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DEPARTMENT OF ECOLOGY
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Electronic Copy

June 12, 2015

Mr. Christophe Allen
Acme Fuel
303 Thurston Avenue NE
Olympia, WA 98501

Re: Further Action at the following Site:

- **Site Name:** ACME Fuel Bulk Plant 305
- **Site Address:** 303 Thurston Avenue NE, Olympia
- **Facility/Site No.:** 37135969
- **Cleanup Site ID No.**: 11769
- **VCP Project No.:** SW1243

Dear Mr. Allen:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the ACME Fuel Bulk Plant 305 facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and the implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

- Petroleum hydrocarbons and related constituents into the Soil and Groundwater.

Enclosure A includes a detailed description and diagram of the Site, as currently known to Ecology.

Please note the parcels of real property can be affected by multiple sites. Vinyl chloride has been detected in groundwater beneath properties located adjacent to the south of the Site. However, no samples from this Site were tested for vinyl chloride. 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. AECOM, Ecology ERTS# 629277 – MTCA 90-day Report for Release at ACME Energy Services, Olympia, Washington, December 14, 2011.

2. AECOM, TECHNICAL MEMORANDUM, To Kenan Advantage Group (KAG), January 24, 2012.

3. AECOM, Ecology ERT# 629277 – Additional Soil Removal at ACME Energy Services, Olympia, Washington, July 11, 2012.

4. AEG, Supplemental Site Characterization Conducted on ACME Bulk Fuel Plant & Cardlock 303 Thurston Ave. NE, Olympia, WA 98501, dated November 7, 2015.

5. GeoEngineers, Groundwater Compliance Monitoring Data Summary Report-August 2012. Dated October 31, 2012.

6. Letter to Michael Chun (AEG Consultants) from Hans Qiu (Ecology), RE: Further Action at the Site, dated December 26, 2012.

7. AECOM, 2014 Remedial Investigation Report, Acme Fast Fuel – Olympia, Washington. dated January 2015.

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.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A**.

ACME Fuel Bulk Plant 305 (ACME Fuel) is located at 303 Thurston Avenue NE, Olympia, Washington. The fuel service facility included two aboveground storage tanks (ASTs), installed in the mid 1970s, with approximate capacities of 70,000 gallons and 30,000 gallons, respectively. These ASTs had stored only diesel, kerosene, and/or bio-diesel fuel. The ASTs were contained in a concrete berm. Located adjacent to the east of ACME Fuel is a cardlock facility, known as Fast Fuel, which is operated by the ACME Fuel Company. The Fast Fuel facility, constructed in 1985, is comprised of five dispenser islands, including four islands housed under two canopies, and the fifth as a stand-alone, non-canopied diesel pump island. There are four 8,000-gallon underground storage tanks (USTs) at this facility, including three storing gasoline, and one storing diesel. There are no records of spills or releases for these USTs (see Fig. 2 of Enclosure A).

On September 17, 2011, 2,600 gallons of diesel were released during delivery of fuel from a tanker truck to the larger AST at the Site. The AST was under repair and was not properly locked out/tagged out to prevent fuel from being introduced into the AST. The spill originated from a man-hole cover that had been loosened due to the repairs.

Due to the emergency nature of the spill, interim cleanup actions were taken prior to any Site characterization being conducted. Immediately after the spill incident, NRC Environmental Services (NRC) was retained to clean up the spilled product from the Site, which included using vacuum trucks to collect product from the berm containment and ground surface, and using wells and trenches to recover product from groundwater (see Section 4 of this letter for details). Some wells were noted as no product present, among

the 51 recovery wells in total installed at the Site. However, no records were made on which wells revealed product and which did not, to define the extent of contamination.

Soil from all accessible impacted areas, except soil directly underneath the concrete berm/pad and associated pipings, was excavated down to the groundwater table; however, no information on specific locations of the excavation was provided and no confirmation soil samples were collected to confirm the cleanup was complete.

On October 7, 2011, samples were submitted for forensic analysis including diesel from the delivery truck, and light non-aqueous phase liquid (LNAPL) in the soil and groundwater present at the Site in 2011. A technical memorandum indicated, based on the forensic analysis, contamination existed prior to the September 2011 release.

Site investigation efforts were initiated on November 1, 2011. Soil and groundwater samples were collected from 11 boring locations, all outside the concrete berm/wall area at accessible locations at the time of drilling. Five of the borings were completed as groundwater monitoring wells (MW-1 through MW-5). These groundwater monitoring wells were mostly located to the north of the AST, including along the property's northern boundary (Fig. 2 in Enclosure A).

One soil sample (MW-4-4.5) near the concrete berm area detected diesel-range total petroleum hydrocarbons (TPH-Dx) and gasoline-range total petroleum hydrocarbons (TPH-Gx) above the MTCA Method A cleanup levels. Three groundwater wells (MW-3, MW-4, and MW-5) detected TPH-Dx in groundwater above the MTCA Method A cleanup level, and one well (MW-4) detected benzene in groundwater above the MTCA Method A cleanup level.

In April 2012, further interim cleanup action was taken, including demolition of the 70,000-gallon AST, removal of the concrete pad (berm), and excavation of the soil beneath the concrete pad (see Section 4 of this letter for details). Confirmation soil samples were collected from the excavation bottom and sidewalls. The results indicated that soil from north (11,000 milligrams per kilogram [mg/kg]), northeast (9,600 mg/kg), southeast (8,200 mg/kg), and south (16,000 mg/kg) sidewalls all detected TPH-Dx above the MTCA Method A cleanup level.

On September 27, 2012, a supplemental Site investigation was conducted. Twelve soil borings were advanced at the Site to further characterize the extent of contamination, including four borings (B-2, B-4, B-5, and B-7) within the former AST and containment concrete pad area, which had been removed and excavated in April 2012, and eight borings outside the former AST containment area, in both the ACME Fuel and the Fast Fuel facility areas. Since the former AST containment area had been excavated and

backfilled, no soil samples were collected within 7 feet below ground surface (bgs), just groundwater samples were collected from all four borings. Among the eight borings outside the former AST area, one soil and one groundwater sample from all borings, except B-9, for which groundwater was not encountered, were collected. Additionally, the previously installed monitoring wells, MW-1 through MW-5, were sampled for groundwater.

Soil and groundwater samples were collected from twelve locations and analyzed for volatile organic compounds (VOCs), polynuclear aromatic compounds (PAHs), TPH-Gx, and TPH-Dx. At four locations (GP-1, GP-8, GP-9, and GP-11) no soil samples were collected for laboratory analysis. At one location (GP-12) there was an insufficient volume of water to collect a sample for analysis of PAHs.

The soil and groundwater sampling results from the 2012 supplemental investigation demonstrated that groundwater contamination from the diesel spill remained at the Site, and some TPH-Gx contamination was also found, which may be from a separate source, as summarized below:

- Groundwater within the former AST containment area was contaminated by TPH-Dx at concentrations ranging from 28,000 to 75,000 micrograms per liter (ug/L).

- Benzene was found to be present in groundwater at the former AST containment area (B-2 at 35 ug/L), north of this area (B-1 at 16 ug/L; MW-4 at 7.4 ug/L), and along the northern property boundary (MW-5 at 6.3 ug/L).

- Groundwater samples at two boring locations, B-2 and B-4, were tested for carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs), and both detected cPAHs above the MTCA Method A cleanup level at 6.5 and 3.0 ug/L, respectively.

- TPH-Gx was found in groundwater outside the former AST area (B-1 at 2,600 ug/L; B-3 at 1,700 ug/L). TPH-Gx had previously been detected above the MTCA Method A cleanup level in soil from MW-4 at roughly the same location in November 2011.

- One boring (B-6) in the adjacent Fast Fuel facility detected a pocket of soil contamination with TPH-Dx, TPH-Gx, and benzene all above the MTCA Method A cleanup levels, at 4,600 mg/kg, 830 mg/kg, and 0.06 mg/kg, respectively.

In November 2014, an additional Site investigation was performed that included the use of a direct-push geo-probe to obtain Membrane Interface Probe (MIP) data, and to collect

soil and groundwater samples. A total of sixteen locations were evaluated for the presence of LNAPL in soil using the MIP.

The soil and groundwater sampling results from the 2014 Remedial Investigation Report are summarized below:

- TPH-Dx soil contamination exceeding MTCA Method A cleanup levels is present approximately 20 feet to the north of the concrete retaining wall and extends eastward into the edge of the ACME Fast Fuel facility approximately 60 feet from the concrete retaining wall.

- Soil concentrations of TPH-Gx exceed MTCA Method A cleanup levels on Site and extend north onto Thurston Avenue and east of the concrete retaining wall.

- Soil concentrations of benzene were not detected in any samples collected during the 2014 investigation.

- The MIP results and field observations indicated the presence of organic compounds at all locations.

- Groundwater concentrations of TPH-Dx exceed MTCA Method A cleanup levels in the tank dike area, the diesel loading rack area, and along Thurston Avenue.

- Groundwater concentrations of TPH-Gx exceeding MTCA Method A cleanup levels extend northward to the edge of the Fast Fuel property along Thurston Avenue and eastward into the Fast Fuel property.

- Groundwater concentrations of benzene exceed MTCA Method A cleanup levels in the tank dike area, the diesel loading rack area, and the Fast Fuel property.

Based on a review of Site investigations and confirmation soil sampling during interim cleanup activities, Ecology has the following comments:

1. The only two wells tested for cPAHs both detected it at concentrations above the MTCA Method A cleanup level. All monitoring wells should be tested for cPAHs to define its extent in groundwater.

2. TPH-Gx soil concentrations were not bounded to the north (beyond Thurston Avenue), and the tank dike area adjacent to the former 70,000-gallon AST was not evaluated.

3. A separate source may have contributed to the soil and groundwater contamination by TPH-Gx, which appears to be commingled with the TPH-Dx contamination. Additional characterization, including defining the nature and extent of impacts to soil and groundwater, and source identification, are needed.

4. One boring (B-6) located in the Fast Fuel facility detected a pocket of soil contamination with TPH-Dx, TPH-Gx, and benzene all above the MTCA Method A cleanup levels. Further characterization is needed to define the extent of contamination in this area.

5. Vinyl chloride has been detected in groundwater beneath properties located adjacent to the south of the Site. At least one round of groundwater samples from on-Site wells of this Site should be analyzed for vinyl chloride to determine if it is present.

6. A Terrestrial Ecological Evaluation (TEE) needs to be completed for the Site. Please fill out the form on our website and submit it to Ecology (along with any supporting documentation, as appropriate) for review. The form can be found at: http://www.ecy.wa.gov/biblio/ecy090300.html.

7. 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 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 processing the data once it is received.

2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site have not met the substantive requirements of MTCA.

MTCA Method A cleanup levels for soil and groundwater were used for the Site. Standard points of compliance should be 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 protection of groundwater shall be established throughout the Site from the uppermost level of the saturated zone extending vertically to the lower most depth that could potentially be affected by the Site.

3. Selection of cleanup action.

Ecology has determined the interim cleanup actions you selected for the Site have not met the substantive requirements of MTCA.

Cleanup actions conducted to date included source removal (removal of the AST and free product from containment berm area, ground surface, and surface of groundwater table); contaminated soil excavation; and pumping and discharge of contaminated groundwater. The discharge of the contaminated water was off Site (see Section 4 of this letter for details).

4. Cleanup.

Ecology has determined the interim cleanup you performed has not met the cleanup standards at the Site. The cleanup activities conducted so far at the Site included:

- The same day after the spill incident, NRC was retained to conduct the recovery activities. Fuel in the AST, within the AST containment, and on the ground surface was recovered using a vacuum truck.

- NRC installed 51 8-inch diameter perforated PVC recovery wells and two trenches to recover free product from the groundwater surface. Not all the recovery wells revealed product but the ones that observed product were vacuumed on a regular basis. As of December 7, 2011, approximately 1,950 gallons of diesel and 37,020 gallons of hydrocarbon-impacted water were recovered. The recovered diesel and associated water was disposed off Site at the Petroleum Reclaiming Services, Inc. (PRS) Group facility at 3003 Taylor Way, Tacoma, WA 98421.

- In April 2011, the AST from which the spill occurred was removed together with its concrete containment pad. After the AST removal, soil excavation was conducted on April 22 – 23, 2011. The soil beneath and in the vicinity of the former AST was excavated to a depth greater than 6 feet bgs. Since groundwater was encountered at about 3 to 4 feet bgs, a vacuum truck was used for dewatering to allow excavation. Soil was excavated down to 6 feet because the groundwater depth was 5 feet bgs at the time of spill. A total of 296 tons of soil was excavated.

During this excavation operation, 4,350 gallons of diesel-impacted groundwater was removed and disposed of at PRS Group, Inc., in Tacoma, WA. However, confirmation samples were collected after excavation indicated that soil contamination existed beyond the excavation extent (see Section 1 of this letter for details).

- In September 2011, additional excavation of diesel-impacted soil was conducted at areas accessible from around the AST and within the retaining wall of the tank berm area, down to the groundwater table, except for the soil directly beneath the AST and associated piping. A total of 140 tons of soil was removed.

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 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 by phone at (360) 407-6265 or by e-mail at jrap461@ecy.wa.gov.

Sincerely,

John Rapp, LHG
Site Manager
SWRO Toxics Cleanup Program

SIR: knfP

Enclosures: A – Description and Diagrams of the Site

By certified mail: 91719999917034898356 50

cc: Mr. Michael S. Chun, Associated Environmental Group, LLC
Mr. Gerald Tousley, Thurston County Health Department
Ms. Dolores Mitchell, Ecology
Mr. Scott Rose, Ecology

Enclosure A

Description and Diagrams of the Site

Site Description

ACME Fuel Bulk Plant 305 (ACME Fuel) is located at 303 Thurston Avenue NE, Olympia, Washington. The fuel service facility included two aboveground storage tanks (ASTs), installed in the mid 1970s, with approximate capacities of 70,000 gallons and 30,000 gallons, respectively. These ASTs had stored only diesel, kerosene, and/or bio-diesel fuel. The ASTs were contained in a concrete berm. Additional equipment included diesel loading rack, fuel dispensary, loading/storage area, and associated facilities. Located adjacent east of ACME Fuel is a cardlock facility, also known as Fast Fuel, which is operated by the ACME Fuel Company. The Fast Fuel facility, constructed in 1985, is comprised of five dispenser islands housed under two canopies and a stand-alone, non-canopied diesel pump island. There are four 8,000-gallon underground storage tanks (USTs) at this facility, including three storing gasoline, and one storing diesel. The USTs are single wall steel tanks installed in 1986 (see Fig. 2 of Enclosure A).

The Site is a triangle property surrounded by Adams Street to the east, Thurston Avenue NE to the north, and a railroad rack consists of its third boundary, which runs diagonal through the block from northwest, intercepting with Thurston Avenue NE, to southeast, intercepting with Adams St.

The Site is located within the southern area of the Puget Lowland area. Borings at the Site revealed poorly graded sand to silt sand and gravel to medium stiff clay to approximately 10 feet below ground surface (bgs). A weathered wood debris/fragments layer ranging from several inches to at least 2 feet thick were encountered at the Site. Groundwater was encountered at 4.5 to 5.8 feet deep and flows from south to north-northeast direction toward Puget Sound.

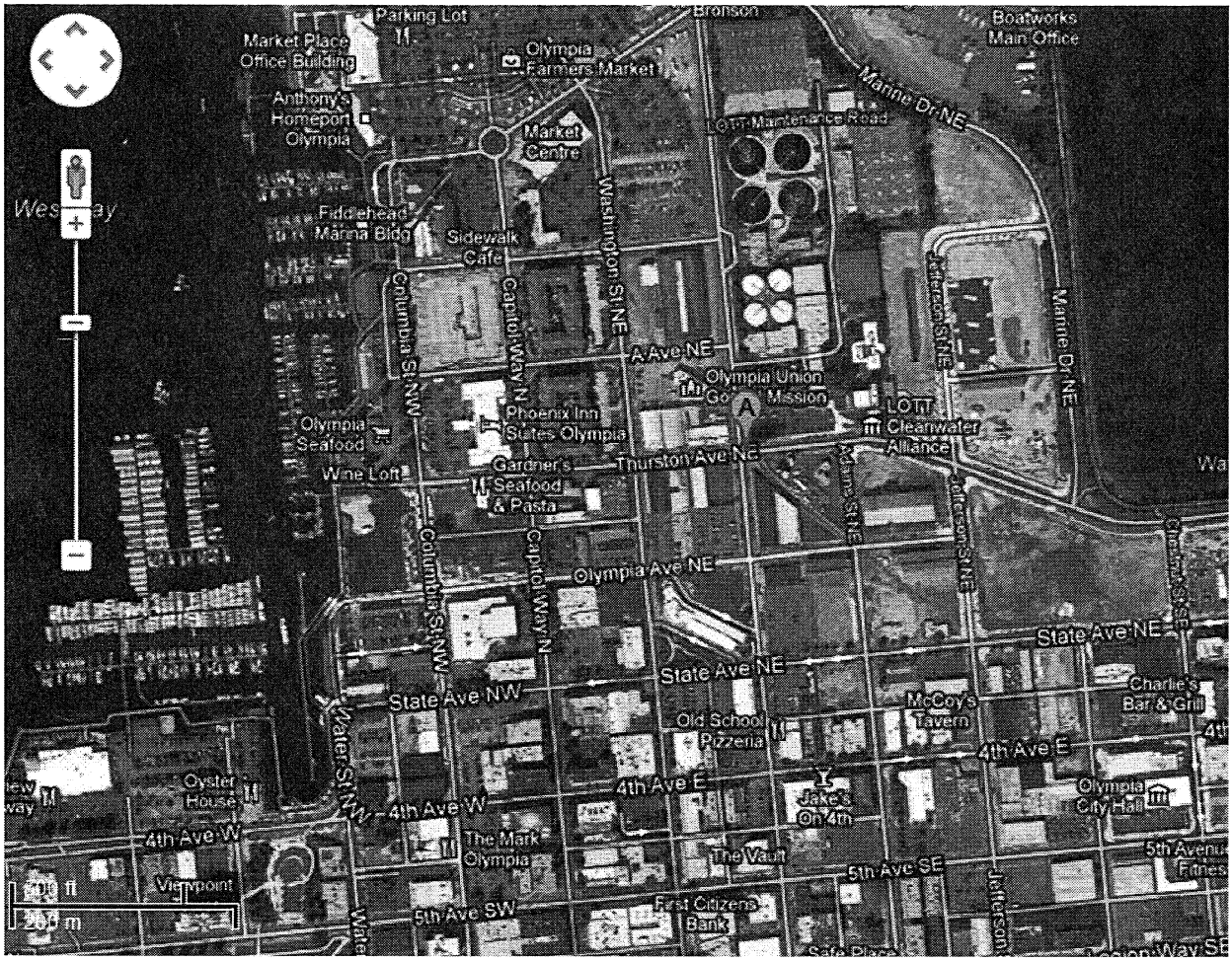


Fig 1. Location of ACME Fuel Plant 305 Site, in Olympia, WA (Snapped from Google Map)

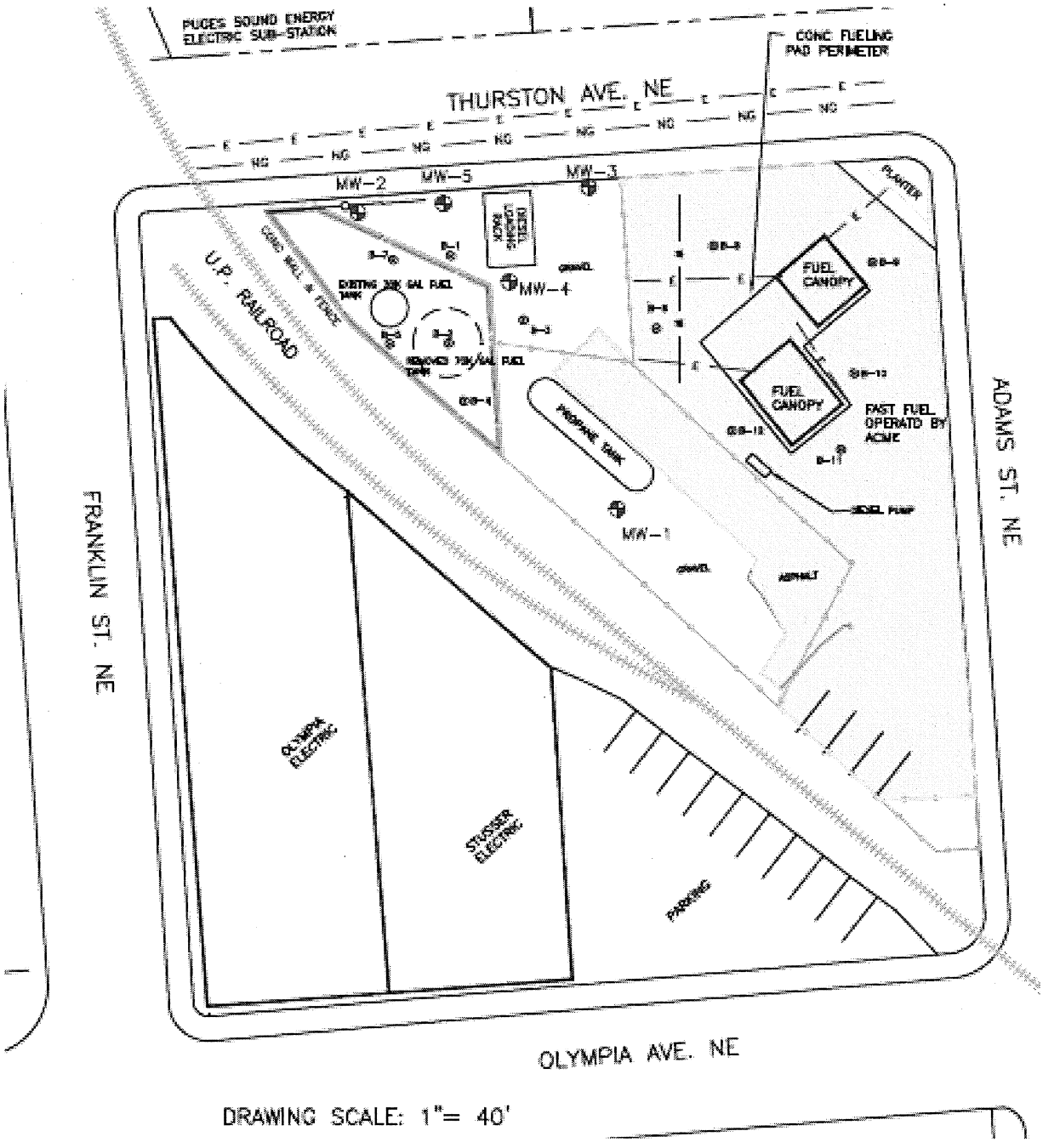


Fig. 2 Soil and groundwater sampling locations at ACME Fuel and its associated Fast Fuel facility (Courtesy of Associated Environmental Group, LLC)

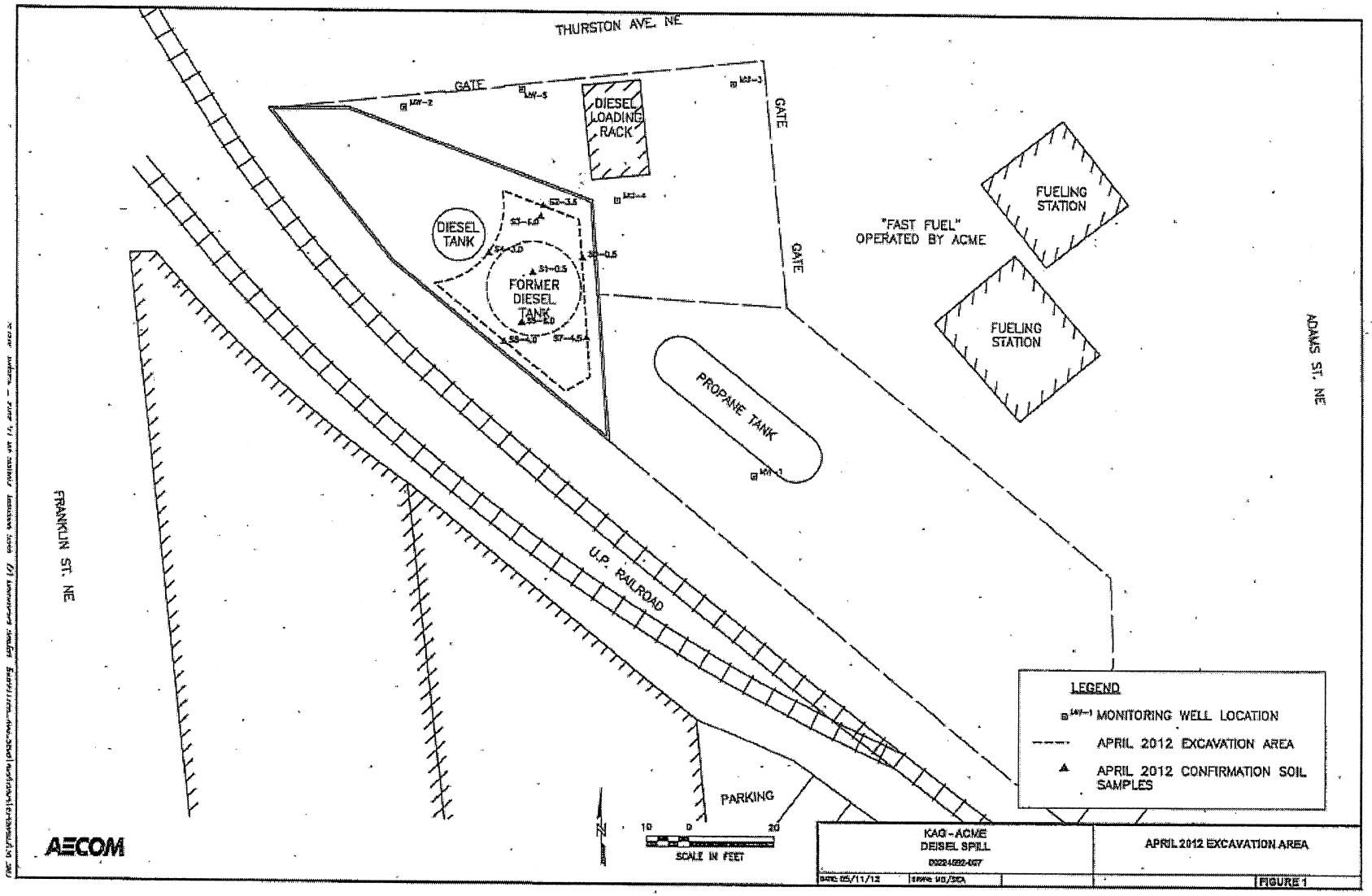


Fig.3 Soil Confirmation sample locations and Soil Excavation Extent around Former Spilled Aboveground Storage Tank (Courtesy of AECOM)

Table 1 Summary of Soil Analytical Results - Supplemental Site Characterization
Acme Bulk Fuel Plant & Cardlock (Fast Fuel)
Olympia, WA

Sample Number[1]	Date Sampled	Depth Sampled (feet)	Diesel Extended TPH[2] (mg/Kg)		Gasoline TPH[3] (mg/Kg)	Selected Volatile Organic Compounds[4] (mg/Kg)			
			Diesel	Heavy Oil		**Benzene**	Toluene	Ethylbenzene	Total Xylenes
B1-S1-4.5/5.0	9/27/2012	4.5-5.0	<50	<100	<10	<0.02	<0.05	<0.05	<0.15
B3-S2-6.5/7.0	9/27/2012	6.5-7.0	<50	<100	<10	<0.02	<0.05	<0.05	<0.15
B6-S1-4.5/5.0	9/27/2012	4.5-5.0	**4,600**	<100	**830**	**0.06**	0.26	<0.05	0.29
B8-S1-4.5/5.0	9/27/2012	4.5-5.0	<50	<100	<10	<0.02	<0.05	<0.05	<0.15
B9-S2-7.5/8.0	9/27/2012	7.5-8.0	<50	<100	<10	<0.02	<0.05	<0.05	<0.15
B10-S1-4.5/5.0	9/27/2012	4.5-5.0	<50	<100	<10	<0.02	<0.05	<0.05	<0.15
B11-S2-7.0/7.5	9/27/2012	7.0-7/5	<50	<100	<10	<0.02	<0.05	<0.05	<0.15
B12-S1-4.5/5.0	9/27/2012	4.5-5.0	<50	<100	<10	<0.02	<0.05	<0.05	<0.15
PQL			50	100	10	0.02	0.05	0.05	0.15
Ecology MTCA Method A Clean Up			2,000	2,000	30[5]	0.03	7	6	9

Notes:
1Approximate sample locations are shown in Figure 2
2Diesel and Heavy Oil range total petroleum hydrocarbons (TPH). Analyzed by Northwest Method NWTPH-Dx/Dx Extended.
3Gasoline range TPH. Analyzed by Northwest Method NWTPH-Gx.
4Select Volatile Organic Compounds. Analyzed by EPA Method 8260C.
5Cleanup level with presence of benzene
mg/Kg = milligrams per kilograms
MTCA = Model Toxics Control Act
PQL=Practical Quantitation Limits
-- = not analyzed for this constituent
< = not detected above laboratory limits
* Ecology has not designated a MTCA Method A cleanup level for this constituent
Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

Table 2 Summary of Groundwater Analytical Results - Supplemental Site Characterization
Acme Bulk Fuel Plant & Cardlock (Fast Fuel)
Olympia, WA

Sample Number[1]	Date Sampled	Diesel Extended TPH[2] (ug/L)		Gasoline TPH[3] (ug/L)	Select Volatile Organic Compounds[4] (ug/L)					Total cPAH[5] (ug/L)
		Diesel	Heavy Oil		Benzene	Toluene	Ethylbenzene	Total Xylenes	Total Napthalenes	
B1-W	9/27/2012	<250	<500	**2,600**	**16**	1	72	41	--	--
B2-W	9/27/2012	**75,000**	<500	--	**35**	2.3	77	340	90	**6.5**
B3-W	9/27/2012	<250	<500	**1,700**	4.2	1.2	35	120	--	--
B4-W	9/27/2012	**28,000**	<500	--	3.3	4.9	115	390	100	**3**
B5-W	9/27/2012	<250	<500	--	2.3	1.5	40	110	--	--
B6-W	9/27/2012	<250	<500	<100	<1.0	<1.0	<1.0	<3.0	--	--
B7-W	9/27/2012	<250	<500	--	<1.0	<1.0	<1.0	<3.0	--	--
B8-W	9/27/2012	<250	<500	<100	<1.0	<1.0	<1.0	<3.0	--	--
B10-W	9/27/2012	<250	<500	<100	<1.0	<1.0	<1.0	<3.0	--	--
B11-W	9/27/2012	<250	<500	<100	<1.0	<1.0	<1.0	<3.0	--	--
B12-W	9/27/2012	<250	<500	<100	<1.0	<1.0	<1.0	<3.0	--	--
PQL		250	500	100	1	1	1	3	5	0.1
MTCA Method A Cleanup Levels		500	500	800[6]	5	1,000	700	1,000	160	0.1[7]

Notes:
1Approximate sample locations are shown in figure 2
2Diesel and Heavy Oil range total petroleum hydrocarbons (TPH). Analyzed by Northwest Method NWTPH-Dx/Dx Extended.
3Gasoline range TPH. Analyzed by Northwest Method NWTPH-Gx.
4Select Volatile Organic Compounds. Analyzed by EPA Method 8260C.
5 Carcinogenic Polyaromatic Hydrocarbons (cPAH). Analyzed by EPA Method 8270 (SIM)
6Cleanup level with presence of benzene
7Cleanup Level for total carcinogens of PAHs are comprised of benzo(a)anthracene through dibenzo(a,h)anthracene
ug/L= micrograms per liter
MTCA = Model Toxics Control Act
PQL=Practical Quantitation Limits
-- = not analyzed for this constituent
< = not detected above laboratory limits
* Ecology has not designated a MTCA Method A cleanup level for this constituent
Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

Table 3 Summary of Groundwater Analytical Results - Monitoring Wells
Acme Bulk Fuel Plant
Olympia, WA

Sample Number[1]	Date Sampled	Diesel Extended TPH[2] (ug/L)		Gasoline TPH[3] (ug/L)	Select Volatile Organic Compounds[4] (ug/L)					Total cPAH[5] (ug/L)
		Diesel	Heavy Oil		Benzene	Toluene	Ethylbenzene	Total Xylenes	Total Napthalenes	
MW-1	11/22/2011[8]	400	<200	--	--	--	--	--	--	--
	9/19/2012[9]	<200	<400	<100	<1.0	<2.0	<1.0	<3.0	--	--
MW-2	11/22/2011[8]	240	<200	--	--	--	--	--	--	--
	9/19/2012[9]	<200	<400	117	<1.0	<2.0	<1.0	<3.0	--	--
MW-3	11/22/2011[8]	**1,200**	210	300	<0.2	<0.2	<0.2	<0.2	--	--
	9/19/2012[9]	<200	<400	--	<1.0	<2.0	<1.0	<3.0	<0.100	<0.100
MW-4	11/22/2011[8]	**1,700**	<200	670	**17**	9.6	14	47	--	--
	9/19/2012[9]	<200	<400	--	**7.4**	<2.0	64.3	171	6.03	<0.100
MW-5	11/22/2011[8]	**2,900**	<200	<250	<0.2	<0.2	<0.2	0.3	--	--
	9/19/2012[9]	<200	<400	--	**6.3**	<2.0	24.1	14.3	0.441	<0.100
PQL		200	400	100	1	2	1	3	0.1	0.1
MTCA Method A Cleanup Levels		500	500	800[6]	5	1,000	700	1,000	160	0.1[7]

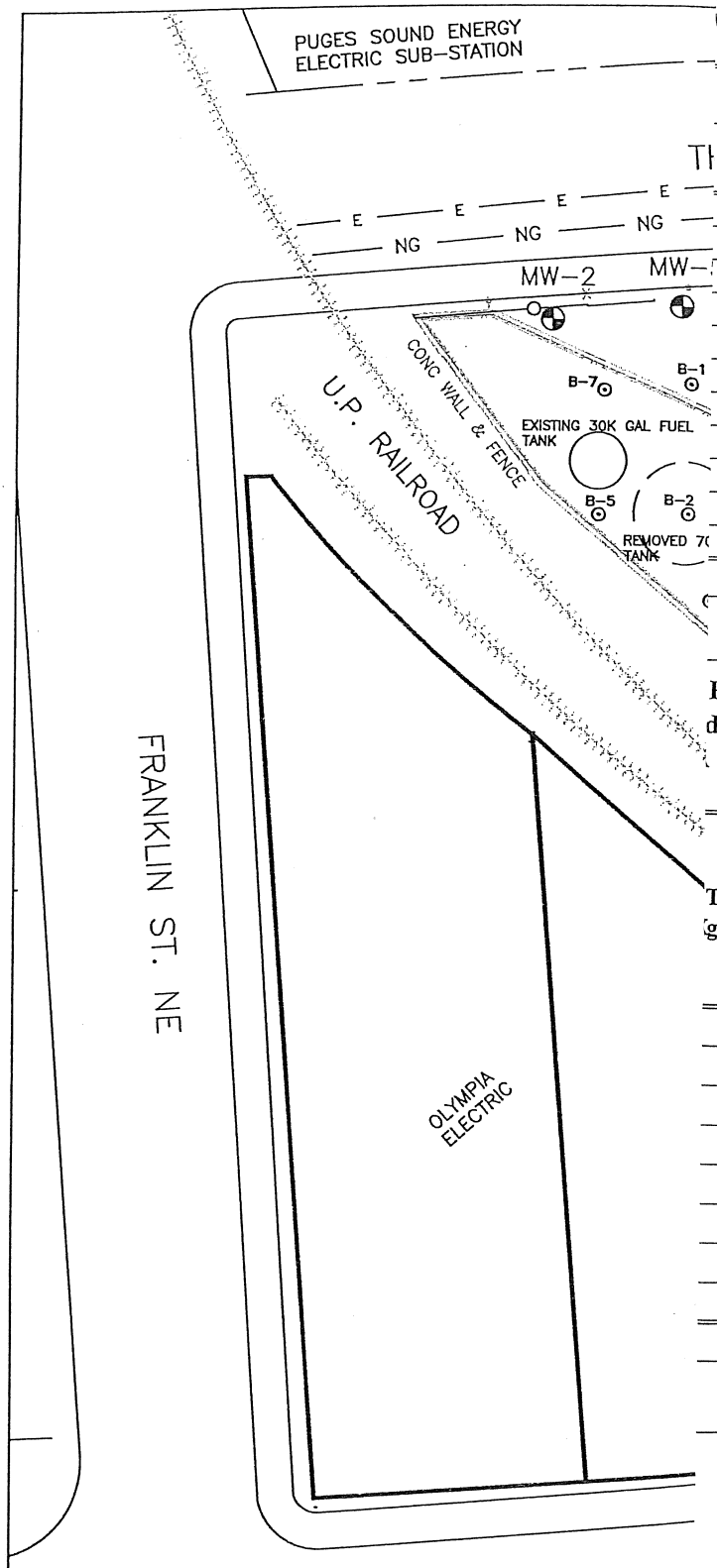
Notes:
[1] Approximate AECOM monitoring well locations are shown in figures 2 and 3
[2] Diesel and Heavy Oil range total petroleum hydrocarbons (TPH). Analyzed by Northwest Method NWTPH-Dx/Dx Extended.
[3] Gasoline range TPH. Analyzed by Northwest Method NWTPH-Gx.
[4] Select Volatile Organic Compounds. Analyzed by EPA Method 8260C.
[5] Carcinogenic Polyaromatic Hydrocarbons (cPAH). Analyzed by EPA Method 8270 (SIM)
[6] Cleanup level with presence of benzene
[7] Cleanup Level for total carcinogens of PAHs are comprised of benzo(a)anthracene through dibenzo(a,h)anthracene
[8] Groundwater monitoring/sampling conducted by AECOM in November 2011. Analytical results presented in AECOM December 14, 2011 MTCA Release Report.
9Groundwater monitoring/sampling conducted by AEG in September 2012.
ug/L= micrograms per liter
MTCA = Model Toxics Control Act
PQL=Practical Quantitation Limits
-- = not analyzed for this constituent
< = not detected above laboratory limits
* Ecology has not designated a MTCA Method A cleanup level for this constituent
Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

ılytical Results - Phase II ESA
ardlock (Fast Fuel)
/A

Select Volatile Organic Compounds[3] (ug/L)				cPAH[5] (ug/L)
Toluene	Ethylbenzene	Total Xylenes	Total Napthalenes	
1.0	72	41	--	--
2.3	77	340	90	6.5
1.2	35	120	--	--
4.9	115	390	100	3.0
1.5	40	110	--	--
<1.0	<1.0	<3.0	--	--
<1.0	<1.0	<3.0	--	--
<1.0	<1.0	<3.0	--	--
<1.0	<1.0	<3.0	--	--
<1.0	<1.0	<3.0	--	--
<1.0	<1.0	<3.0	--	--
1.0	1.0	3.0	5.0	0.1
1,000	700	1,000	160	0.1 [7]

Results - Phase II ESA
dlock (Fast Fuel)

TPH[2] g)	Selected Volatile Organic Compounds[2] (mg/Kg)			
	Benzene	Toluene	Ethylbenzene	Total Xylenes
	<0.02	<0.05	<0.05	<0.15
	<0.02	<0.05	<0.05	<0.15
	0.06	0.26	<0.05	0.29
	<0.02	<0.05	<0.05	<0.15
	<0.02	<0.05	<0.05	<0.15
	<0.02	<0.05	<0.05	<0.15
	<0.02	<0.05	<0.05	<0.15
	<0.02	<0.05	<0.05	<0.15
	0.02	0.05	0.05	0.15
	0.03	7	6	9



DRAWING SCALE: 1"=

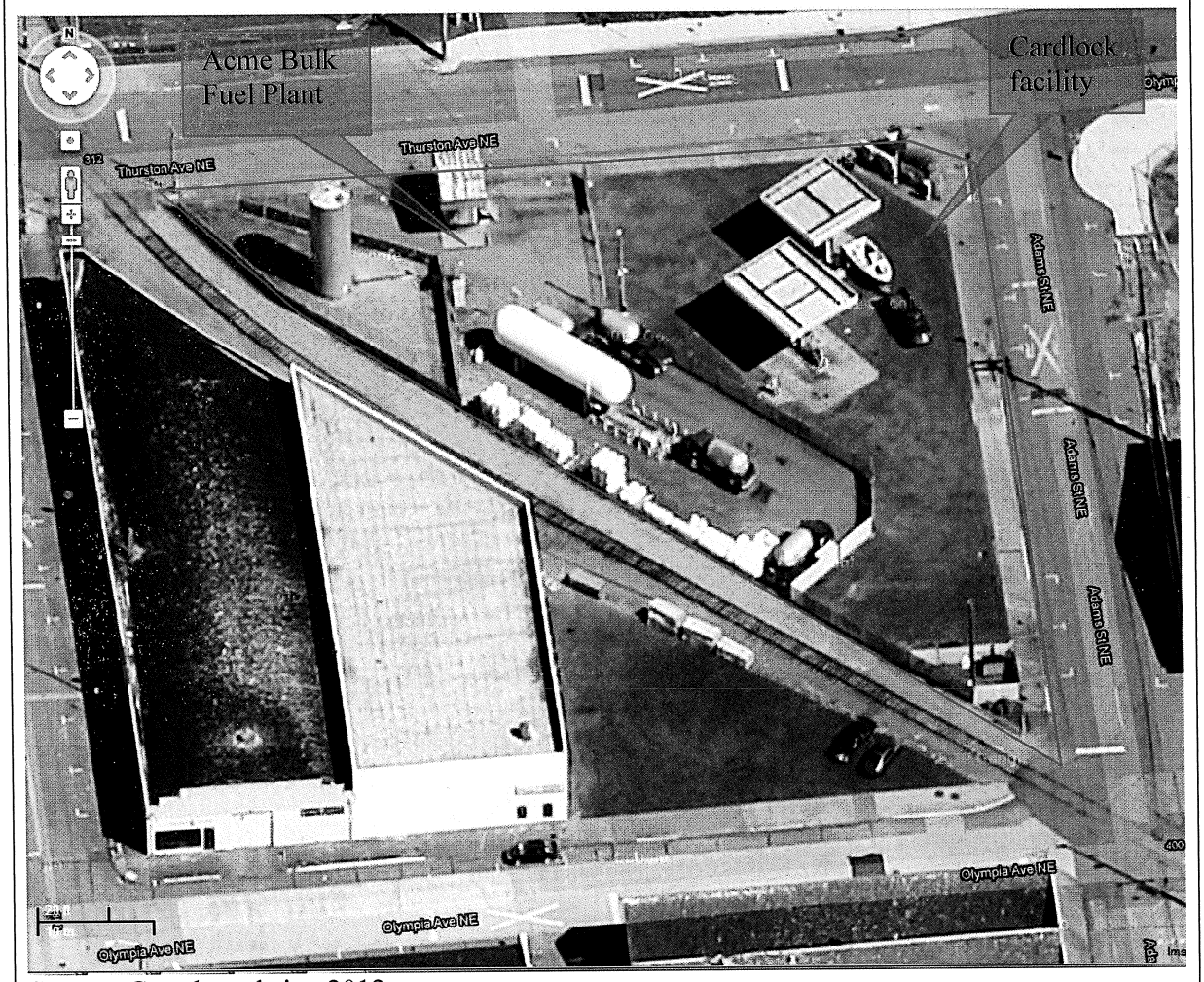
⊙ B-1 BORINGS TAKEN BY AEG
◔ MW-1 AECOM MONITORING WELLS
PAVED AREA OF PROPERTY

Notes:
(1) The locations of all features shown are approximate.
(2) This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document.

Reference: Drawing created from survey drawing by PACIFIC GEOMATIC SERVICES, INC and notes provided by AEG, LLC.

ACME Bulk Fuel Plant & Cardlock
303 THURSTON AVE NE
OLYMPIA, WA

Project# 12-114a	Date: 10/30/2012
File: FILE NAME	Sheet 2 OF 3



Source: Google website, 2012

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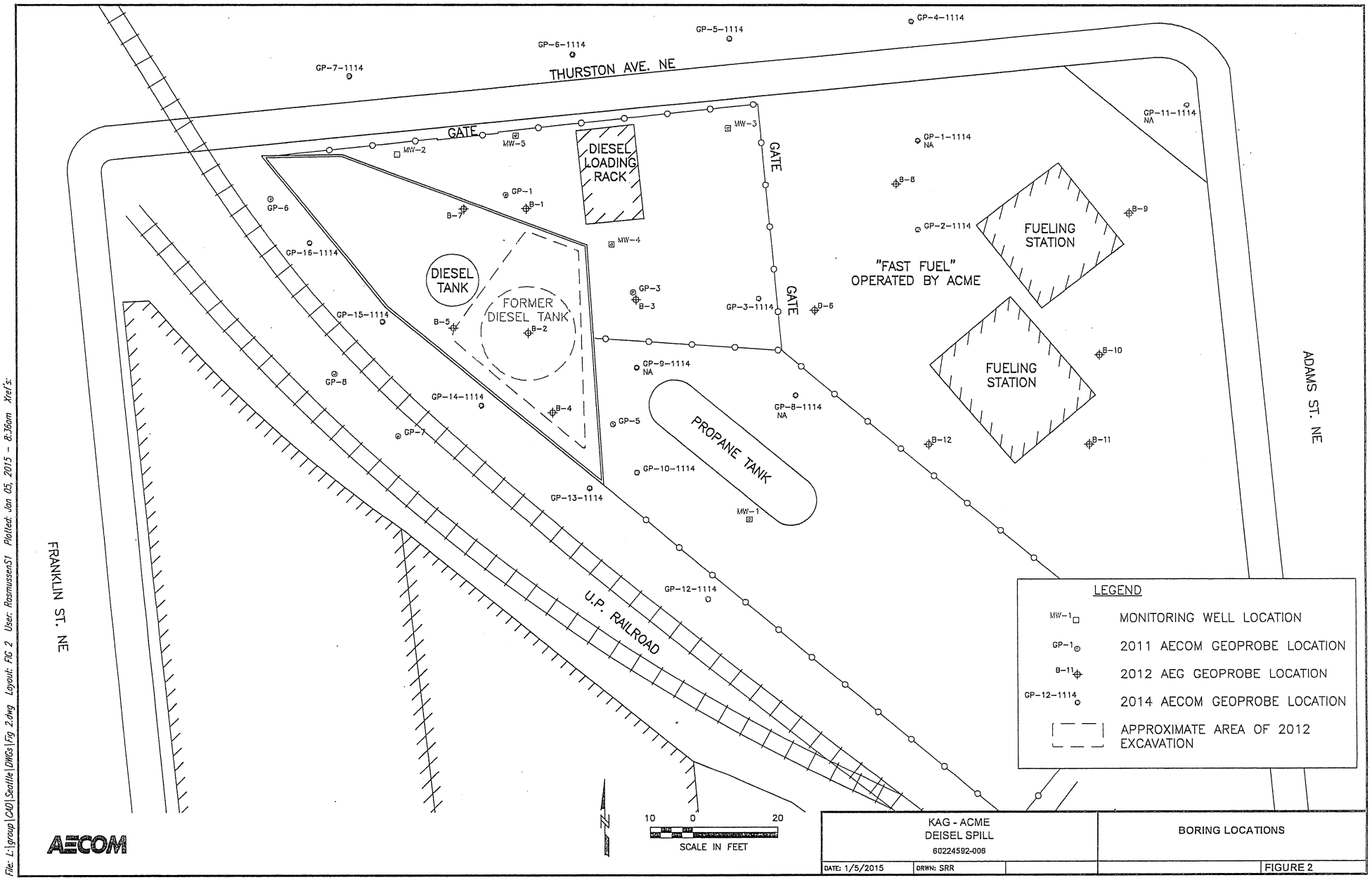
ASSOCIATED
ENVIRONMENTAL
GROUP, LLC

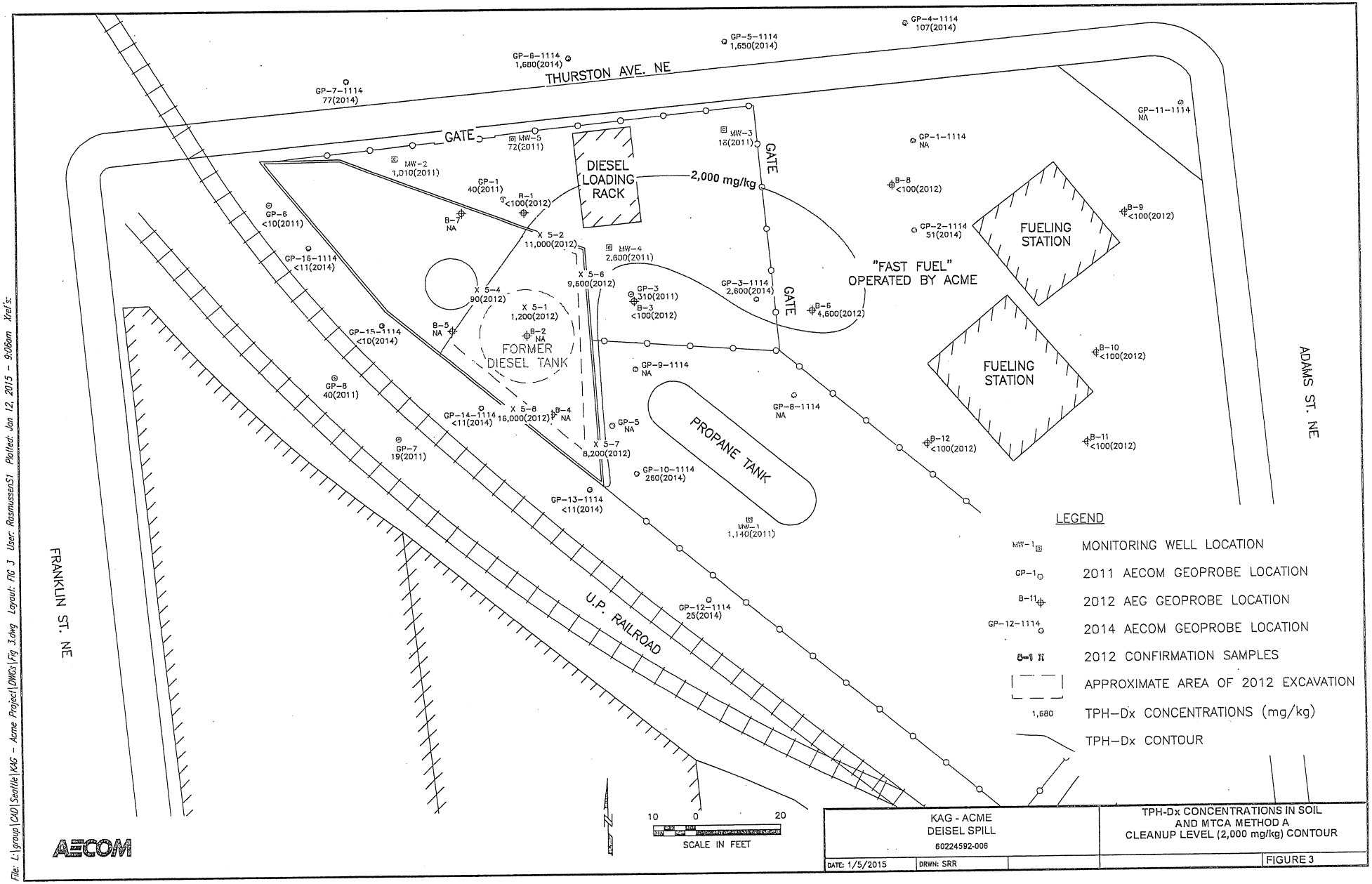
FIGURE 1 - Site & Vicinity Aerial Photo

Acme Bulk Fuel Plant & Cardlock Facilities
303 Thurston Ave. NE
Olympia, WA 98501

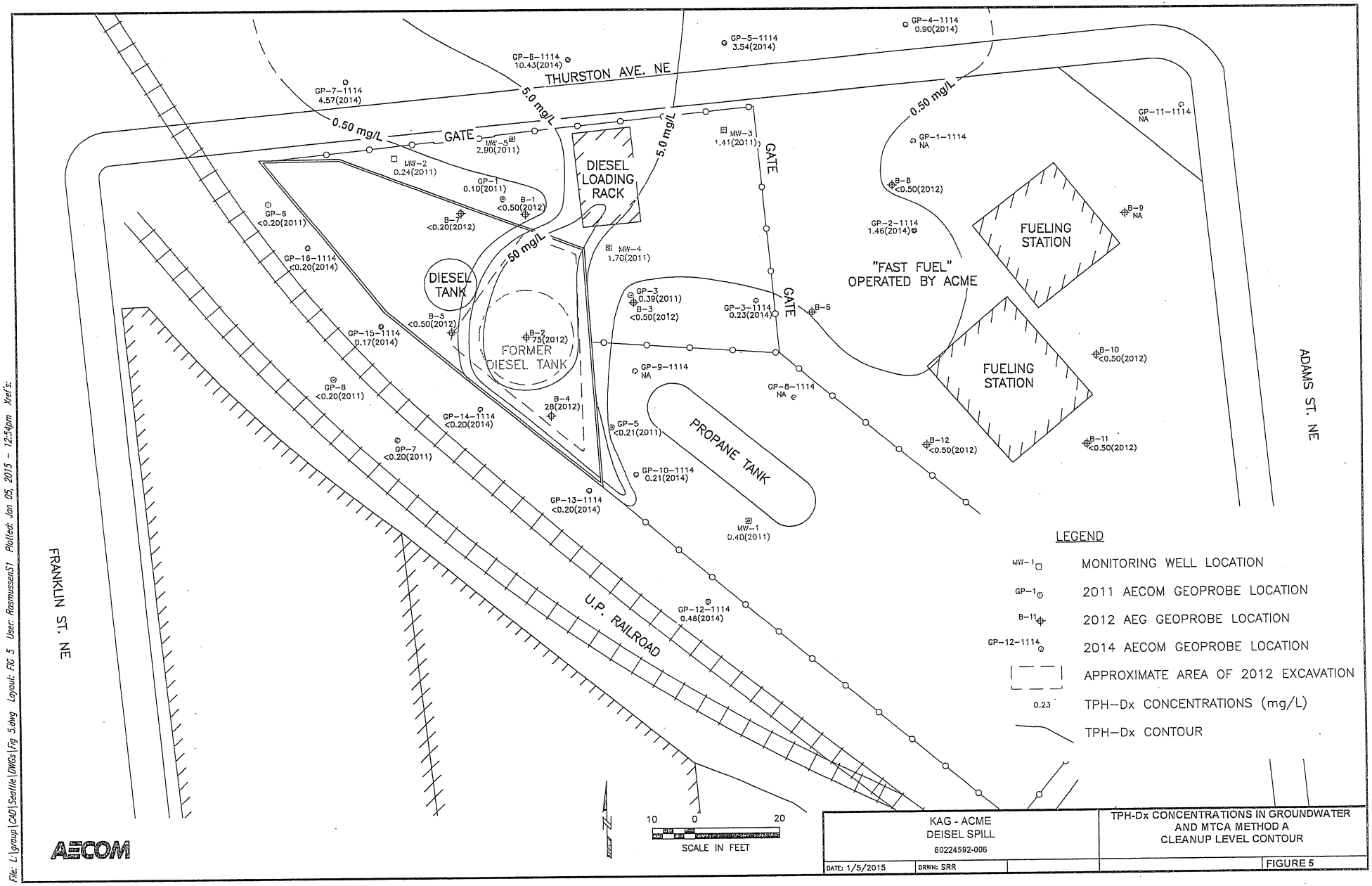
AEG Project No.: 12-114a



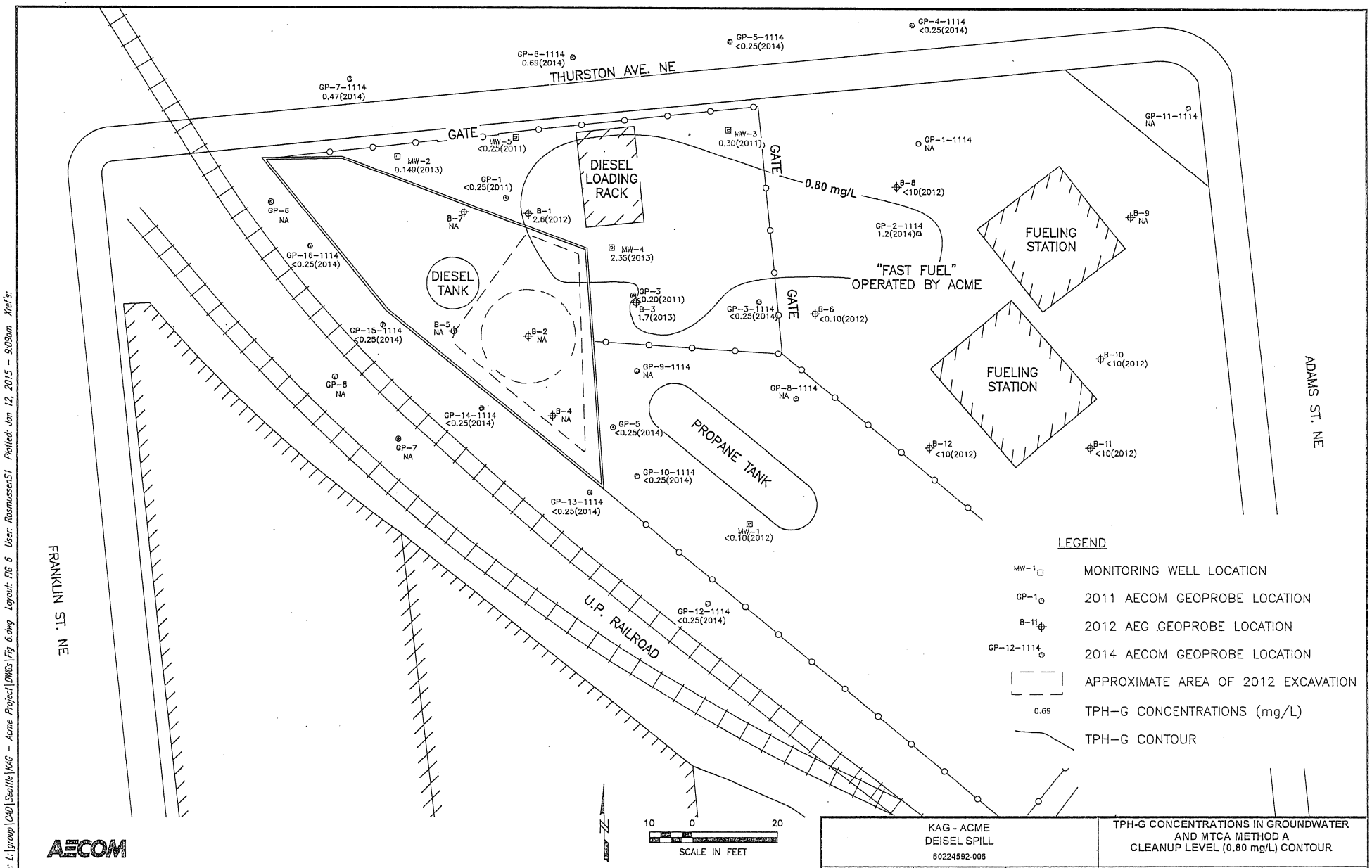
File: L:\group\CAD\Seattle\DWGs\Fig 2.dwg Layout: FIG 2 User: Rasmussen51 Plotted: Jan 05, 2015 - 8:36am Xref's:



File: L:\group\CAD\Seattle\KAG - Acme Project\DWGs\Fig 3.dwg Layout: FIG 3 User: RasmussenS1 Plotted: Jan 12, 2015 - 9:06am Xref's:



File: L:\group\CAD\Seattle\DWGs\Fig 5.dwg Layout: FIG 5 User: RasmussenS1 Plotted: Jan 05, 2015 - 12:54pm Xref's:



KAG - ACME DEISEL SPILL 60224592-006			TPH-G CONCENTRATIONS IN GROUNDWATER AND MTCA METHOD A CLEANUP LEVEL (0.80 mg/L) CONTOUR
DATE: 1/5/2015	DRWN: SRR		FIGURE 6

File: L:\group\C40\Seattle\KAG - Acme Project\DWGs\Fig 6.dwg Layout: FIG 6 User: RasmussenS1 Plotted: Jan 12, 2015 - 9:09am Xref's:

Table 1
BTEX, Gasoline and Diesel Concentrations in Soil
Acme Fast Fuel
Olympia, Washington

Sample No.	Units	Sample Date	Sample Depth (Ft)	Sample Method	TPH-G	TPH-D	TPH-HO	Benzene	Toluene	Ethylbenzene	Xylenes
Diesel Loading Rack											
GP-3-1114-4-5	mg/kg	11/1/2011	4-5	Geoprobe	120	2,600	120	< 1.1	< 1.1	< 1.1	< 1.1
GP-1-4-5-1111	mg/kg	11/1/2011	4-4.6	Geoprobe	< 6.6	28	12	NA	NA	NA	NA
GP-3-4-4.6-1111	mg/kg	11/1/2011	4-5	Geoprobe	< 11	19	24	NA	NA	NA	NA
GP-3-5-6-1111	mg/kg	11/1/2011	5-6	Geoprobe	< 10	7.4	< 14	NA	NA	NA	NA
MW-1-0-3-1111	mg/kg	11/2/2011	0-3	Hollow-stem Auger	NA	57	390	NA	NA	NA	NA
MW-1-5-6-1111	mg/kg	11/2/2011	5-6	Hollow-stem Auger	NA	1,000	140	NA	NA	NA	NA
MW-2-1-2-1111	mg/kg	11/2/2011	1-2	Hollow-stem Auger	NA	810	200	NA	NA	NA	NA
MW-3-5-6-1111	mg/kg	11/2/2011	5-6	Hollow-stem Auger	< 8.6	18	< 13	NA	NA	NA	NA
MW-4-0-1-1111	mg/kg	11/2/2011	0-1	Hollow-stem Auger	NA	150	78	NA	NA	NA	NA
MW-4-4-5-1111	mg/kg	11/2/2011	4-5	Hollow-stem Auger	580	2,600	570	NA	NA	NA	NA
MW-5-5-6-1111	mg/kg	11/2/2011	5-6	Hollow-stem Auger	6.7	56	16	NA	NA	NA	NA
B1-S1-4.5-5[1]	mg/kg	9/27/2012	4-5	Geoprobe	<10	< 50	< 100	< 0.2	< 0.05	< 0.05	< 0.15
B3-S2-6.5-7[1]	mg/kg	9/27/2012	6.5-7	Geoprobe	<10	< 50	< 100	< 0.2	< 0.05	< 0.05	< 0.15
Thurston Avenue											
GP-4-1114-4-5	mg/kg	11/21/2014	4-5	Geoprobe	< 5.6	19	88	< 1.1	< 1.1	< 1.1	< 1.1
GP-5-1114-5-6	mg/kg	11/21/2014	5-6	Geoprobe	130	1,500	150	< 1.3	< 1.3	< 1.3	< 1.3
GP-6-1114-7-8	mg/kg	11/21/2014	7-8	Geoprobe	140	1,600	80	< 1.2	< 1.2	< 1.2	< 1.2
GP-7-1114-7-8	mg/kg	11/21/2014	7-8	Geoprobe	< 4.1	19	58	< 1.1	< 1.1	< 1.1	< 1.1
Union Pacific Railroad											
GP-6-4-5-1111	mg/kg	11/2/2011	4-5	Geoprobe	NA	< 5.1	< 10	NA	NA	NA	NA
GP-7-4-5-1111	mg/kg	11/2/2011	4-5	Geoprobe	NA	< 5.5	19	NA	NA	NA	NA
GP-8-4-5-1111	mg/kg	11/2/2011	4-5	Geoprobe	NA	9.8	30	NA	NA	NA	NA
GP-12-1114-6-6.5	mg/kg	11/20/2014	6-6.5	Geoprobe	< 5.2	7.8	18	< 1.2	< 1.2	< 1.2	< 1.2
GP-13-1114-5-6	mg/kg	11/20/2014	5-6	Geoprobe	< 3.2	< 5.6	< 11	< 1.2	< 1.2	< 1.2	< 1.2
GP-14-1114-5-6	mg/kg	11/20/2014	5-6	Geoprobe	< 3.3	< 5.5	< 11	< 1.0	< 1.0	< 1.0	< 1.0
GP-15-1114-6-7	mg/kg	11/20/2014	6-7	Geoprobe	< 3.4	< 5.7	< 11	< 1.0	< 1.0	< 1.0	< 1.0
GP-16-1114-6-7	mg/kg	11/20/2014	6-7	Geoprobe	< 3.6	< 5.6	< 11	< 1.0	< 1.0	< 1.0	< 1.0
Large Propane Tank											
GP-10-1114-4,5-5	mg/kg	11/19/2014	8-8.5	Geoprobe	< 4.5	91	110	< 1.2	< 1.2	< 1.2	< 1.2
GP-10-1114-8-8.5	mg/kg	11/19/2014	8-8.5	Geoprobe	< 7.6	150	110	< 1.8	< 1.8	< 1.8	< 1.8
GP-5-5-6-1111	mg/kg	11/2/2011	5-6	Geoprobe	< 10	7.4	< 14	NA	NA	NA	NA
Tank Dike											
S1-0.5-0412	mg/kg	4/23/2012	0.0 - 0.5	Surface - directly under concrete pad	NA	1,100	100	NA	NA	NA	NA
S2-3.5-0412	mg/kg	4/23/2012	3.5 - 4.0	North - Sidewall	NA	11,000	490	NA	NA	NA	NA
S3-6.0-0412	mg/kg	4/23/2012	6.0 - 6.5	North - Bottom	NA	66	35	NA	NA	NA	NA
S4-3.0-0412	mg/kg	4/23/2012	3.0 -3.5	West - Sidewall (next to smaller Tank	NA	90	< 11	NA	NA	NA	NA
S5-6.0-0412	mg/kg	4/23/2012	6.0 - 6.5	South - Bottom	NA	180	< 13	NA	NA	NA	NA
S6-4.0-0412	mg/kg	4/23/2012	4.0 - 4.5	NE - Sidewall	NA	9,600	480	NA	NA	NA	NA
S7-4.0-0412	mg/kg	4/23/2012	4.0 - 4.5	SE - Sidewall	NA	8,200	360	NA	NA	NA	NA
S8-4.0-0412	mg/kg	4/23/2012	4.0 - 4.5	South - Sidewall	NA	16,000	580	NA	NA	NA	NA
Fueling Station											
GP-2-1114-4.5-5	mg/kg	11/19/2014	4.5-5	Geoprobe	< 4.1	38	13	< 1.2	< 1.2	< 1.2	< 1.2
B6-S1-4.5-5[1]	mg/kg	9/27/2012	4.5-5	Geoprobe	830	4,600	< 100	0.06	< 0.05	< 0.05	< 0.15
B8-S1-4,5-5[1]	mg/kg	9/27/2012	4.5-5	Geoprobe	< 10	< 50	< 100	< 0.2	< 0.05	< 0.05	< 0.15
B9-S2-7.5-8[1]	mg/kg	9/27/2012	7.5-8	Geoprobe	< 10	< 50	< 100	< 0.2	< 0.05	< 0.05	< 0.15
B10-S1-4.5-5[1]	mg/kg	9/27/2012	4.5-5	Geoprobe	< 10	< 50	< 100	< 0.2	< 0.05	< 0.05	< 0.15
B11-S2-7-7.5[1]	mg/kg	9/27/2012	7-7.5	Geoprobe	< 10	< 50	< 100	< 0.2	< 0.05	< 0.05	< 0.15
B12-S1-4.5-5[1]	mg/kg	9/27/2012	4.5-5	Geoprobe	< 10	< 50	< 100	< 0.2	< 0.05	< 0.05	< 0.15
MCTA Method A Cleanup Level					30	2,000	2,000	0.03	7	6	9

[1] Sample collected by Associated Environmental Group, LLC
NA - Not analyzed.
TPH-G - Total petroleum hydrocarbons in the gasoline range.
TPH-D - Total petroleum hydrocarbons in the diesel range.
TPH-HO - Total petroleum hydrocarbons in the heavy oil range.
830 Exceeds MTCA Method A Cleanup Level.

Table 2
PAH Concentrations in Soil
Acme Fast Fuel
Olympia, Washington

Compound Sample Depth (ft)	GP-2-1114 4.5-5	GP-3-1114 4-5	GP-4-1114 4-5	GP-5-1114 5-6	GP-6-1114 7-8	GP-7-1114 7-8	GP-10-1114 4.5-5	GP-10-1114 8-8.5	GP-12-1114 6-6.5	GP-13-1114 5-6	GP-14-1114 5-6	GP-15-1114 6-7	GP-16-1114 6-7
Naphthalene	9.3	36	43	44	140	55	89	110	8.2	< 4.6	4.0 J	< 4.7	4.6 J
1-Methylnaphthalene	22	100	8.5	35	760	18	150	22	7.2	2.6 J	4.4 J	< 4.7	3.7 J
2-Methylnaphthalene	24	320	7.2	320	2100	12	120	12	6	3.2 J	3.0 J	< 4.7	2.7 J
Acenaphthylene	< 5	< 28	9.5	52	250	12	< 4.9	28	< 4.9	< 4.6	< 5	< 4.7	< 4.6
Acenaphthene	< 5	120	5.1	340	1200	63	9.9	20	< 4.9	< 4.6	< 5	< 4.7	< 4.6
Fluorene	5.3	110	6.1	420	1000	54	7.4	20	< 4.9	< 4.6	< 5	< 4.7	< 4.6
Phenanthrene	8	190	36	71	340	100	53	91	13	2.9 J	8	< 4.7	12
Anthracene	< 5	32	7.8	41	170	54	17	31	< 4.9	< 4.6	3.1 J	< 4.7	2.9 J
Fluoranthene	3.4 J	44	39	44	78	180	46	120	18	3.3 J	8.6	< 4.7	17
Pyrene	4.5 J	99	36	62	96	220	42	100	18	3.0 J	7.4	< 4.7	13
Benzo(a)anthracene	< 5	< 28	9.1	< 21	14 J	43	20	23	8.2	< 4.6	4.8 J	< 4.7	6
Chrysene	< 5	33	16	25	27	64	27	30	14	2.7 J	13	< 4.7	12
Benzo(a)pyrene	< 5	< 28	8.8	< 21	12 J	30	12	19	9	< 4.6	5.3	< 4.7	6.3
Indeno(1,2,3-cd)pyrene	< 5	< 28	5.9	< 21	< 21	18	14	9.6	7	< 4.6	9.3	< 4.7	7.6
Dibenz(a,h)anthracene	< 5	< 28	< 5	< 21	< 21	< 4.9	< 4.9	< 4.8	< 4.9	< 4.6	< 5	< 4.7	< 4.6
Benzo(g,h,i)perylene	< 5	< 28	9.3	< 21	< 21	29	48	19	17	< 4.6	11	< 4.7	12
Dibenzofuran	< 5	48	7.4	150	490	31	30	17	3.0 J	< 4.6	< 5	< 4.7	< 4.6
Total Benzofluoranthenes	< 5	< 28	17	10 J	18 J	58	38	38	21	2.3 J	23	< 4.7	19

Notes: Concentrations are in ug/kg.

Table 3
BTEX, Gasoline and Diesel in Groundwater
Acme Fast Fuel
Olympia, Washington

Sample No.	Sample Date	Sample Method	TPH-G mg/L	TPH-D mg/L	TPH-HO mg/L	Benzene ug/L	Toluene ug/L	Ethylbenzene ug/L	Xylenes ug/L
Diesel Loading Rack									
GP-3-1114	11/19/2014	Geoprobe	< 0.25	0.23	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40
GP-1-W-1111	11/2/2011	Geoprobe	< 0.25	0.10	< 0.20	NA	NA	NA	NA
GP-3-W-1111	11/2/2011	Geoprobe	< 0.25	0.10	0.29	NA	NA	NA	NA
GP-5-W-1111	11/2/2011	Geoprobe	< 0.25	0.21	< 0.20	NA	NA	NA	NA
B1-W[1]	9/27/2012	Geoprobe	**2.6**	< 0.25	< 0.50	**16**	1.0	72	41
B-3W[1]	9/27/2012	Geoprobe	**1.7**	< 0.25	< 0.50	4.2	1.2	35	120
MW-2	11/22/2011	Monitoring Well	NA	0.24	< 0.2	NA	NA	NA	NA
	9/19/2012[1]		0.117	< 0.20	< 0.40	< 1.0	< 2.0	< 1.0	< 3.0
	1/9/2013[1]		0.149	< 0.20	< 0.40	1.89	< 2.0	5.64	15.6
MW-3	11/22/2011	Monitoring Well	0.30	**1.2**	0.21	< 0.20	< 0.20	< 0.20	< 0.20
	9/19/2012[1]		NA	< 0.20	< 0.40	< 1.0	< 2.0	< 1.0	< 3.0
	1/9/2013[1]		< 0.1	< 0.20	< 0.40	< 1.0	< 2.0	< 1.0	< 3.0
MW-4	11/22/2011	Monitoring Well	0.67	**1.7**	< 0.20	**17**	9.6	14	47
	9/19/2012[1]		NA	< 0.20	< 0.40	**7.4**	< 2.0	64	171
	1/9/2013[1]		**2.35**	< 0.20	< 0.40	3.98	< 2.0	78	226
MW-5	11/22/2011	Monitoring Well	< 0.25	**2.9**	< 0.20	< 0.20	< 0.20	< 0.20	0.30
	9/19/2012[1]		NA	< 0.20	< 0.40	**6.3**	< 2.0	24	14
	1/9/2013[1]		< 0.10	< 0.20	< 0.40	< 1.0	< 2.0	< 1.0	< 3.0
Thurston Avenue									
GP-4-1114	11/21/2014	Geoprobe	< 0.25	**0.67**	0.23	< 0.20	< 0.20	< 0.20	< 0.40
GP-5-1114	11/21/2014	Geoprobe	< 0.25	**3.9**	**0.64**	< 0.20	< 0.20	< 0.20	< 0.40
GP-6-1114	11/21/2014	Geoprobe	0.69	**10**	0.43	< 0.20	0.20	< 0.20	< 0.40
GP-7-1114	11/21/2014	Geoprobe	0.47	**4.1**	0.47	< 0.20	< 0.20	2.0	< 0.40
Union Pacific Railroad									
GP-12-1114	11/20/2014	Geoprobe	< 0.25	0.17	0.29	< 0.20	< 0.20	0.22	1.49
GP-13-1114	11/20/2014	Geoprobe	< 0.25	< 0.10	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40
GP-14-1114	11/20/2014	Geoprobe	< 0.25	< 0.10	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40
GP-15-1114	11/20/2014	Geoprobe	< 0.25	0.17	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40
GP-16-1114	11/20/2014	Geoprobe	< 0.25	< 0.10	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40
GP-6-W-1111	11/2/2011	Geoprobe	NA	< 0.10	< 0.20	NA	NA	NA	NA
GP-7-W-1111	11/2/2011	Geoprobe	NA	< 0.10	< 0.20	NA	NA	NA	NA
GP-8-W-1111	11/2/2011	Geoprobe	NA	< 0.10	< 0.20	NA	NA	NA	NA
Large Propane Tank									
GP-10-1114	11/19/2014	Geoprobe	< 0.25	0.21	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40
GP-5-W-1111	11/2/2011	Geoprobe	< 0.25	0.21	< 0.20	NA	NA	NA	NA
MW-1	11/22/2011	Monitoring Well	NA	0.40	< 0.20	NA	NA	NA	NA
	9/19/2012[1]		< 0.10	< 0.20	< 0.40	< 1.0	< 2.0	< 1.0	< 3.0
	1/9/2013[1]		< 0.10	< 0.20	< 0.40	< 1.0	< 2.0	< 1.0	< 3.0
Tank Dike									
B-2W	9/27/2012	Geoprobe	NA	**75**	< 0.50	**35**	2.3	77	340
B-4W	9/27/2012	Geoprobe	NA	**28**	< 0.50	3.3	4.9	115	390
B-5W	9/27/2012	Geoprobe	NA	< 0.25	< 0.50	2.3	1.5	40	110
B7-W	9/27/2012	Geoprobe	NA	< 0.25	< 0.50	< 1.0	< 1.0	< 1.0	< 3.0
Fueling Station									
GP-2-1114	11/19/2014	Geoprobe	**1.2**	**1.2**	0.26	**140 E**	6.2	3.4	14
B6-W[1]	9/27/2012	Geoprobe	< 0.10	< 0.25	< 0.50	< 1.0	< 1.0	< 1.0	< 3.0
B8-W[1]	9/27/2012	Geoprobe	< 0.10	< 0.25	< 0.50	< 1.0	< 1.0	< 1.0	< 3.0
B10-W[1]	9/27/2012	Geoprobe	< 0.10	< 0.25	< 0.50	< 1.0	< 1.0	< 1.0	< 3.0
B11-W[1]	9/27/2012	Geoprobe	< 0.10	< 0.25	< 0.50	< 1.0	< 1.0	< 1.0	< 3.0
B12-W[1]	9/27/2012	Geoprobe	< 0.10	< 0.25	< 0.50	< 1.0	< 1.0	< 1.0	< 3.0
MTCA Method A Cleanup Level			0.8	0.5	0.5	5	1,000	700	1,000

[1] Sample collected by Associated Environmental Group, LLC
TPH-G - Total petroleum hydrocarbons in the gasoline range.
TPH-D - Total petroleum hydrocarbons in the diesel range.
TPH-HO - Total petroleum hydrocarbons in the heavy oil range.
NA - Not analyzed.
E - Value exceeded instrument calibration range.
2.6 Exceeds MTCA Method A Cleanup Level.

Table 4
PAH Concentrations in Groundwater
Acme Fast Fuel
Olympia, Washington

Compound	GP-2-1114	GP-3-1114	GP-4-1114	GP-40-1114 Dup of GP-4-1114	GP-5-1114	GP-6-1114	GP-7-1114	GP-10-1114	GP-12-1114	GP-13-1114	GP-14-1114	GP-15-1114	GP-16-1114
Naphthalene	0.44	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.24	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
1-Methylnaphthalene	5	0.22	< 0.1	< 0.1	< 0.1	< 0.1	0.16	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	7.2	0.67	< 0.1	< 0.1	0.88	46	1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	< 0.1	< 0.1	< 0.1	< 0.1	0.18	0.93	< 0.1	< 0.1	NA	< 0.1	< 0.1	0.36	< 0.1
Acenaphthene	< 0.1	< 0.1	0.16	< 0.1	1.4	7.3	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	0.3	0.2	< 0.1	< 0.1	1.6	8.3	0.11	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	0.23	0.22	< 0.1	< 0.1	< 0.1	1	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.62	< 0.1	< 0.1	NA	< 0.1	0.11	0.11	< 0.1
Fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.16	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	< 0.1	< 0.1	< 0.1	< 0.1	0.14	0.16	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(g,h,i)perylene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	0.1	< 0.1	< 0.1	< 0.1	0.61	3.9	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1
Total Benzofluoranthenes	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1

Notes: Concentrations are in ug/L.