

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Remedial Investigation Work Plan, Lakeside industries Facility, 2400 Sargent boulevard, Aberdeen, Washington, dated April 2011 by Farallon Consulting, LLC.
2. Electronic mail from Mr. Akos Fekete (Farallon) to Mr. Scott Rose (Ecology), RE: Lakeside Industries Aberdeen Facility Meeting Summary, dated June 17, 2011.

Those documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You can make an appointment by calling the SWRO resource contact at (360) 407-6365.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Since characterization efforts are ongoing, Ecology has determined your characterization of the Site is not yet sufficient to establish cleanup standards and select a cleanup action.

The Lakeside Industries operates an asphalt batch plant, which has operated on Site since 1985. Prior to that operation, a bulk fuel storage facility was operated by Chevron on Site from about 1926 to 1985. Current Site features associated with the batch plant operations (*see attached Figure 1B*) include the following:

- Three active aboveground storage tanks (ASTs) with capacities of 275, 12,000, and 15,000 gallons for the storage and distribution of diesel fuel.
- One inactive 4,000-gallon AST.
- One 250-gallon AST and one 1,000-gallon AST containing used oil.
- Three ASTs (two 10,000- and one 12,000-gallon) containing asphalt cement.

- One 10,000-gallon AST containing emulsified asphalt.
- Three 250-gallon ASTs containing various oils, including engine, hydraulic, and heat transfer oils.
- One 2,500-gallon AST containing Anti-Strip used in aggregate asphalt mixing.
- Two 140-gallon ASTs containing new and used antifreeze.
- One diesel fuel dispenser and associated piping.
- Vehicle maintenance areas.
- Product and chemical storage areas.

Historical features associated with the former Chevron bulk fuel facility (*see attached Figure 1B*) included at least 10 ASTs with an estimated total capacity of one million gallons, aboveground product piping, fuel loading rack, and storage shed. Reportedly, a waste oil underground storage tank (UST) was removed from the Site in 1988. A former heating oil UST is reportedly located near the office building.

Soils encountered beneath the Site consist of sand with varying amounts of silt and gravel to depths of 6 to 10 feet below ground surface (bgs). These soils are underlain by silt to the current maximum extent drilled of about 20 feet bgs. Groundwater occurs at about 6 to 9 feet bgs. The direction of groundwater flow and the potential for tidal influence are still being characterized; however, groundwater is assumed to generally flow south toward the Chehalis River.

In January 2009 and April 2011, Farallon Consulting (Farallon) advanced numerous borings throughout the Site to characterize the extent of contamination in soil and groundwater. Contaminants identified included gasoline-, diesel-, and oil-range petroleum hydrocarbons (TPH-G, TPH-D, and TPH-O), benzene, toluene, ethylbenzene, and xylene (BTEX) compounds, polycyclic aromatic hydrocarbons (PAHs), and metals. The attached figures (*1C, 2, 3, & 4*) illustrate the distribution of petroleum hydrocarbons identified to date. Tables 3 and 4 summarize the PAH and metals data, respectively.

To further define the extent of contamination at the Site, Farallon has proposed advancing eight additional borings on Site where data gaps exist, and the installation of 16 permanent monitoring wells (*see attached Figure 5*). Based on a review of this proposal, Ecology has the following comments:

1. **Ecology concurs with the proposed remedial investigation and the locations of the soil borings and monitoring wells.** Please be advised that based on the results of the soil and groundwater data collected, further characterization may be warranted.

2. The Farallon work plan states that potential impacts to surface water and/or sediments will be evaluated following the currently proposed investigation. Ecology is OK with this phased approach; however, it will be necessary to investigate these areas to define the Site.
3. For reporting, please also include figures that illustrate the distribution of contaminants detected at the Site other than petroleum hydrocarbons (i.e., BTEX, PAHs, and metals).
4. In accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements), data generated for Independent Remedial Actions shall be submitted simultaneously in both a written and electronic format. For additional information regarding electronic format requirements, see the website <http://www.ecy.wa.gov/eim>. Be advised that according to the policy, any reports containing sampling data that are submitted for Ecology review are considered incomplete until the electronic data has been entered. Please ensure that data generated during on-site activities is submitted pursuant to this policy. **Data must be submitted to Ecology in this format for Ecology to issue a No Further Action determination.** Please be sure to submit all soil and groundwater data collected to date, as well as any future data, in this format. Data collected prior to August 2005 (effective date of this policy) is not required to be submitted; however, you are encouraged to do so if it is available. Be advised that Ecology requires up to two weeks to process the data once it is received.

2. Establishment of cleanup standards.

Since characterization efforts are ongoing, cleanup levels and points of compliance have not yet been established for the Site.

MTCA Method A cleanup levels for soil and groundwater for unrestricted land uses are being used to characterize the Site. Appropriate cleanup levels per the Sediment Management Standards (WAC 173-204) should be used for sediments. Once the Site has been fully characterized and cleanup levels are established, cleanup levels protective of surface water may be more appropriate for the Site due to its location adjacent to the Chehalis River.

Standard points of compliance are currently being used for the Site. The point of compliance for protection of groundwater shall be established in the soils throughout the Site. For soil cleanup levels based on human exposure via direct contact or other

exposure pathways where contact with the soil is required to complete the pathway, the point of compliance shall be established in the soils throughout the Site from the ground surface to 15 feet bgs. In addition, the point of compliance for the groundwater shall be established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth that could potentially be affected by the Site.

3. Selection of cleanup action.

Since characterization efforts are ongoing, a cleanup action has not yet been selected for the Site. Ecology expects that feasible cleanup alternatives will be evaluated once the Site has been adequately defined.

4. Cleanup.

No cleanup standards have yet been met for the Site. Reportedly, a waste oil UST was removed from the Site in 1988. No other information is known to have been submitted to Ecology regarding the removal of the UST or whether any cleanup occurred. Ecology expects that any contamination that may have been associated with the waste oil UST will be captured as part of the ongoing characterization activities.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you

Ms. Karen Garnes
August 1, 2011
Page 6

performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me at (360) 407-6347 or via email at sros461@ecy.wa.gov.

Sincerely,

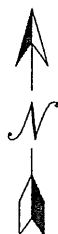
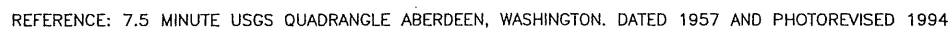


Scott Rose, L.G.
VCP Unit Manager
SWRO Toxics Cleanup Program

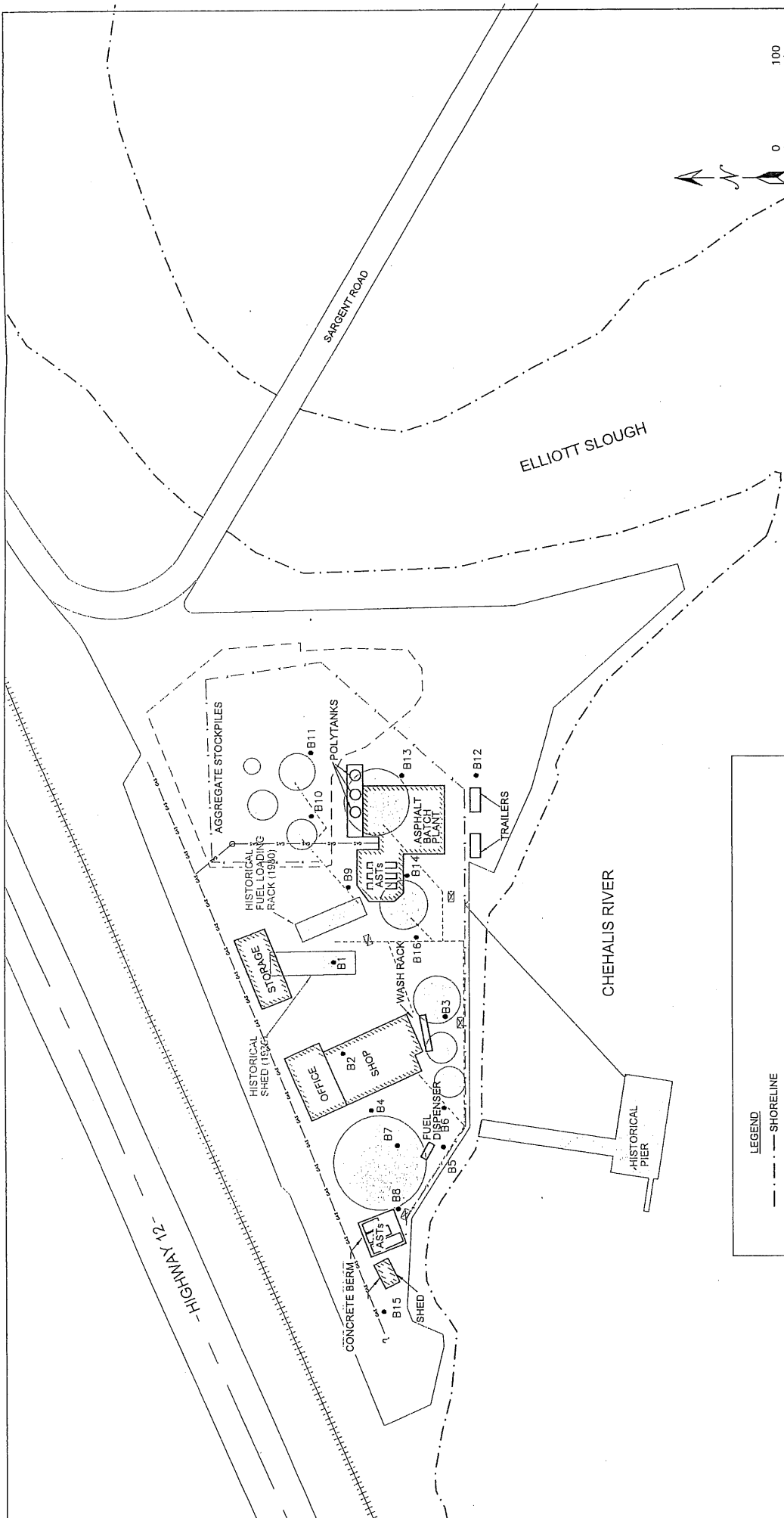
SIR/ksc:Lakeside Ind Aberdeen Further Action

By certified mail: (7009 2820 0001 7160 8043)

cc: Akos Fekete – Farallon Consulting, LLC
Meline MacCurdy – Marten Law
Dolores Mitchell – Ecology



Disk Reference: 525006



LEGEND

- SHORELINE
- +++++ RAILROAD TRACKS
- - - - - APPROXIMATE LOCATION OF CURRENT AGGREGATE STOCKPILES
- - - - - FORMER OR CURRENT FENCE AND / OR CONCRETE BERM
- - - - - OBSERVED LOCATION OF HISTORICAL ABOVEGROUND PRODUCT PIPING
- - - - - GAS-LINE
- ☐ APPROXIMATE LOCATION OF OIL-WATER SEPARATOR
- B14 • BORING LOCATION (FARALLON 2009)
- HISTORICAL ABOVE GROUND STORAGE TANK LOCATIONS
- AST ABOVEGROUND STORAGE TANK

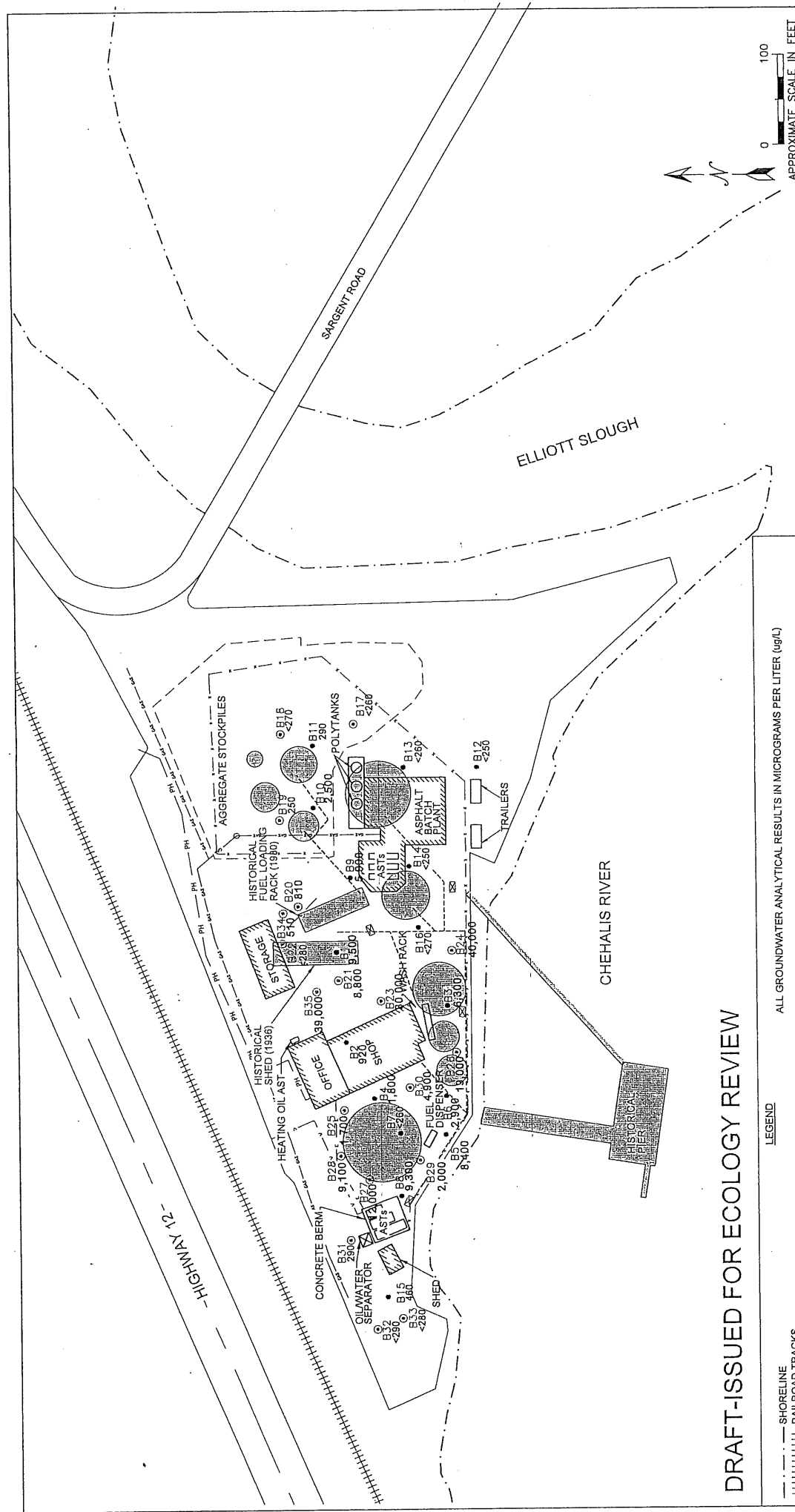
FIGURE #1B

SITE FEATURES MAP
LACEY INDUSTRIES
ABERDEEN FACILITY
ABERDEEN, WASHINGTON



FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

Drawn By: DEW	Checked By: AF	Date: 2/23/10	Disk Reference: 552006
FARALLON PN: 525-006			



DRAFT-ISSUED FOR ECOLOGY REVIEW

FIGURE 1C

SITE PLAN SHOWING DRO
GROUNDWATER ANALYTICAL RESULTS
LAKESIDE INDUSTRIES
ABERDEEN FACILITY
ABERDEEN, WASHINGTON



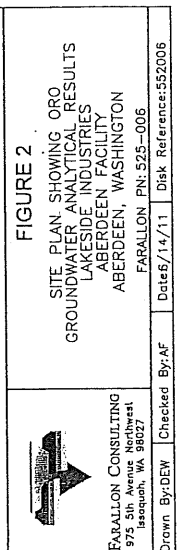
FARALLON CONSULTING
975 3th Avenue Northwest
Issaquah, WA 98027

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Checked By: AF

Date: 6/14/11

Disk Reference: 552006



ALL GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER (ug/L)

15,000= CONCENTRATIONS OF TOTAL PETROLEUM HYDROCARBONS (TPH)
AS OIL-RANGE ORGANICS (ORO)

BOLD = INDICATES CONCENTRATIONS EXCEED WASHINGTON STATE MODEL
TOXICS CONTROL ACT CLEANUP REGULATION METHOD A CLEANUP LEVEL OF XXX ug/L

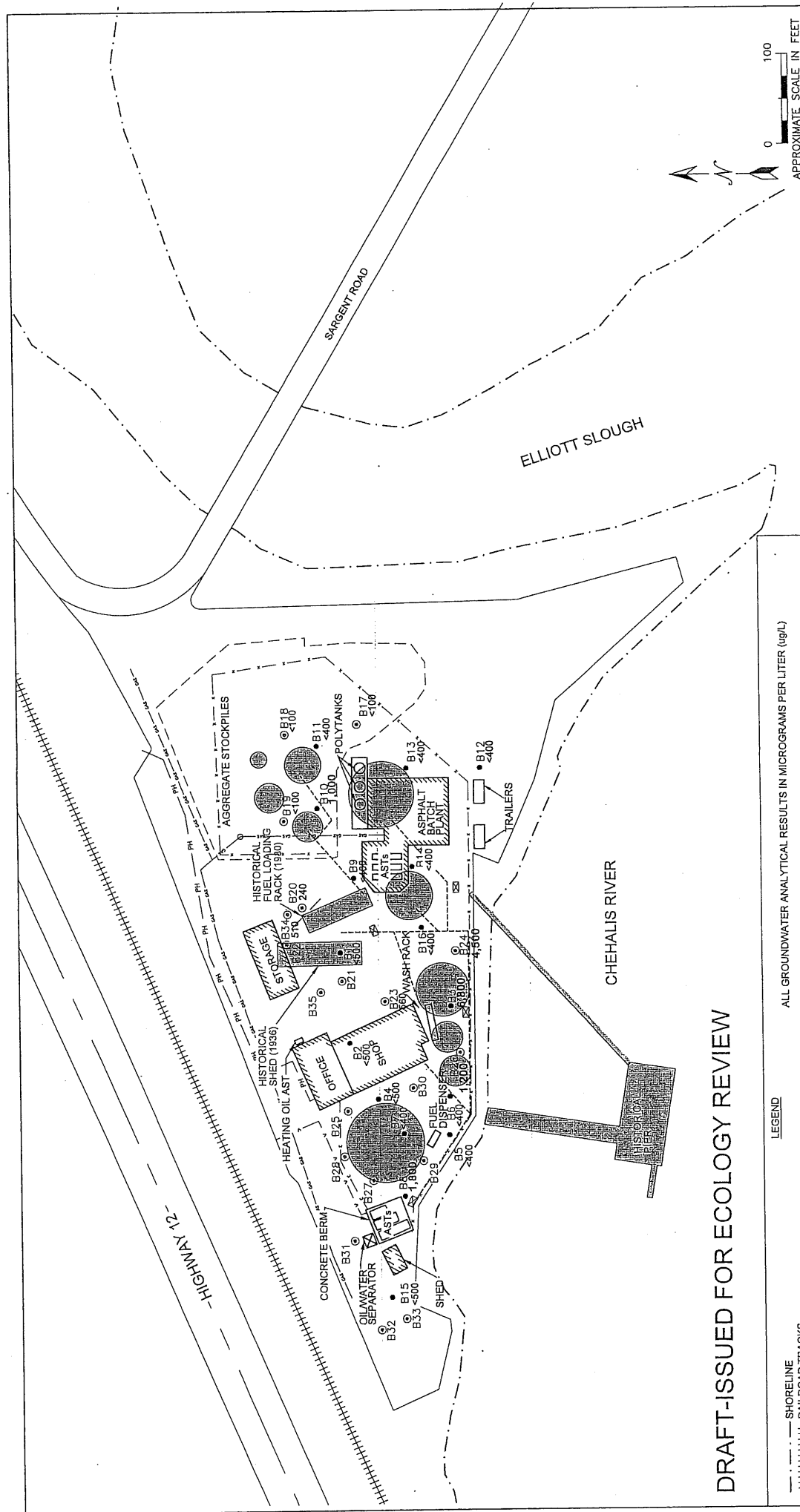
< = INDICATES CONCENTRATIONS NOT DETECTED ABOVE THE STATED
LABORATORY PRACTICAL QUANTITATION LIMIT

AST ABOVEGROUND STORAGE TANK

LOCATIONS ARE APPROXIMATE

LEGEND

--- SHORELINE
+++++ RAILROAD TRACKS
--- APPROXIMATE LOCATION OF CURRENT AGGREGATE STOCKPILES
--- FORMER OR CURRENT FENCE AND / OR CONCRETE BERM
--- OBSERVED LOCATION OF HISTORICAL ABOVEGROUND PRODUCT PIPING
--- GAS-LINE
⊗ APPROXIMATE LOCATION OF OIL-WATER SEPARATOR
B14 ● BORING LOCATION (FARALLON 2009)
B24 ● BORING LOCATION (FARALLON 2021)
● HISTORICAL ABOVE GROUND STORAGE TANK LOCATIONS





FARALLON CONSULTING
975 3rd Avenue, Suite 200
Bellingham, WA 98207

FIGURE 3

SITE PLAN SHOWING GRO
GROUNDWATER ANALYTICAL RESULTS
LAKESIDE INDUSTRIES
ABERDEEN FACILITY
ABERDEEN, WASHINGTON

FARALLON PN: 525-006

Drawn By: DEW

Checked By: AF

Date: 6/14/11

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LEGEND

- SHORELINE
- +++++ RAILROAD TRACKS
- APPROXIMATE LOCATION OF CURRENT AGGREGATE STOCKPILES
- FORMER OR CURRENT FENCE AND / OR CONCRETE BERM
- OBSERVED LOCATION OF HISTORICAL ABOVEGROUND PRODUCT PIPING
- GAS-LINE
- APPROXIMATE LOCATION OF OIL-WATER SEPARATOR
- BORING LOCATION (FARALLON 2009)
- ⊙ BORING LOCATION (FARALLON 4/2011)
- ⊙ HISTORICAL ABOVE GROUND STORAGE TANK LOCATIONS

ALL GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER (ug/L)

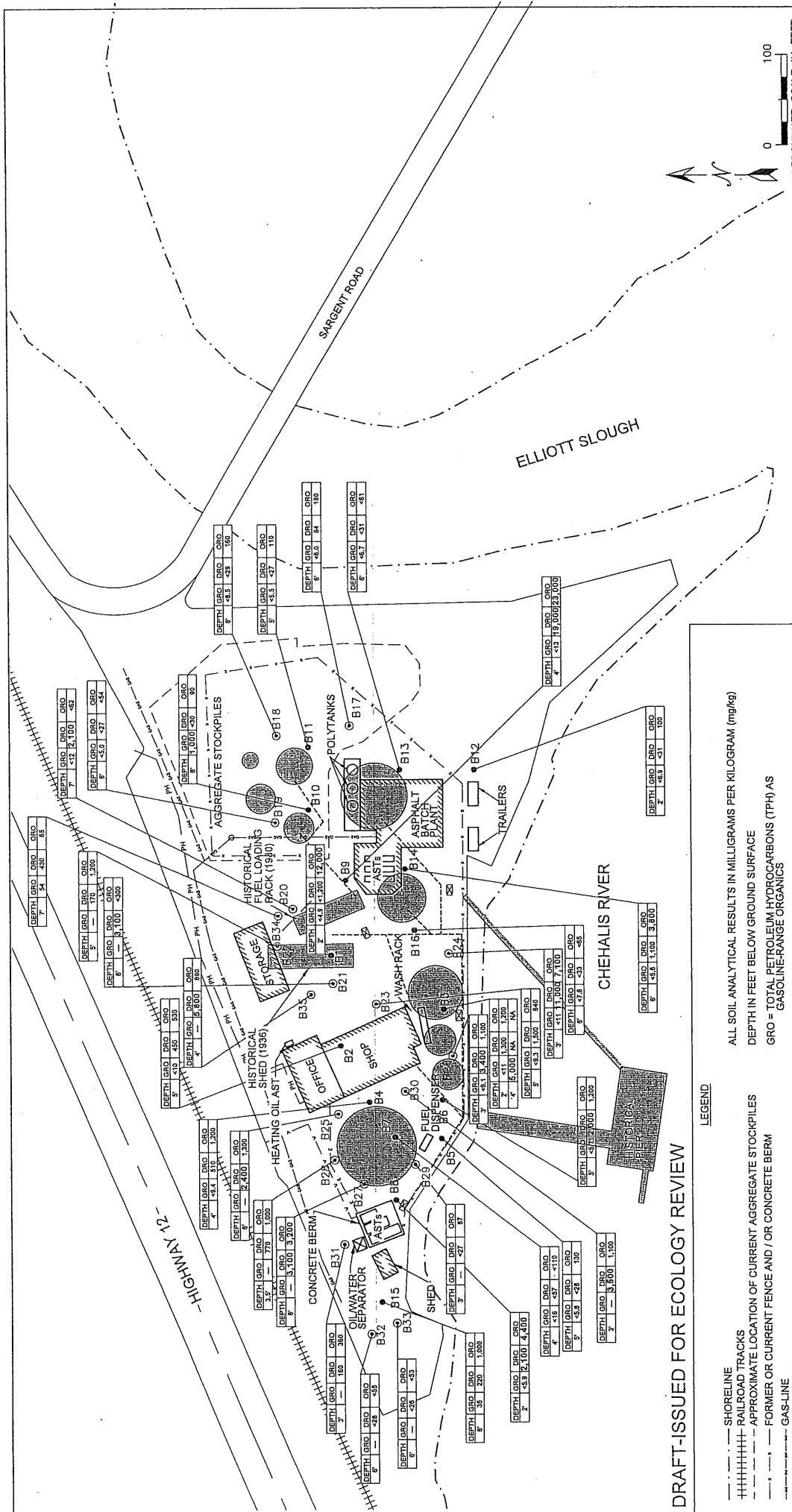
6,800 = CONCENTRATIONS OF TOTAL PETROLEUM HYDROCARBONS (TPH)
AS GASOLINE-RANGE ORGANICS (GRO)

BOLD = INDICATES CONCENTRATIONS EXCEEDED WASHINGTON STATE MODEL
TOXICS CONTROL ACT CLEANUP REGULATION METHOD A CLEANUP LEVEL OF XXXX ug/L

< = INDICATES CONCENTRATIONS NOT DETECTED ABOVE THE STATED
LABORATORY PRACTICAL QUANTIFICATION LIMIT

AST ABOVEGROUND STORAGE TANK

ALL LOCATIONS ARE APPROXIMATE



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Issaquah, WA 98027

FIGURE 4

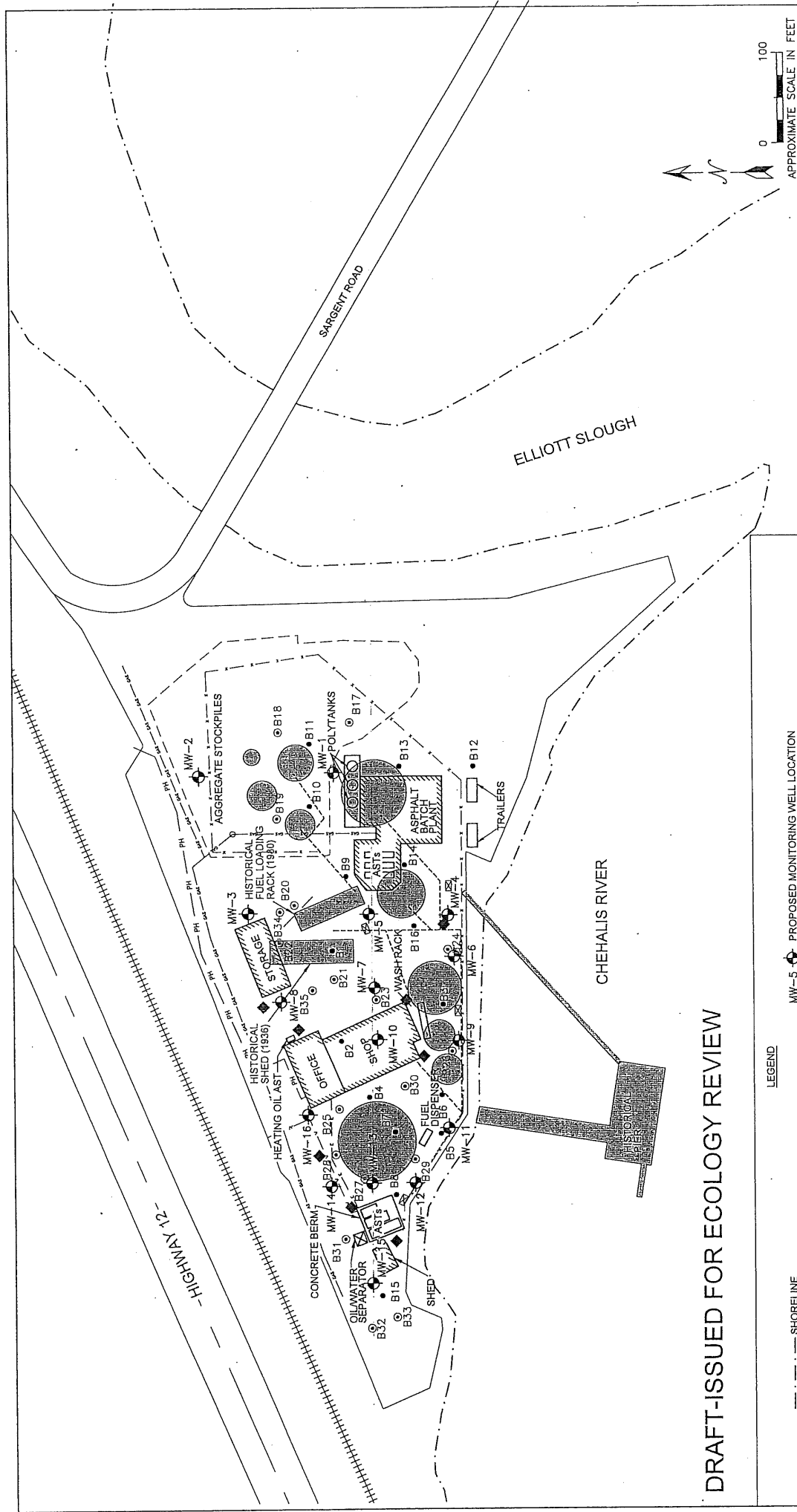
SUMMARY OF SOIL ANALYTICAL RESULTS
TOTAL PETROLEUM HYDROCARBONS
LAKESIDE INDUSTRIES
ABERDEEN FACILITY
ABERDEEN, WASHINGTON

Down By: DEW

Checked By: AF

Date: 6/14/11

Disk Reference: 552006



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- LEGEND**
- SHORELINE
 - RAILROAD TRACKS
 - APPROXIMATE LOCATION OF CURRENT AGGREGATE STOCKPILES
 - FORMER OR CURRENT FENCE AND / OR CONCRETE BERM
 - GAS LINE
 - ELECTRICAL LINE
 - TELECOMMUNICATION LINE
 - WATER LINE
 - APPROXIMATE LOCATION OF OIL-WATER SEPARATOR
 - PROPOSED MONITORING WELL LOCATION
 - PROPOSED BORING LOCATION
 - BORING LOCATION (FARALLON 4/2011)
 - BORING LOCATION (FARALLON 2009)
 - HISTORICAL ABOVE GROUND STORAGE TANK LOCATIONS
 - ABOVEGROUND STORAGE TANK

FIGURE 5

SITE PLAN SHOWING
PROPOSED MONITORING WELLS
LAKESIDE INDUSTRIES
ABERDEEN FACILITY
ABERDEEN, WASHINGTON
FARALLON, PN: 525-006



FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

Drawn By: DEW Checked By: AF Date: 6/14/11 Disk Reference: 552006

Table 1
Summary of Soil Analytical Results - Total Petroleum Hydrocarbons
Lakeside Industries Aberdeen Facility
Aberdeen, Washington
Farallon PN: 525-006

Sample Identification	Boring Number	Sample Date	Depth (feet bgs) ¹	Analytical Results (milligrams per kilogram)						
				GRO ²	DRO ³	ORO ³	Benzene ⁴	Toluene ⁴	Ethylbenzene ⁴	Total Xylenes ⁴
B1-2	B1	1/13/2009	2	<4.9	<1,200	12,000	<0.0011	<0.0053	<0.0011	<0.0021
B2-5	B2	1/13/2009	5	<10	450	530	<0.00091	<0.0045	<0.00091	<0.0018
B3-2	B3	1/13/2009	2	<11	1,300	1,200	0.0017	<0.0052	0.0048	0.0032
B3-4	B3	1/13/2009	4	5,000 ⁵	--	--	1.9	0.69	8	6.6
B4-4	B4	1/13/2009	4	<9.4	510	1,200	<0.00088	<0.0044	<0.00088	<0.0018
B5-5	B5	1/14/2009	5	<5.6	<28	130	<0.020	<0.056	<0.056	<0.056
B6-5	B6	1/14/2009	5	<5.7	2,000	1,200	<0.020	<0.057	<0.057	<0.057
B7-4	B7	1/14/2009	4	<16	<57	<110	<0.031	<0.16	<0.16	<0.16
B8-2	B8	1/14/2009	2	<5.9	2,100	4,400	0.025	<0.059	<0.059	<0.059
B9-4	B9	1/14/2009	4	<13	19,000	23,000	0.088	<0.13	0.34	0.87
B10-6	B10	1/14/2009	6	1,000 ⁵	<30	90	<1.2	<1.2	<1.2	1.4
B11-5	B11	1/14/2009	5	<5.5	<27	110	<0.020	<0.055	<0.055	<0.055
B12-2	B12	1/15/2009	2	<6.9	<31	100	<0.020	<0.069	<0.069	<0.069
B13-6	B13	1/15/2009	6	<6.7	<31	<61	<0.020	<0.067	<0.067	<0.067
B14-6	B14	1/15/2009	6	<5.6	1,100	3,800	<0.020	<0.056	<0.056	<0.056
B15-6	B15	1/15/2009	6	35 ⁶	220	1,000	<0.0012	<0.0058	<0.0012	<0.0023
B16-6	B16	1/15/2009	6	<7.6	<33	<65	<0.020	<0.076	<0.076	<0.076
MTCA Method A Cleanup Levels ⁷				100	2,000	2,000	0.03	7	6	9

NOTES:
 Results in bold denote concentrations above applicable cleanup levels.
 < denotes analyte not detected at or above the reporting limit listed.

-- denotes sample not analyzed
¹Depth in feet below ground surface (bgs).

²Analyzed by Northwest Method NWTPH-Gx.
³Analyzed by Northwest Method NWTPH-Dx.

⁴Analyzed by U.S. Environmental Protection Agency Method 8021B or 8260B.
⁵The laboratory analytical report indicates that the sample chromatogram is not similar to a typical gasoline.

⁶The laboratory analytical report indicates that hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

⁷Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised November 2007.

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics
 GRO = TPH as gasoline-range organics
 ORO = TPH as oil-range organics

Table 2
Summary of Groundwater Analytical Results - Total Petroleum Hydrocarbons
Lakeside Industries Aberdeen Facility
Aberdeen, Washington
Farallon PN: 525-006

Sample Identification	Boring Number	Sample Date	Analytical Results (micrograms per liter)						
			GRO ¹	DRO ²	ORO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
B1-011309-8	B1	1/13/2009	<500	9,500	2,600	<0.20	<1.0	0.29	2.3
B2-011309-10	B2	1/13/2009	<500	920	820	<0.20	<1.0	<0.20	<0.40
B3-011309-6	B3	1/13/2009	6,800	6,300	1,100	400	90	280	366
B4-011309-8	B4	1/13/2009	<500	1,800	<400	<0.20	<1.0	<0.20	<0.40
B5-011409-8	B5	1/14/2009	<400	8,400	5,900	<4.0	<4.0	<4.0	<4.0
B6-011409-9	B6	1/14/2009	<400	2,900	520	<4.0	<4.0	<4.0	<4.0
B7-011409-9	B7	1/14/2009	<400	<260	<410	<4.0	<4.0	<4.0	<4.0
B8-011409-8	B8	1/14/2009	1,800 ⁴	9,300	5,200	<4.0	<4.0	<4.0	<4.0
B9-011409-8	B9	1/14/2009	<400	5,900	5,300	5	<4.0	<4.0	<4.0
B10-011409-8	B10	1/14/2009	1,000	2,500	1,300	18	4.1	8.3	8.8
B11-011409-10	B11	1/14/2009	<400	290	610	<4.0	<4.0	<4.0	<4.0
B12-011509-10	B12	1/15/2009	<400	<250	<400	<4.0	<4.0	<4.0	<4.0
B13-011509-9	B13	1/15/2009	<400	<260	<410	<4.0	<4.0	<4.0	<4.0
B14-011509-9	B14	1/15/2009	<400	<250	<410	<4.0	<4.0	<4.0	<4.0
B15-011509-9	B15	1/15/2009	<500	460	740	<0.20	<1.0	<0.20	<0.40
B16-011509-10	B16	1/15/2009	<400	<270	<430	<4.0	<4.0	<4.0	<4.0
MTCA Method A Cleanup Levels⁴			800/1,000⁵	500	500	5	1,000	700	1,000

NOTES:

Results in bold denote concentrations above applicable cleanup levels.

< denotes analyte not detected at or above the reporting limit listed.

-- denotes sample not analyzed

¹ Analyzed by Northwest Method NWTTPH-Gx.

² Analyzed by Northwest Method NWTTPH-Dx.

³ Analyzed by U.S. Environmental Protection Agency Method 8021B.

⁴ The laboratory analytical report indicates that hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

⁴ Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised November 2007.

⁵ Cleanup level for GRO is with/without the presence of benzene.

Results in *ITALICS* are preliminary and pending re-extraction and re-analysis.

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics

GRO = TPH as gasoline-range organics

ORO = TPH as oil-range organics

Table 3
Summary of Soil Analytical Results - Polycyclic Aromatic Hydrocarbons
Lakeside Industries Aberdeen Facility
Aberdeen, Washington
Farallon PN: 525-006

Analytical Results (milligrams per kilogram) ²																								
Sample Identification	Boring Number	Sample Date	Depth (feet bgs) ¹	Non-Carcinogenic PAHs										Carcinogenic PAHs										
				Naphthalene	2-Methylnaphthalene	1-Methylnaphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(g,h,i)perylene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene	Total Toxic Equivalent Concentration ⁵		
B1-2	B1	1/13/2009	2	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	0.0061	<0.036	<0.036	<0.036	0.11	0.13	0.046	0.54	0.23	<0.036	0.099	<0.036	<0.036	<0.036	0.149
B8-2	B8	1/14/2009	2	0.15	1.3	0.89	0.039	0.11	0.11	0.25	0.024	0.068	0.11	0.099	0.016	0.13	0.091	<0.014	0.086	<0.014	<0.014	<0.014	<0.014	0.109
B9-4	B9	1/14/2009	4	0.97	230	120	0.081	3.1	6.2	8.5	0.68	0.21	1.3	<0.079	0.37	1.3	0.3	<0.079	0.2	<0.079	<0.079	<0.079	<0.079	0.292
B14-6	B14	1/15/2009	6	<0.015	<0.015	<0.015	<0.015	<0.015	0.026	0.048	0.055	0.2	1.8	0.2	0.16	0.95	0.28	0.019	0.37	0.066	0.062	0.062	0.452	
MITCA Cleanup Levels				S ³	NE	4,800 ⁴	3,200 ⁴	NE	24,000 ⁴	3,200 ⁴	2,400 ⁴	NE	Cleanup Level for Mixture									0.1 ³		

NOTES:
Results in bold denote concentrations above applicable cleanup levels.
< denotes analyte not detected at or above the reporting limit listed.
¹Depth in feet below ground surface (bgs).
²Analyzed by U.S. Environmental Protection Agency Method 8270/DSIM.

³Washington State Model Toxics Control Act Cleanup Regulation (MITCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised November 2007.

⁴Washington State Cleanup Levels and Risk Calculations under MITCA, Version 3.1 Standard Method B Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only) and Leaching Pathway, <https://enrress.wa.gov/secure/Reporting/ChemicalQuery.aspx>

⁵Total Toxic Equivalent Concentration for mixtures of carcinogenic PAHs, calculated in accordance with MITCA, Chapter 173-340-708(8)

Table 4
Summary of Soil Analytical Results - Metals
Lakeside Industries Aberdeen Facility
Aberdeen, Washington
Farallon PN: 525-006

Sample Identification	Boring Number	Sample Date	Depth (feet bgs) ¹	Analytical Results (milligrams per kilogram) ²							
				Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
B3-4	B3	1/13/2009	4	26	43	7	30	1,500	4.3	<11	<0.56
B9-4	B9	1/14/2009	4	14	44	<0.60	36	11	<0.30	<12	<0.60
B10-6	B10	1/14/2009	6	<12	44	<0.60	41	6.7	<0.30	<12	<0.60
Natural Background Soil Metals Concentrations ³				7	NE	1	42	36	0.07	NE	NE
MTCA Cleanup Levels				20 ⁴	16,000 ⁵	2 ⁴	2,000 ⁴	250 ⁴	2 ⁴	400 ⁵	400 ⁵

NOTES:

Results in bold denote concentrations above applicable cleanup levels.

< denotes analyte not detected at or above the reporting limit listed.

¹Depth in feet below ground surface (bgs).

²Analyzed by U.S. Environmental Protection Agency 6010B/7471A.

³Washington State Department of Ecology Natural Background Soil Metals Concentrations in Washington State, Publication #94-115, Statewide.

⁴Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised November 2007.

⁵Washington State Cleanup Levels and Risk Calculations under MTCA, Version 3.1 Standard Method B Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only) and Leaching Pathway, <https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx>

NE = background concentration not established

