinker/Ready-Mix Graystone Division site may have used and stored petroleum hydrocarbons and/or concrete products containing metals. To date, no subsurface investigations have been conducted on the former concrete mixing and storage yard, former barge loading terminal, or fill operations in this area of Terminal 115 to confirm or dismiss a release of hazardous materials to the exposed surface or subsurface. If present, contaminated soil and

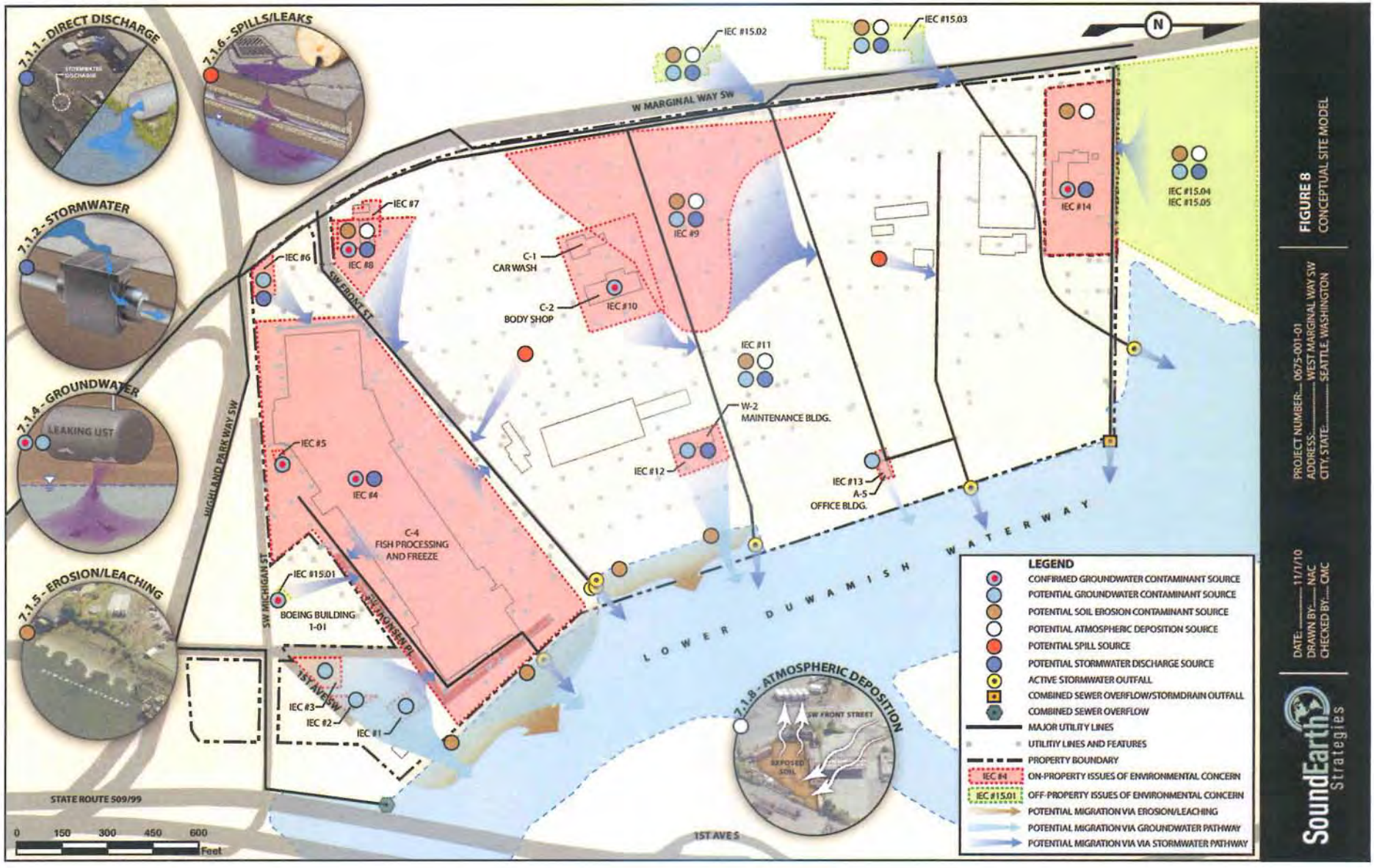


SoundEarth Strategies

DATE: 11/1/10
DRAWN BY: NAC
CHECKED BY: CMC

PROJECT NUMBER: 0675-001-01
ADDRESS: WEST MARGINAL WAY SW
CITY, STATE: SEATTLE, WASHINGTON

FIGURE 7
HISTORICAL TIMELINE MAP


7.1.1 - DIRECT DISCHARGE
7.1.6 - SPILLS/LEAKS
7.1.2 - STORMWATER
7.1.4 - GROUNDWATER
LEAKING UST
7.1.5 - EROSION/LEACHING
7.1.8 - ATMOSPHERIC DEPOSITION
W MARGINAL WAY SW
HIGHLAND PARK WAY SW
SW FRONT ST
SW MICHIGAN ST
1ST AVE S
STATE ROUTE 509/99
LOWER DUWAMISH WATERWAY
IEC #1
IEC #2
IEC #3
IEC #4
IEC #5
IEC #6
IEC #7
IEC #8
IEC #9
IEC #10
IEC #11
IEC #12
IEC #13
IEC #14
IEC #15.01
IEC #15.02
IEC #15.03
IEC #15.04
IEC #15.05
C-1 CAR WASH
C-2 BODY SHOP
W-2 MAINTENANCE BLDG.
A-5 OFFICE BLDG.
C-4 FISH PROCESSING AND FREEZE
BOEING BUILDING 1-01
0 150 300 450 600 Feet
LEGEND
CONFIRMED GROUNDWATER CONTAMINANT SOURCE
POTENTIAL GROUNDWATER CONTAMINANT SOURCE
POTENTIAL SOIL EROSION CONTAMINANT SOURCE
POTENTIAL ATMOSPHERIC DEPOSITION SOURCE
POTENTIAL SPILL SOURCE
POTENTIAL STORMWATER DISCHARGE SOURCE
ACTIVE STORMWATER OUTFALL
COMBINED SEWER OVERFLOW/STORMDRAIN OUTFALL
COMBINED SEWER OVERFLOW
MAJOR UTILITY LINES
UTILITIY LINES AND FEATURES
PROPERTY BOUNDARY
ON-PROPERTY ISSUES OF ENVIRONMENTAL CONCERN
OFF-PROPERTY ISSUES OF ENVIRONMENTAL CONCERN
POTENTIAL MIGRATION VIA EROSION/LEACHING
POTENTIAL MIGRATION VIA GROUNDWATER PATHWAY
POTENTIAL MIGRATION VIA VIA STORMWATER PATHWAY
N
FIGURE 8
CONCEPTUAL SITE MODEL
PROJECT NUMBER: 0675-001-01
ADDRESS: WEST MARGINAL WAY SW
CITY, STATE: SEATTLE, WASHINGTON
DATE: 11/1/10
DRAWN BY: NAC
CHECKED BY: CMC
SoundEarth Strategies

GeoScience Management, Inc. *Environmental Consulting Services*

18608 89th Avenue N.E. · Bothell, Washington 98011 · Telephone/FAX (206) 481-4538

July 2, 1995

Kathy Bahnick
Port of Seattle, Engineering Department
P. O. Box 1209
Seattle, WA 98111

Re: Subsurface Investigation
Port of Seattle Terminal 115 Property

Dear Ms. Bahnick:

GeoScience Management, Inc. (GSM) is pleased to submit this report documenting the results of our recent subsurface investigation at the Terminal 115 property. The investigation was conducted during the period March through early June 1995 under Professional Services Agreement Number P-950137 with the Port of Seattle (Port). The work was conducted in general accordance with GSM's proposal to the Port, and subsequent discussions regarding modifications to the scope of work. Field work, drilling, laboratory analysis, and miscellaneous site work were performed by Quest, Inc., Cascade Drilling, Inc., North Creek Analytical, Inc. and Freidman and Bruya, Inc., CEcon Corporation, INCA Engineers, Inc. and Locating Inc., respectively, under contract to GSM.

INTRODUCTION

The project site is located at the northeast corner of West Marginal Way SW, and SW Front Street in Seattle Washington, and is part of the Port of Seattle's (Port) Terminal 115 property (Figure 1). The site currently contains one empty warehouse structure with attached office space and shed. According to information supplied by the Port of Seattle, the original structure was apparently built by Materials Reclamation Company, Inc. (d.b.a. Maralco Aluminum) about 1952. A later addition was built on the north side of the structure in approximately the early 1970's. Architectural drawings obtained by the Port indicate that an 8,000-gallon fuel oil underground storage tank was installed immediately adjacent to the original building on the east side. An apparent 4-inch diameter fill pipe and vent line were visible behind the building during a site visit on March 3, 1995, at the approximate locations shown on the architectural drawings.

PREVIOUS SITE INVESTIGATION

In November 1994, AGRA Earth and Environmental Technologies, Inc. (AGRA) conducted a geotechnical evaluation of the site for a prospective tenant who planned to install a card-lock fueling

Table 1
Port of Seattle - Terminal 115
Monitoring Well Survey and Depth to Water Data

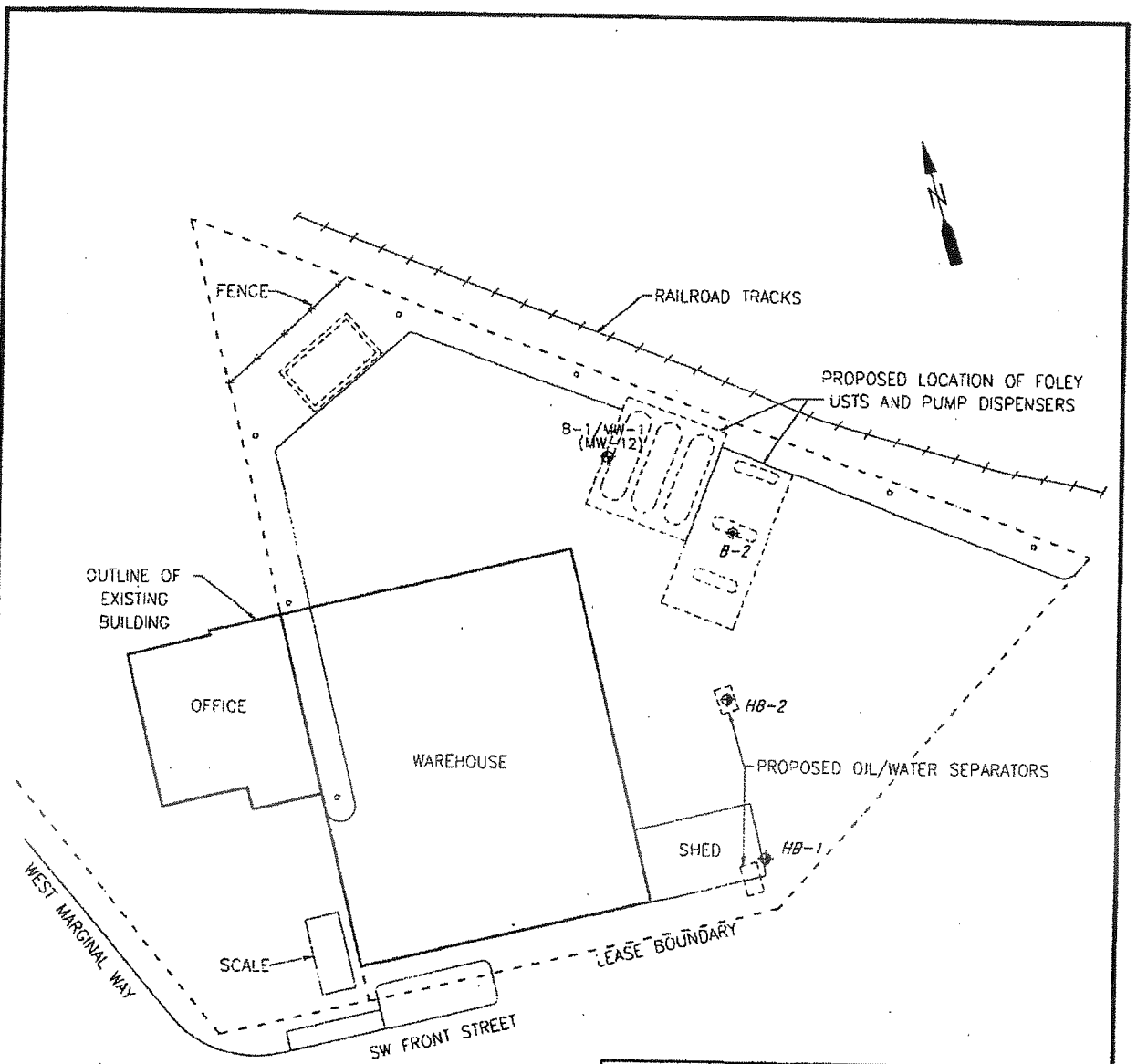
Monitoring Well Number	Coordinates	Description of Measuring Point	Elevations (in Feet)	Depth to Product bTOC (in Feet)	Depth to Water bTOC (in Feet)	Water Level Elevation (in Feet)	Date Water Measured
MW-12	N: 1105.70	N. Edge Casing Rim	20.09				
	E: 30478.06	PVC (Black Mark)	19.78	7.65	8.00	Not Calc.	4/14/95
MW-13	N: 1114.95	Tag on Casing Rim	20.03				
	E: 30421.21	PVC (Black Mark)	19.71		4.68	15.03	4/14/95
MW-14	N: 1057.81	Tag on Casing Rim	20.19				
	E: 30482.72	PVC (Black Mark)	19.58		6.64	12.94	4/14/95
MW-15	N: 1072.37	Tag on Casing Rim	19.97				
	E: 30526.70	PVC (Black Mark)	19.53		4.79	14.74	4/14/95
MW-16	N: 1123.38	Tag on Casing Rim	21.23				
	E: 30493.70	PVC (Black Mark)	20.8		5.74	15.06	4/14/95
MW-17	N: 1025.97	Tag on Casing Rim	20.32				
	E: 30488.27	PVC (Black Mark)	19.81		6.98	12.83	4/14/95
MW-18	N: 1089.78	Tag on Casing Rim	20.24				
	E: 30466.39	PVC (Black Mark)	19.91	6.65	6.66	13.25	4/14/95

Notes:
Survey coodinates from information provided by the Port of Seattle
Refereced to the Seattle Tide Lands Grid and Mean Low Low Water.

Table 2
Port of Seattle - Terminal 115
Laboratory Analytical Results

Sample Number	Sample Date	Sample Depth	WTPH-D	Comments
Hand Auger Borings - Soil (mg/kg)				
HB-1	Not sampled - Maximun depth was 3.5 feet bgs.			No odors
HB-2 @ 7'	3/22/95	7	900	Hydrocarbon-like odor
HB-3	3/22/95	6	N/A	No odors
HB-4	3/22/95	3	N/A	No odors
HB-5 @ 4'	3/22/95	4	8,600	Hydrocarbon-like odor
HB-6 @ 7'	3/23/95	7	ND	No odors
HB-7	3/23/95	7	N/A	No odors
HB-8 @ 4.5'	3/23/95	4.5	3,300	Hydrocarbon-like odor
HB-9 @ 5.5'	3/23/95	5.5	ND	No odors
HB-10	Not Sampled - Maximun depth was 4 feet bgs.			No odors
HB-11 @ 7'	3/23/95	7	ND	No odors
HB-12 @ 4.5'	4/21/95	4.5	52	No odors
Soil Borings - Soil (mg/kg)				
SB-3 @ 6'	4/7/95	6	N/A	No odors
Monitoring Well Borings - Soil (mg/kg)				
MW-2 @ 5' (MW-13)	4/7/95	5	ND	No odors
MW-3 @ 5' (MW-14)	4/7/95	5	N/A	Hydrocarbon-like odor
MW-4 @ 5' (MW-15)	4/7/95	5	ND	No odors
MW-5 @ 5' (MW-16)	4/7/95	5	21	No odors
MW-6 @ 5' (MW-17)	4/7/95	5	ND	No odors
MW-7 @ 5' (MW-18)	4/7/95		N/A	Hydrocarbon-like odor
Hand Auger Borings - Groundwater (mg/L)				
HB-6	4/14/95	N/A	0.34 (D-4)	No odors
Monitoring Wells - Groundwater (mg/L)				
MW-12 *(MW-1)*	4/14/95	N/A	Product	Hydrocarbon-like odor
MW-13 *(MW-2)*	4/14/95	N/A	0.31	No odors
MW-14 *(MW-3)*	4/14/95	N/A	5.4 (D-3)	Hydrocarbon-like odor
MW-15 *(MW-4)*	4/14/95	N/A	1.3 (D-3, D-4)	No odors
MW-16 *(MW-5)*	4/14/95	N/A	1.7 (D-3, D-4)	No odors
MW-17 *(MW-6)*	4/14/95	N/A	0.57 (D-3)	No odors
MW-18 *(MW-7)*	4/14/95	N/A	Product	Hydrocarbon-like odor

Notes: MW-1 was installed by AGRA in 1994. The well was renamed as MW-12 to conform with the Port of Seattle Terminal 115 Well Numbering Program.
MW-13 *(MW-2)* - Well number in accordance with Port of Seattle Well Numbering Program. *(Laboratory reports).*
WTPH-D means Total Petroleum Hydrocarbons in the diesel range.
All reported concentrations are mg\kg (soil) and mg\L (water) which approximate parts per milllion (ppm) concentrations.
D-3 means results partially due to individual peak(s) eluting in the diesel/motor oil carbon range.
D-4 means laboratory detected complex mixture or diesel and oil-range organics.
N/A means Not Analyzed
ND Meands Not Detected



EXPLANATION	
B-1/MW-1 (MW-12)	BORING/MONITORING WELL BY AGRA (1994). (RENAMED MW-12 BY THE PORT OF SEATTLE)
B-2	SOIL BORING BY AGRA (1994)
HB-1	HAND BORING BY AGRA (1994)
	LAMP POST

0 50 100

SCALE (FEET)

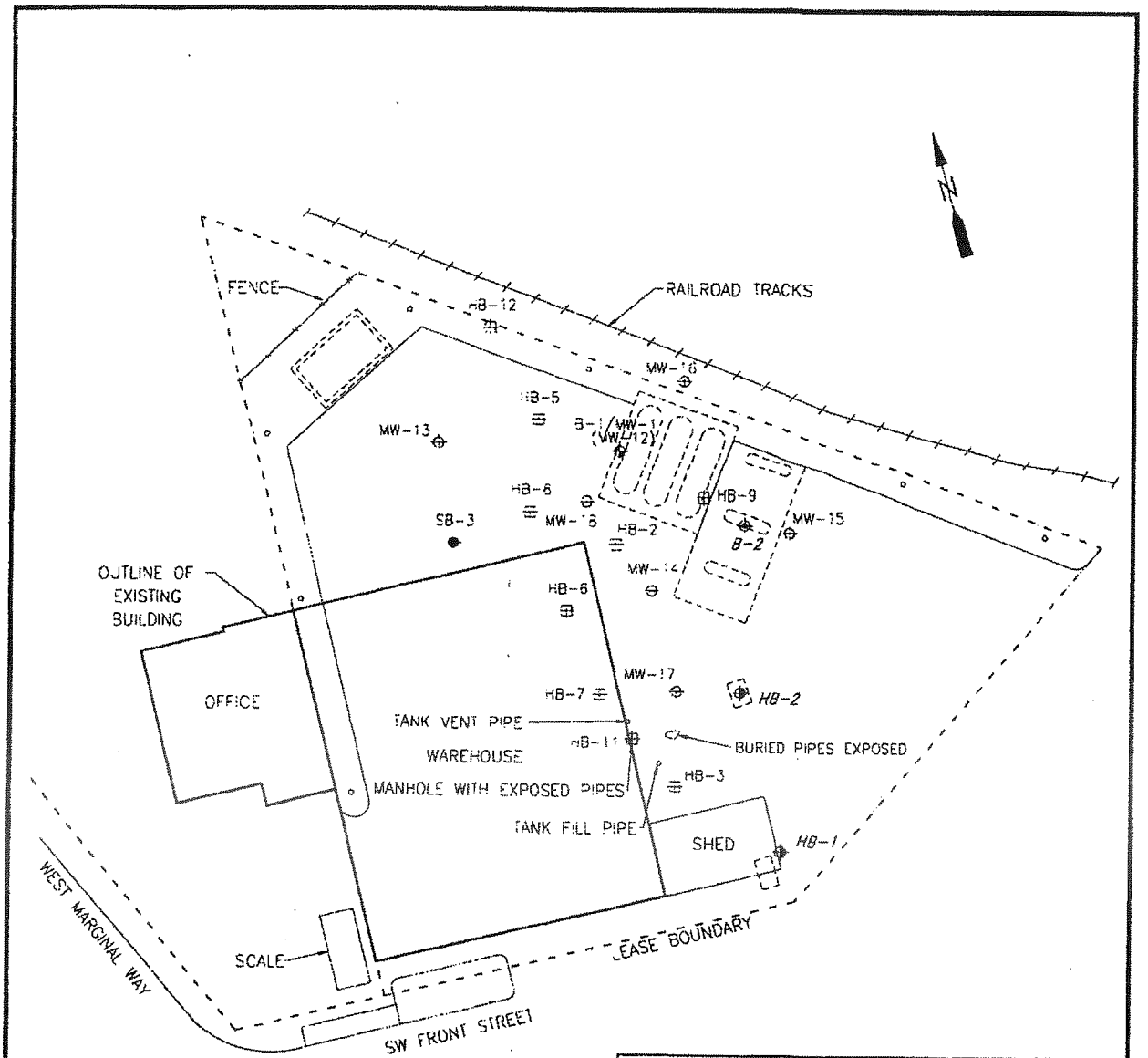
DVGFOLEY-C REV:950604-2057 DSK:00001007 TID:0.641816

BASE MAP FROM AGRA 1994

GeoScience Management, Inc.
Environmental Consulting Services
18608 89th Avenue NE
Bothell, Washington 98011

W.O. _____
DESIGN _____
DRAWN PJM, HWS
DATE 04/95
SCALE 50'=1" A SIZE

FIGURE 2
PORT OF SEATTLE – TERMINAL 115
PROPOSED FOLEY CARDLOCK FACILITY
SEATTLE, WASHINGTON
PREVIOUS INVESTIGATION



EXPLANATION	
B-1/MW-1 (MW-12)	BORING/MONITORING WELL BY AGRA (1994). (RENAMED MW-12 BY THE PORT OF SEATTLE)
B-2	SOIL BORING BY AGRA (1994)
HB-1	HAND BORING BY AGRA (1994)
MW-13	SOIL BORING\MONITORING WELL
HA-5	HAND AUGER BORING
SB-3	SOIL BORING
	LAMP POST

0 50 100

SCALE (FEET)

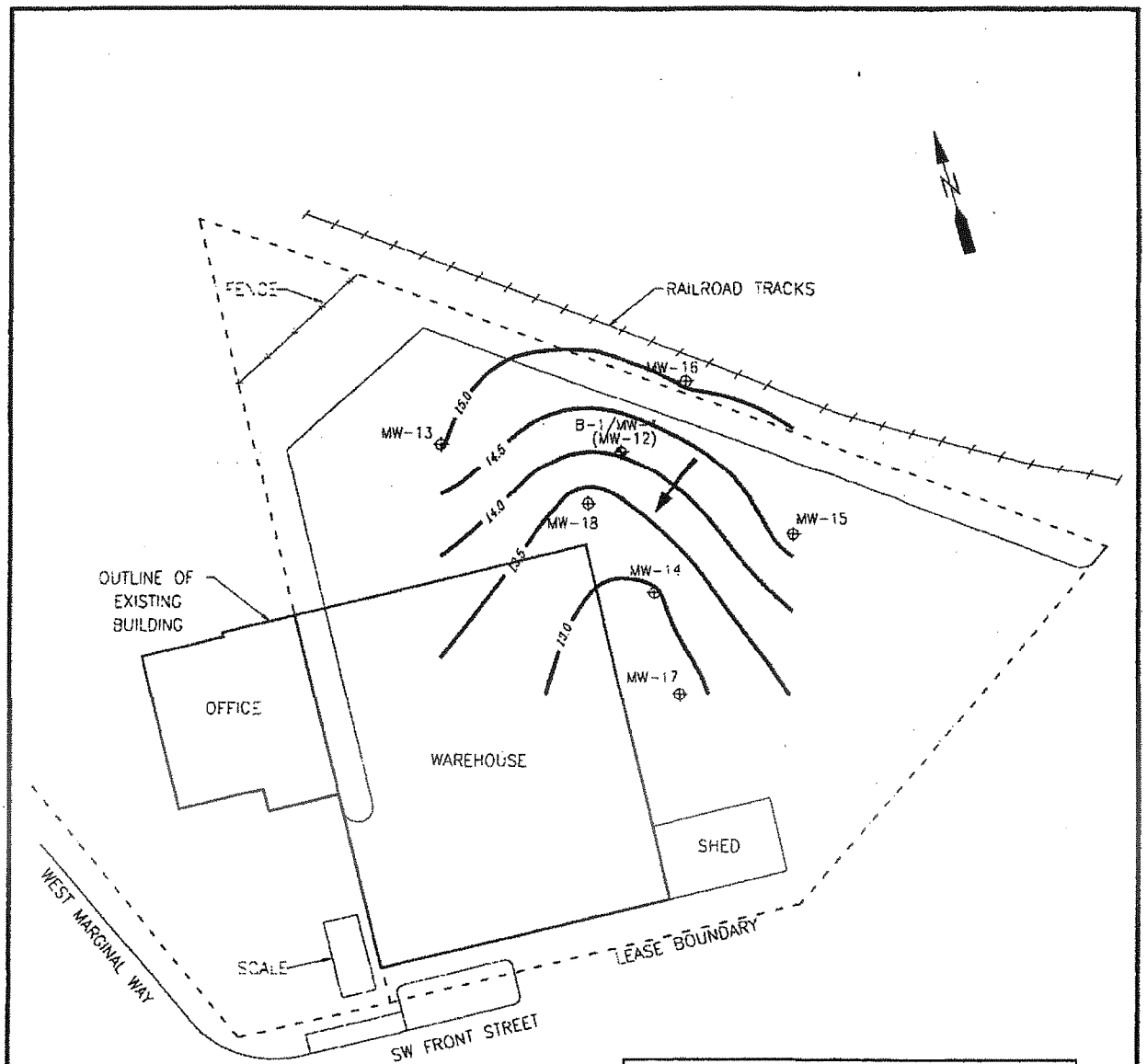
BASE MAP FROM AGRA 1994

DWGFOLEY-C REV:950604.2057 DSK:00001007 TID:0.641816

GeoScience Management, Inc.
Environmental Consulting Services
18608 69th Avenue NE
Bothell, Washington 98011

W.O. _____
DESIGN _____
DRAWN PJM, HWS
DATE 04/95
SCALE 50'=1" A SIZE

FIGURE 3
PORT OF SEATTLE – TERMINAL 115
PROPOSED FOLEY CARDLOCK FACILITY
SEATTLE, WASHINGTON
SITE AND EXPLORATION PLAN



EXPLANATION

B-1/MW-1 (MW-12)	BORING/MONITORING WELL BY AGRA (1994). (RENAMED MW-12 BY THE PORT OF SEATTLE)
	WATER LEVEL ELEVATION CONTOURS AND FLOW DIRECTION. DATA WERE KRIGED AND SMOOTHED USING GOLDEN SOFTWARE.
MW-13	SOIL BORING\MONITORING WELL
*	MW-12 WAS NOT USED DUE TO PRESENCE OF PRODUCT

0 50 100

SCALE (FEET)

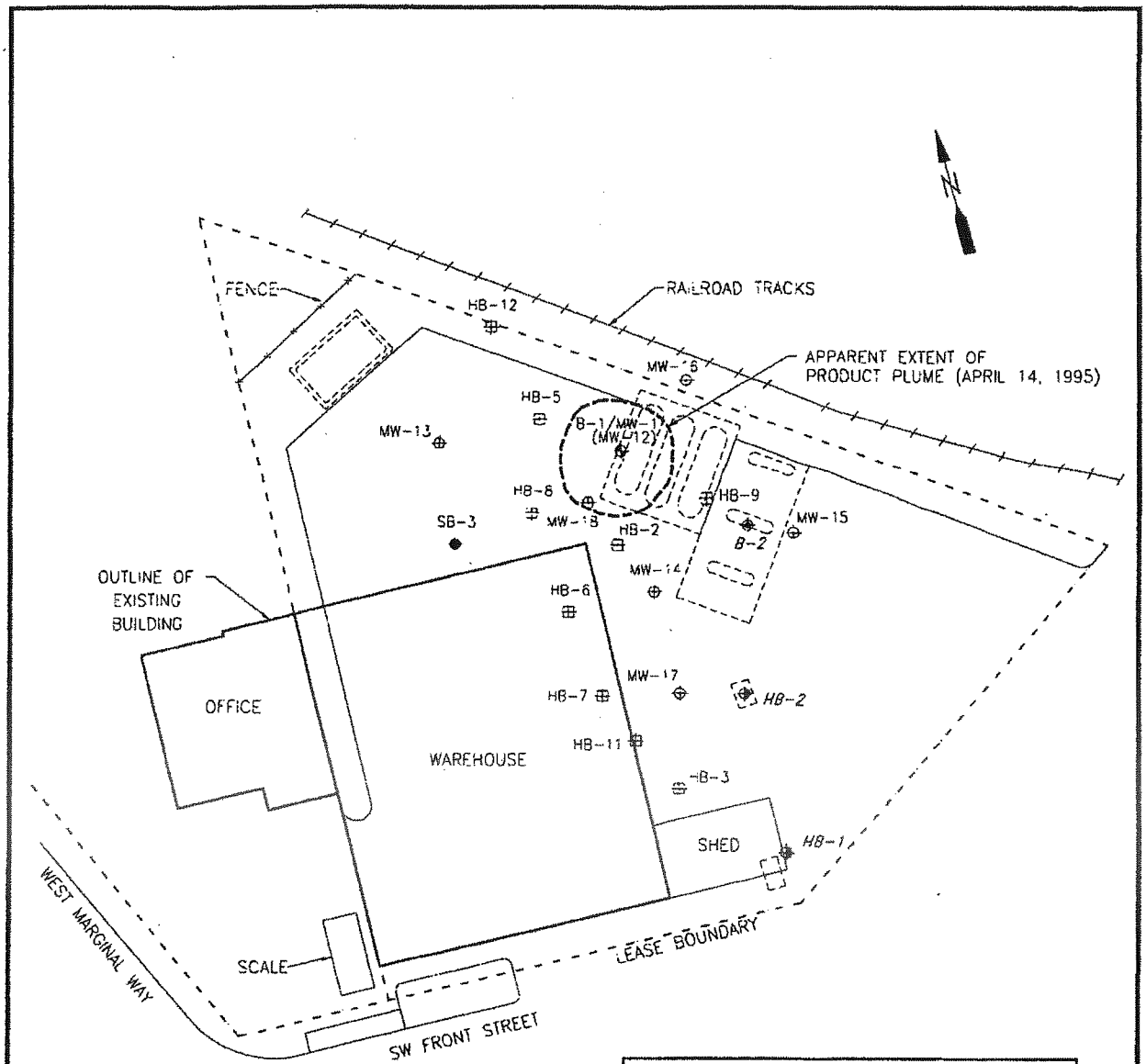
BASE MAP FROM AGRA 1994

DWG:FOLEY-C REV:950604.2057 DSK:00001007 TID:0.641816

GeoScience Management, Inc.
Environmental Consulting Services
18608 89th Avenue NE
Bothell, Washington 98011

W.O. ____
DESIGN ____
DRAWN PJM, HWS
DATE 04/95
SCALE 50'=1" A SIZE

FIGURE 4
PORT OF SEATTLE – TERMINAL 115
PROPOSED FOLEY CARDLOCK FACILITY
SEATTLE, WASHINGTON
WATER LEVEL ELEVATIONS (APRIL–1995)



EXPLANATION

B-1/MW-1 (MW-12)	BORING/MONITORING WELL BY AGRA (1994). (RENAMED MW-12 BY THE PORT OF SEATTLE)
B-2	SOIL BORING BY AGRA (1994)
HB-1	HAND BORING BY AGRA (1994)
MW-13	SOIL BORING\MONITORING WELL
HA-5	HAND AUGER BORING
SB-3	SOIL BORING

BASE MAP FROM AGRA 1994

DWGFOLEY-C REV:950604.2057 DSK:00001007 TID:0641816

GeoScience Management, Inc.
Environmental Consulting Services
18608 89th Avenue NE
Bothell, Washington 98011

W.O. _____
DESIGN _____
DRAWN PJM, HWS
DATE 04/95
SCALE 50'-1" A SIZE

FIGURE 5
PORT OF SEATTLE – TERMINAL 115
PROPOSED FOLEY CARDLOCK FACILITY
SEATTLE, WASHINGTON
APPARENT EXTENT OF PRODUCT PLUME

Columbia Environmental Inc.
200 S. 333rd St. • Suite 120 • Federal Way, WA 98003 • Seattle 206/838-7261 Tacoma 206/927-1588 Fax 206/838-5744

March 8, 1996

Mr. Ray Foley
Shultz Distributing, Inc.
6851 East Marginal Way South
Seattle, WA 98124

Re: Hand Auger Sampling
Port of Seattle, Terminal 115
Southwest Front Street &
West Marginal Way Southwest
Seattle, Washington
Project Number 96624

References: 1) Columbia Environmental, Inc., September 1995 "UST Closure Report", same site.

2) GeoScience Management, Inc., July 2, 1995 "Subsurface Investigation", same site. *Portions of report were provided for review.*

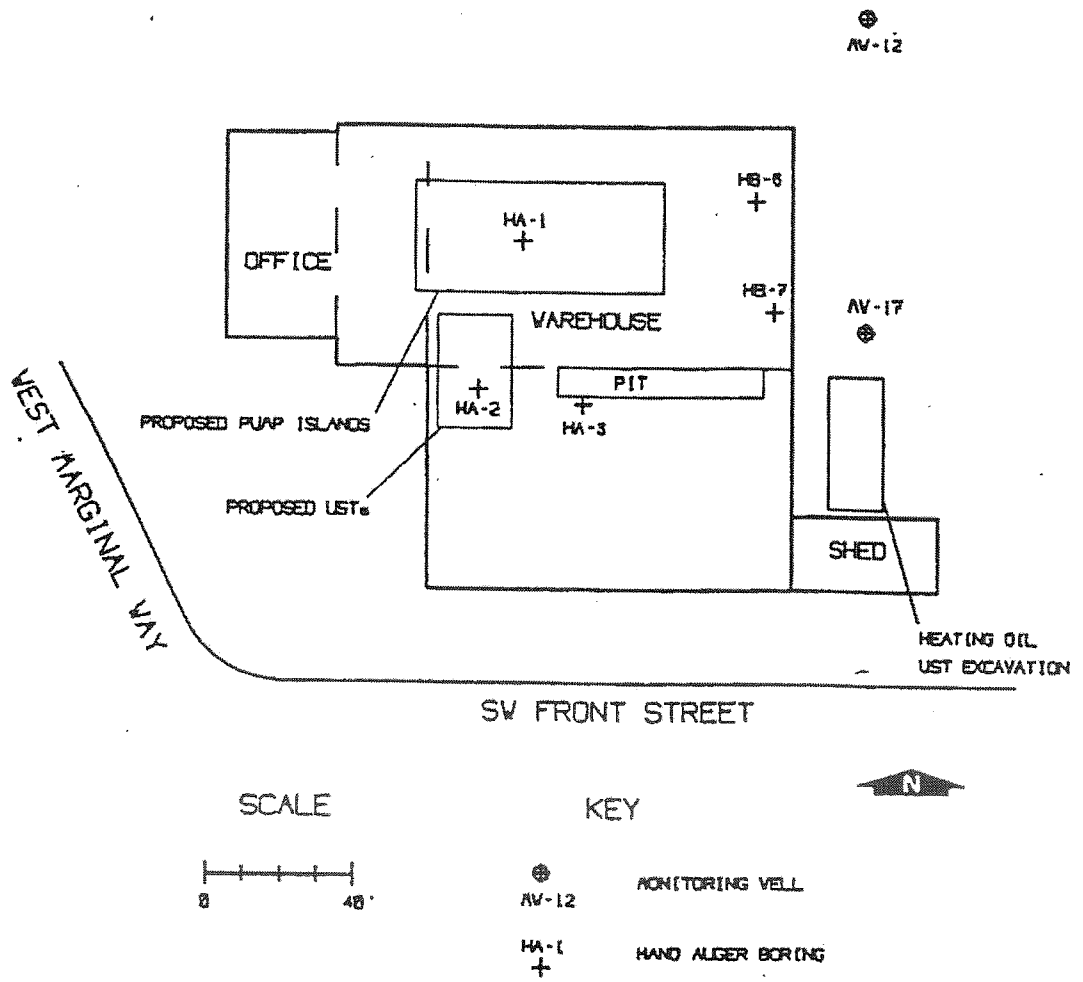
3) AGRA Earth & Environmental, December 13, 1994 "Results of Soil Testing and Groundwater Monitoring", same site. *Portions of report were provided for review.*

Dear Ray:

In response to your recent request, we have completed hand auger sampling and laboratory analysis at the Terminal 115 site in Seattle, Washington. The portion of the site addressed by this study is a former metals recycling facility which contains a warehouse structure along with an attached shed and office space. The buildings are currently vacant.

The site contained an underground storage tank (UST) which was roughly 9,000 gallons in capacity and had been used to store heating oil. The tank was removed during August of 1995. The referenced previous studies have indicated that groundwater contamination is present to the northeast, and soil contamination is present to the east and northeast of the warehouse building. The contamination appears to be the most severe in the vicinity of Monitoring Well MW-12, where over two feet of free product has been reported (reference 3). The primary contaminant appears to be diesel fuel.

Future plans include demolition of the existing building and installation of a Cardlock petroleum fueling facility. The samples collected during this project were intended to provide a baseline of current soil and groundwater conditions at the proposed locations of the pump islands and USTs for this facility.



Notes:
- Proposed UST and pump island locations are approximate.
- Hand auger borings with prefix HA were completed by our firm, those with prefix HB were completed by other firms.
- Not all wells and borings are shown on plan.

SITE PLAN Terminal 115 Seattle, Washington	Columbia Environmental Inc. Project Number 96624 March 1996

TABLE A: SUMMARY OF ANALYTICAL RESULTS

Sample Number	Location	Analysis	Analyte	Results (ppm)	Cleanup Level (ppm)
HA1-1	HA1 @ 5'	WTPH-D	Diesel	ND	200
HA1-2	HA1 @ 7'	WTPH-D WTPH-G EPA 8020	Diesel Gasoline BTEX	ND ND ND	200 100 -
HA1-GW	Groundwater in HA1	WTPH-D WTPH-G EPA 8020	Diesel Gasoline BTEX	ND ND ND	1.0 1.0 -
HA2-1	HA2 @ 5'	WTPH-D	Diesel	ND	200
HA2-2	HA2 @ 7'	WTPH-D WTPH-G EPA 8020	Diesel Gasoline BTEX	ND ND ND	200 100 -
HA3-1	HA3 @ 4'	WTPH-D	Diesel	ND	200
HA3-3	HA3 @ 7'	WTPH-D WTPH-G EPA 8020	Diesel Gasoline BTEX	ND ND ND	200 100 -

NOTES TO TABLE A

- Cleanup level varies according to contaminant.

1) ppm indicates parts per million.
2) Cleanup levels are Method A cleanup levels as specified in the Model Toxics Control Act, WAC 173-340.
3) ND denotes none detected. Refer to laboratory report for analytical detection limits.

Columbia Environmental Inc.
200 S. 333rd St. • Suite 120 • Federal Way, WA 98003 • Seattle 206/838-7261 Tacoma 206/927-1588 Fax 206/838-5744

September 5, 1996

Mr. Ray Foley
Shultz Distributing, Inc.
6851 East Marginal Way South
Seattle, WA 98124

RE: Soil Sampling
Port of Seattle, Terminal 115
Southwest Front Street &
West Marginal Way Southwest
Seattle, Washington
Project Number 96624-1

Dear Ray:

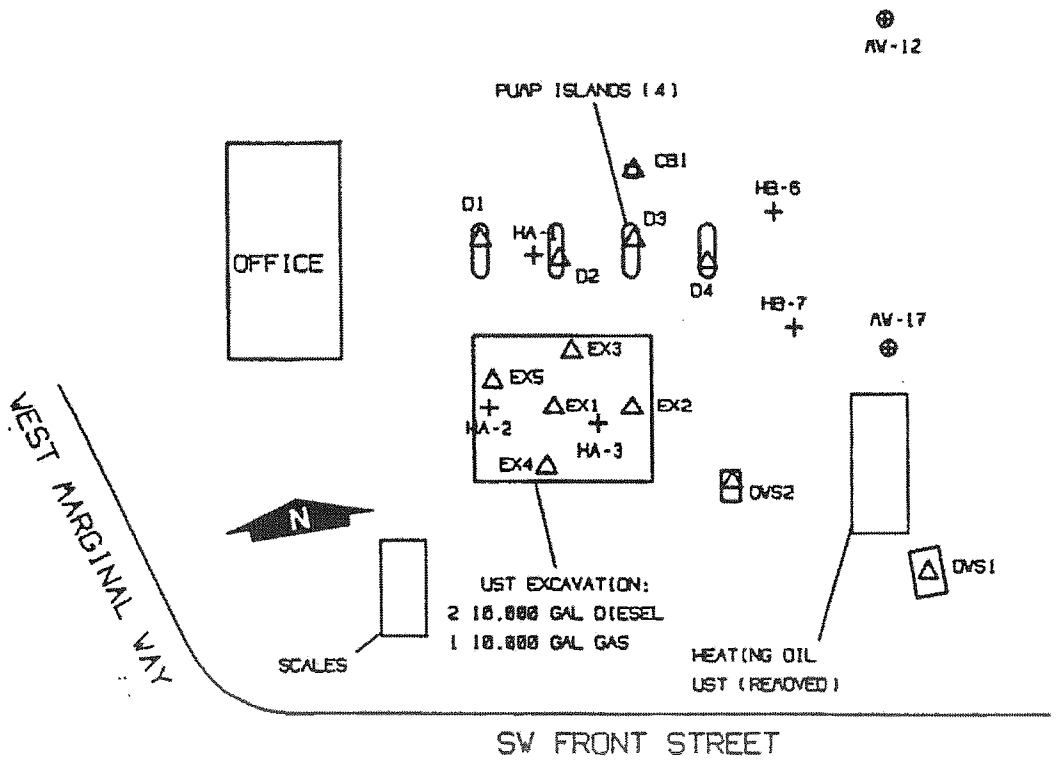
In response to your recent request, we have completed soil sampling and laboratory analysis at the Terminal 115 site in Seattle, Washington. The sampling was completed during construction of a cardlock petroleum dispensing facility on the property. The facility includes three underground storage tanks (USTs) and four pump islands. Two of the tanks will contain diesel fuel, and the third will contain unleaded gasoline.

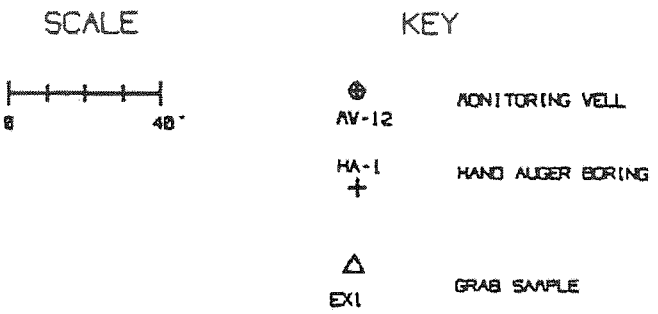
In a letter dated April 18, 1996, the Port of Seattle stated that prior to operation of the system, they will require the collection and laboratory analysis of soil samples from the new piping, dispenser, UST, catch basin, and oil water separator excavations. The purpose of this sampling would be to establish a baseline of site conditions prior to system start up. The requirement for sampling within the piping trench was later rescinded since with the exception of connections to the dispensers and USTs, there are no connection or joints in the product piping the system.

Scope of Work

The scope of work for this project, as outlined in our proposal dated April 26, included:

- The collection of soil samples from UST, dispenser, catch basin, and oil/water separator locations.
- Laboratory analysis of the samples using the WTPH-D extended analysis for diesel fuel and heavier hydrocarbons. In addition, 4 samples were selected for analysis using the WTPH-G/EPA 8260 method for gasoline and BTEX.
- Preparation of this report.





Reference: Site Plan by David Evans and Associates, 1/28/96.

SITE PLAN **Terminal 115** **Seattle, Washington**	**Columbia Environmental, Inc.** **Project Number 96624-1** **September 1996**

T115s

GeoScience Management, Inc. *Environmental Consulting Services*

18608 89th Avenue N.E. • Bothell, Washington 98011 • Telephone/FAX (206) 481-4538

December 18, 1996

Ms. Kathy Bahnick
Port of Seattle, Environmental Engineering
P.O. Box 1209
Seattle, WA

Re: Letter Report Documenting Removal of 600-Gallon
Fuel Oil Underground Storage Tank T115s
Terminal 115, Seattle, Washington 606275 Site number

Dear Ms Bahnick

This letter report documents removal of a single underground storage tank (UST) at the Port of Seattle's proposed Foley Cardlock Facility, Terminal 115 site. The site is located at 6730 West Marginal Way in Seattle, Washington (Figure 1). The work was performed under Professional Services Agreement Number P-950137 and subsequent Amendments.

The Port of Seattle (Port) has leased a portion of the Terminal 115 property to a tenant who is currently constructing a commercial retail fueling station. Diesel-range petroleum hydrocarbon impacts have previously been documented at the site, apparently related to a former heating oil UST, which was removed by the Port in 1995. During site construction work in July 1996, a previously unknown UST was encountered by the site contractor while installing subsurface drainage lines for the new fueling facility. The fill pipe for the tank was completely encased in concrete, with no indications at the surface that a UST was present. An approximately 1/2 inch diameter copper pipe was connected to the top of the tank, and was removed. No pump dispenser footing or mechanism was found associated with the UST. Based on the size and configuration of the UST, we assume that it was an old fuel oil tank used to store fuel oil for consumption by equipment or machinery on the property. On behalf of the Port, GeoScience Management (GSM) personnel observed excavation and removal of the UST, collected representative soil samples form the tank excavation and soil stockpile, submitted selected soil samples to an analytical laboratory and prepared this report.

Tank Removal

Excavation and tank removal services were provided by Lee Morse Construction, Inc. of Fife, Washington. On September 4, 1996, Lee Morse personnel excavated and removed a single steel UST, and a limited amount of petroleum hydrocarbon-impacted soil from the central portion of the site (Figure 2). Prior to excavation and removal, the tank was pumped and rinsed, and all tank fluids recovered, by MarVac under contract to Lee Morse. A sample of the product (labeled T115-FP1) was collected from the bottom of the tank for fuel fingerprint analysis. Analysis of the sample indicated that the product was diesel fuel or similar product. The single wall steel tank measured six feet in length, by four feet, four inches in diameter, resulting in a calculated volume of approximately 600 gallons total capacity.

GSM personnel noted that at the time of removal, the tank appeared to be in poor condition with numerous holes in the ends and bottom. Soil in the excavation was noted to have a petroleum hydrocarbon-like odor, and

was slightly discolored near the west end of the tank and beneath the tank. Approximately 10-12 cubic yards of soil were removed from above and to the west of the UST in order to allow removal of the tank. Following tank removal, another 10-12 cubic yards of petroleum hydrocarbon-impacted soil was removed at the direction of GSM personnel. A total of approximately 25 cubic yards of soil were stockpiled temporarily on plastic, adjacent to the excavation pending arrangement of appropriate disposal. We understand that the Port will arrange for appropriate disposal of the excavated materials. The excavation was backfilled using clean imported fill material.

Soil Sampling

Soil samples were collected using a stainless steel sampling spoon from the excavator bucket. Samples were obtained from the excavation sidewalls and floor (Figure 3). Soil samples from the east and west sidewalls (EWALL and WWALL, respectively) and from beneath the tank (FLOOR) were submitted to North Creek Analytical of Bothell, Washington for quantitative chemical analysis. Additionally, two soil stockpile samples (SS1 and SS2) were submitted for analysis.

Soils consisted of several feet of damp to wet, dark brown, slightly gravely, silty sand fill, with scattered debris (metal, wood, bricks), underlain by moist to wet, gray to gray-brown silty clay to clayey silt. The excavation was extended to a depth of approximately 8 feet below existing ground surface. No groundwater seepage was observed in the excavation.

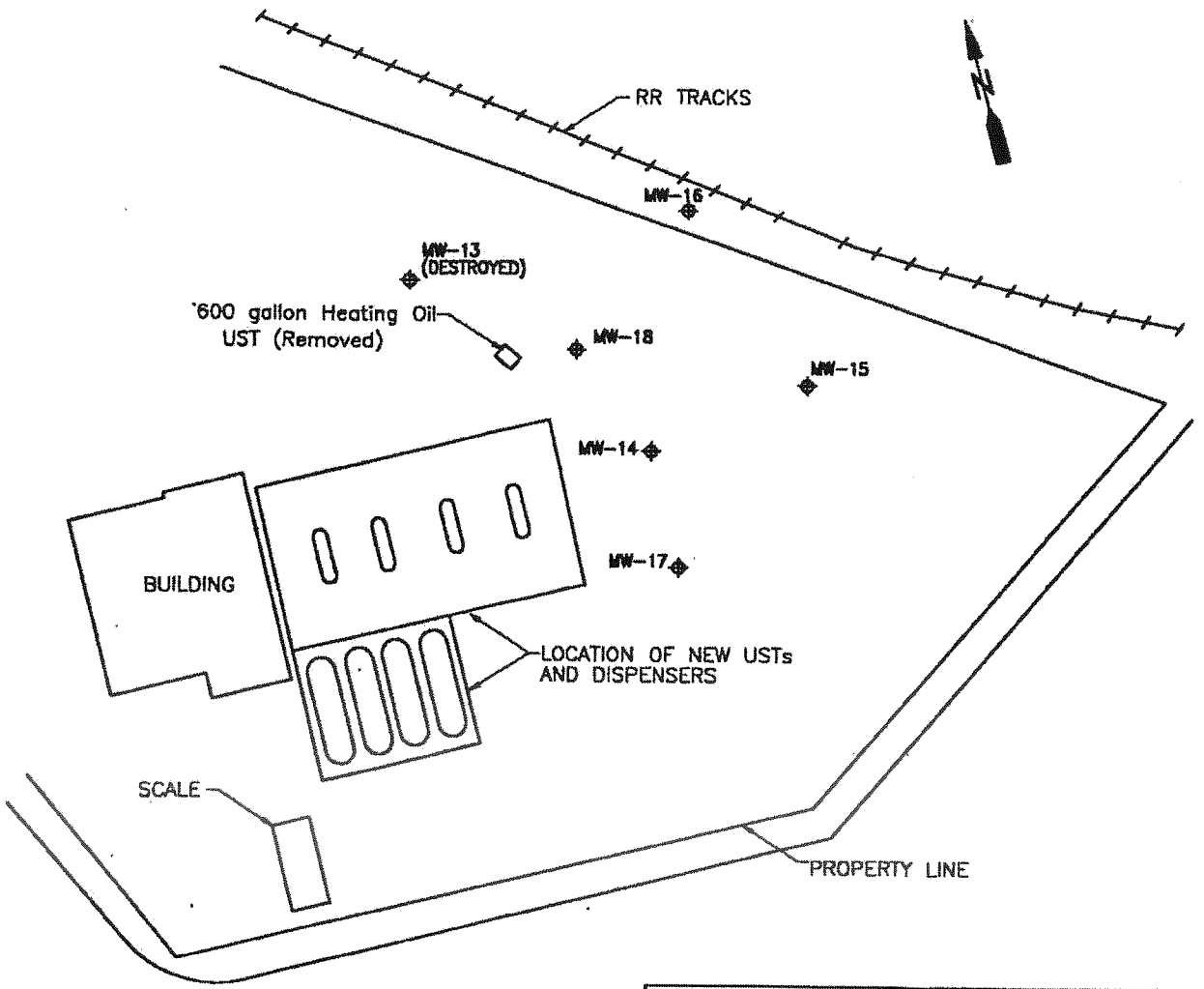
Laboratory Analysis

Each of the five soil samples submitted for analysis was analyzed for petroleum hydrocarbons in the diesel and heavy oil ranges by Washington State Department of Ecology Method WTPH-D, Extended. A summary of the reported TPH concentrations is presented in Table 1. A copy of the analytical laboratory report is attached.

Table 1
Summary of Analytical Data - Soil
Port of Seattle, Terminal 115
Seattle, Washington

Sample ID	Collection Depth (Feet)	TPH Diesel Range (mg/kg)	TPH Heavy Oil Range (mg/kg)
EWALL	8	**263**	45.7
WWALL	8	**5,810**	223
FLOOR	9	**846**	28.6
SS-1	NA	**1,740**	38.5
SS-2	NA	**2,690**	ND

Bold indicates reported concentration exceeds MTCA Method A Cleanup Level for Soil



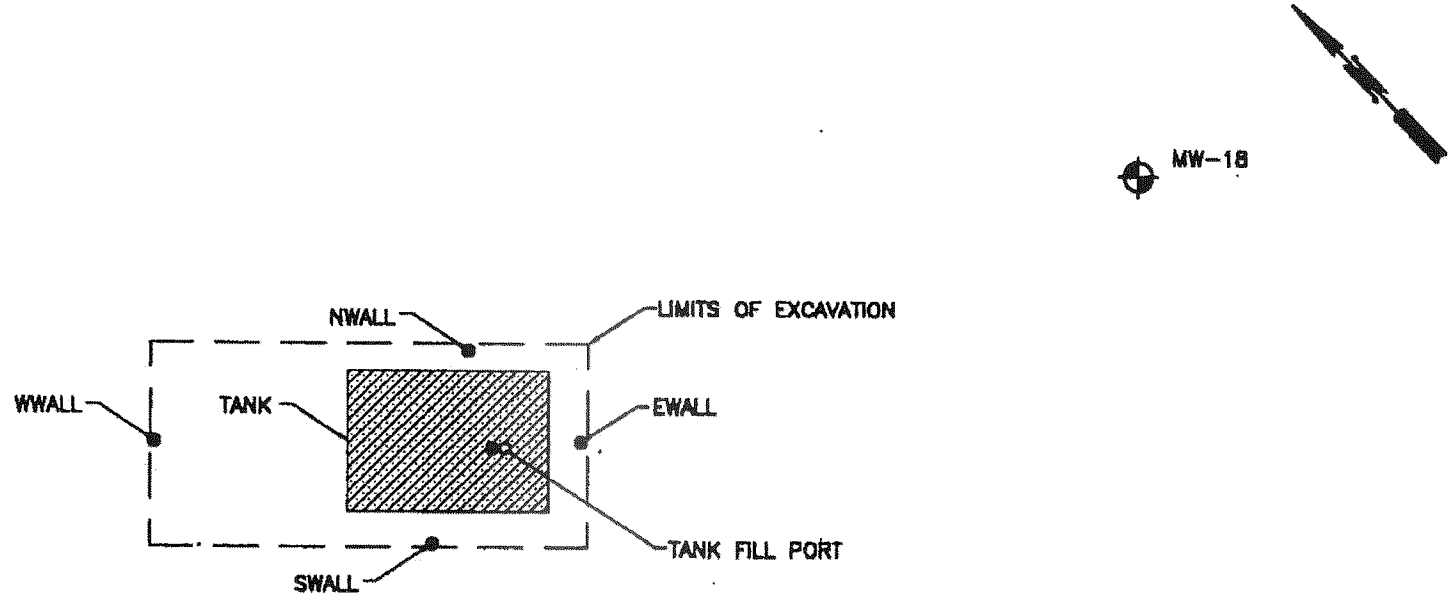
EXPLANATION
MW-14 ⊕ EXISTING MONITORING WELL LOCATION

0 50 100

SCALE (FEET)

BASE MAP FROM AGRA 1994

GeoSciences Management, Inc. *Environmental Consulting Services* *18908 80th Avenue NE* *Bothell, Washington 98011*	Job # 1002.01 DESIGN DRAWN JB, HWS DATE October 1996 SCALE 1" = 50'	FIGURE 2 PORT OF SEATTLE - TERMINAL 115 PROPOSED FOLEY CARDLOCK FACILITY SEATTLE, WASHINGTON SITE PLAN



EXPLANATION

MONITOR WELL LOCATION

SOIL SAMPLE LOCATION

0 5 10

1" = 6'

GeoScience Management, Inc.
Environmental Consulting Services
18606 69th Avenue NE
Bothell, Washington 98011

DESIGN HS
DRAWN HS/JB
DATE October, 1996
JOB No. 1002.01

FIGURE 3
PORT OF SEATTLE
TERMINAL 115
HEATING OIL UST
SOIL SAMPLING LOCATIONS

Columbia Environmental Inc.
200 S. 333rd St. • Suite 120 • Federal Way, WA 98003 • Seattle 206/838-7261 Tacoma 206/927-1588 Fax 206/838-5744

January 13, 1997

Mr. Ray Foley
Shultz Distributing, Inc.
6851 East Marginal Way South
Seattle, WA 98124

RE: Monitoring Well Installation, Soil, and Groundwater Sampling
Port of Seattle, Terminal 115
Southwest Front Street &
West Marginal Way Southwest
Seattle, Washington
Project Number 96624-2

Dear Ray:

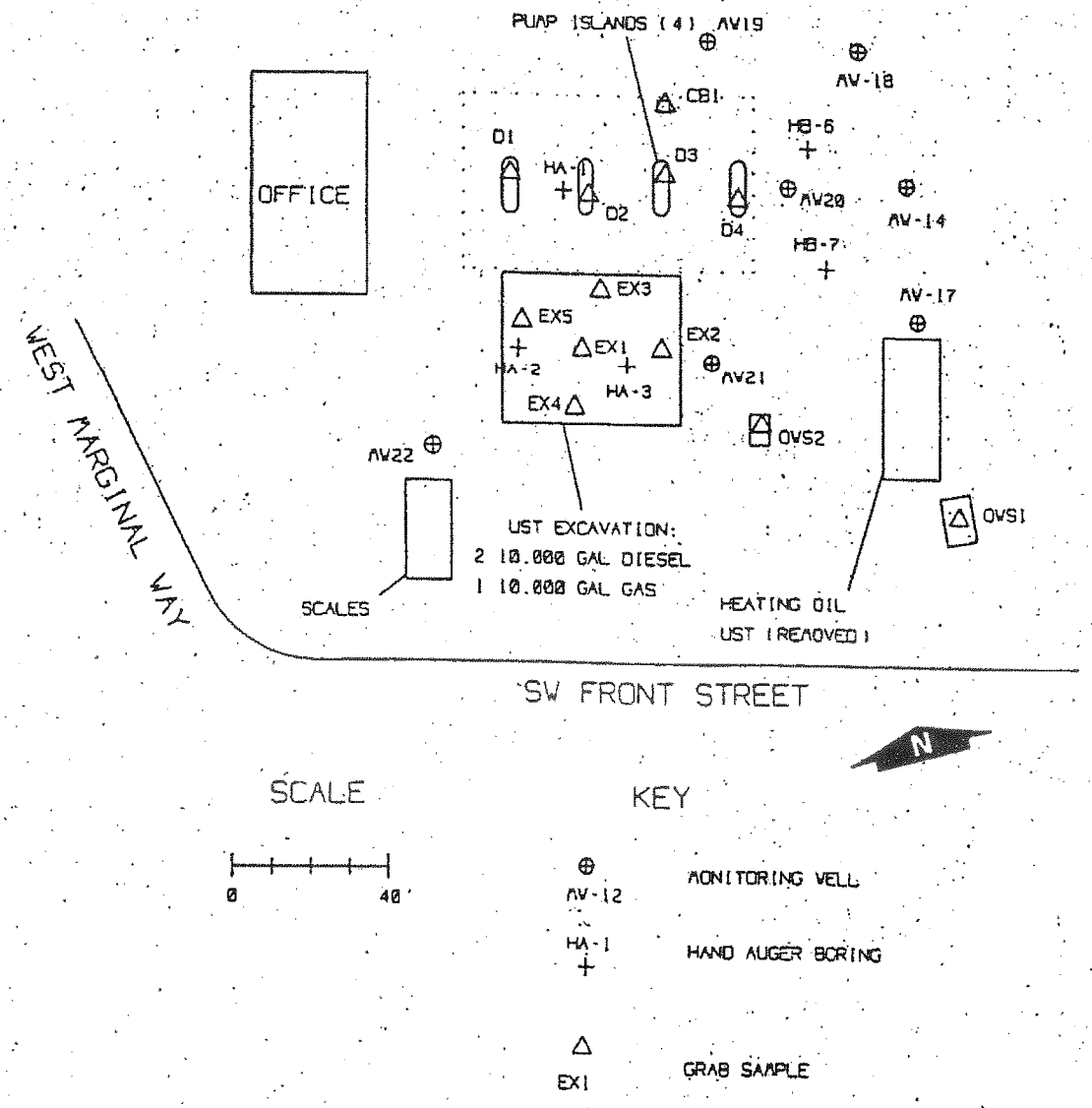
In response to your request, we have completed monitoring well installation, soil and groundwater sampling, and laboratory analysis at the Terminal 115 site in Seattle, Washington. The well installation and sampling was completed after construction, but prior to operation, of a cardlock petroleum dispensing facility on the property. The facility includes three underground storage tanks (USTs) and four pump islands. Two of the tanks will contain diesel fuel, and the third will contain unleaded gasoline.

The wells were installed in accordance with Port of Seattle requirements as stated in a letter to Shultz Distributing dated April 18, 1996. In addition to the three wells required by the Port, a monitoring well was installed to replace a well which was destroyed during construction. This fourth well was replaced at the expense of Lee Morse General Contractor, who constructed the facility.

SCOPE OF WORK

The scope of work for this project was completed in accordance with our proposal dated April 26, 1996, as amended to include the fourth monitoring well, and included:

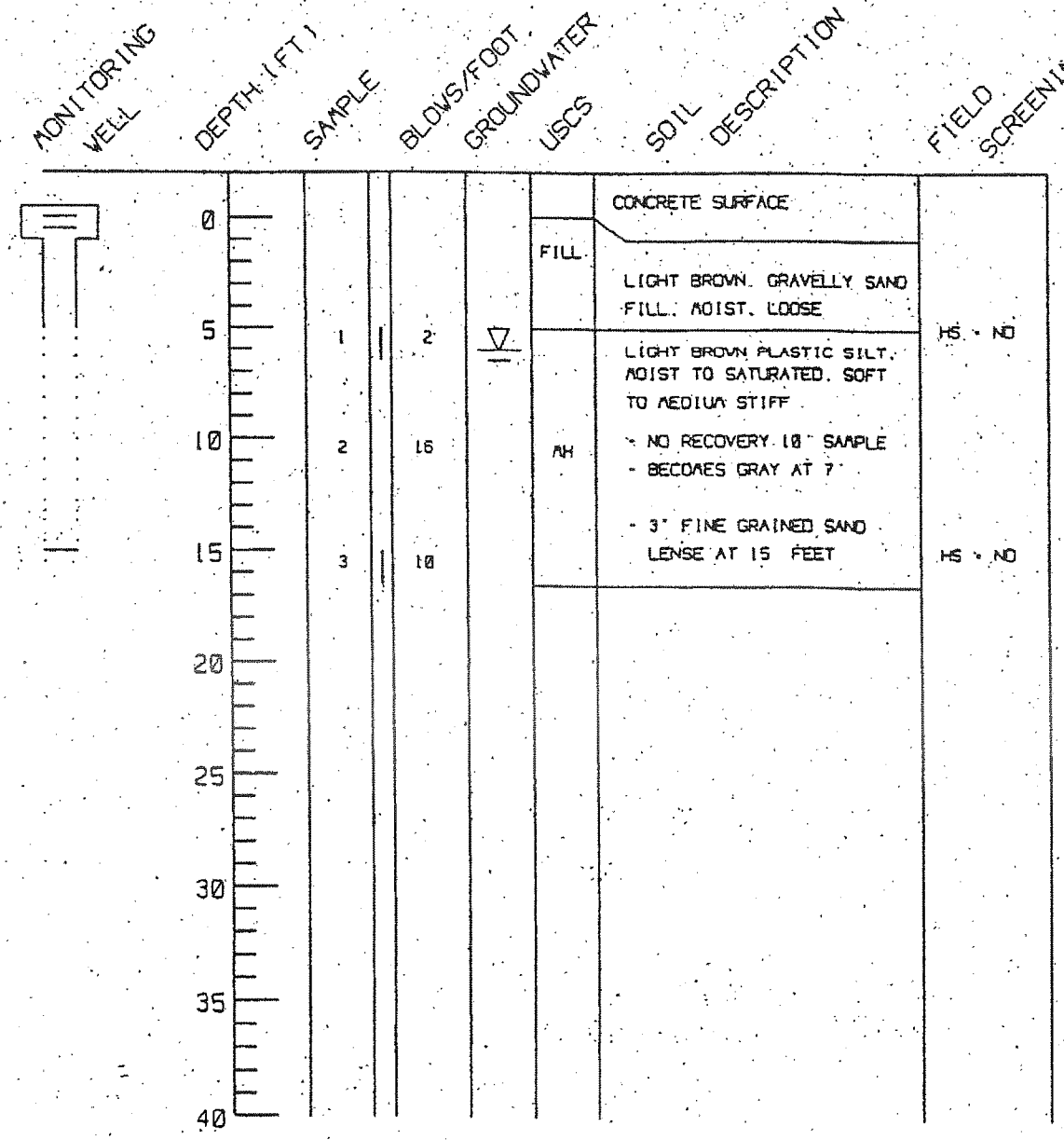
- The drilling of four test borings on the property, and the collection of soil samples from the borings.
- The installation of groundwater monitoring wells in the borings.
- The development and sampling of groundwater from three of the wells.
- Laboratory analysis of soil and groundwater samples.
- Preparation of this report.



Reference: Site Plan by David Evans and Associates, 1/28/96.

SITE PLAN Terminal 115 Seattle, Washington	Columbia Environmental, Inc. Project Number 96624-2 January 1997

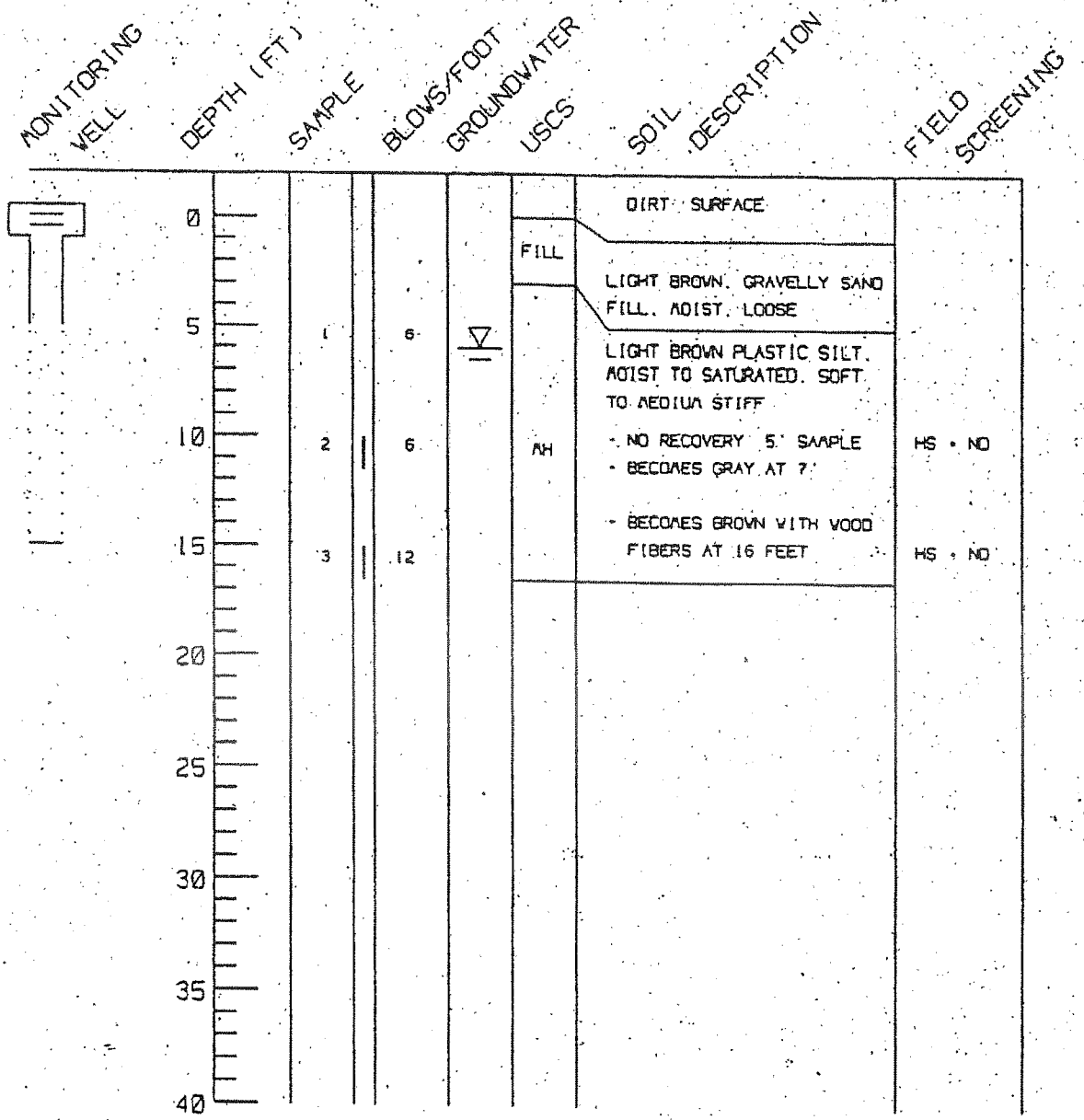
MONITORING WELL MW19



NOTES: - Sample numbering includes prefix indicating monitoring well or boring (e.g.: sample MW1-1 is sample 1 from monitoring well MW1).
- Some silt soils encountered may be fill material native to general area.
- HS = results of head space screening. Results in parts per million (ppm). ND denotes none detected.

SOIL/MONITORING WELL LOG Terminal 115 Seattle, Washington	Columbia Environmental, Inc. Project Number 96624-2 January 1997

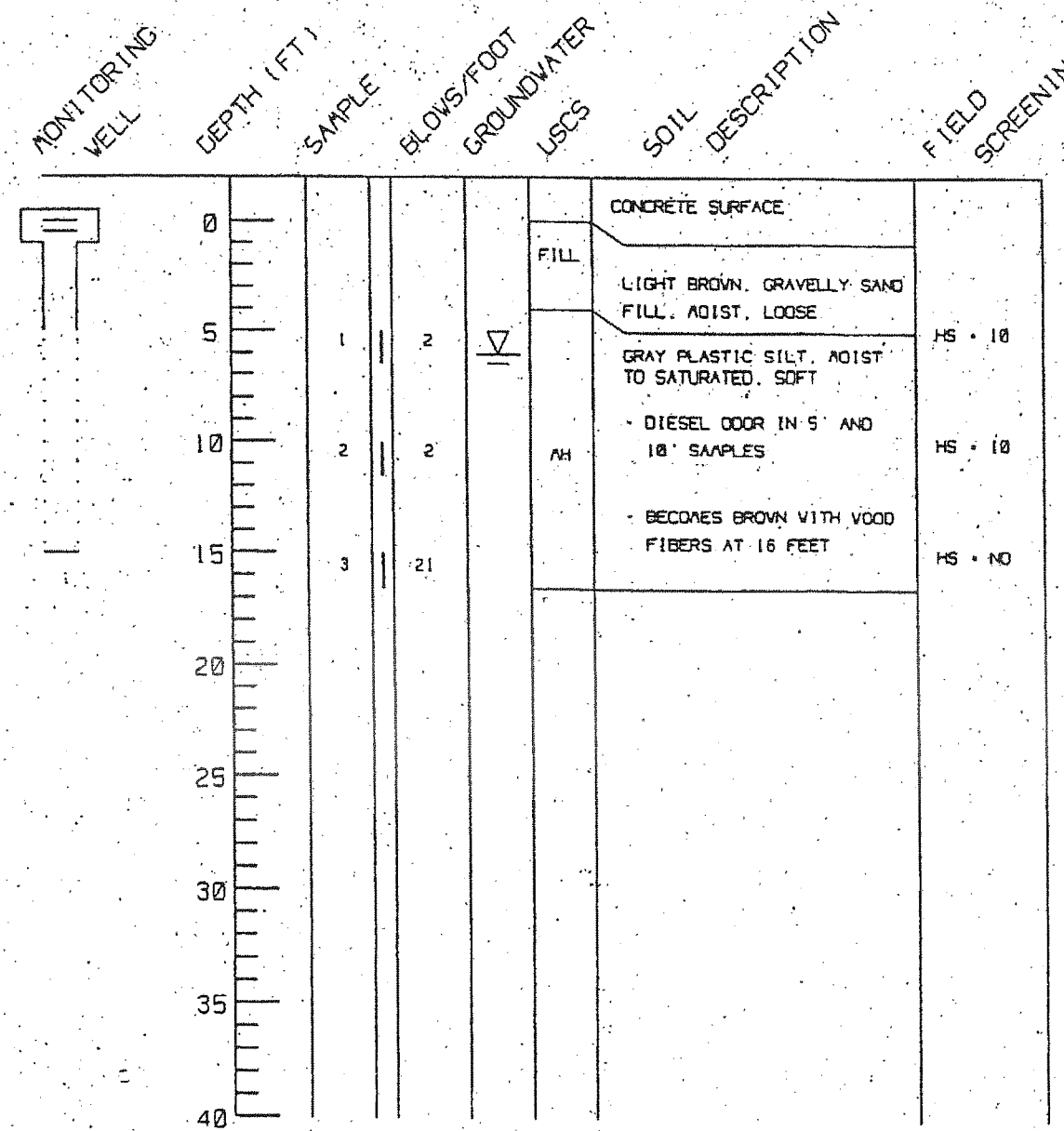
MONITORING WELL MW20



NOTES: - Sample numbering includes prefix indicating monitoring well or boring (e.g.: sample MW1-1 is sample 1 from monitoring well MW1).
- Some silt soils encountered may be fill material native to general area.
- HS = results of head space screening. Results in parts per million (ppm). ND denotes none detected.

SOIL/MONITORING WELL LOG Terminal 115 Seattle, Washington	Columbia Environmental, Inc. Project Number 96624-2 January 1997

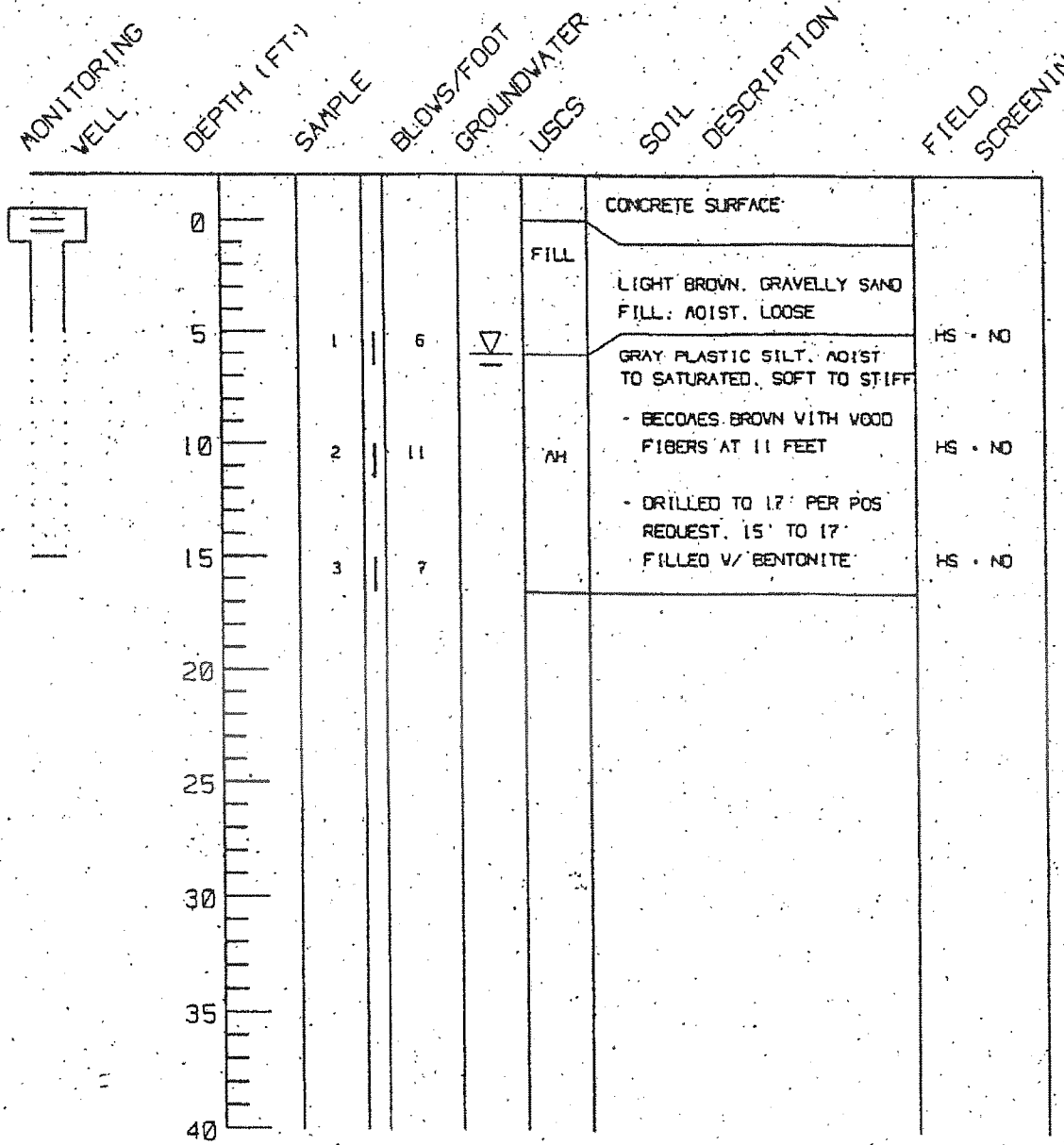
MONITORING WELL MW21



NOTES: - Sample numbering includes prefix indicating monitoring well or boring (e.g.: sample MW1-1 is sample 1 from monitoring well MW1).
- Some silt soils encountered may be fill material native to general area.
- HS = results of head space screening. Results in parts per million (ppm). ND denotes none detected.

SOIL/MONITORING WELL LOG Terminal 115 Seattle, Washington	Columbia Environmental, Inc. Project Number 96624-2 January 1997

MONITORING WELL MW22



NOTES: - Sample numbering includes prefix indicating monitoring well or boring (e.g.: sample MW1-1 is sample 1 from monitoring well MW1).
- Some silt soils encountered may be fill material native to general area.
- HS = results of head space screening. Results in parts per million (ppm). ND denotes none detected.

SOIL/MONITORING WELL LOG Terminal 115 Seattle, Washington	Columbia Environmental, Inc. Project Number 96624-2 January 1997

TABLE A: SURVEY RESULTS
Project Number 96624-2

Monitoring Well	Coordinates	Casing Elevation	Depth to Groundwater*	Groundwater Elevation*
MW14	N:1057.81+ E:30482.72+	19.58+	NM	NM
MW17	N:1025.97+ E:30488.72+	19.81+	NM	NM
MW18	N:1089.78+ E:30466.39+	19.91+	NM	NM
MW19	N:1109.31# E:30445.61#	19.82#	NM	NM
MW20	N:1053.94# E:30449.57#	19.56#	5.47	14.09#
MW21	N:1009.64# E:30435.67#	20.06#	5.08	14.98#
MW22	N:968.83# E:30371.44#	19.75#	4.79	14.96#

Notes:

* Measured on 12/19/96
\+ Data provided by Port of Seattle.
\# Calculated using survey information and Port of Seattle data.
- All measurements in feet.
- Elevation measurements accurate to nearest 0.01 foot.
- Lateral (coordinate) measurements accurate to nearest 0.1 foot.
- NM indicates not measured.
- Measurements relative to Seattle Tide Lands Grid and Mean Low Low Water elevation.

Appendix B

Laboratory Results

TABLE B: SUMMARY OF ANALYTICAL RESULTS
Project Number 96624-2

Sample Number	Location	Analysis	Analyte	Results (ppm)	Cleanup Level (ppm)
Comp-1	Composite of soil from MW22	WTPH-Dext	Diesel/Oils	41	200
MW21-1	Soil from MW21, 6 feet	WTPH-Dext	Diesel/Oils	9,600	200
Comp-2	Composite of soil from MW20	WTPH-Dext	Diesel/Oils	77	200
Comp-3	Composite of soil from MW19	WTPH-Dext	Diesel/Oils	27	200
MW22	Groundwater from MW22	WTPH-G	Gasoline	ND	1
		EPA 8020	Benzene	ND	0.005
			Toluene	ND	0.040
			EBenzene	ND	0.030
			Xylenes	ND	0.020
		WTPH-Dext	Diesel/Oils	ND	1
MW21	Groundwater from MW21	WTPH-G	Gasoline	ND	1
		EPA 8020	Benzene	ND	0.005
			Toluene	ND	0.040
			EBenzene	ND	0.030
			Xylenes	ND	0.020
		WTPH-Dext	Diesel/Oils	0.97	1
MW20	Groundwater from MW20	WTPH-G	Gasoline	ND	1
		EPA 8020	Benzene	ND	0.005
			Toluene	ND	0.040
			EBenzene	ND	0.030
			Xylenes	ND	0.020
		WTPH-Dext	Diesel/Oils	ND	1

Notes:

1) ppm denotes parts per million.
2) Cleanup levels are Method A cleanup levels as specified in the Model Toxics Control Act, WAC 173-340.
3) ND denotes none detected. Refer to laboratory report for analytical detection limits.

GeoScience Management, Inc. *Environmental Consulting Services*

18608 89th Avenue N.E. • Bothell, Washington 98011 • Telephone (206) 481-4538 • FAX (206) 402-1388

April 23, 1997

Ms. Kathy Bahnick
Port of Seattle, Environmental Engineering
P.O. Box 1209
Seattle, WA

Re: April 4, 1997 Groundwater Sampling Data
Port of Seattle Terminal 115, Seattle, Washington

Dear Ms. Bahnick,

This letter transmits the field data and laboratory results for the April 4, 1997 (first quarter) groundwater sampling event performed by GeoScience Management, Inc. at the Port of Seattle's Foley Cardlock Facility, Terminal 115 (T-115) located at 6730 West Marginal Way, Seattle, Washington (Figure 1). The work was performed under Professional Services Agreement Number P-950137 and subsequent amendments. At your request, I have not included a groundwater flow map or data tables with this transmittal. A report will be submitted at the end of 1997 documenting the results of all 1997 groundwater sampling. The attached map shows the approximate locations of all site wells. Also attached are the field data sampling sheets recording field measurements collected April 4, 1997, and the laboratory reports from North Creek Analytical, Inc. Groundwater sample designations are as follows:

Monitoring Well Number	**Sample Designation**
MW-13	Destroyed in 1995 by Lee Morse during station construction in 1996
MW-14	Not sampled due to presence of product
MW-15	97-0404-02
MW-16	97-0404-01
MW-17	97-0404-03
MW-18	Not sampled due to presence of product
MW-19	97-0404-06
MW-20	97-0404-04
MW-21	97-0404-07
MW-22	97-0404-08

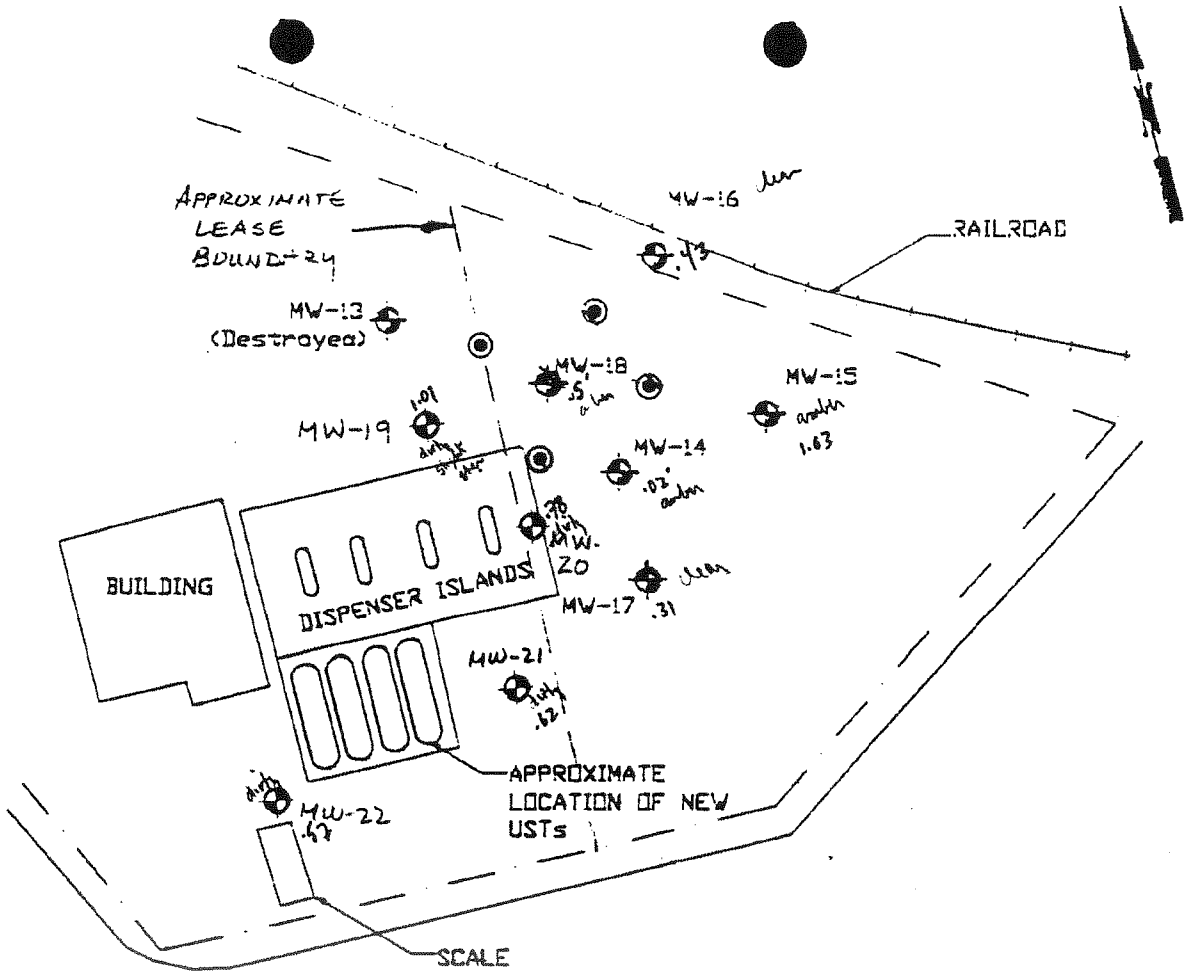
All samples were analyzed for total petroleum hydrocarbons in the diesel- and oil-ranges by method WTPH-D, extended. Diesel-range hydrocarbon concentrations ranged from a low of 0.429 mg/L in well MW-16 to a high of 1.03 mg/L. No oil-range hydrocarbons were reported in any of the samples at concentrations at or above the analytical method reporting limits of 0.750 mg/L. Please refer to the attached laboratory reports for specific analytical results. If you have questions or would like to discuss any of the information presented here, please contact me at your earliest convenience.

Sincerely,
GeoScience Management, Inc.

Howard W. Small, R.G., C.P.G.
Project Manager

Attachments: Field Sampling Data Sheets
Laboratory Report Number B704109, North Creek Analytical, Inc., dated April 14, 1997

c:\\pos\t115\4qtrgw.n04



MW-16 Existing Monitoring Well Location

50 0 50

scale feet

GeoScience Management, Inc.
Environmental Consulting Services
18608 89th Avenue NE
Bothell, Washington 98011

DESIGNED BY:	HS
DRAWN BY:	JB
DATE:	December 1996
JOB No.:	1002.01

PORT OF SEATTLE – TERMINAL 115
PROPOSED FOLEY CARDLOCK FACILITY

WELL LOCATIONS

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

Geo Science Management, Inc.	Project:	Port of Seattle	Sampled: 4/1/97
18608 89th Avenue NE	Project Number:	1002.02	Received: 4/7/97
Bothell, WA 98011	Project Manager:	Howard Small	Reported: 4/14/97 08:13

Summary Report*
(Please refer to the Analytical Report for a thorough review of the complete data set.)

Method	Analyte	Units	97-0404-01 Water 4/1/97 B704109-01	97-0404-02 Water 4/1/97 B704109-02	97-0404-03 Water 4/1/97 B704109-03	97-0404-04 Water 4/1/97 B704109-04	97-0404-06 Water 4/1/97 B704109-05
WTPH-Dext	Diesel Range Hydrocarbons	mg/l	**0.429**	**1.03**	**0.308**	**0.779**	**1.01**
"	Heavy Oil Range Hydrocarbons	"	<0.750	<0.750	<0.750	<0.750	<0.750

Method	Analyte	Units	97-0404-07 Water 4/1/97 B704109-06	97-0404-08 Water 4/1/97 B704109-07
WTPH-Dext	Diesel Range Hydrocarbons	mg/l	**0.616**	**0.570**
"	Heavy Oil Range Hydrocarbons	"	<0.750	<0.750

North Creek Analytical, Inc.

Matthew Essig, Project Manager

**The Summary Report is a subset of the final Analytical Report and does not include substantial supportive information such as quality control data; this report accurately summarizes sample results for your convenience only.*

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

Geo Science Management, Inc.	Project:	Port of Seattle	Sampled:	4/1/97
18608 89th Avenue NE	Project Number:	1002.02	Received:	4/7/97
Bothell, WA 98011	Project Manager:	Howard Small	Reported:	4/14/97 08:11

ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
97-0404-01	B704109-01	Water	4/1/97
97-0404-02	B704109-02	Water	4/1/97
97-0404-03	B704109-03	Water	4/1/97
97-0404-04	B704109-04	Water	4/1/97
97-0404-06	B704109-05	Water	4/1/97
97-0404-07	B704109-06	Water	4/1/97
97-0404-08	B704109-07	Water	4/1/97

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

Geo Science Management, Inc.	Project:	Port of Seattle	Sampled: 4/1/97
18608 89th Avenue NE	Project Number:	1002.02	Received: 4/7/97
Bothell, WA 98011	Project Manager:	Howard Small	Reported: 4/14/97 08:11

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C40) by WTPH-D (extended)
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
97-0404-01			**B704109-01**				**Water**	
Diesel Range Hydrocarbons	0470204	4/8/97	4/9/97		0.250	**0.429**	mg/l	
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*81.2*	%	
97-0404-02			**B704109-02**				**Water**	
Diesel Range Hydrocarbons	0470204	4/8/97	4/10/97		0.250	**1.03**	mg/l	
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*80.6*	%	
97-0404-03			**B704109-03**				**Water**	
Diesel Range Hydrocarbons	0470204	4/8/97	4/10/97		0.250	**0.308**	mg/l	
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*88.5*	%	
97-0404-04			**B704109-04**				**Water**	
Diesel Range Hydrocarbons	0470204	4/8/97	4/10/97		0.250	**0.779**	mg/l	1
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*94.3*	%	
97-0404-06			**B704109-05**				**Water**	
Diesel Range Hydrocarbons	0470204	4/8/97	4/10/97		0.250	**1.01**	mg/l	1
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*86.7*	%	
97-0404-07			**B704109-06**				**Water**	
Diesel Range Hydrocarbons	0470204	4/8/97	4/10/97		0.250	**0.616**	mg/l	
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*88.9*	%	
97-0404-08			**B704109-07**				**Water**	
Diesel Range Hydrocarbons	0470246	4/9/97	4/11/97		0.250	**0.570**	mg/l	1,2
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*75.5*	%	

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Matthew Essig, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ■ (206) 481-9200 ■ FAX 485-2992
SPOKANE ■ (509) 924-9200 ■ FAX 924-9290
PORTLAND ■ (503) 643-9200 ■ FAX 644-2202

Geo Science Management, Inc.	Project:	Port of Seattle	Sampled: 4/1/97
18608 89th Avenue NE	Project Number:	1002.02	Received: 4/7/97
Bothell, WA 98011	Project Manager:	Howard Small	Reported: 4/14/97 08:11

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C40) by WTPH-D (extended)/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0470204	**Date Prepared: 4/8/97**					**Extraction Method: EPA 3520/600 Series**				
Blank	**0470204-BLK1**									
Diesel Range Hydrocarbons	4/9/97			ND	mg/l	0.250				
Heavy Oil Range Hydrocarbons	"			ND	"	0.750				
Surrogate: 2-FBP	"	*0.350*		*0.305*	"	*50.0-150*	*87.1*			
LCS	**0470204-BS1**									
Diesel Range Hydrocarbons	4/9/97	2.04		2.07	mg/l	52.0-131	101			
Surrogate: 2-FBP	"	*0.350*		*0.324*	"	*50.0-150*	*92.6*			
Duplicate	**0470204-DUP1**	**B704109-01**								3
Diesel Range Hydrocarbons	4/10/97		0.429	0.483	mg/l			44.0	11.8	
Surrogate: 2-FBP	"	*0.660*		*0.572*	"	*50.0-150*	*86.7*			
Batch: 0470246	**Date Prepared: 4/9/97**					**Extraction Method: EPA 3520/600 Series**				
Blank	**0470246-BLK1**									
Diesel Range Hydrocarbons	4/10/97			ND	mg/l	0.250				
Heavy Oil Range Hydrocarbons	"			ND	"	0.750				
Surrogate: 2-FBP	"	*0.350*		*0.278*	"	*50.0-150*	*79.4*			
LCS	**0470246-BS1**									
Diesel Range Hydrocarbons	4/10/97	2.04		1.85	mg/l	52.0-131	90.7			
Surrogate: 2-FBP	"	*0.350*		*0.294*	"	*50.0-150*	*84.0*			
Duplicate	**0470246-DUP1**	**B704073-26**								
Diesel Range Hydrocarbons	4/11/97		ND	ND	mg/l			44.0		
Surrogate: 2-FBP	"	*0.700*		*0.533*	"	*50.0-150*	*76.1*			

North Creek Analytical, Inc.

**Refer to end of report for text of notes and definitions.*

Matthew Essig, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (206) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Geo Science Management, Inc.	Project:	Port of Seattle	Sampled: 4/1/97
18608 89th Avenue NE	Project Number:	1002.02	Received: 4/7/97
Bothell, WA 98011	Project Manager:	Howard Small	Reported: 4/14/97 08:11

Notes and Definitions

#	Note
1	The hydrocarbon concentration result in this sample is partially due to one or more individual peaks eluting in the diesel/heavy oil range. Quantitation by EPA method 8270 is recommended.
2	The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
3	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

North Creek Analytical, Inc.

Matthew Essig, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9300 FAX 644-2202

CHAIN OF CUSTODY REPORT

Work Order # 704109

REPORT TO: GeoScience Management, Inc
ATTENTION: Howard W. Small
ADDRESS: 18605 84th Ave NE
Bothell WA 98011
PHONE: 206 481-4538 FAX: 206 481-1358
PROJECT NAME: Port of Seattle Terminal 115
PROJECT NUMBER: 1002.01
SAMPLED BY: HW Small

INVOICE TO: GSM
ATTENTION: HW Small
ADDRESS: Same
P.O. NUMBER: NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 Standard | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: 5 Standard | 3-4 | 2 | 1 | Same Day
OTHER Specify: Standard
* Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NCA SAMPLE ID (Laboratory Use Only)	Analysis Request: TPH-D, G	MATRIX (W, S, A, O)	# OF CONTAINERS	COMMENTS
1. 97-0404-01	4/4/97		X			704109-01
2. 97-0404-02			X			109-02
3. 97-0404-03			X			109-03
4. 97-0404-04			X			109-04
5. 97-0404-05		No Sample				~~109-05~~
6. 97-0404-06			X			~~109-06~~ 05
7. 97-0404-07			X			~~109-07~~ 06
8. 97-0404-08			X			~~109-08~~ 07
						4/7

RELINQUISHED BY (Signature): HW Small — DATE: 4/7/97
PRINT NAME: HW SMALL — FIRM: — TIME: 1:10 PM
RECEIVED BY (Signature): Amy Wright — DATE: 4/7/97
PRINT NAME: Amy Wright — FIRM: NCA — TIME: 1:10 PM

RELINQUISHED BY (Signature): — DATE:
PRINT NAME: — FIRM: — TIME:
RECEIVED BY (Signature): — DATE:
PRINT NAME: — FIRM: — TIME:

ADDITIONAL REMARKS:

PAGE OF

APPENDIX C

Preliminary Phase-II Tables & Laboratory Report

TABLE 1 - Petroleum Hydrocarbons - Soil Sampling Results
All results and limits in parts per million (ppm)

Strataprobe Boring / Sample Name	Gasoline (TPH)	Diesel	Heavy Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes
B1-16-17	<10	<50	<100	***0.17*** [6]	<0.05	<0.05	<0.15
B3-3-4	19	<50	<100	<0.02	<0.05	<0.05	<0.15
B4-3-4	<10	<50	<100	<0.02	<0.05	<0.05	<0.15
Reporting Limit [3]	10	50	100	0.02	0.05	0.05	0.15
WDOE Target Compliance Level[4]	**100** [5]	**2000**	**2000**	**0.03**	**7**	**6**	**9**

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A soil cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC.
5- The MTCA gasoline TPH cleanup level is 30 ppm for soils with benzene otherwise it is 100 ppm.
6- Dection of benzene may be an "artifact" of sampling methdology given the high concentrations of petroleum in the overlying groundwater through which the sample traveled.

Bold and Italics denotes concentrations above MTCA Method A soil cleanup levels.

TABLE 2 - Petroleum Hydrocarbons - Groundwater Sampling Results
All results and limits in parts per billion (ppb)

Strataprobe Boring	Gasoline (TPH)	Diesel (TPH)	Heavy Oil (TPH)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
B1	***910***	***9,100***	<500	***170***	15	13	40	NA
B2	***830***	***18,000***	<500	***67***	18	<1	42	<1
B3	<100	<250	<500	<1	<1	<1	<1	<1
B4	<100	<250	<500	<1	<1	<1	<1	NA
MW-19	440	<250	<500	<1	<1	<1	<1	NA
MW-21	<100	<250	<500	<1	<1	<1	<1	NA
MW-22	<100	<250	<500	<1	<1	<1	<1	NA
Reporting Limit [3]	100	250	500	1	1	1	1	1
MTCA-Method-A Cleanup Levels[4]	**800 or 1000[5]**	**500**	**500**	**5**	**1000**	**700**	**1000**	**20**

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC.
5- The MTCA gasoline TPH cleanup level is 800 ppb for groundwater with benzene. Otherwise, the cleanup level is 1000 ppb.

Bold and Italics denotes concentrations above existing or proposed MTCA Method A groundwater cleanup levels.

ESN NORTHWEST, INC. | Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Associated Petroleum Products / EAI

ADDRESS: 1380 - 112th Ave NE, Suite 200 Bellevue WA 98004

PHONE: (425) 455-9025 FAX: (425) 455-2316

CLIENT PROJECT #: JN-31026 PROJECT MANAGER: Robert Roe

DATE: 4/28/2011 PAGE 1 OF 1

PROJECT NAME: Shultz - Terminal 115

LOCATION: Seattle - WA

COLLECTOR: Robert Roe DATE OF COLLECTION 4/28/2011

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260CL	VOC 8260	SemiVol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	WO Suite	MTBE	NOTES	Total Number of Containers	Laboratory Note Number
1. B1-3-4			Soil	VOA + Jar	X	X	X																	3	
2. B1-16-17					X	X	X																	3	
3. B2-3-4																								3	
4. B3-3-4					X	X	X																	3	
5. B3-7-8																								3	
6. B4-3-4					X	X	X																	3	
7. B4-7-8																								3	
8. B1			H_2O	VOA + AB	X	X	X																HOT	~~3~~	
9. B2					X	X	X														X		HOT	3	
10. B3					X	X	X														X			3	
11. B4					X	X	X																	3	
12. MW-19					X	X	X																	3	
13. MW-21					X	X	X																	3	
14. MW-22					X	X	X																	3	
15.																									
16.																									
17.																									
18.																									

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	4/28/2011	[signature]	4/28/11 1408
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR (5 DAY)

ESN NORTHWEST CHEMISTRY LABORATORY

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Associated Petroleum Products/EAI
SHULTZ -TERMINAL 115 PROJECT
Client Project #JN-31026
Seattle, Washington

Analysis of Diesel Range Organics & Lube Oil Range Organics in Water by Method NWTPH-Dx

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (ug/L)	Lube Oil Range Organics (ug/L)
Method Blank	5/3/2011	5/4/2011	115%	nd	nd
B1	5/3/2011	5/4/2011	90%	**9100**	nd
B2	5/3/2011	5/4/2011	100%	**18000**	nd
B3	5/3/2011	5/5/2011	109%	nd	nd
B4	5/3/2011	5/4/2011	98%	nd	nd
MW-19	5/3/2011	5/4/2011	103%	nd	nd
MW-21	5/3/2011	5/4/2011	103%	nd	nd
MW-22	5/3/2011	5/4/2011	116%	nd	nd
Reporting Limits				250	500

*A sample duplicate was not analyzed due to insufficient sample volume.

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

Associated Petroleum Products/EAI
SHULTZ -TERMINAL 115 PROJECT
Client Project #JN-31026
Seattle, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil
by Method NWTPH-Dx/Dx Extended

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (mg/kg)	Lube Oil Range Organics (mg/kg)
Method Blank	5/4/2011	5/4/2011	122%	nd	nd
B1-16-17	5/4/2011	5/4/2011	108%	nd	nd
B3-3-4	5/4/2011	5/4/2011	101%	nd	nd
B4-3-4	5/4/2011	5/4/2011	113%	nd	nd
Reporting Limits				50	100

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

Associated Petroleum Products/EAI
SHULTZ -TERMINAL 115 PROJECT
Clicnt Project #JN-31026
Seattle, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Gasoline Range Organics & BTEX in Water by Method NWTPH-Gx/8260

Sample Number	Date Analyzed	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	Gasoline Range Organics (ug/L)	Surrogate Recovery (%)
Method Blank	5/7/2011	nd	nd	nd	nd	nd	nd	99
LCS	5/7/2011	100%	85%	124%	118%	128%	97%	106
B2	5/7/2011	nd	**67**	**18**	nd	**42**	**830**	108
B3	5/7/2011	nd	nd	nd	nd	nd	nd	105
Reporting Limits			1.0	1.0	1.0	3.0	100	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS: 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

Associated Petroleum Products/EAI
SHULTZ -TERMINAL 115 PROJECT
Client Project #JN-31026
Seattle, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Gasoline Range Organics & BTEX in Water by Method NWTPH-Gx/8260

Sample Number	Date Analyzed	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	Gasoline Range Organics (ug/L)	Surrogate Recovery (%)
Method Blank	5/7/2011	nd	nd	nd	nd	nd	99
LCS	5/7/2011	85%	124%	118%	128%	97%	106
B1	5/7/2011	**170**	**15**	**13**	**40**	**910**	126
B4	5/7/2011	nd	nd	nd	nd	nd	95
MW-19	5/7/2011	nd	nd	nd	nd	**440**	126
MW-21	5/7/2011	nd	nd	nd	nd	nd	114
MW-22	5/7/2011	nd	nd	nd	nd	nd	127
Reporting Limits		1.0	1.0	1.0	3.0	100	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS: 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

Associated Petroleum Products/EAI
SHULTZ -TERMINAL 115 PROJECT
Client Project #JN-31026
Seattle, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Gasoline Range Organics & BTEX in Soil by Method NWTPH-Gx/8260

Sample Number	Date Prepared	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline Range Organics (mg/kg)	Surrogate Recovery (%)
Method Blank	4/29/2011	5/8/2011	nd	nd	nd	nd	nd	128
LCS	4/29/2011	5/8/2011	97%	86%	75%	83%	135%	109
LCSD	4/29/2011	5/8/2011	91%	76%	65%	67%	—	107
B1-16-17	4/29/2011	5/8/2011	**0.17**	nd	nd	nd	nd	119
B3-3-4	4/29/2011	5/8/2011	nd	nd	nd	nd	**19**	95
B4-3-4	4/29/2011	5/8/2011	nd	nd	nd	nd	nd	128
Reporting Limits			0.02	0.05	0.05	0.15	10	

"—" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS : 65% TO 135%

APPENDIX D

Environmental Database Report

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

Target Property:

6760 WEST MARGINAL WAY

SEATTLE WA 98106

Job Number: JN-31026

PREPARED FOR:

Environmental Associates, Inc.

1380 112th Avenue NE

Bellevue, WA 98004

04-12-11

Tel: (781) 551-0470 *Fax: (781) 551-0471*

Environmental FirstSearch
Search Summary Report

Target Site: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	01-14-11	1.00	0	0	0	1	0	0	1
NPL Delisted	Y	01-14-11	0.50	0	0	0	0	-	0	0
CERCLIS	Y	01-26-11	0.50	0	0	0	0	-	1	1
NFRAP	Y	01-26-11	0.50	0	0	1	2	-	0	3
RCRA COR ACT	Y	01-11-11	1.00	0	0	0	0	1	0	1
RCRA TSD	Y	01-11-11	0.50	0	0	0	0	-	0	0
RCRA GEN	Y	01-11-11	0.25	0	1	7	-	-	0	8
RCRA NLR	Y	01-11-11	0.25	0	0	7	-	-	2	9
Federal Brownfield	Y	03-01-11	0.50	0	0	0	1	-	3	4
ERNS	Y	01-24-11	0.15	0	0	-	-	-	23	26
Tribal Lands	Y	12-01-05	1.00	0	0	0	0	0	1	1
State/Tribal Sites	Y	11-05-10	1.00	0	0	2	5	46	2	55
State Spills 90	Y	05-23-06	0.25	0	0	0	-	-	0	0
State/Tribal SWL	Y	04-07-05	0.50	0	0	0	0	-	0	0
State/Tribal LUST	Y	11-05-10	0.50	0	0	2	3	-	0	5
State/Tribal UST/AST	Y	11-29-10	0.25	0	1	3	-	-	0	4
State/Tribal EC	Y	NA	0.50	0	0	0	0	-	0	0
State/Tribal IC	Y	11-05-10	0.25	0	0	0	-	-	0	0
State/Tribal VCP	Y	11-05-10	0.50	0	0	0	1	-	1	2
State/Tribal Brownfields	Y	11-05-10	0.50	0	0	0	0	-	0	0
State Other	Y	11-29-10	0.25	0	0	0	-	-	0	0
Federal IC/EC	Y	02-07-11	0.50	0	0	0	0	-	0	0
-TOTALS-				0	2	25	13	47	33	120

Notice of Disclaimer

Due to the limitations, constraints, and inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSeaarch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

Environmental FirstSearch
Site Information Report

Request Date:	04-12-11	**Search Type:**	COORD
Requestor Name:	ROBERT ROE	**Job Number:**	JN-31026
Standard:	AAI	**Filtered Report**	

Target Site: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

Demographics

Sites:	120	**Non-Geocoded:**	33	**Population:**	NA
Radon:	0 - 0.3 PCI/L				

Site Location

	Degrees (Decimal)	Degrees (Min/Sec)		UTMs
Longitude:	-122.342855	-122:20:34	**Easting:**	549454.381
Latitude:	47.541372	47:32:29	**Northing:**	5265318.163
Elevation:	49		**Zone:**	10

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes:

ZIP Code	City Name	ST	Dist/Dir	Sel

Services:

	Requested?	Date
Fire Insurance Maps	No	
Aerial Photographs	No	
Historical Topos	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Liens	No	
Historic Map Works	No	
Online Topos	No	

Environmental FirstSearch
Target Site Summary Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

TOTAL: 120 **GEOCODED:** 87 **NON GEOCODED:** 33 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.

No sites found for target address

Environmental FirstSearch
Sites Summary Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

TOTAL: 120 **GEOCODED:** 87 **NON GEOCODED:** 33 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
1	RCRAGN	PIONEER INDUSTRIES SEATTLE WAD982657504/SGN	7000 HIGHLAND PKWY S SEATTLE WA 98106	0.09 SW	+ 23	1
2	UST	SHULTZ DISTRIBUTING INC 395043/OPERATIONAL	6760 W MARGINAL WAY SW SEATTLE WA 98108	0.10 NW	+ 7	3
3	RCRAGN	NORTHLAND SERVICES INC WAH000011486/LGN	6700 W MARGINAL WAY SW S TE SEATTLE WA 98106	0.13 NW	+ 17	7
3	ERNS	6700 WEST MARGINAL WAY SW NRC-889729/FIXED	6700 W MARGINAL WAY SW SEATTLE WA	0.13 NW	+ 4	15
3	RCRANLR	AMERICA CARGO TRANSPORT INC WAH000012377/NLR	6700 W MARGINAL WAY SW STE SEATTLE WA 98106	0.13 NW	+ 17	4
3	RCRANLR	ALOHA CARGO TRANSPORT INC WAH000008474/NLR	6700 W MARGINAL WAY SW TERM SEATTLE WA 98106	0.13 NW	+ 17	13
3	RCRANLR	ALASKA CARGO TRANSPORT INC WAD051251957/NLR	6700 MARGINAL WAY SW SEATTLE WA 98106	0.13 NW	+ 17	11
3	ERNS	NORTH LAND SERVICES 6700 WEST MARG NRC-883450/MOBILE	N LAND SERVICES 6700 WEST SEATTLE WA	0.13 NW	+ 69	16
3	ERNS	NRC-540656/FIXED	6700 W MARGINAL WAY SW SEATTLE WA 98106	0.13 NW	N/A	8
3	RCRANLR	NORTHLAND SERVICES INC WAH000011486/NLR	6700 W MARGINAL WAY SW S TE SEATTLE WA 98106	0.13 NW	+ 17	14
3	RCRAGN	AMERICA CARGO TRANSPORT INC WAH000012377/TR	6700 W MARGINAL WAY SW STE SEATTLE WA 98106	0.13 NW	+ 17	6
3	RCRAGN	ALOHA CARGO TRANSPORT INC WAH000008474/TR	6700 W MARGINAL WAY SW TERM SEATTLE WA 98106	0.13 NW	+ 17	12
3	RCRAGN	ALASKA CARGO TRANSPORT INC WAD051251957/TR	6700 MARGINAL WAY SW SEATTLE WA 98106	0.13 NW	+ 17	5
4	RCRANLR	EASTMONT TRANSFER STATION WAD980836050/NLR	7155 W MARGINAL WAY SW SEATTLE WA 98106	0.16 SE	- 7	17
5	RCRAGN	LLOYD ELECTRIC APPARATUS CO WAD020245395/VGN	7126 W MARGINAL WAY SW SEATTLE WA 98106	0.17 SE	- 13	18
6	LUST	WASTE MANAGEMENT SEATTLE 3446/CLEANUP STARTED	7201 W MARGINAL WAY SW SEATTLE WA 98146	0.19 SE	+ 33	25
6	STATE	BAYSIDE DISPOSAL CSCR:2183/NOT REPORTED	7201 W MARGINAL WAY SW SEATTLE WA 98106	0.19 SE	+ 33	26
6	STATE	WASTE MANAGEMENT OF SEATTLE CSCR:2425/RANKED, AWAITING RA	7201 W MARGINAL WAY SW SEATTLE WA 98106	0.19 SE	+ 33	22
6	UST	WASTE MANAGEMENT SEATTLE 3446/CLOSED IN PLACE	7201 W MARGINAL WAY SW SEATTLE WA 98146	0.19 SE	+ 33	19
6	RCRAGN	WASTE MANAGEMENT OF SEATTLE WAD041333576/LGN	7201 W MARGINAL WAY SW SEATTLE WA 98106	0.19 SE	+ 33	21

Environmental FirstSearch
Sites Summary Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

TOTAL: 120 **GEOCODED:** 87 **NON GEOCODED:** 33 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
6	NFRAP	BAYSIDE DISPOSAL CO WAD980723084/NFRAP-N	7201 W MARGINAL WAY SW SEATTLE WA 98106	0.19 SE	+ 33	27
6	RCRANLR	WASTE MANAGEMENT OF SEATTLE WAD041333576/NLR	7201 W MARGINAL WAY SW SEATTLE WA 98106	0.19 SE	+ 33	20
7	LUST	JONES WASHINGTON STEVEDORING CO 2313/REPORTED CLEANED UP	7245 W MARGINAL WAY SW SEATTLE WA 98106	0.23 SE	+ 47	30
7	RCRAGN	NUPRECON LP WAH000030554/SGN	7245 W MARGINAL WAY SW SEATTLE WA 98106	0.23 SE	- 18	28
7	UST	JONES WASHINGTON STEVEDORING CO 2313/REMOVED	7245 W MARGINAL WAY SW SEATTLE WA 98106	0.23 SE	+ 47	29
8	UST	AL BOLSERS TIRE STORES INC 3981/REMOVED	6515 W MARGINAL WAY SW SEATTLE WA 98106	0.24 NW	+ 26	31
8	RCRANLR	NORBUK LTD WAH000004622/NLR	6515 W MARGINAL WAY SW SEATTLE WA 98106	0.24 NW	+ 26	32
9	NPL	LOWER DUWAMISH WATERWAY WA0002329803/FINAL	RIVER KILOMETER 1.5 SEATTLE WA 98134	0.30 SE	N/A	33
10	LUST	ALASKA MARINE LINES SHIPYARD 100532/REPORTED CLEANED UP	7100 2ND AVE SW SEATTLE WA 98106	0.34 SE	- 29	35
10	STATE	DOUGLAS MANAGEMENT DOCK CSCR:97573251/AWAITING SHA	7100 2ND AVE SW SEATTLE WA 98106	0.34 SE	- 29	36
11	STATE	FOSS ENVIRONMENTAL SVCS CO CSCR:24178231/NOT REPORTED	200 SW MICHIGAN ST SEATTLE WA 98106	0.36 SE	- 37	38
11	LUST	FOSS ENVIRONMENTAL AND INFRASTRUCT 494604/CLEANUP STARTED	200 SW MICHIGAN AVENUE SEATTLE WA 98124	0.36 SE	- 37	39
12	STATE	SEATTLE CITY LIGHT STEAMPLANT GEOR CSCR:6487827/RANKED, AWAITING RA	6700 13TH AVE S SEATTLE WA 98108	0.41 NW	+ 288	40
13	NFRAP	CHEMICAL PROCESSORS INC WAD000831735/NFRAP-N	7500 DETROIT AV SW SEATTLE WA 98108	0.42 SE	+ 140	42
14	STATE	INDUSTRIAL CONTAINER SERVICES WA L CSCR:2154/RANKED, AWAITING RA	7152 1ST AVE S SEATTLE WA 98108	0.43 SE	- 37	45
14	FEDBROWNFIELD	NORTHWEST COOPERAGE 39881505-46/EPA BROWNFIELD	7152 1ST AVE S SEATTLE WA 98108	0.43 SE	- 36	44
14	NFRAP	NORTHWEST COOPERAGE CO. INC. WAD000066084/NFRAP-N	7152 1ST AVE S SEATTLE WA 98108	0.43 SE	- 37	43
15	VCP	DUWAMISH MARINE CENTER VCP:21945598/NOT REPORTED	6365 1ST AVE S SEATTLE WA 98108	0.49 NE	- 37	48
15	STATE	DUWAMISH MARINE CENTER CSCR:21945598/RA IN PROGRESS	6365 1ST AVE S SEATTLE WA 98108	0.49 NE	- 37	49
16	LUST	WDOT RIVER STREET (EXEMPT) 200163/CLEANUP STARTED	107 S RIVER ST SEATTLE WA	0.49 NE	- 37	51

Environmental FirstSearch
Sites Summary Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

TOTAL: 120 **GEOCODED:** 87 **NON GEOCODED:** 33 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
17	STATE	PORT OF SEATTLE N TERMINAL 115 CSCR:2177/AWAITING SHA	6000 W MARGINAL WAY SW SEATTLE WA 98106	0.54 NW	+ 42	52
18	STATE	FRANKS USED CARS CSCR:2337/AWAITING SHA	6305 E MARGINAL WAY S SEATTLE WA 98108	0.56 NE	- 37	55
19	STATE	KING RESIDENCE CSCR:3121499/AWAITING SHA	6518 16TH AVE SW SEATTLE WA 98106	0.58 NW	+ 216	58
20	STATE	WEST COAST EQUIPMENT 2 CSCR:12494/RA IN PROGRESS	7746 DETROIT AV SW SEATTLE WA 98106	0.58 SE	+ 48	61
21	STATE	BIG JOHNS TRUCK REPAIR INC CSCR:44383713/AWAITING SHA	6533 3RD AVE S SEATTLE WA 98108	0.59 NE	- 36	63
22	STATE	GLACIER NORTHWEST INC CSCR:23881883/RA IN PROGRESS	5900 W MARGINAL WAY SW SEATTLE WA 98106	0.60 NW	+ 23	65
22	STATE	REICHOLD CHEMICAL LONE STAR CSCR:2167/RANKED, AWAITING REMEDIAL ACTI	5900 W MARGINAL WAY SW SEATTLE WA 98106	0.60 NW	+ 23	68
23	STATE	WEST COAST EQUIPMENT INC CSCR:2262/AWAITING SHA	7777 DETROIT AV SW SEATTLE WA 98106	0.60 SE	+ 81	70
24	STATE	CONSOLIDATED FREIGHTWAYS SEATTLE CSCR:54757868/AWAITING SHA	6050 E MARGINAL WAY S SEATTLE WA 98108	0.61 NE	- 36	73
25	STATE	EASTERN SUPPLY CO CSCR:2258/CONSTRUCTION COMPLETED, O & M	7745 1ST AVE S SEATTLE WA 98108	0.61 SE	- 29	75
25	STATE	LAIDLAW CSCR:2320/RANKED, AWAITING RA	7739 1ST AVE S SEATTLE WA 98108	0.61 SE	- 29	77
26	STATE	BPB GYPSUM CSCR:2253/NOT REPORTED	5931 E MARGINAL WAY S SEATTLE WA 98134	0.63 NE	- 34	79
27	STATE	LONGVIEW FIBRE PAPER & PACKAGING I CSCR:2226/RANKED, AWAITING RA	5901 E MARGINAL WAY S SEATTLE WA 98134	0.63 NE	- 33	81
28	STATE	NORTHWEST ENVIROSERVICE 2W CSCR:2537/AWAITING SHA	1ST AV SW & MARGINAL SEATTLE WA 98108	0.66 NE	- 37	84
29	STATE	WASTE MANAGEMENT OF SEATTLE 1ST AV CSCR:95878752/AWAITING SHA	7901 1ST AVE S SEATTLE WA 98108	0.74 SE	- 33	87
30	STATE	VIOX MCDOWELL SITE CSCR:2260/NOT REPORTED	551 S RIVER ST SEATTLE WA 98108	0.75 NE	- 37	89
31	STATE	ATC DISTRIBUTION GROUP CSCR:8162841/AWAITING SHA	401 S WEBSTER SEATTLE WA 98108	0.76 SE	- 37	90
32	STATE	FIRST AVE BRIDGE LANDFILL CSCR:2201/RANKED, AWAITING RA	7700 BLOCK OF 2ND AVE SW SEATTLE WA 98106	0.76 SE	- 37	92
33	STATE	RYDER STUDENT TRANSPORTATION SERVI CSCR:63293426/AWAITING SHA	130 S KENYON ST SEATTLE WA 98108	0.77 SE	- 36	95
34	STATE	FOX AVE BLDG CSCR:2282/RA IN PROGRESS	6900 FOX AVE S SEATTLE WA 98108	0.78 SE	- 37	99

Environmental FirstSearch
Sites Summary Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

TOTAL: 120 **GEOCODED:** 87 **NON GEOCODED:** 33 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
34	RCRACOR	CASCADE COLUMBIA WAD008957961/CA	6900 FOX AVE S SEATTLE WA 98108	0.78 SE	- 37	97
35	STATE	DUWAMISH SHIPYARD INC CSCR:2071/RANKED, AWAITING RA	5658 W MARGINAL WAY SW SEATTLE WA 98106	0.79 NW	- 4	101
36	STATE	EVERCLEAN INC DB CSCR:64981477/NOT REPORTED	551 S MICHIGAN ST SEATTLE WA 98108	0.79 NE	- 37	104
37	STATE	MOBILE CRANE CO INC CSCR:96851494/NOT REPORTED	5900 2ND AVE S SEATTLE WA 98108	0.79 NE	- 37	106
38	STATE	DR CONCRETE RECYCLE CSCR:4504516/AWAITING SHA	149 SW KENYON SEATTLE WA 98063	0.80 SE	- 37	108
39	STATE	VIOX CORP CSCR:3856995/NOT REPORTED	6701 6TH AVE S SEATTLE WA 98108	0.80 NE	- 36	110
40	STATE	SEATTLE S TRANSFER STA CSCR:2175/AWAITING SHA	8100 2ND AVE S SEATTLE WA 98108	0.82 SE	- 37	111
41	STATE	MYRTLE STREET PROPERTY CSCR:12153465/RA IN PROGRESS	606 S MYRTLE ST SEATTLE WA 98108	0.82 SE	- 37	114
42	STATE	AIR TEC CO PARCEL C CSCR:57633623/AWAITING SHA	5701 1ST AVE S SEATTLE WA 98108	0.83 NE	- 37	116
43	STATE	EMERALD TOOL INC CSCR:2084/RANKED, AWAITING RA	6332 6TH S SEATTLE WA 98108	0.84 NE	- 37	118
44	STATE	SAHLBERG EQUIPMENT CSCR:2450/AWAITING SHA	5950 4TH AVE S SEATTLE WA 98108	0.85 NE	- 37	120
45	STATE	SHELL OIL PRODUCTS US SAP 121430 CSCR:19688471/RA IN PROGRESS	600 S MICHIGAN SEATTLE WA 98108	0.85 NE	- 37	123
46	STATE	CAPITAL INDUSTRIES INC CSCR:11598755/AWAITING SHA	5801 3RD AVE S SEATTLE WA 98108	0.86 NE	- 36	125
47	STATE	CHEVRON SERVICE STATION 21-1551 CSCR:63938375/RA IN PROGRESS	7132 DELRIDGE WAY SW SEATTLE WA 98106	0.86 SW	+ 144	128
48	STATE	PERKINS LOT CSCR:43114188/NOT REPORTED	719 S MYRTLE ST SEATTLE WA 98108	0.86 SE	- 37	130
49	STATE	NORTHWEST ENVIROSERVICE 2 CSCR:2536/AWAITING SHA	8105 1ST AVE S SEATTLE WA 98108	0.89 SE	- 17	132
50	STATE	MASTER BUILDERS CSCR:2254/AWAITING SITE HAZARD ASSESSMEN	64 S LUCILE ST SEATTLE WA 98134	0.90 NE	- 36	134
51	STATE	BLASER DIE CASTING CO CSCR:7118747/AWAITING SHA	5700 3RD AVE S SEATTLE WA 98108	0.91 NE	- 37	135
52	STATE	MANITOWAK WESTERN CSCR:2430/RA IN PROGRESS	8250 5TH AVE S SEATTLE WA 98108	0.91 SE	- 37	138
53	STATE	640 S RIVERSIDE DR CSCR:22726/RA IN PROGRESS	640 S RIVERSIDE DR SEATTLE WA 98108	0.92 SE	- 37	140

Environmental FirstSearch
Sites Summary Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

TOTAL: 120 **GEOCODED:** 87 **NON GEOCODED:** 33 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
54	STATE	DELRIDGE ARCO AM PM CSCR:23213563/NOT REPORTED	7301 DELRIDGE WAY SW SEATTLE WA 98106	0.92 SW	+ 166	142
55	STATE	INLAND TRANSPORTATION CO CSCR:2134/AWAITING SITE HAZARD ASSESSMEN	6737 CORSON S SEATTLE WA 98108	0.92 NE	- 37	143
56	STATE	WRIGHT SCHUCHART INC CSCR:2339/AWAITING SITE HAZARD ASSESSMEN	5500 W MARGINAL WAY SW SEATTLE WA 98106	0.92 NW	+ 34	144
57	STATE	ART BRASS PLATING INC SEATTLE CSCR:88531932/AWAITING SHA	5516 3RD AVE S SEATTLE WA 98108	0.99 NE	- 37	146
58	STATE	ALASKA LOGISTICS LLC CSCR:63123962/AWAITING SHA	7400 8TH AVE S SEATTLE WA 98108	1.00 SE	- 37	151
58	STATE	CROWLEY MARINE SERVICES INC 8TH AV CSCR:1940187/RANKED, AWAITING RA	7400 8TH AVE S SEATTLE WA 98108	1.00 SE	- 37	148
59	STATE	KING AUTO & TRUC CSCR:2278/NOT REPORTED	543 S MONROE ST SEATTLE WA 98108	1.00 SE	- 37	154
	ERNS	NRC-832169/MOBILE	3400 E MARGINAL WAY SEATTLE WA	NON GC	N/A	N/A
	ERNS	215545/	E MARGINAL WAYBOEING MILIT SEATTLE WA	NON GC	N/A	N/A
	ERNS	206334/	TERM. 106 IDAHO AND E. MAR SEATTLE WA	NON GC	N/A	N/A
	ERNS	UNKNOWN 182766/FIXED FACILITY	W MARGINAL INDUSTRIAL DIST SEATTLE WA	NON GC	N/A	N/A
	ERNS	UNLOADING DOCK NRC-730954/FIXED	5900 W MARGINAL WAY SEATTLE WA 98106	NON GC	N/A	N/A
	ERNS	NRC-829153/FIXED	3443 W MARGINAL WAY SEATTLE WA 98106	NON GC	N/A	N/A
	ERNS	NRC-749878/RAILROAD NON-RELEASE	S HUDSON ST AND EAST MARGI SEATTLE WA	NON GC	N/A	N/A
	ERNS	NRC-774462/FIXED	S NEVADA AND MARGINAL WAY SEATTLE WA	NON GC	N/A	N/A
	ERNS	THE BOEING CO 645535/FIXED FACILITY	E MARGINAL WAY SEATTLE WA	NON GC	N/A	N/A
	STATE	PUGET PARK CSCR:2479/AWAITING SHA	16TH AV SW SEATTLE WA 98106	NON GC	N/A	N/A
	STATE	SOUTH KENYON STREET CSCR:3388037/RA IN PROGRESS	110, 130, 150, & 200 SOUTH SEATTLE WA	NON GC	N/A	N/A
	TRIBALLAND	BUREAU OF INDIAN AFFAIRS CONTACT I BIA-98106/	UNKNOWN WA 98106	NON GC	N/A	N/A
	FEDBROWNFIELD	PAINTING BUSINESS/CENTRAL PAINTING 39881505-29/EPA BROWNFIELD	W MARGINAL WAY SOUTH DUWAM SEATTLE WA 98106	NON GC	N/A	N/A

Environmental FirstSearch
Sites Summary Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

TOTAL: 120 **GEOCODED:** 87 **NON GEOCODED:** 33 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
	FEDBROWNFIELD	PEDERSON PROPERTY 39881505-34/EPA BROWNFIELD	S PARK - 14TH AVENUE SEATTLE WA	NON GC	N/A	N/A
	FEDBROWNFIELD	SOUTH PARK/CROSBY PROPERTY FRAME & 39881505-33/EPA BROWNFIELD	S PARK 14TH AVENUE SEATTLE WA	NON GC	N/A	N/A
	ERNS	NRC-776030/FIXED	N END OF PIER 46 MARGINAL SEATTLE WA	NON GC	N/A	N/A
	VCP	PUGET PARK VCP:2479/NOT REPORTED	16TH AV SW SEATTLE WA 98106	NON GC	N/A	N/A
	ERNS	8531 E MARGINAL WAY NRC-935955/MOBILE	8531 E MARGINAL WAY SEATTLE WA	NON GC	N/A	N/A
	ERNS	IN FRONT OF PUBLIX HOTEL KING ST A NRC-939663/FIXED	IN FRONT OF PUBLIX HOTEL K SEATTLE WA	NON GC	N/A	N/A
	ERNS	7546 WEST MARGINAL WAY SW NRC-875313/MOBILE	7546 W MARGINAL WAY SW SEATTLE WA	NON GC	N/A	N/A
	ERNS	JAMES C CARTER 179953/HIGHWAY RELATED	IN FRONT OF THE HOUSE-1623 SEATTLE WA	NON GC	N/A	N/A
	ERNS	2715 EAST MARGINAL WAY NRC-865091/STORAGE TANK	2715 E MARGINAL WAY SEATTLE WA	NON GC	N/A	N/A
	RCRANLR	VICTORY MARINE INC WAD988467130/NLR	TERMINAL 115 S 6700 W MARG SEATTLE WA 98106	NON GC	N/A	N/A
	ERNS	RABANCO 645532/HIGHWAY RELATED	1ST AVE S & S MICHIGAN ST SEATTLE WA	NON GC	N/A	N/A
	CERCLIS	LINDE CONTAINER WAN001002882/NOT PROPOSED	16TH AVE SW & SW LANDER ST SEATTLE WA	NON GC	N/A	N/A
	ERNS	A DISCHARGE PIPE FROM THE BOEING F NRC-841510/FIXED	E MARGINAL WAY SEATTLE WA	NON GC	N/A	N/A
	ERNS	BOEING, PLANT 2 191038/	244 BLDG ON E. MARGINAL WAY SEATTLE WA	NON GC	N/A	N/A
	ERNS	DUWAMISH RIVER 3225 E MARGINAL WAY NRC-867831/STORAGE TANK	E DUWAMISH RIVER 3225 MARG SEATTLE WA	NON GC	N/A	N/A
	ERNS	DUWAMISH RIVER- SW IDAHO ST & WEST NRC-935505/MOBILE	SW IDAHO ST & WEST MARGINA SEATTLE WA	NON GC	N/A	N/A
	ERNS	THE BOEING CO 536896/FIXED FACILITY	215 E MARGINAL WAY SEATTLE WA	NON GC	N/A	N/A
	ERNS	BALL FOSTER GLASS CO 556192/FIXED FACILITY	5800 MARGINAL WAY SEATTLE WA	NON GC	N/A	N/A
	ERNS	PARKING LOT IN FRONT OF THE PROVID NRC-901242/FIXED	PARKING LOT IN FRONT OF TH SEATTLE WA	NON GC	N/A	N/A
	RCRANLR	METRO TERM 117 WAD981762263/NLR	W MARGINAL WAY S TERM 117 SEATTLE WA 98106	NON GC	N/A	N/A

Environmental FirstSearch
Sites Summary Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

TOTAL: 120 **GEOCODED:** 87 **NON GEOCODED:** 33 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRAGN

SEARCH ID: 12 **DIST/DIR:** 0.09 SW **ELEVATION:** 72 **MAP ID:** 1

NAME:	PIONEER INDUSTRIES SEATTLE	**REV:**	1/11/11
ADDRESS:	7000 HIGHLAND PKWY S	**ID1:**	WAD982657504
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	SGN
CONTACT:		**PHONE:**	
SOURCE:	EPA		

SITE INFORMATION

CONTACT INFORMATION: ROBERT GALLAGHER
7440 W MARGINAL WAY S
SEATTLE WA 98108

PHONE: (206)766-7040

UNIVERSE INFORMATION:

NAIC INFORMATION

332812 - METAL COATING, ENGRAVING (EXCEPT JEWELRY AND SILVERWARE), AND ALLIED SERVICES TO MANUFACTURERS

ENFORCEMENT INFORMATION:

AGENCY: S - STATE DATE: 6/24/1998
TYPE: 120 - WRITTEN INFORMAL

AGENCY: S - STATE DATE: 6/24/1998
TYPE: 120 - WRITTEN INFORMAL

AGENCY: S - STATE DATE: 3/6/2006
TYPE: 120 - WRITTEN INFORMAL

AGENCY: S - STATE DATE: 3/6/2006
TYPE: 120 - WRITTEN INFORMAL

VIOLATION INFORMATION:

VIOLATION NUMBER: 0001 RESPONSIBLE: S - STATE
DETERMINED: 6/17/1998 DETERMINED BY: S - STATE
CITATION: 170(a)&070(3)
RESOLVED: 10/12/1998
TYPE: GENERATOR-GENERAL REQUIREMENTS

VIOLATION NUMBER: 0002 RESPONSIBLE: S - STATE
DETERMINED: 6/17/1998 DETERMINED BY: S - STATE
CITATION: 200(1)(d)
RESOLVED: 6/27/1998
TYPE: GENERATOR-GENERAL REQUIREMENTS

VIOLATION NUMBER: 0003 RESPONSIBLE: S - STATE
DETERMINED: 6/17/1998 DETERMINED BY: S - STATE
CITATION: 200(1)(b)ref630(3)
RESOLVED: 6/27/1998
TYPE: GENERATOR-GENERAL REQUIREMENTS

VIOLATION NUMBER: 0004 RESPONSIBLE: S - STATE
DETERMINED: 6/17/1998 DETERMINED BY: S - STATE
CITATION: 140(2)ref cfr268.7(a)(7)

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRAGN

SEARCH ID: 12 **DIST/DIR:** 0.09 SW **ELEVATION:** 72 **MAP ID:** 1

NAME:	PIONEER INDUSTRIES SEATTLE	**REV:**	1/11/11
ADDRESS:	7000 HIGHLAND PKWY S	**ID1:**	WAD982657504
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	SGN
CONTACT:		**PHONE:**	
SOURCE:	EPA		

RESOLVED: 7/27/1998
TYPE: GENERATOR-LAND BAN REQUIREMENTS

VIOLATION NUMBER: 0005 RESPONSIBLE: S - STATE
DETERMINED: 6/17/1998 DETERMINED BY: S - STATE
CITATION: 200(1)(c)&350, 360
RESOLVED: 7/4/1998
TYPE: GENERATOR-GENERAL REQUIREMENTS

VIOLATION NUMBER: 0006 RESPONSIBLE: S - STATE
DETERMINED: 6/17/1998 DETERMINED BY: S - STATE
CITATION: 220(a)(b)(c)
RESOLVED: 7/27/1998
TYPE: GENERATOR-MANIFEST REQUIREMENTS

VIOLATION NUMBER: 0007 RESPONSIBLE: S - STATE
DETERMINED: 2/15/2006 DETERMINED BY: S - STATE
CITATION: -340(2)
RESOLVED: 3/16/2006
TYPE: GENERATOR-GENERAL REQUIREMENTS

VIOLATION NUMBER: 0008 RESPONSIBLE: S - STATE
DETERMINED: 2/15/2006 DETERMINED BY: S - STATE
CITATION: -200(1)(c)
RESOLVED: 2/24/2006
TYPE: GENERATOR-GENERAL REQUIREMENTS

VIOLATION NUMBER: 0009 RESPONSIBLE: S - STATE
DETERMINED: 2/15/2006 DETERMINED BY: S - STATE
CITATION: -630(5)(a)
RESOLVED: 3/10/2006
TYPE: GENERATOR-GENERAL REQUIREMENTS

VIOLATION NUMBER: 0010 RESPONSIBLE: S - STATE
DETERMINED: 2/15/2006 DETERMINED BY: S - STATE
CITATION: -200(1)(d)
RESOLVED: 3/10/2006
TYPE: GENERATOR-GENERAL REQUIREMENTS

VIOLATION NUMBER: 0011 RESPONSIBLE: S - STATE
DETERMINED: 2/15/2006 DETERMINED BY: S - STATE
CITATION: -210(1)
RESOLVED: 3/28/2006
TYPE: GENERATOR-MANIFEST REQUIREMENTS

VIOLATION NUMBER: 0012 RESPONSIBLE: S - STATE
DETERMINED: 2/15/2006 DETERMINED BY: S - STATE
CITATION: -630(7)
RESOLVED: 4/10/2006

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

UST

SEARCH ID: 79 **DIST/DIR:** 0.10 NW **ELEVATION:** 56 **MAP ID:** 2

NAME:	SHULTZ DISTRIBUTING INC	**REV:**	06/25/10
ADDRESS:	6760 W MARGINAL WAY SW	**ID1:**	395043
	SEATTLE WA 98108	**ID2:**	
	KING	**STATUS:**	OPERATIONAL
CONTACT:		**PHONE:**	
SOURCE:	WA DOE		

Facility Site ID: 94368646
Tank # or Reference Name: 1
Tank ID: 395048
Status: Operational
Installation Date: 7/31/1996
Capacity: 10,000 to 19,999 Gallons
Compartment ID: 438714
Number of Compartments: 1
Substance Stored: Unleaded Gasoline
Ecology Region: NORTHWEST

Facility Site ID: 94368646
Tank # or Reference Name: 3
Tank ID: 395049
Status: Operational
Installation Date: 7/31/1996
Capacity: 10,000 to 19,999 Gallons
Compartment ID: 438715
Number of Compartments: 1
Substance Stored: Diesel
Ecology Region: NORTHWEST

Facility Site ID: 94368646
Tank # or Reference Name: 2
Tank ID: 395050
Status: Operational
Installation Date: 7/31/1996
Capacity: 10,000 to 19,999 Gallons
Compartment ID: 438716
Number of Compartments: 1
Substance Stored: Diesel
Ecology Region: NORTHWEST

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRANLR

SEARCH ID: 16 **DIST/DIR:** 0.13 NW **ELEVATION:** 66 **MAP ID:** 3

NAME:	AMERICA CARGO TRANSPORT INC	**REV:**	1/11/11
ADDRESS:	6700 W MARGINAL WAY SW STE 100	**ID1:**	WAH000012377
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	NLR
CONTACT:		**PHONE:**	
SOURCE:	EPA		

SITE INFORMATION

CONTACT INFORMATION: RICHARD MAXWELL
6700 W MARGINAL WAY SW
SEATTLE WA 98105

PHONE: (206)762-5955

UNIVERSE INFORMATION:

NAIC INFORMATION

481111 - SCHEDULED PASSENGER AIR TRANSPORTATION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRAGN

SEARCH ID: 6 **DIST/DIR:** 0.13 NW **ELEVATION:** 66 **MAP ID:** 3

NAME:	ALASKA CARGO TRANSPORT INC	**REV:**	3/11/02
ADDRESS:	6700 MARGINAL WAY SW	**ID1:**	WAD051251957
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	TR
CONTACT:	LEO NAEKEL	**PHONE:**	2067623035
SOURCE:	EPA		

SITE INFORMATION

CONTACT INFORMATION: LEO NAEKEL

6700 W MARGINAL WAY SW
SEATTLE WA 981061930

PHONE: 2067623035

UNIVERSE NAME:

TR: TRANSPORTER

SIC INFORMATION:

4424 - TRANS. & UTILITIES - DEEP SEA DOMESTIC TRANS. OF F

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRAGN

SEARCH ID: 8 **DIST/DIR:** 0.13 NW **ELEVATION:** 66 **MAP ID:** 3

NAME:	AMERICA CARGO TRANSPORT INC	**REV:**	2/9/04
ADDRESS:	6700 W MARGINAL WAY SW STE 100	**ID1:**	WAH000012377
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	TR
CONTACT:	RICHARD MAXWELL	**PHONE:**	2067625955
SOURCE:	EPA		

SITE INFORMATION

UNIVERSE TYPE:

TRANSPORT - TRANSPORTER

SIC INFORMATION:

4424 - TRANS. & UTILITIES - DEEP SEA DOMESTIC TRANS. OF F

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRAGN

SEARCH ID: 10 **DIST/DIR:** 0.13 NW **ELEVATION:** 66 **MAP ID:** 3

NAME:	NORTHLAND SERVICES INC	**REV:**	1/11/11
ADDRESS:	6700 W MARGINAL WAY SW S TERM	**ID1:**	WAH000011486
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	LGN
CONTACT:		**PHONE:**	
SOURCE:	EPA		

DETAILS NOT AVAILABLE

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

ERNS

SEARCH ID: 23 **DIST/DIR:** 0.13 NW **ELEVATION:** **MAP ID:** 3

NAME:
ADDRESS: 6700 W MARGINAL WAY SW
SEATTLE WA 98106
KING
CONTACT:
SOURCE: EPA

REV: 12/31/00
ID1: NRC-540656
ID2:
STATUS: FIXED
PHONE:

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

DATE RECEIVED: 8/31/2000 8:08:11 PM DATE COMPLETE: 8/31/2000 8:16:30 PM
CALL TAKER: CALL TYPE: INC

RESPONSIBLE PARTY:
PHONE #1:
PHONE #2:
PHONE #3:

RESPONSIBLE COMPANY: JORE MARINE SERVICES
ORGANIZATION TYPE: PRIVATE ENTERPRISE

ADDRESS:
SEATTLE WA 98106

SOURCE: UNAVAILABLE

INCIDENT INFORMATION

INCIDENT DESCRIPTION: SMALL PIECE OF EQUIPMENT FELL INTO THE RIVER CAUSING A SHEEN ON THE WATER

INCIDENT TYPE: FIXED INCIDENT CAUSE: OPERATOR ERROR
INCIDENT DATE: 8/31/2000 3:30:00 PM INCIDENT DATE DESC: OCCURRED
DISTANCE FROM CITY: DISTANCE UNITS:
DIRECTION FROM CITY: LOCATION SECTION:
LOCATION TOWNSHIP: LOCATION RANGE:

AIRCRAFT TYPE: UNKNOWN AIRCRAFT MODEL:
AIRCRAFT ID: AIRCRAFT FUEL CAPACITY:
AIRCRAFT FUEL CAPACITY UNITS: AIRCRAFT FUEL ON BOARD:
AIRCRAFT FUEL ON BOARD UNITS: AIRCRAFT SPOT NUMBER:
AIRCRAFT HANGER: AIRCRAFT RUNWAY NUM:
ROAD MILE MARKER: BUILDING ID:
TYPE OF FIXED OBJECT: OTHER POWER GEN FACILITY: NO
GENERATING CAPACITY: TYPE OF FUEL:
NPDES: NPDES COMPLIANCE: UNKNOWN
PIPELINE TYPE: DOT REGULATED: UNKNOWN
PIPELINE ABOVE GROUND: ABOVE EXPOSED UNDERWATER: NO
PIPELINE COVERED: UNKNOWN GRADE CROSSING: NO
LOCATION SUBDIVISION: RAILROAD MILEPOST:
TYPE VEHICLE INVOLVED: CROSSING DEVICE TYPE:
DEVICE OPERATIONAL: YES

DOT CROSSING NUMBER: BRAKE FAILURE: NO
TANK ABOVE GROUND: ABOVE TRANSPORTABLE CONTAINER: UNKNOWN
TANK REGULATED: UNKNOWN TANK REGULATED BY:
TANK ID: CAPACITY OF TANK:
CAPACITY OF TANK UNITS: ACTUAL AMOUNT:
ACTUAL AMOUNT UNITS: PLATFORM RIG NAME:
PLATFORM LETTER: LOCATION AREA ID:
LOCATION BLOCK ID:

DESCRIPTION OF TANK:

- Continued on next page -

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

ERNS

SEARCH ID: 23 **DIST/DIR:** 0.13 NW **ELEVATION:** **MAP ID:** 3

NAME:
ADDRESS: 6700 W MARGINAL WAY SW
SEATTLE WA 98106
KING
CONTACT:
SOURCE: EPA

REV: 12/31/00
ID1: NRC-540656
ID2:
STATUS: FIXED
PHONE:

OCSG NUMBER: OCSP NUMBER:
STATE LEASE NUMBER: PIER DOCK NUMBER:
BERTH SLIP NUMBER: CONTIN RELEASE TYPE:
INITIAL CONT RELEASE NUM: CONT RELEASE PERMIT:
ALLISION: NO TYPE OF STRUCTURE:
STRUCTURE NAME: STRUCT OPERATIONAL: UNKNOWN
AIRBAG DEPLOYED: DATE NORMAL SERVICE:
SERVICE DISRUPT TIME: SERVICE DISRUPT UNITS:
TRANSIT BUS FLAG: CR BEGIN DATE:
CR END DATE: CR CHANGE DATE:

FIRE INVOLVED: NO FIRE EXTINGUISHED: UNKNOWN
ANY EVACUATIONS: NO NUMBER EVACUATED:
WHO EVACUATED: RADIUS OF EVACUATION:
ANY INJURIES: YES NUMBER INJURED:
NUMBER HOSPITALIZED: ANY FATALITIES: NO
NUMBER FATALITIES: ANY DAMAGES: NO
DAMAGE AMOUNT: AIR CORRIDOR CLOSED: NO
AIR CORRIDOR DESC: AIR CLOSURE TIME:
WATERWAY CLOSED: NO WATERWAY DESC:
WATERWAY CLOSURE TIME: ROAD CLOSED: NO
ROAD DESC: ROAD CLOSURE TIME:
CLOSURE DIRECTION: MAJOR ARTERY: NO

TRACK CLOSED: NO TRACK DESC:
TRACK CLOSURE TIME: MEDIA INTEREST: NONE
MEDIUM DESC: WATER ADDTL MEDIUM INFO: DUWAMISH
BODY OF WATER: DUWAMISH RIVER TRIBUTARY OF: ELLIOTT BAY
NEAREST RIVER MILE MARK: RELEASE SECURED: UNKNOWN
EST DUR OF RELEASE: RELEASE RATE:
TRACK CLOSE DIR: ST AGENCY ON SCENE:
ST AGENCY RPT NUM: OTHER AGENCY NOTIFIED:
WEATHER CONDITIONS: PARTLY CLOUDY AIR TEMPERATURE: 65
WIND SPEED: 10 WIND DIRECTION: SW
WATER SUPPLY CONTAM: UNKNOWN SHEEN SIZE:
SHEEN COLOR: RAINBOW DIR OF SHEEN TRAVEL:
SHEEN ODOR DESCRIPTION: WAVE CONDITION:
CURRENT SPEED: CURRENT DIRECTION:
WATER TEMPERATURE:

DESC OF REMEDIAL ACTION: BOOMS APPLIED

EMPL FATALITY: PASS FATALITY:
COMMUNITY IMPACT: NO WIND SPEED UNITS: KNTS
EMPLOYEE INJURIES: PASSENGER INJURIES:
OCCUPANT FATALITY: CURRENT SPEED UNITS:
ROAD CLOSURE UNITS: TRACK CLOSURE UNITS:
SHEEN SIZE UNITS: STATE AGENCY NOTIFIED: FIRE DEPT, POLICE DEPT
FED AGENCY NOTIFIED: USCG NEAREST RIVER MILE MARK:
SHEEN SIZE LENGTH: 30 SHEEN SIZE LENGTH UNITS: FEET
SHEEN SIZE WIDTH: 30 SHEEN SIZE WIDTH UNITS: FEET
OFFSHORE: N DURATION UNIT:
RELEASE RATE UNIT: RELEASE RATE RATE:

- Continued on next page -

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

ERNS

SEARCH ID: 23 **DIST/DIR:** 0.13 NW **ELEVATION:** **MAP ID:** 3

NAME:		**REV:**	12/31/00
ADDRESS:	6700 W MARGINAL WAY SW	**ID1:**	NRC-540656
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	FIXED
CONTACT:		**PHONE:**	
SOURCE:	EPA		

ADDITIONAL INFO: CALLER HAD NO ADDITIONAL INFORMATION

MATERIAL INFORMATION

CHRIS CODE: OTD CASE NUMBER: 000000-00-0
UN NUMBER: REACHED WATER: YES

NAME OF MATERIAL: OIL, FUEL: NO. 2-D
AMOUNT OF MATERIAL: 0 UNKNOWN AMOUNT
AMOUNT IN WATER: 0 UNKNOWN AMOUNT

OTHER MATERIAL INFORMATION

MOBILE DETAILS INFORMATION

TRAIN INFORMATION

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRANLR

SEARCH ID: 14 **DIST/DIR:** 0.13 NW **ELEVATION:** 66 **MAP ID:** 3

NAME: ALASKA CARGO TRANSPORT INC
ADDRESS: 6700 MARGINAL WAY SW
SEATTLE WA 98106
KING
CONTACT:
SOURCE: EPA

REV: 1/11/11
ID1: WAD051251957
ID2:
STATUS: NLR
PHONE:

SITE INFORMATION

CONTACT INFORMATION: JOHN STETSON
PO BOX 24527
SEATTLE WA 98124

PHONE: 206763-3000

UNIVERSE INFORMATION:

NAIC INFORMATION

483111 - DEEP SEA FREIGHT TRANSPORTATION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRAGN

SEARCH ID: 7 **DIST/DIR:** 0.13 NW **ELEVATION:** 66 **MAP ID:** 3

NAME:	ALOHA CARGO TRANSPORT INC	**REV:**	2/9/04
ADDRESS:	6700 W MARGINAL WAY SW TERMINA	**ID1:**	WAH000008474
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	TR
CONTACT:	RICHARD MAXWELL	**PHONE:**	2067625955
SOURCE:	EPA		

SITE INFORMATION

UNIVERSE TYPE:

TRANSPORT - TRANSPORTER

SIC INFORMATION:

4424 - TRANS. & UTILITIES - DEEP SEA DOMESTIC TRANS. OF F

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRANLR

SEARCH ID: 15 **DIST/DIR:** 0.13 NW **ELEVATION:** 66 **MAP ID:** 3

NAME:	ALOHA CARGO TRANSPORT INC	**REV:**	1/11/11
ADDRESS:	6700 W MARGINAL WAY SW TERMINA	**ID1:**	WAH000008474
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	NLR
CONTACT:		**PHONE:**	
SOURCE:	EPA		

SITE INFORMATION

CONTACT INFORMATION: JOHN STETSON
PO BOX 24527
SEATTLE WA 98124

PHONE: 206763-3000

CONTACT INFORMATION: FERGUS BLACK
1101 8TH AVE
ANACORTES WA 98221

PHONE: (360)293-7211

UNIVERSE INFORMATION:

NAIC INFORMATION

483111 - DEEP SEA FREIGHT TRANSPORTATION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRANLR

SEARCH ID: 19 **DIST/DIR:** 0.13 NW **ELEVATION:** 66 **MAP ID:** 3

NAME:	NORTHLAND SERVICES INC	**REV:**	6/6/06
ADDRESS:	6700 W MARGINAL WAY SW S TERMI	**ID1:**	WAH000011486
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	NLR
CONTACT:	JOHN STETSON	**PHONE:**	206763-3000
SOURCE:	EPA		

SITE INFORMATION

CONTACT INFORMATION: JOHN STETSON
PO BOX 24527
SEATTLE WA 98124-0527

PHONE: 206763-3000

UNIVERSE INFORMATION:

NAIC INFORMATION

48832 - MARINE CARGO HANDLING

ENFORCEMENT INFORMATION:

AGENCY: S - STATE DATE: 4/12/2002
TYPE: 120 - WRITTEN INFORMAL

AGENCY: S - STATE DATE: 4/12/2002
TYPE: 120 - WRITTEN INFORMAL

VIOLATION INFORMATION:

VIOLATION NUMBER: 0001 RESPONSIBLE: S - STATE
DETERMINED: 2/21/2002 DETERMINED BY: S - STATE
CITATION: -240(6)(c) / -330
RESOLVED: 3/26/2002
TYPE: GENERATOR-RECORDKEEPING REQUIREMENTS

VIOLATION NUMBER: 0002 RESPONSIBLE: S - STATE
DETERMINED: 2/21/2002 DETERMINED BY: S - STATE
CITATION: -320(2)
RESOLVED: 5/15/2002
TYPE: GENERATOR-RECORDKEEPING REQUIREMENTS

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

ERNS

SEARCH ID: 21 **DIST/DIR:** 0.13 NW **ELEVATION:** 53 **MAP ID:** 3

NAME:	6700 WEST MARGINAL WAY SW	**REV:**	3/1/09
ADDRESS:	6700 W MARGINAL WAY SW	**ID1:**	NRC-889729
	SEATTLE WA	**ID2:**	
	KING	**STATUS:**	FIXED
CONTACT:		**PHONE:**	
SOURCE:	NRC		

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

INCIDENT DATE: -NOV-2008 11:03
REPORTED DATE: 11-NOV-2008 14:48
TYPE OF INCIDENT: FIXED
CAUSE OF INCIDENT: UNKNOWN
MEDIUM AFFECTED: WATER
MATERIAL NAME: OIL: DIESEL
LOCATION: 6700 WEST MARGINAL WAY SW
SUSPECTED COMPANY:

DESCRIPTION: THE CALLER IS REPORTING A SPILL OF UNKNOWN ORIGIN THAT OCCURRED ON THE COMPANY S PROPERTY (POSSIBLY FROM A TRANSIENT TRUCK). A PORTION OF THE SPILLED FUEL HAS ENTERED A NAVIGABLE WATERWAY.

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

ERNS

SEARCH ID: 22 **DIST/DIR:** 0.13 NW **ELEVATION:** 118 **MAP ID:** 3

NAME:	NORTH LAND SERVICES 6700 WEST MARGINAL WAY SW	**REV:**	11/17/08
ADDRESS:	N LAND SERVICES 6700 WEST MARGINAL	**ID1:**	NRC-883450
	SEATTLE WA	**ID2:**	
	KING	**STATUS:**	MOBILE
CONTACT:		**PHONE:**	
SOURCE:	NRC		

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

INCIDENT DATE: -SEP-2008 08:52
REPORTED DATE: 11-SEP-2008 12:10
TYPE OF INCIDENT: MOBILE
CAUSE OF INCIDENT: OTHER
MEDIUM AFFECTED: WATER
MATERIAL NAME: OIL: DIESEL
LOCATION: NORTH LAND SERVICES 6700 WEST MARGINAL WAY SW
SUSPECTED COMPANY: NORTH LAND SERVICES

DESCRIPTION: CALLER STATED DUE TO OPERATOR ERROR AND EQUIPMENT FAILURE THERE WAS A SPILL OF MATERIALS FROM A VERY LARGE FORKLIFT THAT WAS BEING REFUELED. CALLER STATED THE OPERATOR WAS NOT PAYING ATTENTION AND THE MACHINE DID NOT AUTOMATICALLY CUTOFF. THIS RESULTED IN A SPILL OF MATERIALS IN THE WATER AND ONTO THE GROUND.

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRANLR

SEARCH ID: 17 **DIST/DIR:** 0.16 SE **ELEVATION:** 42 **MAP ID:** 4

NAME:	EASTMONT TRANSFER STATION	**REV:**	1/11/11
ADDRESS:	7155 W MARGINAL WAY SW	**ID1:**	WAD980836050
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	NLR
CONTACT:		**PHONE:**	
SOURCE:	EPA		

SITE INFORMATION

CONTACT INFORMATION: TAMARA GORDY
13225 NE 126TH PL
KIRKLAND WA 98034

PHONE: (425)823-6164

UNIVERSE INFORMATION:

NAIC INFORMATION

562 - WASTE MANAGEMENT AND REMEDIATION SERVICES
562111 - SOLID WASTE COLLECTION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRAGN

SEARCH ID: 9 **DIST/DIR:** 0.17 SE **ELEVATION:** 36 **MAP ID:** 5

NAME:	LLOYD ELECTRIC APPARATUS CO	**REV:**	1/11/11
ADDRESS:	7126 W MARGINAL WAY SW	**ID1:**	WAD020245395
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	VGN
CONTACT:		**PHONE:**	
SOURCE:	EPA		

SITE INFORMATION

CONTACT INFORMATION: KEN JANSSON
7126 W MARGINAL WAY SW
SEATTLE WA 98106

PHONE: (206)762-7773

UNIVERSE INFORMATION:

NAIC INFORMATION

335314 - RELAY AND INDUSTRIAL CONTROL MANUFACTURING
335312 - MOTOR AND GENERATOR MANUFACTURING

ENFORCEMENT INFORMATION:

AGENCY: S - STATE DATE: 7/1/1998
TYPE: 120 - WRITTEN INFORMAL

AGENCY: S - STATE DATE: 7/1/1998
TYPE: 120 - WRITTEN INFORMAL

VIOLATION INFORMATION:

VIOLATION NUMBER: 0001 RESPONSIBLE: S - STATE
DETERMINED: 6/25/1998 DETERMINED BY: S - STATE
CITATION: 200(1)(c)(d)
RESOLVED: 6/25/1998
TYPE: GENERATOR-GENERAL REQUIREMENTS

VIOLATION NUMBER: 0002 RESPONSIBLE: S - STATE
DETERMINED: 6/25/1998 DETERMINED BY: S - STATE
CITATION: 210(1)
RESOLVED: 6/30/1998
TYPE: GENERATOR-MANIFEST REQUIREMENTS

VIOLATION NUMBER: 0003 RESPONSIBLE: S - STATE
DETERMINED: 6/25/1998 DETERMINED BY: S - STATE
CITATION: 141(1)
RESOLVED: 7/13/1998
TYPE: GENERATOR-GENERAL REQUIREMENTS

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

UST

SEARCH ID: 80 **DIST/DIR:** 0.19 SE **ELEVATION:** 82 **MAP ID:** 6

NAME:	WASTE MANAGEMENT SEATTLE	**REV:**	06/25/10
ADDRESS:	7201 W MARGINAL WAY SW	**ID1:**	3446
	SEATTLE WA 98146	**ID2:**	
	KING	**STATUS:**	CLOSED IN PLACE
CONTACT:		**PHONE:**	
SOURCE:	WA DOE		

Facility Site ID: 2425
Tank # or Reference Name: 4
Tank ID: 32411
Status: Removed
Installation Date: 6/1/1975
Capacity: 111 TO 1,100 Gallons
Compartment ID: 32881
Number of Compartments: 1
Substance Stored: Used Oil/Waste Oil
Ecology Region: NORTHWEST

Facility Site ID: 2425
Tank # or Reference Name: 2
Tank ID: 32510
Status: Closed in Place
Installation Date: 6/1/1975
Capacity:
Compartment ID: 32980
Number of Compartments: 1
Substance Stored:
Ecology Region: NORTHWEST

Facility Site ID: 2425
Tank # or Reference Name: 1
Tank ID: 32580
Status: Closed in Place
Installation Date: 6/1/1975
Capacity:
Compartment ID: 33050
Number of Compartments: 1
Substance Stored:
Ecology Region: NORTHWEST

Facility Site ID: 2425
Tank # or Reference Name: 3
Tank ID: 32638
Status: Closed in Place
Installation Date: 6/1/1975
Capacity:
Compartment ID: 33111
Number of Compartments: 1
Substance Stored:
Ecology Region: NORTHWEST

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRANLR

SEARCH ID: 20 **DIST/DIR:** 0.19 SE **ELEVATION:** 82 **MAP ID:** 6

NAME:	WASTE MANAGEMENT OF SEATTLE	**REV:**	1/11/11
ADDRESS:	7201 W MARGINAL WAY SW	**ID1:**	WAD041333576
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	NLR
CONTACT:		**PHONE:**	
SOURCE:	EPA		

SITE INFORMATION

CONTACT INFORMATION: JOHN RASMUSSEN
7201 W MARGINAL WAY SW
SEATTLE WA 98106-1912

PHONE: (206)762-1152

CONTACT INFORMATION: CHUCK HOLLENBECK
7201 W MARGINAL WAY SW
SEATTLE WA 98106-1912

PHONE: (206)762-1152

UNIVERSE INFORMATION:

NAIC INFORMATION

562119 - OTHER WASTE COLLECTION
562111 - SOLID WASTE COLLECTION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRAGN

SEARCH ID: 13 **DIST/DIR:** 0.19 SE **ELEVATION:** 82 **MAP ID:** 6

NAME:	WASTE MANAGEMENT OF SEATTLE	**REV:**	2/9/04
ADDRESS:	7201 W MARGINAL WAY SW	**ID1:**	WAD041333576
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	LGN
CONTACT:	TAMARA GORDY	**PHONE:**	4258147834
SOURCE:	EPA		

SITE INFORMATION

UNIVERSE TYPE:

LQG - LARGE QUANTITY GENERATORS: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

SIC INFORMATION:

7699 - SERVICES - REPAIR SERVICES, NEC
4212 - TRANS. & UTILITIES - LOCAL TRUCKING, WITHOUT STORA
4953 - TRANS. & UTILITIES - REFUSE SYSTEMS
7530 -

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

STATE

SEARCH ID: 72 **DIST/DIR:** 0.19 SE **ELEVATION:** 82 **MAP ID:** 6

NAME:	WASTE MANAGEMENT OF SEATTLE	**REV:**	11/05/10
ADDRESS:	7201 W MARGINAL WAY SW	**ID1:**	CSCR:2425
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	RANKED, AWAITING RA
CONTACT:		**PHONE:**	
SOURCE:	WA DOE		

GENERAL INFORMATION
Ecology Status: Ranked, Awaiting RA
Responsible Unit: NORTHWEST
Date Entered: 10/27/1992
Date Updated: 6/23/2009
Brownfield Status: No
VCP Status:
WARM Bin Number: 5
Affected Media Name: Soil
Affected Media Status Code: Confirmed
Affected Media Last Update: 1/1/2001
Clean Method:
Drinking Water Type:
Cleanup Standard:
Acres_Remediated:
Agency Recorded Latitude: 47.5385
Agency Recorded Longitude: -122.33917

GENERAL INFORMATION
Ecology Status: Ranked, Awaiting RA
Responsible Unit: NORTHWEST
Date Entered: 10/27/1992
Date Updated: 6/23/2009
Brownfield Status: No
VCP Status:
WARM Bin Number: 5
Affected Media Name: Groundwater
Affected Media Status Code: Suspected
Affected Media Last Update: 1/1/2001
Clean Method:
Drinking Water Type:
Cleanup Standard:
Acres_Remediated:
Agency Recorded Latitude: 47.5385
Agency Recorded Longitude: -122.33917

GENERAL INFORMATION
Ecology Status: Ranked, Awaiting RA
Responsible Unit: NORTHWEST
Date Entered: 10/27/1992
Date Updated: 6/23/2009
Brownfield Status: No
VCP Status:
WARM Bin Number: 5
Affected Media Name: Surface Water
Affected Media Status Code: Suspected
Affected Media Last Update: 1/1/2001
Clean Method:
Drinking Water Type:
Cleanup Standard:
Acres_Remediated:
Agency Recorded Latitude: 47.5385
Agency Recorded Longitude: -122.33917

GENERAL INFORMATION

- Continued on next page -

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

STATE

SEARCH ID: 72 **DIST/DIR:** 0.19 SE **ELEVATION:** 82 **MAP ID:** 6

NAME:	WASTE MANAGEMENT OF SEATTLE	**REV:**	11/05/10
ADDRESS:	7201 W MARGINAL WAY SW	**ID1:**	CSCR:2425
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	RANKED, AWAITING RA
CONTACT:		**PHONE:**	
SOURCE:	WA DOE		

Ecology Status: Ranked, Awaiting RA
Responsible Unit: NORTHWEST
Date Entered: 10/27/1992
Date Updated: 6/23/2009
Brownfield Status: No
VCP Status:
WARM Bin Number: 5
Affected Media Name: Sediment
Affected Media Status Code: Suspected
Affected Media Last Update: 1/1/2001
Clean Method:
Drinking Water Type:
Cleanup Standard:
Acres_Remediated:
Agency Recorded Latitude: 47.5385
Agency Recorded Longitude: -122.33917

Base/ Neutral/ Acid Organics:
Halogenated Organics:
Metals, Priority Pollutants: Confirmed
Metals, Other:
Poly-Chlorinated bi-Phenyls:
Pesticides:
Petroleum Products: Suspected
Phenolic Compounds:
Non-Halogenated Solvents:
Dioxins:
Polynuclear Aromatic Hydrocarbons:
Reactive Wastes:
Corrosive Wastes:
Radioactive Wastes:
Conventionals, Organic:
Asbestos:
Arsenic:
MTBE:
Phenolic Compounds:

Base/ Neutral/ Acid Organics:
Halogenated Organics:
Metals, Priority Pollutants: Suspected
Metals, Other:
Poly-Chlorinated bi-Phenyls:
Pesticides:
Petroleum Products: Suspected
Phenolic Compounds:
Non-Halogenated Solvents:
Dioxins:
Polynuclear Aromatic Hydrocarbons:
Reactive Wastes:
Corrosive Wastes:
Radioactive Wastes:
Conventionals, Organic:
Asbestos:
Arsenic:

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

STATE

SEARCH ID: 72 **DIST/DIR:** 0.19 SE **ELEVATION:** 82 **MAP ID:** 6

NAME:	WASTE MANAGEMENT OF SEATTLE	**REV:**	11/05/10
ADDRESS:	7201 W MARGINAL WAY SW	**ID1:**	CSCR:2425
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	RANKED, AWAITING RA
CONTACT:		**PHONE:**	
SOURCE:	WA DOE		

MTBE:
Phenolic Compounds:

Base/ Neutral/ Acid Organics:
Halogenated Organics:
Metals, Priority Pollutants: Suspected
Metals, Other:
Poly-Chlorinated bi-Phenyls:
Pesticides:
Petroleum Products: Suspected
Phenolic Compounds:
Non-Halogenated Solvents:
Dioxins:
Polynuclear Aromatic Hydrocarbons:
Reactive Wastes:
Corrosive Wastes:
Radioactive Wastes:
Conventionals, Organic:
Asbestos:
Arsenic:
MTBE:
Phenolic Compounds:

Base/ Neutral/ Acid Organics:
Halogenated Organics:
Metals, Priority Pollutants: Suspected
Metals, Other:
Poly-Chlorinated bi-Phenyls:
Pesticides:
Petroleum Products: Suspected
Phenolic Compounds:
Non-Halogenated Solvents:
Dioxins:
Polynuclear Aromatic Hydrocarbons:
Reactive Wastes:
Corrosive Wastes:
Radioactive Wastes:
Conventionals, Organic:
Asbestos:
Arsenic:
MTBE:
Phenolic Compounds:

Wood Debris:
Bioassay Benthic Failures:
TBT:
UXO:
Other Deleterious Substances:

Wood Debris:
Bioassay Benthic Failures:
TBT:
UXO:
Other Deleterious Substances:

Wood Debris:
Bioassay Benthic Failures:

- More Details Exist For This Site; Max Page Limit Reached -

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

LUST

SEARCH ID: 84 **DIST/DIR:** 0.19 SE **ELEVATION:** 82 **MAP ID:** 6

NAME:	WASTE MANAGEMENT SEATTLE	**REV:**	11/05/10
ADDRESS:	7201 W MARGINAL WAY SW	**ID1:**	3446
	SEATTLE WA 98146	**ID2:**	3644
	KING	**STATUS:**	CLEANUP STARTED
CONTACT:		**PHONE:**	
SOURCE:	WA DOE		

Facility Site ID: 2425
Alternate Name: BAYSIDE DISPOSAL/SUNSET DISPOSAL
Release Status: Cleanup Started

Release ID: 3644
Release Notification Date: 4/30/1992
Status Date: 6/1/1995
Media: Ground Water
Ecology Region: NORTHWEST

Facility Site ID: 2425
Alternate Name: BAYSIDE DISPOSAL/SUNSET DISPOSAL
Release Status: Cleanup Started

Release ID: 3644
Release Notification Date: 4/30/1992
Status Date: 6/1/1995
Media: Soil
Ecology Region: NORTHWEST

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

STATE

SEARCH ID: 29 **DIST/DIR:** 0.19 SE **ELEVATION:** 82 **MAP ID:** 6

NAME:	BAYSIDE DISPOSAL	**REV:**	06/14/00
ADDRESS:	7201 W MARGINAL WAY SW	**ID1:**	CSCR:2183
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	NOT REPORTED
CONTACT:		**PHONE:**	
SOURCE:	WA DOE		

GENERAL INFORMATION
Ecology Status: Awaiting Site Hazard Assessment (SHA)
Independent Status:
Responsible Unit: NORTHWEST REGION
WARM Bin Number:
Affected Media Name: 4
Affected Media Status Code: Suspected
Agency Recorded Latitude: 473220
Agency Recorded Longitude: 1222029

Base/ Neutral/ Acid Organics:
Halogenated Organics:
Metals, Priority Pollutants:
Metals, Other:
Poly-Chlorinated bi-Phenyls:
Pesticides:
Petroleum Products: Suspected
Phenolic Compounds:
Non-Halogenated Solvents: Suspected
Dioxins:
Polynuclear Aromatic Hydrocarbons:
Reactive Wastes:
Corrosive Wastes:
Radioactive Wastes:
Conventionals, Organic:
Asbestos:
Phenolic Compounds:

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

NFRAP

SEARCH ID: 2 **DIST/DIR:** 0.19 SE **ELEVATION:** 82 **MAP ID:** 6

NAME:	BAYSIDE DISPOSAL CO	**REV:**	1/26/11
ADDRESS:	7201 W MARGINAL WAY SW	**ID1:**	WAD980723084
	SEATTLE WA 98106	**ID2:**	1000955
	KING	**STATUS:**	NFRAP-N
CONTACT:		**PHONE:**	
SOURCE:	EPA		

DESCRIPTION:

ACTION/QUALITY AGENCY/RPS START/RAA END
ARCHIVE SITE EPA In-House 11/12/1985

DISCOVERY EPA Fund-Financed 6/9/1981

PRELIMINARY ASSESSMENT State, Fund Financed /1-85-9/12 11/12/1985
NFRAP: NO FURTHER REMEDIAL ACTION PLANNED

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRAGN

SEARCH ID: 11 **DIST/DIR:** 0.23 SE **ELEVATION:** 31 **MAP ID:** 7

NAME:	NUPRECON LP	**REV:**	1/11/11
ADDRESS:	7245 W MARGINAL WAY SW	**ID1:**	WAH000030554
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	SGN
CONTACT:		**PHONE:**	
SOURCE:	EPA		

CONTACT INFORMATION:
JIMMY HANSON
(206)423-0398

UNIVERSE INFORMATION:

GOVERNMENT PERFORMANCE AND RESULTS ACT (GPRA)
GPRA CA BASELINE UNIVERSE: NO
GPRA CA 2008: NO

SUBJECT TO CORRECTIVE ACTION (SUBJCA)
SUBJCA: NO
SUBJCA TSD 3004: NO
SUBJCA NON TSD: NO
SUBJCA TSD DISCRETION: NO

PERMIT WORKLOAD: -----
CLOSURE WORKLOAD: -----
POST CLOSURE WORKLOAD: -----

PERMITTING /CLOSURE/POST-CLOSURE PROGRESS: -----
CORRECTIVE ACTION WORKLOAD: NO
GENERATOR STATUS: SQG
TRANSPORTER: NO
UNIVERSAL WASTE: NO
RECYCLER: NO
USED OIL: NO
IMPORTER: NO
MIXED WASTE GENERATOR: NO
ONSITE BURNER EXEMPT: NO
FURNACE EXEMPTION: NO
UNDERGROUND INJECTION: NO

NAIC 1: Administration of Air and Water Resource and Solid Waste Management Programs
NAIC 2:
NAIC 3:
NAIC 4:

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

UST

SEARCH ID: 78 **DIST/DIR:** 0.23 SE **ELEVATION:** 96 **MAP ID:** 7

NAME:	JONES WASHINGTON STEVEDORING CO	**REV:**	06/25/10
ADDRESS:	7245 W MARGINAL WAY SW	**ID1:**	2313
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	REMOVED
CONTACT:		**PHONE:**	
SOURCE:	WA DOE		

Facility Site ID: 94931167
Tank # or Reference Name: 1
Tank ID: 33701
Status: Removed
Installation Date: 5/1/1982
Capacity:
Compartment ID: 34196
Number of Compartments: 1
Substance Stored:
Ecology Region: NORTHWEST

Facility Site ID: 94931167
Tank # or Reference Name: 3
Tank ID: 33830
Status: Removed
Installation Date: 5/1/1982
Capacity:
Compartment ID: 34326
Number of Compartments: 1
Substance Stored: Unleaded Gasoline
Ecology Region: NORTHWEST

Facility Site ID: 94931167
Tank # or Reference Name: 2
Tank ID: 33843
Status: Removed
Installation Date: 5/1/1982
Capacity:
Compartment ID: 34339
Number of Compartments: 1
Substance Stored: Leaded Gasoline
Ecology Region: NORTHWEST

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

LUST

SEARCH ID: 83 **DIST/DIR:** 0.23 SE **ELEVATION:** 96 **MAP ID:** 7

NAME:	JONES WASHINGTON STEVEDORING CO	**REV:**	11/05/10
ADDRESS:	7245 W MARGINAL WAY SW	**ID1:**	2313
	SEATTLE WA 98106	**ID2:**	5592
	KING	**STATUS:**	REPORTED CLEANED UP
CONTACT:		**PHONE:**	
SOURCE:	WA DOE		

Facility Site ID: 94931167
Alternate Name: JONES WASHINGTON STEVEDORING
Release Status: Cleanup Started

Release ID: 5592
Release Notification Date: 10/10/1994
Status Date: 10/10/1994
Media: Soil
Ecology Region: NORTHWEST

Facility Site ID: 94931167
Alternate Name: JONES WASHINGTON STEVEDORING
Release Status: Reported Cleaned Up

Release ID: 5592
Release Notification Date: 10/10/1994
Status Date: 6/1/1995
Media: Soil
Ecology Region: NORTHWEST

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

UST

SEARCH ID: 77 **DIST/DIR:** 0.24 NW **ELEVATION:** 75 **MAP ID:** 8

NAME:	AL BOLSERS TIRE STORES INC	**REV:**	06/25/10
ADDRESS:	6515 W MARGINAL WAY SW	**ID1:**	3981
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	REMOVED
CONTACT:		**PHONE:**	
SOURCE:	WA DOE		

Facility Site ID: 17445598
Tank # or Reference Name: 1
Tank ID: 11558
Status: Removed
Installation Date: 4/16/1985
Capacity: 5,000 to 9,999 Gallons
Compartment ID: 11744
Number of Compartments: 1
Substance Stored: Unleaded Gasoline
Ecology Region: NORTHWEST

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

RCRANLR

SEARCH ID: 18 **DIST/DIR:** 0.24 NW **ELEVATION:** 75 **MAP ID:** 8

NAME:	NORBUK LTD	**REV:**	1/11/11
ADDRESS:	6515 W MARGINAL WAY SW	**ID1:**	WAH000004622
	SEATTLE WA 98106	**ID2:**	
	KING	**STATUS:**	NLR
CONTACT:		**PHONE:**	
SOURCE:	EPA		

SITE INFORMATION

CONTACT INFORMATION: BOB NORSEN
6515 W MARGINAL WAY SW
SEATTLE WA 98106

PHONE: (206)767-2025

UNIVERSE INFORMATION:

NAIC INFORMATION

23839 - OTHER BUILDING FINISHING CONTRACTORS

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch
Site Detail Report

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

NPL

SEARCH ID: 1 **DIST/DIR:** 0.30 SE **ELEVATION:** **MAP ID:** 9

NAME:	LOWER DUWAMISH WATERWAY	**REV:**	1/14/11
ADDRESS:	RIVER KILOMETER 1.5	**ID1:**	WA0002329803
	SEATTLE WA 98134	**ID2:**	1002020
		STATUS:	FINAL
CONTACT:		**PHONE:**	
SOURCE:	EPA		

SITE INFORMATION

SITE DESCRIPTION

Sediments in the lower Duwamish River are contaminated with BNAs, PCBs, inorganics, and organotins. In order to address the long-term threat to the human food chain and sensitive environments in the river, the EPA is proposing this site to the NPL. The Duwamish River originates at the confluence of the Green and Black Rivers near Tukwila, Washington, then flows northeast for 21 RKs, dividing at the southern end of Harbor Island to form the East and West waterways prior to discharging into Elliot Bay at Seattle, Washington. A segment of the river is maintained by the US ACE as a federal navigation channel (i.e., the reach downchannel of Turning Basin #3).

The shorelines along the majority of the Duwamish Waterway have been developed for industrial and commercial operations. Much of the upland areas are heavily industrialized. In addition, this reach of the river is the receiving water body for discharges from over 100 storm drains, combined sewer overflows (CSOs), and other outfalls. Historical or current commercial and industrial operations include cargo handling and storage; marine construction; boat manufacturing; marina operations; paper and metals fabrication; food processing; and airplane parts manufacturing. Contaminants may have entered the river via several transport mechanisms, including spillage during product shipping and handling, direct disposal or discharge, contaminated groundwater discharge, surface water runoff, storm water discharge, or contaminated soil erosion.

Numerous past investigations within the Duwamish Waterway have been conducted with varying scopes. In 1997, the Natural Resource Trustees for the Duwamish River initiated an investigation to evaluate the extent and severity of PCB and polychlorinated terphenyl (PCT) contamination in the sediments of the Duwamish Waterway. In total, the Trustees collected 328 sediment samples within the Waterway. The analytical results for this study were compared to Washington State Sediment Quality Standard (SQS). The major findings of the sediment characterization indicate that almost 71 acres of the 350 acre sampled area of the Waterway, or just under 20 percent, are estimated to have PCB contaminant levels that exceed the SQS. Concentrations of PCBs at many sample points in the middle portion of the Waterway (north of Slip 6 and south of Slip 2) are 10 to 100 times the SQS. The report also concluded that the quantity and concentrations of PCBs found in Duwamish Waterway sediments are potentially sufficient to cause injuries to natural resources.

In 1997, the King County Department of Natural Resources Wastewater Treatment Division and Water and Land Resources Division performed a water quality assessment. King County performed the CSO Water Quality Assessment for the Duwamish River and Elliott Bay to better understand the risk to aquatic life, wildlife, and people who use the resources of the estuary. King County concluded that clear evidence of potential risks to aquatic life, wildlife, and people exists under the baseline conditions of the estuary. Several City of Seattle or King County CSOs exist in the lower Duwamish River. Seven of these outfalls discharge 318 million gallons of raw untreated sewage annually to the lower Duwamish River.

In October 1997, the Boeing Company (Boeing) performed a Phase I Surface Sampling Screening. The objective of the Phase I sampling design was to generate information that could be used as a first step in evaluating potential chemical releases to the Duwamish Waterway that could be attributable exclusively to Boeing. A total of 88 3-part composite surface (0 to 10 centimeters) sediment samples were collected at stations adjacent to Boeing facilities. Sample results indicated the presence of PCB, mercury, and semivolatile organic compound contamination to surface sediments throughout the river segment.

In August and September 1998, consultants for the EPA conducted site inspection field work for the lower Duwamish River. Sampling activities included the collection of 312 surface (0 to 10 centimeter) sediment samples, 35 subsurface (0 to 0.6 meter) sediment samples, and 16 sediment porewater samples from the lower Duwamish River. Surface sediment sample results documented BNA, inorganic, PCB, and organotin contamination in the lower Duwamish River. Further, subsurface sample results indicate that BNA, inorganic, and organotin contamination exists up to a depth of 1.2 meters (i.e., 4 feet) at some locations.

The lower Duwamish River is fished for recreational, commercial, and subsistence purposes. Three salmon hatcheries within the Green-Duwamish River system release approximately 10 million juvenile salmon each year. The Duwamish River is part of the traditional fishing grounds for the Muckleshoot and Suquamish Indian tribes. The National Marine Fisheries Service, has conducted numerous studies on the effects of contaminated sediments on biotic resources in the Duwamish River and elsewhere in Puget Sound. This research has shown that juvenile salmon from the Duwamish River exhibit reduced growth and immune system function relative to salmon from uncontaminated areas.

The lower Duwamish River serves as a migratory route, nursery, and osmoregulatory transition zone for several species of Pacific salmon. Puget Sound Chinook salmon are federally listed as threatened and utilize the lower Duwamish River during a critical stage of their migration from a fresh water to a salt water environment. The federal candidate species Coho salmon also occurs in this area as does a nesting territory for the federally listed threatened Bald eagle and a wetland.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at http://www.atsdr.cdc.gov/toxfaq.html or by telephone at 1-888-42-ATSDR or 1-888-422-8737.

- Continued on next page -

Target Property: 6760 WEST MARGINAL WAY
SEATTLE WA 98106

JOB: JN-31026

NPL

SEARCH ID: 1 **DIST/DIR:** 0.30 SE **ELEVATION:** **MAP ID:** 9

NAME: LOWER DUWAMISH WATERWAY
ADDRESS: RIVER KILOMETER 1.5
SEATTLE WA 98134

CONTACT:
SOURCE: EPA

REV: 1/14/11
ID1: WA0002329803
ID2: 1002020
STATUS: FINAL
PHONE:

notice letters issued Federal Enforcement 8/23/2007

notice letters issued Federal Enforcement 3/25/2008

notice letters issued Federal Enforcement 7/17/2008

notice letters issued Federal Enforcement 7/17/2008

notice letters issued Federal Enforcement 1/29/2009

notice letters issued Federal Enforcement 4/23/2009

administrative order on consent Federal Enforcement 9/29/2010

potentially responsible party removal Responsible Party 9/5/2006 11/10/2006
Stabilized

potentially responsible party removal Responsible Party 4/28/2009
Stabilized

discovery EPA Fund-Financed 3/25/1998

preliminary assessment EPA Fund-Financed 4/15/1998 4/21/1999
Higher priority for further assessment

removal negotiations Federal Enforcement 10/17/2005

removal negotiations Federal Enforcement 12/22/2005

removal negotiations Federal Enforcement 8/11/2006

site inspection EPA Fund-Financed 4/15/1998 4/21/1999
Higher priority for further assessment

technical assistance grant EPA Fund-Financed 3/6/2006

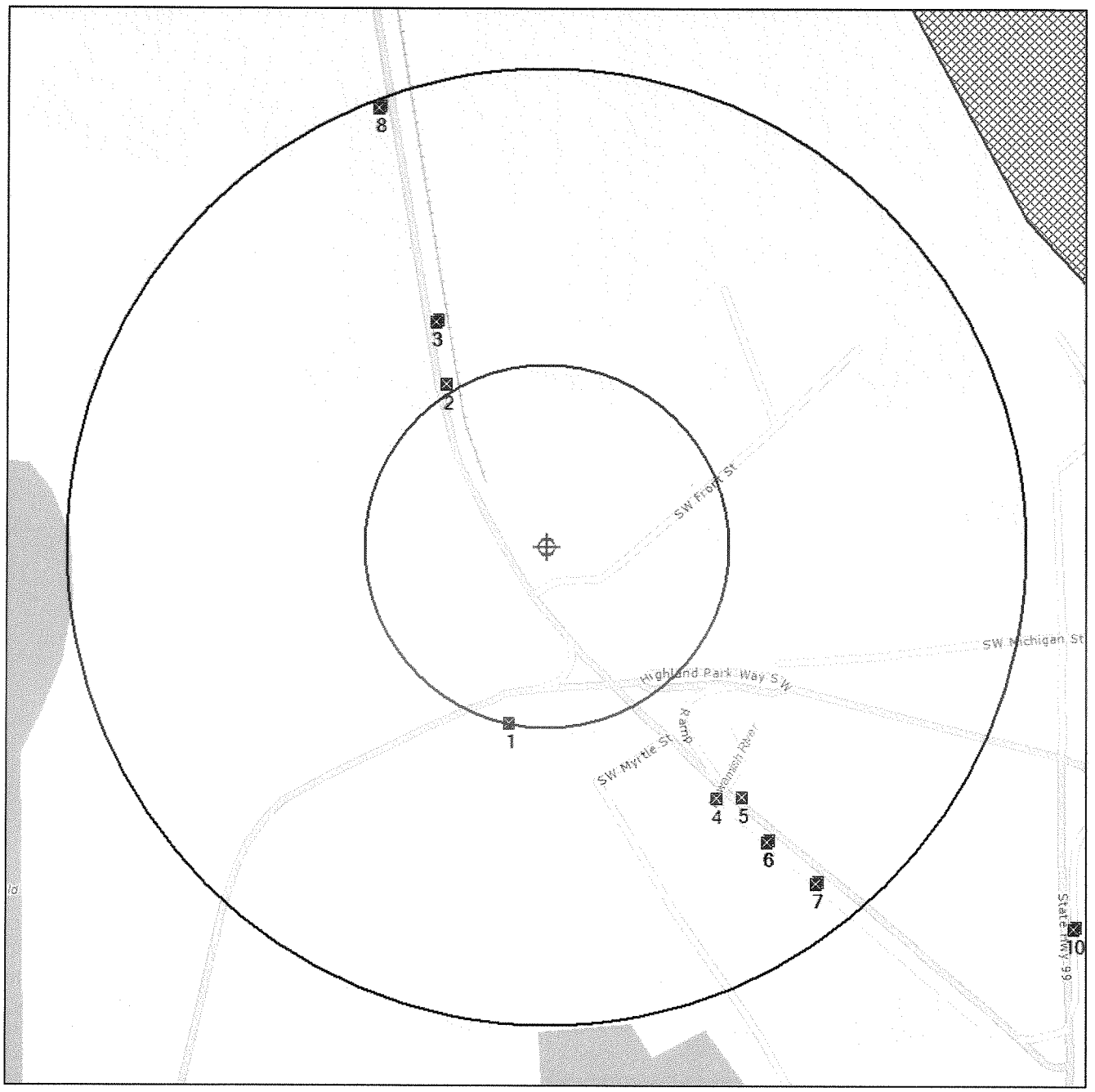
technical assistance grant EPA Fund-Financed 8/7/2001 9/30/2005

Environmental FirstSearch

.25 Mile Radius

Single Map:

6760 WEST MARGINAL WAY , SEATTLE WA 98106



Source: Tele Atlas

Target Site (Latitude: 47.541372 Longitude: -122.342855) .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

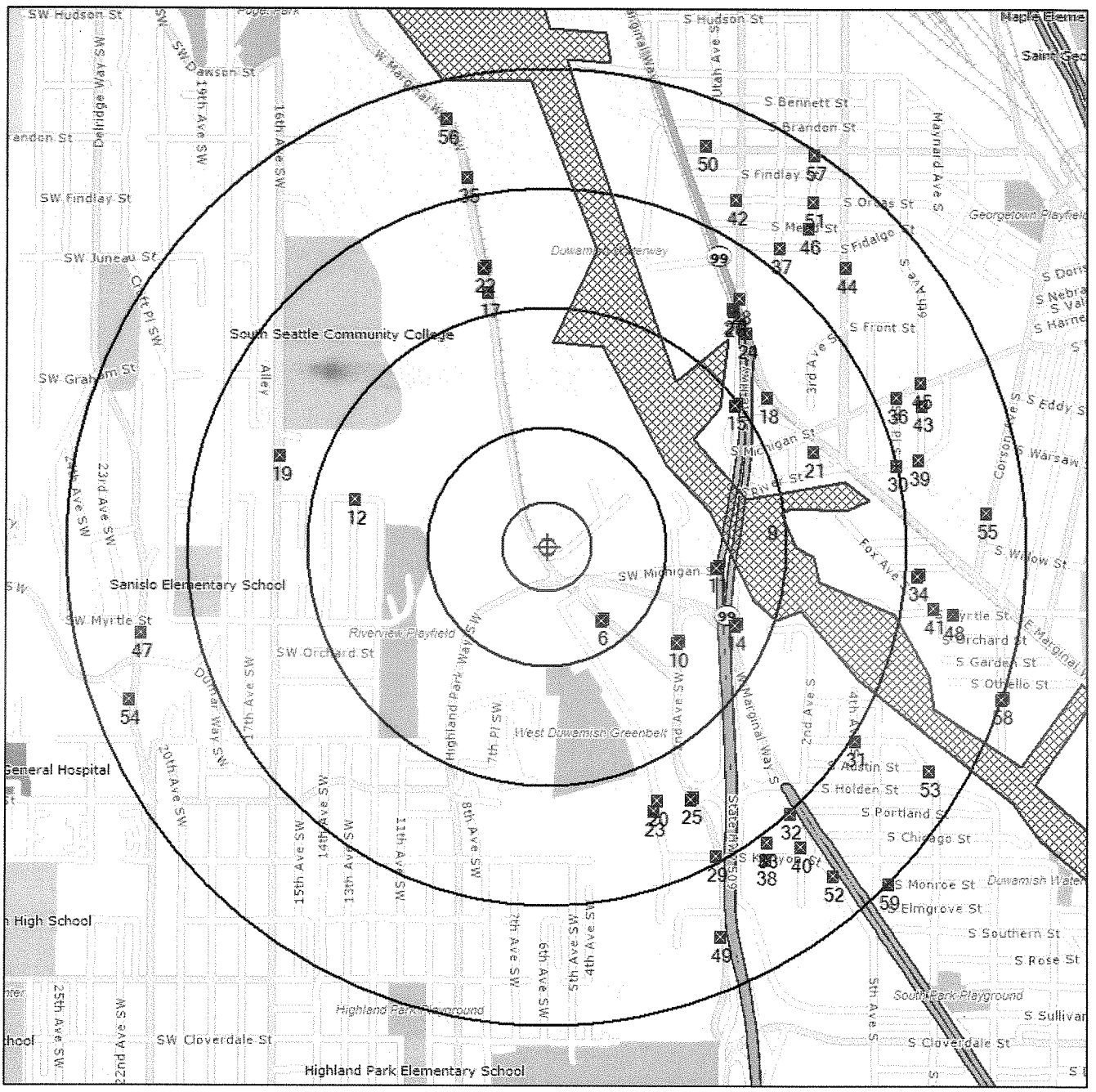
Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

1 Mile Radius

ASTM Map: NPL, RCRACOR, STATE Sites

6760 WEST MARGINAL WAY , SEATTLE WA 98106



Source: Tele Atlas

Target Site (Latitude: 47.541372 Longitude: -122.342855) .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

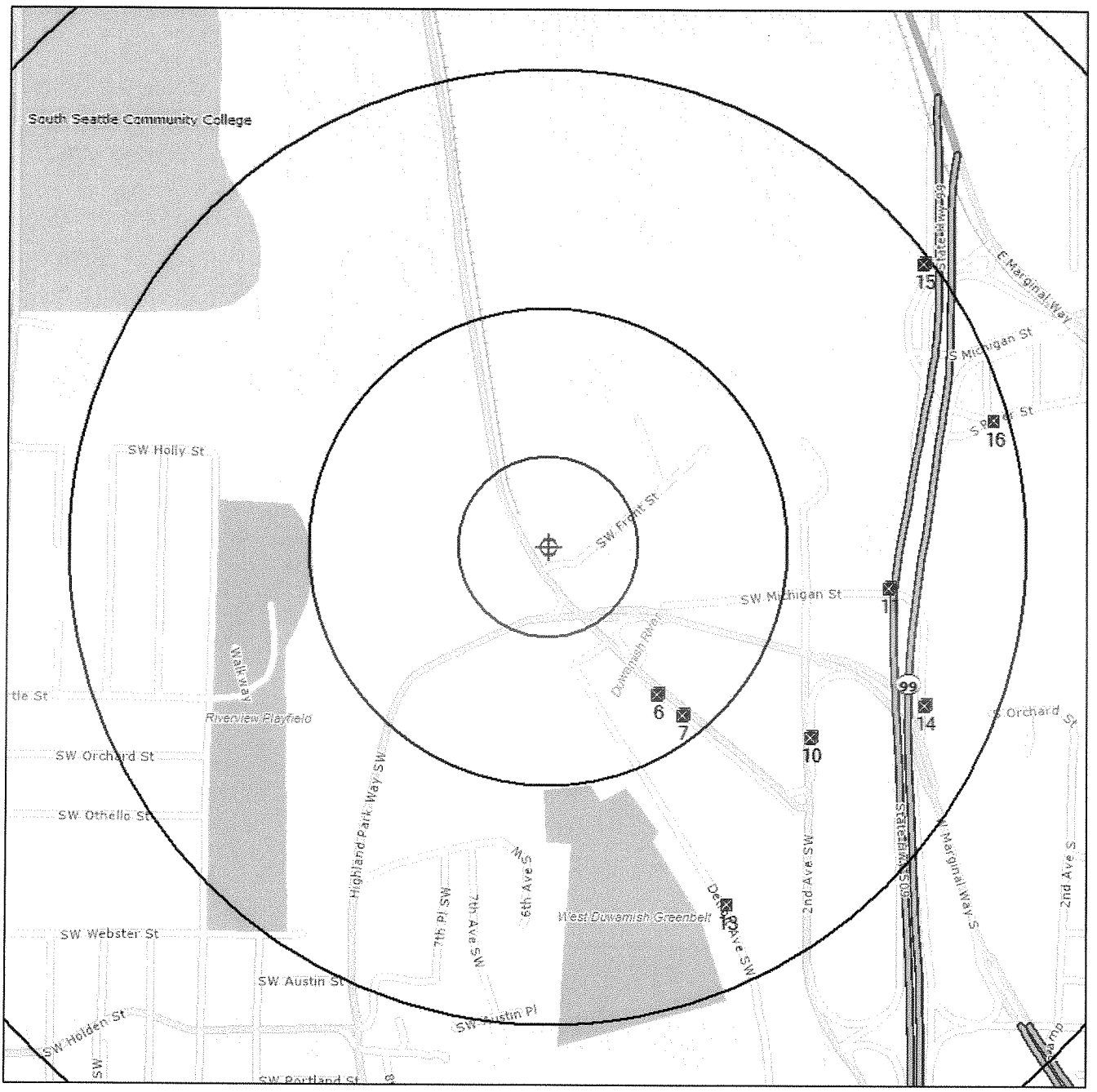
Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM Map: CERCLIS, RCRATSD, LUST, SWL

6760 WEST MARGINAL WAY , SEATTLE WA 98106



Source: Tele Atlas

Target Site (Latitude: 47.541372 Longitude: -122.342855) .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

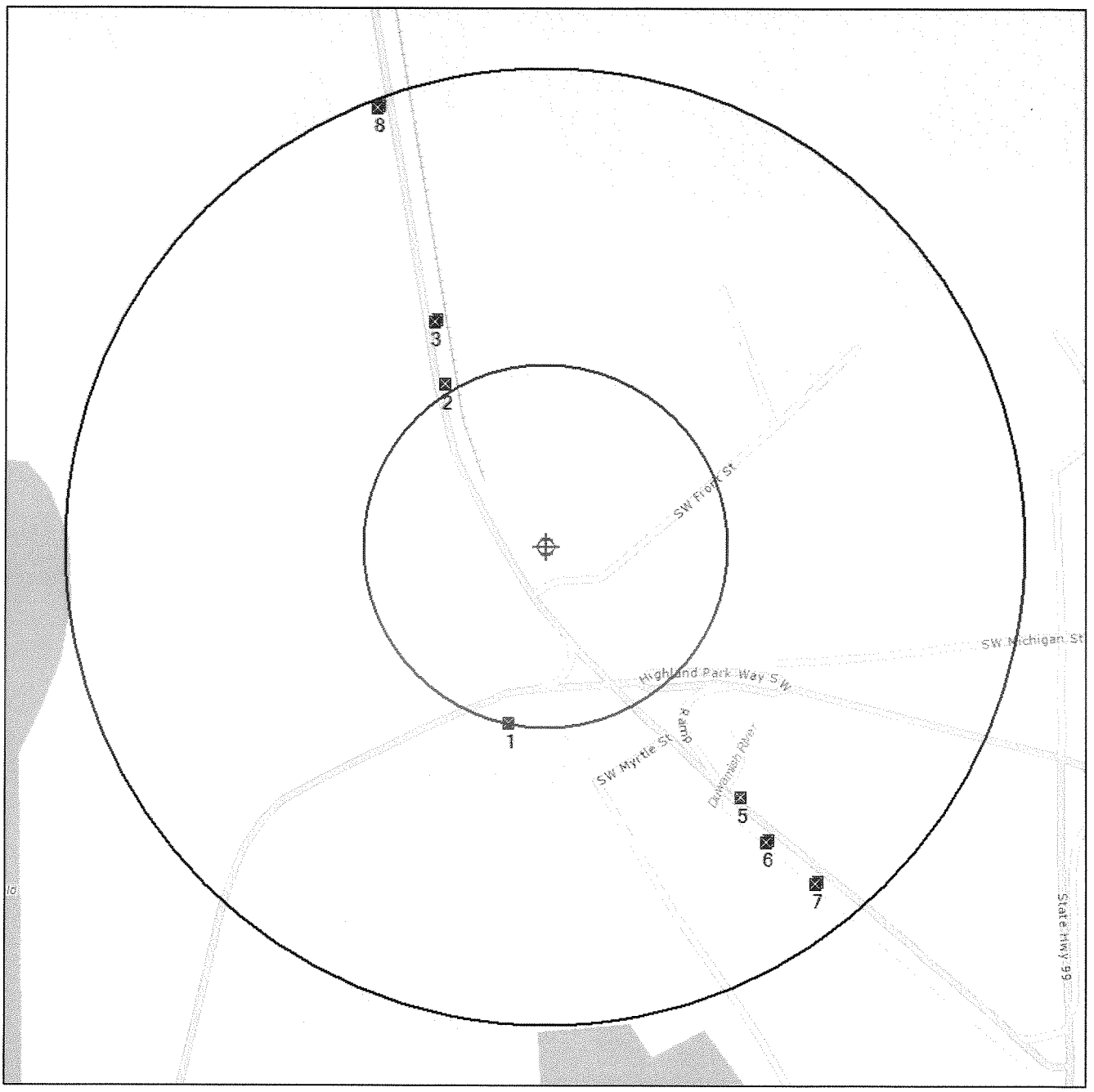
Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.25 Mile Radius

ASTM Map: RCRAGEN, ERNS, UST, FED IC/EC, METH LABS

6760 WEST MARGINAL WAY , SEATTLE WA 98106



Source: Tele Atlas

Target Site (Latitude: 47.541372 Longitude: -122.342855) .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

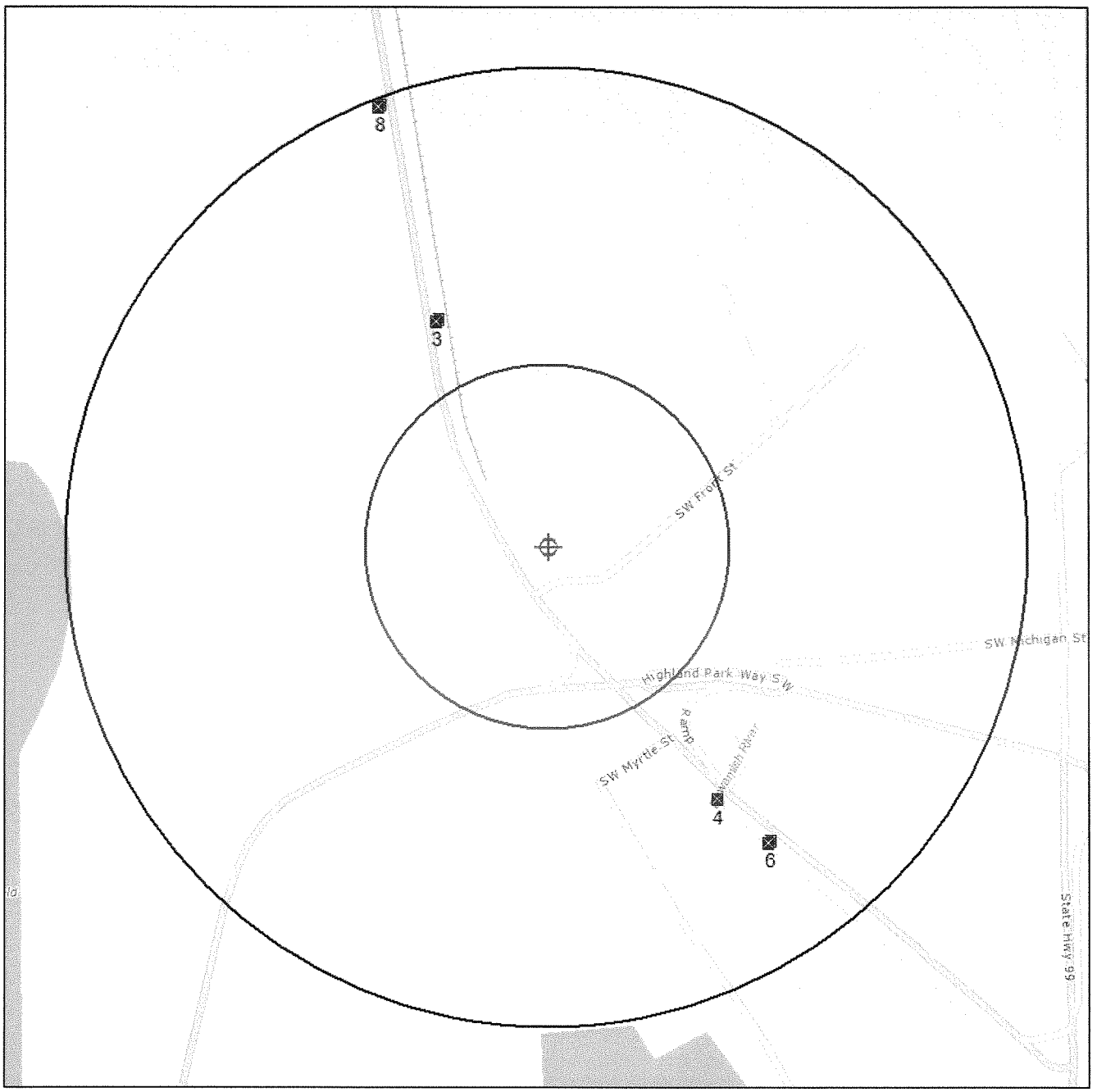
Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.25 Mile Radius

Non-ASTM Map: RCRANLR

6760 WEST MARGINAL WAY , SEATTLE WA 98106



Source: Tele Atlas

Target Site (Latitude: 47.541372 Longitude: -122.342855) .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

National Historic Sites and Landmark Sites .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius