Oregon Office
1176 West 7th Avenue
Eugene, Oregon 97402
Ph: (541) 743-2600
Fax: (541) 743-2471
www.etgroupinc.com

December 6, 2018
Project 2004-004.002

Ms. Jing Song
Washington Department of Ecology -
Toxic Cleanup Program, NWRO
3190 160th Avenue Southeast
Bellevue, Washington 98008

Re: Fourth Quarter 2018 Groundwater Monitoring Report, Former Provisioner's Express, Inc. Facility, 2102 West Valley Highway North, Auburn, Washington, Ecology Facility ID 91612121, Cleanup Site ID 6847, VCP Project No. 3206

Dear Ms. Song:

Environmental Technologies Group, Inc. (ETG), on behalf of Commerce Road Terminals, LLC (CRT), has prepared this groundwater monitoring report to provide the results of the fourth quarter 2018 groundwater monitoring completed at the former Provisioner's Express, Inc. (Provisioner's) facility (Site) located at 2102 West Valley Highway North in Auburn, Washington. This report presents the details and findings of the groundwater monitoring activities conducted at the Site on November 15, 2018.

SITE DESCRIPTION

The former Provisioner's facility is located at 2102 West Valley Highway North Auburn, Washington, east of the intersection of 22nd street Northwest and West Valley Highway North, northwest quarter of Section 12, Township 21 North, Range 4 East, Willamette Meridian in King County, Washington (Figure 1). The Tax Parcel No. for the property is 1221049034, and the zoning is designated M-1, Light Industrial.

The facility is currently operated by Estes Express Lines (Estes), a motor freight transportation company. Estes uses the Site primarily as a trucking terminal, and includes a maintenance garage.

The property is fully paved or covered by buildings and has a storm water conveyance system consisting of catch basins that are connected to an oil/water separator through underground piping with discharge to the municipal sewer system. Pavement is primarily asphalt with concrete pads surrounding the on-Site buildings and loading bays.

The topography of the property is relatively flat with an approximate elevation of 65 feet above mean sea level. Mill Creek and the White River Park Wetland System are the

nearest surface water bodies and are located approximate 200 feet to the southeast of the Site. A drainage ditch flowing to the White River Park Wetland System is present near the south property boundary, approximately 40 feet south of the Site. The property and the Site are separated from Mill Creek and the White River Park Wetland System by an adjoining property. The nearest major surface water body, the Green River, is located approximately 1.7 miles east of the Site.

The property contains a single Washington Department of Ecology (Ecology) Model Toxics Control Act (MTCA) site that is defined by the lateral and vertical extent of soil and groundwater impacted by diesel and oil range petroleum hydrocarbons (TPH-d and TPH-o) at concentrations greater than applicable MTCA Method A Cleanup Levels (CULs). Under the MTCA program, the Facility Site Identification No. is 91612121, Cleanup Site Identification No. is 6847, and in July 2018 the Voluntary Cleanup Program (VCP) number was change from NW2532, to VCP No. 3206 when CRT became responsible for the Site cleanup.

BACKGROUND

Soil and groundwater at the Site were impacted by petroleum hydrocarbon releases from conveyance piping related to a 550-gallon used oil underground storage tank (UST) located near the northwest corner of the truck maintenance building (Figure 2). The UST and approximately 350 cubic yards of petroleum-contaminated soil (PCS) were removed for disposal off-Site, and four monitoring wells, designated MW-1, MW-2, MW-3, and MW-4, were constructed in December 1998 (EMR, 1999).

In January 2000, Ecology issued a conditional No Further Action (NFA) determination for the Site. The NFA contained the condition that quarterly groundwater monitoring and reporting be continued until the *site demonstrates sustained, continuous compliance with Model Toxics Control Act (MTCA) Groundwater Cleanup Levels (CULs) for at least one year.* The NFA also stipulated that analytical results for groundwater compliance *shall include BTEX {benzene, toluene, ethylbenzene, and xylene), diesel, and heavy oils.*" Available records indicate that the monitoring wells were sampled approximately every quarter from December 1998 until October 2002.

In November 2002, the Site owner petitioned for a full NFA determination based on three (3) years of data demonstrating that benzene groundwater concentrations greater than MTCA Method A CULs was confined to the area on the north side of the maintenance building around MW-2. At that time, the sample collected from MW-2 had a gasoline range petroleum hydrocarbon (TPH-g) concentration of 180 micrograms per liter (µg/L) and a benzene concentration of 12.0 µg/L. The reported TPH-g concentration was less than the MTCA Method A CUL of 800 µg/L. However, the benzene concentration exceeded the MTCA Method A CUL of 5 µg/L. No other BTEX compounds, TPH-d, or TPH-o were reported in the sample collected from MW-2. Reported contaminant concentrations for the samples collected from the remaining monitoring wells were also below MTCA Method A CULs.

Groundwater sampling was discontinued in late 2002 and the Site did not receive a full NFA determination, due to the benzene concentration exceeding the MTCA Method A CUL in the samples from MW-2. Records indicate that the Site was subsequently dropped from Ecology's VCP due to inactivity.

The Site re-entered the VCP in August 2011 and was assigned VCP No. NW 2532. Quarterly groundwater sampling of the four on-Site wells was resumed in August 2011. On March 26, 2012, Ecology notified the Site owner that the January 2000 conditional NFA determination was rescinded because the benzene concentrations in groundwater samples collected from well MW-2 remained greater than the MTCA Method A CUL and the previous groundwater remedy (excavation of petroleum impacted soils followed by groundwater monitoring) did not achieve and maintain compliance with the applicable MTCA Method A CULs.

On November 28, 2012, a 12,000-gallon diesel fuel UST was removed south of the truck maintenance building (Figure 2). According to available information, the UST was emptied and removed from service in 1998 when the 550-gallon waste oil UST was decommissioned, and had not been operated between 1998 and 2012. EPI personnel oversaw the UST decommissioning activities and collected nine (9) soil samples and a water sample from the excavation. The diesel contaminated water in the excavation was reportedly rinsate from the UST that was spilled as it was removed from the excavation due to improper rigging and hoisting of the UST. EPI prepared the *Underground Storage Tank Site Assessment Report* (EPI, 2013a), dated January 4, 2013, for submittal to Ecology's Underground Storage Tank Division.

In an opinion letter dated April 22, 2013, Ecology requested installation of two additional monitoring wells designated MW-5 and MW-6. Well MW-5 was installed at the southwest corner of the truck maintenance building, near the on-Site oil/water separator (OWS), to monitor groundwater downgradient of MW-1. Well MW-6 was installed at the southeast corner of the former 12,000-gallon diesel UST excavation to evaluate groundwater quality based on the reported petroleum hydrocarbon concentrations in a water sample collected from the spilled rinsate water in the UST excavation (EPI, 2013b).

In October 2013, EPI performed a site investigation at Ecology's request. The investigation included advancing nine (9) direct-push soil borings DP-1 through DP-9 (Figure 2); five were located around MW-1 and four were located downgradient of MW-6. Laboratory analytical results indicated soil impacts around MW-1 were limited to location DP-3, which was immediately adjacent to the exterior wall of the northwest corner of the Truck Maintenance Building. This result was anticipated because a small quantity of impacted soil was left in place immediately under the truck maintenance building to maintain geotechnical stability during impacted soil excavation. None of the remaining soil samples had detections for petroleum hydrocarbons (EPI, 2013b).

On August 26, 2016, EPI directed the advancement of two soil borings, designated BH-1 and BH-2 for soil sample collection, and construction of two conditional point of compliance (POC) monitoring wells, designated MW-7 and MW-8. BH-1 and BH-2 were advanced east of the former 12,000-gallon diesel UST to evaluate subsurface conditions immediately downgradient of the former UST. Well MW-7 was installed southeast and downgradient of the former 12,000-gallon diesel UST and existing well MW-6. Well MW-8 was installed northeast of MW-7, also downgradient of the former 12,000-gallon diesel UST and existing well MW-6. The purpose of the POC monitoring wells was to monitor groundwater conditions downgradient of the former 12,000-gallon diesel UST, which is a source area for diesel impacts to groundwater at the Site (EPI, 2017a). The soil boring and monitoring wells locations are presented on Figure 2.

On August 11, 2017, monitoring well MW-9 was installed by Holt Services near the northwest corner of the truck maintenance building (Figure 2). The additional well was requested by CRT as part of their environmental due diligence prior to their purchase of the property. Historical direct-push sampling data from this location indicated TPH-d and TPH-o above MTCA Method A in a groundwater sample collected from the boring (EPI, 2017b).

On May 17, 2018, during collection of depth-to-water measurements, asphalt sealant was encountered in the monument for MW-8. After removal of the asphalt sealant, it was discovered that the locking expansion plug for the monitoring well was loose, and that asphalt sealant had seeped past the plug. Visible material was skimmed from the well surface and the monitoring well was purged of approximately 30 gallons of groundwater prior to sampling. TPH-d and TPH-o were reported above MTCA Method A cleanup levels in the groundwater sample collected on May 17, 2018.

On June 5, 2018, ETG cleaned the casing for monitoring well MW-8, using clean absorbent pads to wipe the well casing. Following cleaning, the well was developed by extracting water with a development pump beginning at the top of the groundwater surface and lowering the pump as groundwater dropped in elevation. This process was repeated approximately 15 times until the purge water no longer changed in color between purging events. A total of 25 gallons of groundwater was removed from the well. The well was resampled following cleaning and development. Though significant reduction in TPH-d and TPH-o concentrations were reported, laboratory analytical results still reported TPH-d and TPH-o above MTCA Method A cleanup levels in the groundwater sample.

Remedial System

In 2014, because groundwater data indicated that natural attenuation of the residual TPH-d and TPH-o impacts was not occurring at a rate that would result in a reasonable restoration timeframe, an active groundwater remediation system was designed, installed, and operated for the area around MW-1 as described in the following.

In May 2014, EPI installed three shallow air injection wells at locations upgradient of MW-1 (Figure 2) to add dissolved oxygen (DO) to the groundwater. The increased DO concentrations in groundwater would stimulate existing aerobic bacteria by providing the oxygen necessary for those bacteria to metabolize dissolved petroleum hydrocarbons in groundwater at a higher rate.

Each of the shallow air injection wells was equipped with a 1-foot section of Kerfoot Technologies C-Sparger® screen set in a sand filter pack and set below groundwater at approximately 14 to 15 feet bgs. Pressurized air pumped through the C-Sparger® screens forces air, containing oxygen, into groundwater as microbubbles, greatly increasing the surface area of the bubbles for more efficient oxygenation of the groundwater. The remaining well annulus was sealed using hydrated bentonite chips and the surface was completed in 8-inch diameter flush completion steel monuments set in concrete.

An appropriately-sized rotary vane air compressor was installed in the fenced area at the north end of the truck maintenance building to provide air to the shallow air injection wells. The shallow air injection wells are connected to the compressor using 1-inch diameter polyvinyl chloride (PVC) piping installed below grade into each of the well monuments. PVC air supply lines were installed in trenches that were appropriately backfilled and patched with asphalt at the surface to match the surrounding pavement grade.

The remediation system was started and tested on May 15, 2014 after quarterly groundwater monitoring was completed. An electrical issue with the compressor's motor caused the air injection remediation system to shut down in August 2014. Analytical results from the August 2014 monitoring event indicated that TPH-d and TPH-o concentrations were not reported, at or above laboratory method reporting limits (MRLs) in the sample from MW-1. Based on the favorable result, remediation system operation was suspended at MW-1 from August 2014 to April 2015 so that groundwater data could be collected to demonstrate that groundwater was remediated to concentrations below Ecology MTCA Method A Groundwater CULs, and to provide data intended to demonstrate that contaminant concentration rebound was not occurring.

The positive response to operation of the air injection remediation system at MW-1 demonstrated that expansion to remediate impacted groundwater at MW-6 was warranted. In January 2015, EPI installed three additional shallow air injection wells at locations upgradient of MW-6 (Figure 2). The three wells are constructed like the air injection wells at MW-1, equipped with 1-foot lengths of Kerfoot Technologies C-Sparger® screen set in a sand filter pack and set below groundwater at approximately 14 to 15 feet bgs.

Operation of the expanded air injection remediation system at MW-6 was initiated on April 3, 2015. The expanded system at MW-6 ran from April until June 2015 when an

electrical issue with the compressor's motor caused the air injection remediation system to shut down, requiring replacement.

Repairs to the air injection system were completed and the remediation system was restarted on February 3, 2016. However, the system was not operational during the June 21, 2016 groundwater sampling event and inspection revealed that the compressor motor was damaged due to overheating. EPI was informed that the system had been off for several weeks prior to the sampling event.

EPI evaluated the potential reasons for the compressor motor overheating and the likely cause was low voltage power throughout the area, which was measured at 208 volts at the air injection system panel. The actual voltage was lower than the design voltage of 220-230 volts. EPI concluded that although the compressor motor was rated to operate at 208 volts, voltage fluctuations below 208 volts caused high amperage on the motor, resulting in excessive heat that eventually burned-out the motor.

In November 2016, EPI installed a 1.5 horsepower, Republic Manufacturing, Model DRT-425 rotary vane compressor with a 208-volt-specific motor. The compressor was started up on November 16, 2016. The system was operational before and after the December 20, 2016 groundwater sampling event. Sometime between the December 20, 2016 monitoring event and a site visit by EPI personnel on March 20, 2017, the air injection system shut down. On March 20, 2017, EPI personnel inspected the compressor and determined that the rotary vanes were destroyed and required replacement. The compressor repair work was completed under warranty at the manufacturer's facility.

The repaired compressor was reconnected and returned to service on June 19, 2017. Both areas of the air injection system MW-1 and MW-6, were back in operation following the completion of groundwater monitoring on June 19, 2017.

Since installation in 2015, air injection well Al-6, located near monitoring well MW-6, consistently had little to no air flow. EPI tested, evaluated, and attempted to increase air flow through this point with no measurable improvement and determined that the well was plugged and unrepairable. On June 26, 2017, Holocene Drilling, under EPI direction, decommissioned Al-6 per Ecology requirements and replaced it with air injection well Al-6R.

The air injection system was inspected during a Site visit by EPI on December 14, 2017 and again during quarterly monitoring on December 20, 2017 and was operating as designed with no excessive heat or mechanical issues noted. EPI returned to the property on January 2, 2018 to re-sample wells MW-4, MW-6, and MW-6 and noted that the air compressor was not running. The compressor was replaced, and the air injection system re-started (EPI, 2018).

The air injection system has continued to operate since January 2018, with the exception of maintenance events and prior to some monitoring events.

GROUNDWATER MONITORING

On November 15, 2018, ETG conducted a groundwater monitoring event which included collection of depth-to-water measurements from monitoring wells MW-1 through MW-9. As requested by Ecology, groundwater samples were collected from monitoring wells MW-1, MW-3, MW-6, MW-8, and MW-9. Depth-to-water measurements and groundwater elevation data are provided in Table 1. Operation of the air injection system was suspended approximately ½-hour prior to the monitoring event.

Monitoring Procedures

During the monitoring event, groundwater samples were collected utilizing "low-flow" sampling techniques in general accordance with the United States Environmental Protection Agency (USEPA) *Low-Flow Groundwater Monitoring Procedures* (USEPA, 1996). Prior to sampling, depth-to-water measurements were used to determine the static water level in each well. During purging, field parameters including: pH, conductivity, temperature, oxidation-reduction (Redox), and dissolved oxygen were measured utilizing a flow-through cell. Groundwater samples were collected after at least three sequential field parameter readings had stabilized to within the limits specified in the USEPA procedure and the water level was below the top of the screened interval. Field sampling data, including depth-to-water at the completion of sampling were recorded on field sampling data sheets (FSDSs). Copies of FSDSs are provided in Attachment A.

Groundwater samples were collected from disposable discharge tubing connected to the peristaltic pump and transferred directly to laboratory-supplied containers with as little agitation as possible. Groundwater samples were labeled with a unique blind code and delivered in an iced cooler using chain-of-custody (COC) procedure to Pace Analytical Services, LLC (PACE) in Minneapolis, Minnesota. All groundwater samples were analyzed for TPH-d and TPH-o by Ecology Method NWTPH-Dx. For quality assurance/quality control (QA/QC) purposes, a duplicate groundwater sample was collected from monitoring well MW-9.

All purge water, development water, and decontamination water was stored on-Site in a United States Department of Transportation (USDOT) approved 55-gallon drum pending proper disposal.

Groundwater Elevation and Flow Direction

Based on the depth-to-water measurements collected on November 15, 2018 from the nine (9) shallow monitoring wells, a groundwater elevation contour map was generated for the Site (Figure 3) using field measurements and data from a well survey completed on September 19, 2017. Groundwater elevation data indicated a predominantly easterly groundwater flow direction, consistent with prior monitoring events. The horizontal groundwater gradient was calculated to be less than 0.01 feet per foot (ft/ft) during the November 15, 2018 groundwater monitoring event.

Groundwater Analytical Results

A summary of select laboratory analytical results for groundwater samples collected from monitoring wells MW-1, MW-3, MW-6, MW-8, and MW-9 on November 15, 2018 are provided in Table 2 along with Ecology MTCA Method A CULs for comparison. TPH-d and TPH-o analytical results are also presented on Figure 4. A copy of the laboratory analytical report is provided as Attachment B.

Analytical results for groundwater samples collected from monitoring wells MW-1, MW-3, MW-6, MW-8, and MW-9 on November 15, 2018 indicated the following:

Diesel Range Hydrocarbons

- TPH-d was not reported at, or above, the laboratory MRL in the groundwater samples collected from monitoring wells MW-1, MW-3, MW-6, MW-8 and MW-9. All laboratory MRLs were below the Ecology MTCA Method A CUL of 500 micrograms per liter (μg/L).

Oil Range Hydrocarbons

- TPH-o was not reported at, or above, the laboratory MRL in the groundwater samples collected from monitoring wells MW-1, MW-3, MW-6, MW-8 and MW-9. All laboratory MRLs were below the Ecology MTCA Method A CUL of 500 μg/L.

Total Diesel and Oil Range Hydrocarbons

- Total TPH-d and TPH-o was reported below the laboratory MRL in the groundwater samples collected from monitoring wells MW-1, MW-3, MW-6, MW-8 and MW-9.

REMEDIAL SYSTEM OPERATION

On November 15, 2018 at 6:30 AM, operation of the air injection system was suspended for the groundwater monitoring event. Following completion of the monitoring event, a system maintenance event was completed. The external filter for the air injection system blower was inspected, the condensate drains blown down, and flow and pressure readings collected. The air injection system resumed operations after completion of the maintenance event. A copy of the air injection treatment system data sheet (TSDS) is provided as Attachment C.

Dissolved oxygen data collected during the November 2018 monitoring event (Table 1) indicate higher concentrations than August 2018, consistent with analytical results reported during the event.

Based on the November 2018 monitoring results, air injection system operation will be suspended at the Site.

SCHEDULED ACTIONS

The new proposed groundwater monitoring well downgradient of MW-8 will be installed prior to the first quarter groundwater monitoring event, which is scheduled to occur in February 2018. Groundwater level measurements will be collected from monitoring wells MW-1 through MW-9, and the new proposed monitoring well. Groundwater samples will be collected from monitoring wells MW-1, MW-3, MW-6, MW-8, MW-9, and the new monitoring well, and analyzed for TPH-d and TPH-o.

If there are any questions regarding this report please call.

Sincerely,

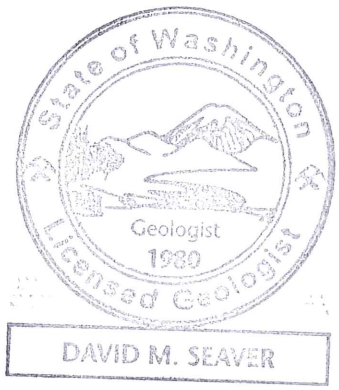
Environmental Technologies Group, Inc.

Daniel J. Landry
Senior Project Manager

David M. Seaver, L.G.
Senior Geologist

Attachments: References
Limitations
Tables 1 and 2
Figures 1, 2, 3, and 4
Attachment A, B, and C

cc: Ms. Angela Maidment, CRT



REFERENCES

EMR. 1999. *Remedial Investigation/Feasibility Study*, Provisioners Express Auburn Facility, 2102 West Valley Highway, Auburn, Washington. Environmental Management Resources, Inc. March.

EPI. 2013a. *Underground Storage Tank Site Assessment Report,* Estes Express Facility, 2102 West Valley Highway North, Auburn, Washington. Environmental Partners, Inc. January 4.

EPI. 2013b. *Phase II Environmental Site Assessment Report,* Estes West Express Trucking Facility, 2102 West Valley Highway North, Auburn, Washington. Environmental Partners, Inc. December 9.

EPI. 2017a. *September and December 2016 Groundwater Sampling Report – Twenty and Twenty-First Rounds*, Estes West Express Trucking Facility, 2102 West Valley Highway North, Auburn, Washington. Environmental Partners, Inc. February 24.

EPI. 2017b. *September 2017 Groundwater Sampling Report – Twenty-Fourth Round*, Estes West Express Trucking Facility, 2102 West Valley Highway North, Auburn, Washington. Environmental Partners, Inc. October 3.

EPI. 2018. *December 2017 – January 2018 Groundwater Sampling Report – Twenty-Fifth Round*, Estes West Express Trucking Facility, 2102 West Valley Highway North, Auburn, Washington. Environmental Partners, Inc. February 21.

USEPA. 1996. *Low-Flow Groundwater Monitoring Procedures*, USEPA/540/S-95/504, United States Environmental Protection Agency. April.

LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

The purpose of a geologic/hydrogeologic study is to reasonably characterize existing site conditions based on the geology/hydrogeology of the area. In performing such a study, it is understood that a balance must be struck between a reasonable inquiry into the site conditions and an exhaustive analysis of each conceivable environmental characteristic. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to describe all geologic/hydrogeologic conditions of interest at a given site. If conditions have not been identified during the study, such a finding should not therefore be construed as a guarantee of the absence of such conditions at the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

We are unable to report on or accurately predict events that may change the site conditions after the described services are performed, whether occurring naturally or caused by external forces. We assume no responsibility for conditions we were not authorized to evaluate, or conditions not generally recognized as predictable when services were performed.

Geologic/hydrogeologic conditions may exist at the site that cannot be identified solely by visual observation. Where subsurface exploratory work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Table 1
Groundwater Elevation Summary

Well Number/ TOC Elevation	Date of Measurement	Dissolved Oxygen (mg/L)	DTW (feet)	SWL (feet)	Change in SWL (feet)
MW-1					
60.77	08/12/11	--	6.12	54.65	--
	11/11/11	--	5.42	55.35	0.70
	02/10/12	--	4.76	56.01	0.66
	05/17/12	--	5.35	55.42	-0.59
	08/28/12	--	6.28	54.49	-0.93
	11/15/12	--	4.99	55.78	1.29
	02/14/13	--	5.22	55.55	-0.23
	05/16/13	--	5.42	55.35	-0.20
	08/14/13	0.21	6.17	54.60	-0.75
	11/25/13	0.29	5.06	55.71	1.11
	02/20/14	0.25	3.62	57.15	1.44
	05/15/14	0.41	4.76	56.01	-1.14
	08/14/14	7.69	7.32	53.45	-2.56
	11/24/14	0.67	5.22	55.55	2.10
	03/31/15	0.45	4.99	55.78	0.23
	06/29/15	0.15	6.23	54.54	-1.24
	09/28/15	0.40	6.37	54.40	-0.14
	03/03/16	10.71	2.18	58.59	4.19
	06/21/16	4.82	5.82	54.95	-3.64
	09/16/16	0.16	5.99	54.78	-0.17
	12/20/16	7.69	4.92	55.85	1.07
	03/24/17	1.99	3.33	57.44	1.59
	06/16/17	0.93	4.25	56.52	-0.92
	09/05/17	0.49	6.17	54.60	-1.92
	12/20/17	11.2	4.45	56.32	1.72
	05/17/18	5.90	5.50	55.27	-1.05
	08/23/18	3.37	6.54	54.23	-1.04
	11/15/18	7.77	5.40	55.37	1.14
MW-2					
60.85	08/12/11	--	5.51	55.34	--
	11/11/11	--	5.13	55.72	0.38
	02/10/12	--	4.94	55.91	0.19
	05/17/12	--	5.42	55.43	-0.48
	08/28/12	--	6.40	54.45	-0.98
	11/15/12	--	5.12	55.73	1.28
	02/14/13	--	5.32	55.53	-0.20
	05/16/13	--	5.48	55.37	-0.16
	08/14/13	0.58	6.33	54.52	-0.85
	11/25/13	0.27	5.14	55.71	1.19
	02/20/14	3.08	2.23	58.62	2.91
	05/15/14	0.12	4.86	55.99	-2.63
	08/14/14	0.36	4.93	55.92	-0.07
	11/24/14	0.14	3.70	57.15	1.23
	03/31/15	2.12	5.02	55.83	-1.32
	06/29/15	0.28	6.36	54.49	-1.34
	09/28/15	0.84	6.50	54.35	-0.14
	03/03/16	1.34	2.64	58.21	3.86
	06/21/16	0.74	5.95	54.90	-3.31
	09/16/16	0.15	6.13	54.72	-0.18
	12/20/16	0.87	4.71	56.14	1.42
	03/24/17	--	3.09	57.76	1.62
	06/16/17	0.51	4.75	56.10	-1.66
	09/05/17	0.55	6.32	54.53	-1.57
	12/20/17	4.41	4.21	56.64	2.11
	05/17/18	0.56	5.60	55.25	-1.39
	08/23/18	--	6.68	54.17	-1.08
	11/15/18	--	5.44	55.41	1.24

Table 1
Groundwater Elevation Summary

Well Number/ TOC Elevation	Date of Measurement	Dissolved Oxygen (mg/L)	DTW (feet)	SWL (feet)	Change in SWL (feet)
MW-3					
60.80	08/12/11	--	5.54	55.26	--
	11/11/11	--	8.90	51.90	-3.36
	02/10/12	--	5.05	55.75	3.85
	05/17/12	--	5.60	55.20	-0.55
	08/28/12	--	6.40	54.40	-0.80
	11/15/12	--	5.25	55.55	1.15
	02/14/13	--	5.38	55.42	-0.13
	05/16/13	--	5.56	55.24	-0.18
	08/14/18	0.37	6.31	54.49	-0.75
	11/25/13	0.41	5.22	55.58	1.09
	02/20/14	0.26	4.34	56.46	0.88
	05/15/14	0.77	5.03	55.77	-0.69
	08/14/14	0.29	6.28	54.52	-1.25
	11/24/14	0.05	5.21	55.59	1.07
	03/31/15	1.24	5.15	55.65	0.06
	06/29/15	0.25	6.37	54.43	-1.22
	09/28/15	0.25	6.51	54.29	-0.14
	03/03/16	1.48	4.55	56.25	1.96
	06/21/16	0.90	5.93	54.87	-1.38
	09/16/16	0.11	6.09	54.71	-0.16
	12/20/16	1.94	5.38	55.42	0.71
	03/24/17	--	4.57	56.23	0.81
	06/16/17	0.29	5.23	55.57	-0.66
	09/05/17	0.21	6.30	54.50	-1.07
	12/20/17	0.78	4.91	55.89	1.39
	05/17/18	0.71	5.63	55.17	-0.72
	08/23/18	--	6.63	54.17	-1.00
	11/15/18	1.91	5.48	55.32	1.15
MW-4					
60.93	08/12/11	--	6.37	54.56	--
	11/11/11	--	5.65	55.28	0.72
	02/10/12	--	5.20	55.73	0.45
	05/17/12	--	5.63	55.30	-0.43
	08/28/12	--	6.50	54.43	-0.87
	11/15/12	--	5.36	55.57	1.14
	02/14/13	--	5.50	55.43	-0.14
	05/16/13	--	5.67	55.26	-0.17
	08/14/13	0.18	6.42	54.51	-0.75
	11/25/13	--	5.31	55.62	1.11
	02/20/14	0.37	4.45	56.48	0.86
	05/15/14	0.45	5.14	55.79	-0.69
	08/14/14	0.27	6.33	54.60	-1.19
	11/24/14	0.04	5.27	55.66	1.06
	03/31/15	0.98	5.27	55.66	0.00
	06/29/15	0.15	6.45	54.48	-1.18
	09/28/15	0.27	6.62	54.31	-0.17
	03/03/16	4.79	3.20	57.73	3.42
	06/21/16	0.49	6.11	54.82	-2.91
	09/16/16	0.64	6.40	54.53	-0.29
	12/20/16	0.75	6.32	54.61	0.08
	03/24/17	0.23	4.69	56.24	1.63
	06/16/17	0.24	5.36	55.57	-0.67
	09/05/17	0.58	6.39	54.54	-1.03
	12/20/17	0.75	5.00	55.93	1.39
	01/02/18	1.52	5.00	55.93	0.00
	05/17/18	0.57	5.74	55.19	-0.74
	08/23/18	--	6.73	54.20	-0.99
	11/15/18	--	5.55	55.38	1.18

Table 1
Groundwater Elevation Summary

Well Number/ TOC Elevation	Date of Measurement	Dissolved Oxygen (mg/L)	DTW (feet)	SWL (feet)	Change in SWL (feet)
MW-5					
60.90	08/14/13	0.21	6.31	54.59	--
	11/25/13	--	5.24	55.66	1.07
	02/20/14	--	4.38	56.52	0.86
	05/15/14	0.29	5.06	55.84	-0.68
	08/14/14	--	6.31	54.59	-1.25
	11/24/14	0.08	5.24	55.66	1.07
	03/31/15	1.09	5.17	55.73	0.07
	06/29/15	0.28	6.35	54.55	-1.18
	09/28/15	0.52	6.51	54.39	-0.16
	03/03/16	2.03	4.59	56.31	1.92
	06/21/16	0.40	5.96	54.94	-1.37
	09/16/16	0.10	6.11	54.79	-0.15
	12/20/16	1.09	5.16	55.74	0.95
	03/24/17	--	4.61	56.29	0.55
	06/16/17	0.30	5.27	55.63	-0.66
	09/05/17	0.51	6.27	54.63	-1.00
	12/20/17	0.93	4.92	55.98	1.35
	01/02/18	1.20	4.92	55.98	0.00
	05/17/18	0.95	5.65	55.25	-0.73
	08/23/18	--	6.58	54.32	-0.93
	11/15/18	--	5.44	55.46	1.14
MW-6					
60.76	08/14/13	0.22	6.21	54.55	--
	11/25/13	--	5.13	55.63	1.08
	02/20/14	0.29	4.27	56.49	0.86
	05/15/14	0.33	4.97	55.79	-0.70
	08/14/14	0.20	6.13	54.63	-1.16
	11/24/14	0.09	5.08	55.68	1.05
	03/31/15	0.09	5.10	55.66	-0.02
	06/29/15	0.17	6.27	54.49	-1.17
	09/28/15	0.37	6.42	54.34	-0.15
	03/03/16	0.67	4.53	56.23	1.89
	06/21/16	0.52	5.91	54.85	-1.38
	09/16/16	0.33	6.01	54.75	-0.10
	12/20/16	1.30	5.14	55.62	0.87
	03/24/17	0.18	4.52	56.24	0.62
	06/16/17	0.23	5.18	55.58	-0.66
	09/05/17	0.61	6.23	54.53	-1.05
	12/20/17	0.76	4.80	55.96	1.43
	01/02/18	0.86	4.80	55.96	0.00
	05/17/18	0.35	5.57	55.19	-0.77
	08/23/18	0.48	6.51	54.25	-0.94
	11/15/18	1.22	5.39	55.37	1.12
MW-7					
59.87	09/16/16	0.57	5.15	54.72	--
	12/20/16	0.72	5.27	54.60	-0.12
	03/24/17	0.23	3.68	56.19	1.59
	06/16/17	0.31	4.33	55.54	-0.65
	09/05/17	0.21	5.43	54.44	-1.10
	12/20/17	0.94	3.95	55.92	1.48
	05/17/18	0.53	4.71	55.16	-0.76
	08/23/18	--	5.67	54.20	-0.96
	11/15/18	--	4.49	55.38	1.18
MW-8					
59.70	09/16/16	0.52	5.09	54.61	--
	12/20/16	1.29	4.62	55.08	0.47
	03/24/17	0.33	3.67	56.03	0.95

Table 1
Groundwater Elevation Summary

Well Number/ TOC Elevation	Date of Measurement	Dissolved Oxygen (mg/L)	DTW (feet)	SWL (feet)	Change in SWL (feet)
MW-8	06/16/17	0.28	4.21	55.49	-0.54
Continued	09/05/17	0.34	5.31	54.39	-1.10
	12/20/17	1.39	3.78	55.92	1.53
	05/17/18	0.62	4.66	55.04	-0.88
	06/05/18	0.67	5.90	53.80	-1.24
	08/23/18	0.93	5.56	54.14	0.34
	11/15/18	2.03	4.44	55.26	1.12
MW-9					
60.91	09/05/17	0.38	6.33	54.58	--
	12/20/17	4.73	4.73	56.18	1.60
	05/17/18	0.67	5.64	55.27	-0.91
	08/23/18	1.03	6.69	54.22	-1.05
	11/15/18	0.84	5.50	55.41	1.19

Notes:

TOC - Top of casing
mg/L - Milligrams per liter
DTW - Depth to water
-- - Not applicable/Not measured
SWL - Static water level
NC - Not collected
Wells surveyed to the North American Vertical Datum of 1988 (NAVD 88) on September 19, 2017.

Table 2
Summary of Groundwater Analytical Results

			Ecology Method NWTPH-Gx (µg/L)	Ecology Method NWTPH-Dx (µg/L)			Volatile Organic Compounds USEPA Method 8021B/8260B (µg/L)			
Well ID	**Sample ID**	**Collection Date**	**TPH-g**	**TPH-d**	**TPH-o**	**Total TPH (C_{12} - C_{36})**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**
MW-1	NA	8/12/2011	<100	<250	<500	<500	<1	<1	<1	<3
	NA	11/11/2011	<100	**1,500**	300	**1,800**	<1	<1	<1	<3
	NA	2/10/2012	<100	**690**	<250	**690**	<1	<1	<1	<3
	NA	5/17/2012	<100	**1,100**	480	**1,580**	<1	<1	<1	<3
	NA	8/28/2012	<100	**1,200**	**820**	**2,020**	<1	<1	<1	<3
	NA	11/15/2012	<100	**2,700**	**1,200**	**3,900**	<1	<1	<1	<3
	NA	2/14/2013	<100	**1,600**	**510**	**2,110**	<1	<1	<1	<3
	NA	5/16/2013	<100	**1,500**	340	**1,840**	<1	<1	<1	<3
	NA	8/14/2013	<100	**1,100**	290	**1,390**	<1	<1	<1	<3
	NA	11/25/2013	--	**1,400**	400	**1,800**	--	--	--	--
	NA	2/20/2014	--	**700**	280	**980**	--	--	--	--
	NA	5/15/2014	--	**940**	<250	**940**	--	--	--	--
	NA	8/14/2014	--	<50	<250	<250	--	--	--	--
	NA	11/24/2014	--	220	<250	220	--	--	--	--
	NA	3/31/2015	--	340	<250	340	--	--	--	--
	NA	6/29/2015	--	240	<250	240	--	--	--	--
	NA	9/28/2015	--	**700**	290	**990**	--	--	--	--
	NA	3/3/2016	--	220	<250	220	--	--	--	--
	NA	6/21/2016	--	160	<250	160	--	--	--	--
	NA	9/16/2016	--	**580**	420	**1,000**	--	--	--	--
	NA	12/20/2016	--	190	<250	190	--	--	--	--
	NA	3/24/2017	--	53	<250	53	--	--	--	--
	NA	6/19/2017	--	310	**560**	**870**	--	--	--	--
	NA	9/5/2017	--	340	340	**680**	--	--	--	--
	NA	12/20/2017	--	150	340	490	--	--	--	--
	EW-051718-1	5/17/2018	--	<400	<400	<400	--	--	--	--
	EW-082318-3	8/23/2018	--	<380	<380	<380	--	--	--	--
	EW-111518-6	11/15/2018	--	<400	<400	<400	--	--	--	--
MW-2	NA	8/12/2011	<100	<250	<500	<500	<1	<1	<1	<3
	NA	11/11/2011	<100	500	<250	500	<1	<1	<1	<3
	NA	2/10/2012	<100	<50	<250	<250	<1	<1	<1	<3
	NA	5/17/2012	<100	<50	<250	<250	<1	<1	<1	<3
	NA	8/28/2012	<100	470	**730**	**1,200**	<1	<1	<1	<3
	NA	11/15/2012	<100	140	<260	140	<1	<1	<1	<3
	NA	2/14/2013	<100	94	260	354	<1	<1	<1	<3
	NA	5/16/2013	<100	77	<250	77	<1	<1	<1	<3
	NA	8/14/2013	<100	280	<250	280	<1	<1	<1	<3
	NA	11/25/2013	--	53	<250	53	--	--	--	--
	NA	2/20/2014	--	<50	<250	<250	--	--	--	--
	NA	5/15/2014	--	<50	<250	<250	--	--	--	--
	NA	8/14/2014	--	100	<250	100	--	--	--	--
	NA	11/24/2014	--	<50	<250	<250	--	--	--	--
	NA	3/31/2015	--	57	<250	57	--	--	--	--
	NA	6/29/2015	--	97	<250	97	--	--	--	--
	NA	9/28/2015	--	150	<250	150	--	--	--	--
	NA	3/3/2016	--	<50	<250	<250	--	--	--	--
	NA	6/21/2016	--	86	<250	86	--	--	--	--
	NA	9/16/2016	--	95	<250	95	--	--	--	--
	NA	12/20/2016	--	<50	<250	<250	--	--	--	--
	NA	6/19/2017	--	61	<250	61	--	--	--	--
	NA	9/5/2017	--	100	<250	100	--	--	--	--
	NA	12/20/2017	--	<50	<250	<250	--	--	--	--
	EW-051718-4	5/17/2018	--	<410	<410	<410	--	--	--	--

Table 2
Summary of Groundwater Analytical Results

			Ecology Method NWTPH-Gx (µg/L)	Ecology Method NWTPH-Dx (µg/L)			Volatile Organic Compounds USEPA Method 8021B/8260B (µg/L)			
Well ID	**Sample ID**	**Collection Date**	**TPH-g**	**TPH-d**	**TPH-o**	**Total TPH (C_{12} - C_{36})**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**
MW-2	NS	8/23/2018	--	--	--	--	--	--	--	--
Continued	NS	11/15/2018	--	--	--	--	--	--	--	--
MW-3	NA	8/12/2011	<100	<250	<500	<500	<1	<1	<1	<3
	NA	11/11/2011	<100	65	<250	65	<1	<1	<1	<3
	NA	2/10/2012	<100	100	<250	100	<1	<1	<1	<3
	NA	5/17/2012	<100	53	<250	53	<1	<1	<1	<3
	NA	8/28/2012	<100	130	<250	130	<1	<1	<1	<3
	NA	11/15/2012	<100	120	<280	120	<1	<1	<1	<3
	NA	2/14/2013	<100	150	<250	150	<1	<1	<1	<3
	NA	5/16/2013	<100	200	<250	200	<1	<1	<1	<3
	NA	8/14/2013	<100	140	<250	140	<1	<1	<1	<3
	NA	11/25/2013	--	170	<250	170	--	--	--	--
	NA	2/20/2014	--	160	<250	160	--	--	--	--
	NA	5/15/2014	--	120	<250	120	--	--	--	--
	NA	8/14/2014	--	140	<250	140	--	--	--	--
	NA	11/24/2014	--	130	<250	130	--	--	--	--
	NA	3/31/2015	--	220	<250	220	--	--	--	--
	NA	6/29/2015	--	130	<250	130	--	--	--	--
	NA	9/28/2015	--	110	<250	110	--	--	--	--
	NA	3/3/2016	--	92	<250	92	--	--	--	--
	NA	6/21/2016	--	85	<250	85	--	--	--	--
	NA	9/16/2016	--	100	<250	100	--	--	--	--
	NA	12/20/2016	--	99	<250	99	--	--	--	--
	NA	6/19/2017	--	310	<250	310	--	--	--	--
	NA	9/5/2017	--	210	<250	210	--	--	--	--
	NA	12/20/2017	--	150	<250	150	--	--	--	--
	EW-051718-9	5/17/2018	--	**520**	<400	**520**	--	--	--	--
	NS	8/23/2018	--	--	--	--	--	--	--	--
	EW-111518-1	11/15/2018	--	<390	<390	<390	--	--	--	--
MW-4	NA	8/12/2011	<100	<250	<500	<500	<1	<1	<1	<3
	NA	11/11/2011	<100	72	<250	72	<1	<1	<1	<3
	NA	2/10/2012	<100	150	<250	150	<1	<1	<1	<3
	NA	5/17/2012	<100	160	<250	160	<1	<1	<1	<3
	NA	8/28/2012	<100	200	<250	200	<1	<1	<1	<3
	NA	11/15/2012	<100	220	<250	220	<1	<1	<1	<3
	NA	2/14/2013	<100	220	<250	220	<1	<1	<1	<3
	NA	5/16/2013	<100	210	<250	210	<1	<1	<1	<3
	NA	8/14/2013	<100	200	<250	200	<1	<1	<1	<3
	NA	2/20/2014	--	140	<250	140	--	--	--	--
	NA	5/15/2014	--	140	<250	140	--	--	--	--
	NA	8/14/2014	--	290	<250	290	--	--	--	--
	NA	11/24/2014	--	290	<250	290	--	--	--	--
	NA	3/31/2015	--	320	<250	320	--	--	--	--
	NA	6/29/2015	--	240	<250	240	--	--	--	--
	NA	9/28/2015	--	220	<250	220	--	--	--	--
	NA	3/3/2016	--	130	<250	130	--	--	--	--
	NA	6/21/2016	--	63	<250	63	--	--	--	--
	NA	9/29/2016	--	68	<250	68	--	--	--	--
	NA	12/20/2016	--	78	<250	78	--	--	--	--
	NA	3/24/2017	--	<50	<250	<250	--	--	--	--
	NA	6/19/2017	--	110	<250	110	--	--	--	--
	NA	9/5/2017	--	150	<250	150	--	--	--	--
	NA	1/2/2018	--	<50	<250	<250	--	--	--	--

Table 2
Summary of Groundwater Analytical Results

			Ecology Method NWTPH-Gx (µg/L)	Ecology Method NWTPH-Dx (µg/L)			Volatile Organic Compounds USEPA Method 8021B/8260B (µg/L)			
Well ID	**Sample ID**	**Collection Date**	**TPH-g**	**TPH-d**	**TPH-o**	**Total TPH (C_{12} - C_{36})**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**
MW-4	EW-051718-8	5/17/2018	--	<400	<400	<400	--	--	--	--
Continued	NS	8/23/2018	--	--	--	--	--	--	--	--
	NS	11/15/2018	--	--	--	--	--	--	--	--
MW-5	NA	6/5/2013	<100	160	<250	160	<1	<1	<1	<3
	NA	8/14/2013	<100	56	<250	56	<1	<1	<1	<3
	NA	11/24/2014	<100	<50	<250	<250	--	--	--	--
	NA	3/31/2015	--	52	<250	52	--	--	--	--
	NA	6/29/2015	--	<50	<250	<250	--	--	--	--
	NA	9/28/2015	--	<50	<250	<250	--	--	--	--
	NA	3/3/2016	--	<50	<250	<250	--	--	--	--
	NA	6/21/2016	--	<50	<250	<250	--	--	--	--
	NA	9/16/2016	--	<50	<250	<250	--	--	--	--
	NA	12/20/2016	--	<50	<250	<250	--	--	--	--
	NA	6/19/2017	--	55	<250	55	--	--	--	--
	NA	9/5/2017	--	68	<250	68	--	--	--	--
	NA	1/2/2018	--	<50	<250	<250	--	--	--	--
	EW-051718-5	5/17/2018	--	<380	<380	<380	--	--	--	--
	NS	8/23/2018	--	--	--	--	--	--	--	--
	NS	11/15/2018	--	--	--	--	--	--	--	--
MW-6	NA	6/5/2013	<100	**680**	<250	**680**	<1	<1	<1	<3
	NA	8/14/2013	<100	**790**	<250	**790**	<1	<1	<1	<3
	NA	2/20/2014	--	**740**	<250	**740**	--	--	--	--
	NA	5/15/2014	--	**950**	<250	**950**	--	--	--	--
	NA	8/14/2014	--	**1,200**	<250	**1,200**	--	--	--	--
	NA	11/24/2014	--	**680**	<250	**680**	--	--	--	--
	NA	3/31/2015	--	**750**	<250	**750**	--	--	--	--
	NA	6/29/2015	--	**750**	<250	**750**	--	--	--	--
	NA	9/28/2015	--	**610**	<250	**610**	--	--	--	--
	NA	3/3/2016	--	**1,100**	390	**1,490**	--	--	--	--
	NA	6/21/2016	--	**650**	<250	**650**	--	--	--	--
	NA	9/16/2016	--	340	<250	340	--	--	--	--
	NA	12/20/2016	--	**640**	<250	**640**	--	--	--	--
	NA	3/24/2017	--	**580**	<250	**580**	--	--	--	--
	NA	6/19/2017	--	**970**	280	**1,250**	--	--	--	--
	NA	9/5/2017	--	320	<250	320	--	--	--	--
	NA	1/2/2018	--	240	<250	240	--	--	--	--
	EW-051718-6	5/17/2018	--	**880**	<400	**880**	--	--	--	--
	EW-082318-4	8/23/2018	--	<400	<400	<400	--	--	--	--
	EW-082318-3	11/15/2018	--	<380	<380	<380	--	--	--	--
MW-7	NA	9/16/2016	--	140	<250	140	--	--	--	--
	NA	12/20/2016	--	78	<250	78	--	--	--	--
	NA	3/24/2017	--	<50	<250	<250	--	--	--	--
	NA	6/19/2017	--	100	<250	100	--	--	--	--
	NA	9/5/2017	--	59	<250	59	--	--	--	--
	NA	12/20/2017	--	99	<250	99	--	--	--	--
	EW-051718-7	5/17/2018	--	<380	<380	<380	--	--	--	--
	NS	8/23/2018	--	--	--	--	--	--	--	--
	NS	11/15/2018	--	--	--	--	--	--	--	--
MW-8	NA	10/3/2016	--	290	<250	290	--	--	--	--
	NA	12/20/2016	--	140	<250	140	--	--	--	--
	NA	3/24/2017	--	<50	<250	<250	--	--	--	--
	NA	6/26/2017	--	180	<250	180	--	--	--	--

Table 2
Summary of Groundwater Analytical Results

			Ecology Method NWTPH-Gx (µg/L)	Ecology Method NWTPH-Dx (µg/L)			Volatile Organic Compounds USEPA Method 8021B/8260B (µg/L)			
Well ID	**Sample ID**	**Collection Date**	**TPH-g**	**TPH-d**	**TPH-o**	**Total TPH (C_{12} - C_{36})**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**
MW-8	NA	9/5/2017	--	160	<250	160	--	--	--	--
Continued	NA	12/20/2017	--	140	<250	140	--	--	--	--
	EW-051718-10	5/17/2018	--	**1,900**	**2,800**	**4,700**	--	--	--	--
	EW-060518-1	6/5/2018	--	**850**	**770**	**1,620**	--	--	--	--
	EW-082318-5	8/23/2018	--	450	<380	450	<1.0	<1.0	<1.0	<3.0
	EW-111518-2	11/15/2018	--	<400	<400	<400	--	--	--	--
MW-9	NA	9/5/2017	--	**4,300**	<250	**4,300**	--	--	--	--
	NA	12/20/2017	--	360	<250	360	--	--	--	--
	EW-051718-2	5/17/2018	--	450	<400	450	--	--	--	--
duplicate	EW-051718-3	5/17/2018	--	470	<390	470	--	--	--	--
	EW-082318-1	8/23/2018	--	**790**	<400	**790**	--	--	--	--
duplicate	EW-0823718-2	8/23/2018	--	**700**	<400	**700**	--	--	--	--
	EW-111518-4	11/15/2018	--	<390	<390	<390	--	--	--	--
duplicate	EW-111518-5	11/15/2018	--	<400	<400	<400	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[a]			**800/1,000[b]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**

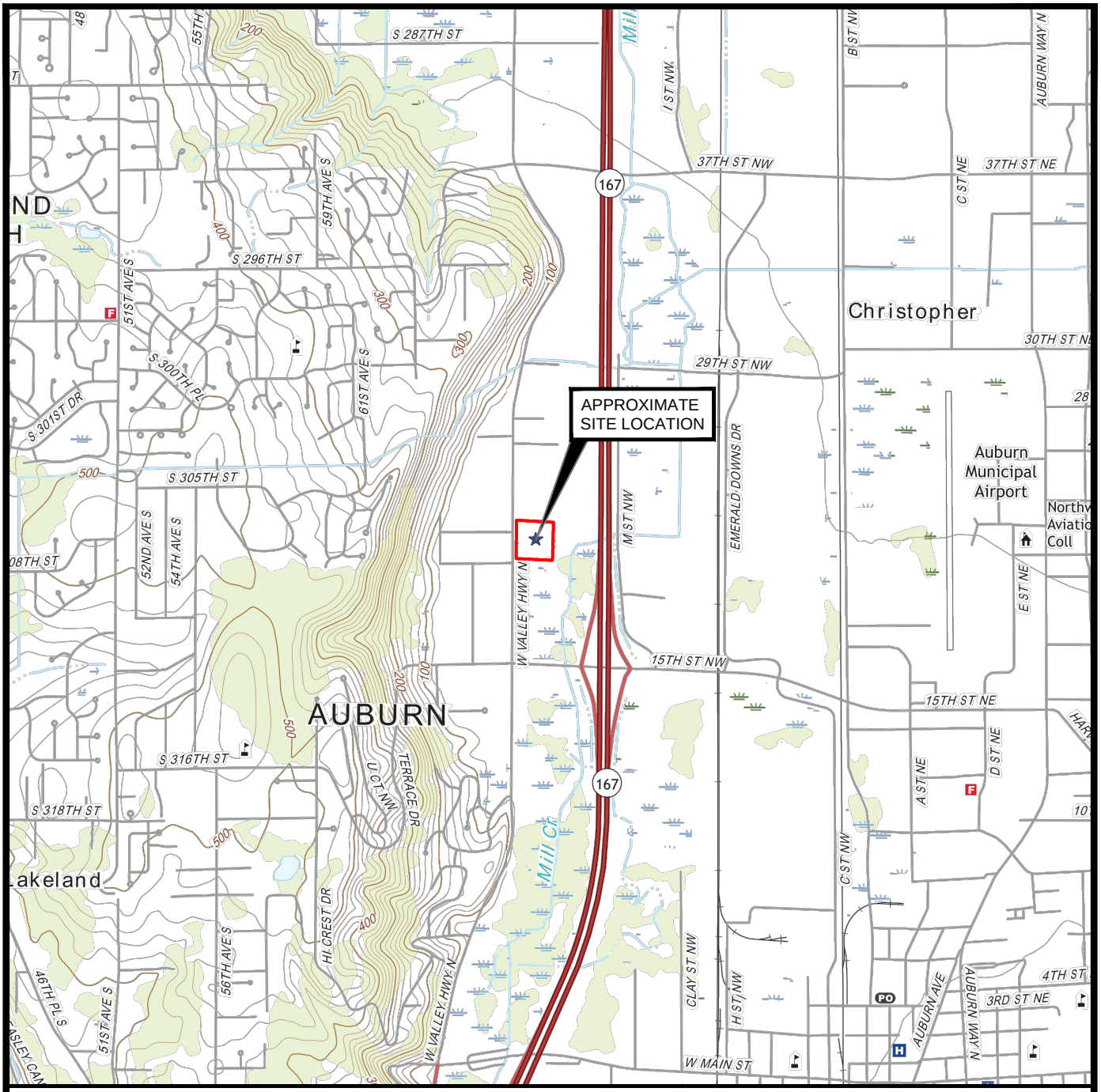
Notes:

MTCA - Model Toxics Control Act
USEPA - United States Environmental Protection Agency
CCL - Contaminant Cleanup Level
Bold - Value exceeds MTCA Method A cleanup level
TPH-d - diesel range total petroleum hydrocarbons
TPH-g - gasoline range total petroleum hydrocarbons
TPH-o - total petroleum hydrocarbons in the oil range

µg/L - micrograms per liter
-- - Not Analyzed
<1 - Not reported at, or above the indicated laboratory method reporting limit
NS - Not Sampled
NA - Not Applicable

[a] MTCA Method A Groundwater Cleanup Levels for Unrestricted Land Uses are referenced from the February 12, 2001. *Washington Department of Ecology Model Toxics Control Act Cleanup Regulation Chapter 173-340,* Table 720-1.

[b] 800 µg/L if benzene has been detected in groundwater; 1,000 µg/L if benzene has not been detected in groundwater.



SOURCE: U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLE
AUBURN, WA AND POVERTY BAY, WA (2017)

SCALE FEET
0 2,000 4,000

N

Environmental Technologies Group
1176 West 7th Avenue
Eugene, Oregon 97402
phone: 541-743-2600
fax: 541-743-2471
www.etgroupinc.com

FIGURE TITLE	***SITE LOCATION MAP***
DOCUMENT TITLE	FOURTH QUARTER 2018 GROUNDWATER MONITORING REPORT
CLIENT	ESTES EXPRESS LINES, INC.
LOCATION	FORMER PROVISIONERS EXPRESS FACILITY 2102 WEST VALLEY HIGHWAY NORTH, AUBURN, WASHINGTON

DATE	11/27/18
SCALE	AS SHOWN
DESIGNED BY	DJL
APPROVED BY	DJL
DRAWN BY	SRM
PROJECT NUMBER	2004-004.002
FIGURE NUMBER	1

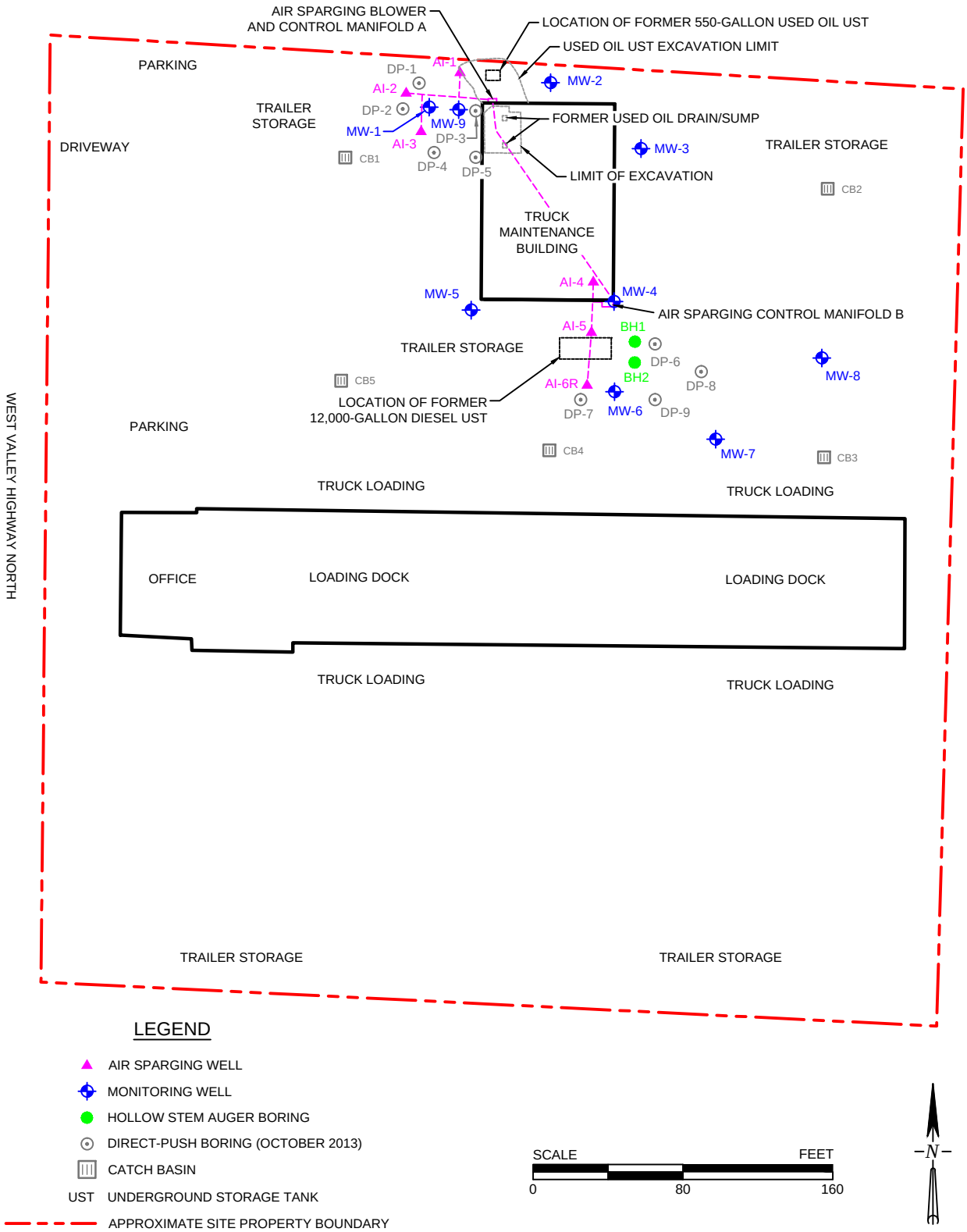


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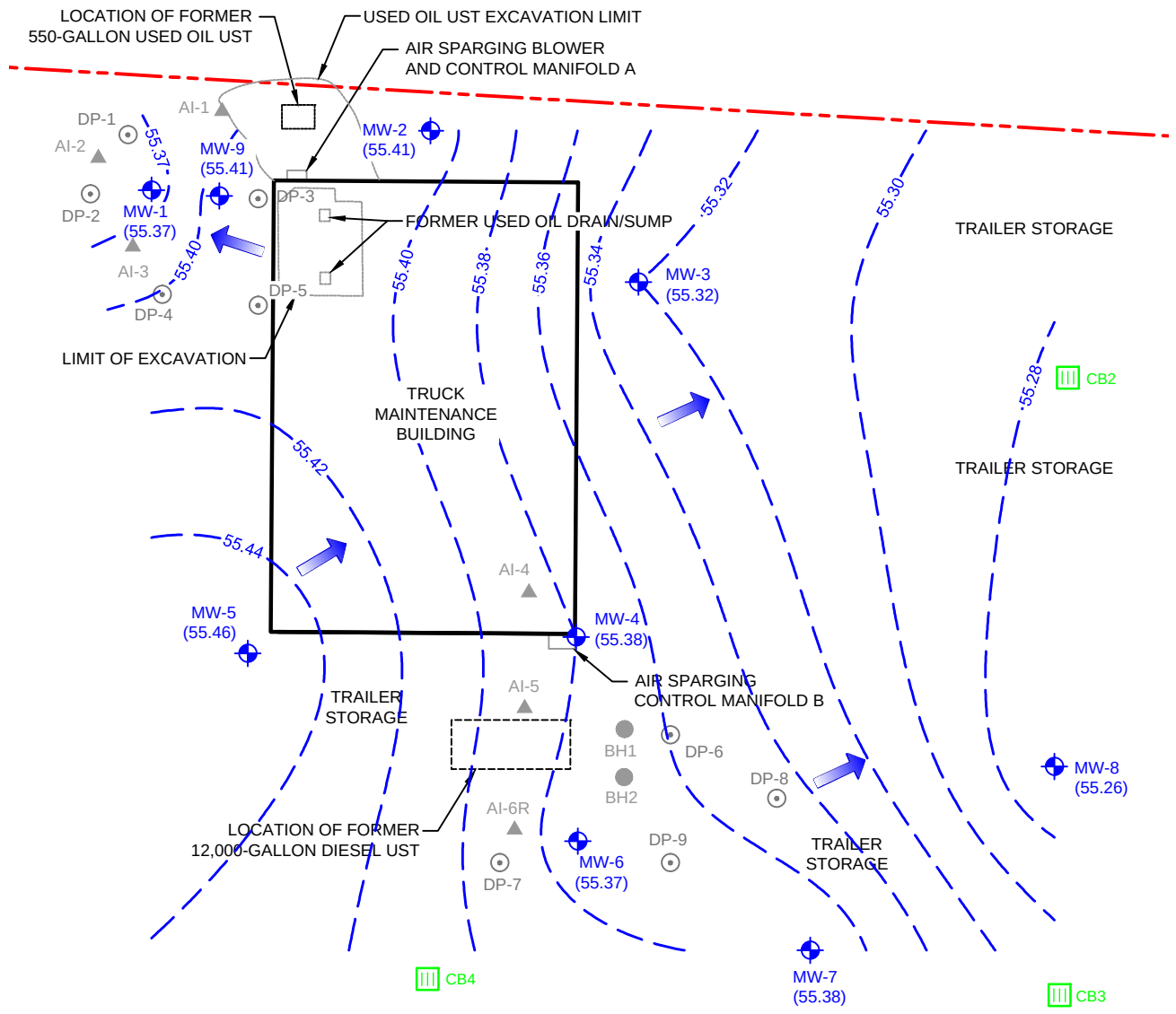
FIGURE TITLE	***SITE MAP***
DOCUMENT TITLE	FOURTH QUARTER 2018 GROUNDWATER MONITORING REPORT
CLIENT	ESTES EXPRESS LINES, INC.
LOCATION	FORMER PROVISIONERS EXPRESS FACILITY 2102 WEST VALLEY HIGHWAY NORTH, AUBURN, WASHINGTON

DATE	11/27/18
SCALE	AS SHOWN
DESIGNED BY	DJL
APPROVED BY	DJL
DRAWN BY	SRM
PROJECT NUMBER	2004-004.002
FIGURE NUMBER	2



LEGEND

- 55.40 — GROUNDWATER ELEVATION CONTOUR
- (55.37) — GROUNDWATER ELEVATION
- APPROXIMATE FLOW DIRECTION OF SHALLOW GROUNDWATER
- AIR SPARGING WELL
- MONITORING WELL
- HOLLOW STEM AUGER BORING
- DIRECT-PUSH BORING (OCTOBER 2013)
- CATCH BASIN
- UST — UNDERGROUND STORAGE TANK
- APPROXIMATE SITE PROPERTY BOUNDARY

TRUCK LOADING

LOADING DOCK

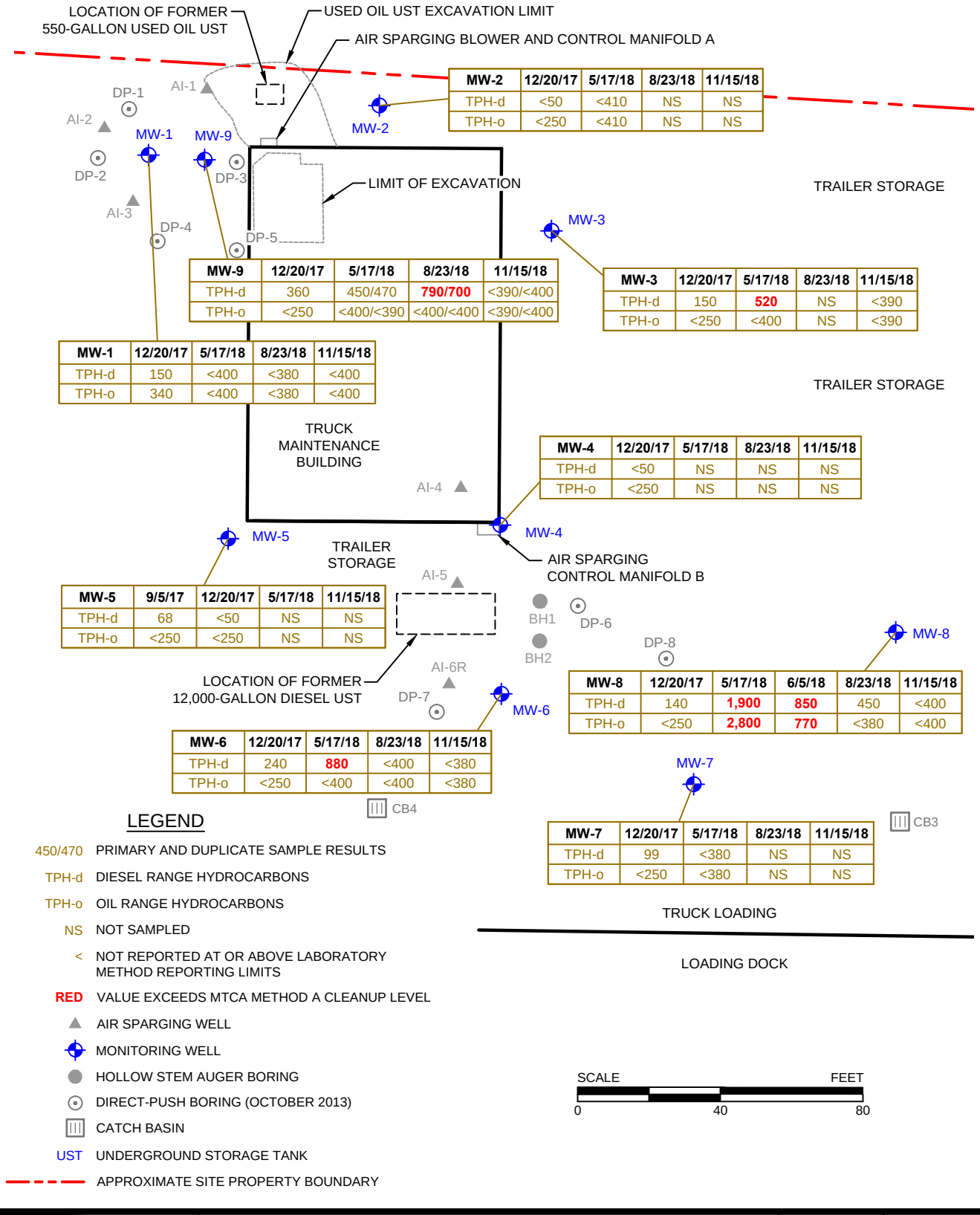
SCALE FEET
0 40 80

N

etg Environmental Technologies Group
1176 West 7th Avenue
Eugene, Oregon 97402
phone: 541-743-2600
fax: 541-743-2471
www.etgroupinc.com

FIGURE TITLE	***GROUNDWATER CONTOUR NOVEMBER 15, 2018***
DOCUMENT TITLE	FOURTH QUARTER 2018 GROUNDWATER MONITORING REPORT
CLIENT	ESTES EXPRESS LINES, INC.
LOCATION	FORMER PROVISIONERS EXPRESS FACILITY 2102 WEST VALLEY HIGHWAY NORTH, AUBURN, WASHINGTON

DATE	11/27/18
SCALE	AS SHOWN
DESIGNED BY	DJL
APPROVED BY	DJL
DRAWN BY	SRM
PROJECT NUMBER	2004-004.002
FIGURE NUMBER	3



MW-2	12/20/17	5/17/18	8/23/18	11/15/18
TPH-d	<50	<410	NS	NS
TPH-o	<250	<410	NS	NS

MW-9	12/20/17	5/17/18	8/23/18	11/15/18
TPH-d	360	450/470	**790/700**	<390/<400
TPH-o	<250	<400/<390	<400/<400	<390/<400

MW-3	12/20/17	5/17/18	8/23/18	11/15/18
TPH-d	150	**520**	NS	<390
TPH-o	<250	<400	NS	<390

MW-1	12/20/17	5/17/18	8/23/18	11/15/18
TPH-d	150	<400	<380	<400
TPH-o	340	<400	<380	<400

MW-4	12/20/17	5/17/18	8/23/18	11/15/18
TPH-d	<50	NS	NS	NS
TPH-o	<250	NS	NS	NS

MW-5	9/5/17	12/20/17	5/17/18	11/15/18
TPH-d	68	<50	NS	NS
TPH-o	<250	<250	NS	NS

MW-8	12/20/17	5/17/18	6/5/18	8/23/18	11/15/18
TPH-d	140	**1,900**	**850**	450	<400
TPH-o	<250	**2,800**	**770**	<380	<400

MW-6	12/20/17	5/17/18	8/23/18	11/15/18
TPH-d	240	**880**	<400	<380
TPH-o	<250	<400	<400	<380

MW-7	12/20/17	5/17/18	8/23/18	11/15/18
TPH-d	99	<380	NS	NS
TPH-o	<250	<380	NS	NS

LEGEND

- 450/470 — PRIMARY AND DUPLICATE SAMPLE RESULTS
- TPH-d — DIESEL RANGE HYDROCARBONS
- TPH-o — OIL RANGE HYDROCARBONS
- NS — NOT SAMPLED
- < — NOT REPORTED AT OR ABOVE LABORATORY METHOD REPORTING LIMITS
- **RED** — VALUE EXCEEDS MTCA METHOD A CLEANUP LEVEL
- AIR SPARGING WELL
- MONITORING WELL
- HOLLOW STEM AUGER BORING
- DIRECT-PUSH BORING (OCTOBER 2013)
- CATCH BASIN
- UST — UNDERGROUND STORAGE TANK
- APPROXIMATE SITE PROPERTY BOUNDARY

Environmental Technologies Group
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FIGURE TITLE	***GROUNDWATER ANALYTICAL RESULTS***
DOCUMENT TITLE	FOURTH QUARTER 2018 GROUNDWATER MONITORING REPORT
CLIENT	ESTES EXPRESS LINES, INC.
LOCATION	FORMER PROVISIONERS EXPRESS FACILITY 2102 WEST VALLEY HIGHWAY NORTH, AUBURN, WASHINGTON

DATE	11/27/18
SCALE	AS SHOWN
DESIGNED BY	DJL
APPROVED BY	DJL
DRAWN BY	SRM
PROJECT NUMBER	2004-004.002
FIGURE NUMBER	4

ATTACHMENT A
FIELD SAMPLING DATA SHEETS

FIELD SAMPLING DATA SHEET
LOW-FLOW GROUNDWATER SAMPLING

PROJECT NAME: ESTES West WELL ID: MW-3

SITE ADDRESS: Auburn, WA LABEL CODE: EW-11 15 18- 1

DUPLICATE ID: _____

Wind From	N	NE	E	SE	S	SW	W	NW	Light	Medium	Heavy
Weather	Sunny		Cloudy		Rain		_____?		Temperature:	_____°F	_____°C

WELL DATA

Date	Time	Casing Diameter	DT-Product	DT-Water	Product Thickness
11/15/18		2	—	5.48	—

PUMP/INTAKE DEPTH (ft btoc): _____

WATER QUALITY DATA

Time	Liters	PH	Temp	DO	Spec. Cond.	Redox	Turbidity
0800	1	6.20	15.0	1.85	654	-44.3	CLEAR
0802	1.8	6.20	15.0	1.92	649	-44.4	"
0804	2.6	6.20	15.0	1.91	642	-44.7	"
0806	3.2	6.20	15.0	1.91	641	-44.7	"

GROUNDWATER SAMPLE DATA

Sample Date: 11/15/18

Sample Time: 0810

Bottle Type	√	Amount & Volume		Preservative	Filter	
VOA Glass			40 ml	HCl	No	
Amber Glass	✓	2	250 ml	HCl	No	
Poly			250 ml			
Total Bottles		2				

Notes: PUMP @ 0.4 LPM & NO DRAW DOWN

Sampled By: Steve McCray Signature: _____

FIELD SAMPLING DATA SHEET
LOW-FLOW GROUNDWATER SAMPLING

PROJECT NAME: ESTES West WELL ID: MW-8

SITE ADDRESS: Auburn, WA LABEL CODE: EW-11 15 18-2

DUPLICATE ID: _____

Wind From	N	NE	E	SE	S	SW	W	NW	Light	Medium	Heavy
Weather	Sunny		Cloudy		Rain		_____?		Temperature:	_____°F	_____°C

WELL DATA

Date	Time	Casing Diameter	DT-Product	DT-Water	Product Thickness
11/15/18		2	—	4.44	—

PUMP/INTAKE DEPTH (ft btoc): _____

WATER QUALITY DATA

Time	Liters	PH	Temp	DO	Spec. Cond.	Redox	Turbidity
0825	0.5	6.36	16.3	1.97	711	-45.9	CLEAR
0827	1.1 ~~0.8~~	6.36	16.4	2.01	710	-46.7	"
0829	1.7 ~~1.4~~	6.37	16.4	2.02	710	-47.7	"
0831	2.3	6.36	16.4	2.03	710	-48.0	"

GROUNDWATER SAMPLE DATA

Sample Date: 11/15/18

Sample Time: 0835

Bottle Type	√	Amount & Volume		Preservative	Filter	
VOA Glass			40 ml	HCl	No	
Amber Glass	√	2	250 ml	HCl	No	
Poly			250 ml			
Total Bottles		2				

Notes: PUMP RATE 0.3 LPM

Sampled By: Steve McCray Signature: _____

FIELD SAMPLING DATA SHEET
LOW-FLOW GROUNDWATER SAMPLING

PROJECT NAME: ESTES West WELL ID: MW-6

SITE ADDRESS: Auburn, WA LABEL CODE: EW-11 15 18- 3

DUPLICATE ID: _____

Wind From	N	NE	E	SE	S	SW	W	NW	Light	Medium	Heavy
Weather	Sunny		Cloudy		Rain		_____?		Temperature:	____°F	____°C

WELL DATA

Date	Time	Casing Diameter	DT-Product	DT-Water	Product Thickness
11/15/18		2	—	5.39	—

PUMP/INTAKE DEPTH (ft btoc): _____

WATER QUALITY DATA

Time	Liters	PH	Temp	DO	Spec. Cond.	Redox	Turbidity
0848	1	6.38	17.6	1.22	488	-40.6	CLEAR
0850	2	6.32	17.7	1.21	486	-40.4	"
0852	3	6.32	17.8	1.21	486	-41.0	"
0854	4	6.31	17.9	1.22	485	-41.4	"

GROUNDWATER SAMPLE DATA

Sample Date: 11/15/18

Sample Time: 0900

Bottle Type	√	Amount & Volume		Preservative	Filter	
VOA Glass			40 ml	HCl	No	
Amber Glass	✓	2	250 ml	HCl	No	
Poly			250 ml			
Total Bottles		2				

Notes: NO DRAW DOWN @ 0.5 LPM

Sampled By: Steve McCray Signature: Steve McCray

FIELD SAMPLING DATA SHEET
LOW-FLOW GROUNDWATER SAMPLING

PROJECT NAME: ESTES West WELL ID: MW-9

SITE ADDRESS: Auburn, WA LABEL CODE: EW-11 15 18- 4

DUPLICATE ID: EW-111518-5

Wind From	N	NE	E	SE	S	SW	W	NW	Light	Medium	Heavy
Weather	Sunny		Cloudy		Rain		_____?		Temperature:	____°F	____°C

WELL DATA

Date	Time	Casing Diameter	DT-Product	DT-Water	Product Thickness
11/15/18		2	—	5.50	—

PUMP/INTAKE DEPTH (ft btoc): _____

WATER QUALITY DATA

Time	Liters	PH	Temp	DO	Spec. Cond.	Redox	Turbidity
0926	0.4	6.14	15.0	0.86	402	140.1	yellow TINT
0928	0.6	6.14	15.0	0.86	402	140.1	"
0930	0.8	6.13	15.0	0.84	402	140.1	CLEAR

GROUNDWATER SAMPLE DATA

Sample Date: 11/15/18

Sample Time: 0910 DUPLICATE TIME 0935

Bottle Type	√	Amount & Volume		Preservative	Filter	
VOA Glass			40 ml	HCl	No	
Amber Glass	√	2x2	250 ml	HCl	No	
Poly			250 ml			
Total Bottles		4				

Notes: PUMP RATE 100 ml/min

Sampled By: Steve McCray Signature: Steve McCray

FIELD SAMPLING DATA SHEET
LOW-FLOW GROUNDWATER SAMPLING

PROJECT NAME: ESTES West WELL ID: MW-1

SITE ADDRESS: Auburn, WA LABEL CODE: EW-11 15 18-6

DUPLICATE ID: _____

Wind From	N	NE	E	SE	S	SW	W	NW	Light	Medium	Heavy
Weather	Sunny		Cloudy		Rain		_____?		Temperature:	____°F	____°C

WELL DATA

Date	Time	Casing Diameter	DT-Product	DT-Water	Product Thickness
11/15/18		2	—	5.40	—

PUMP/INTAKE DEPTH (ft btoc): _____

WATER QUALITY DATA

Time	Liters	PH	Temp	DO	Spec. Cond.	Redox	Turbidity
0950	0.5	6.89	15.1	7.79	198	131.0	clear
0952	0.7	6.89	15.1	7.80	197	131.2	"
0954	0.9	6.89	15.1	7.77	193	131.8	"
	IT						

GROUNDWATER SAMPLE DATA

Sample Date: 11/15/18

Sample Time: 1000

Bottle Type	√	Amount & Volume		Preservative	Filter	
VOA Glass			40 ml	HCl	No	
Amber Glass	√	2	250 ml	HCl	No	
Poly			250 ml			
Total Bottles		2				

Notes: PUMP RATE 100 ML/MIN

Sampled By: Steve McCray Signature: Steve McCray

ESTES WEST GW SAMPLE & BLOWER CHECK

111518

0630 ETA ONSITE. PREP FOR SAMPLES
~~TURN OFF BLOWER & BLOWER CHECK~~ BLOWER WAS ON

0700 BEGIN WL READINGS & SAMPLE

WELL	DTW	WELL	DTW
*MW-1	5.40	*MW-6	5.39
MW-2	5.44	MW-7	4.49
*MW-3	5.48	*MW-8	4.44
MW-4	5.55	*MW-9	5.50
MW-5	5.44		

* = SAMPLE GW

1000 FINISH GW SAMPLE, DUMP PURGE WATER, TURN ON SYSTEM. FILL OUT DATA SHEET

1045 ETA OFFSITE TO DROP SAMPLES

NOTE COLLECTED DTW FOR WELLS ~~AWAY FROM~~ NEAR AIR INJECTION WELLS FIRST TO LET WLS STABILIZE.

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

November 21, 2018

Dan Landry
Environmental Technologies Group, Inc
1176 West 7th Avenue
Eugene, OR 97402

RE: Project: 2004-004.002 Estes West Trucki
Pace Project No.: 10455808

Dear Dan Landry:
Enclosed are the analytical results for sample(s) received by the laboratory on November 16, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jennifer Gross
jennifer.gross@pacelabs.com
(206)957-2426
Project Manager

Enclosures

cc: Steve McCray, ETG
Dave Seaver, Environmental Technologies Group, Inc.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 2004-004.002 Estes West Trucki
Pace Project No.: 10455808

Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon NwTPH Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C
West Virginia DEP Certification #: 382
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 2004-004.002 Estes West Trucki
Pace Project No.: 10455808

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10455808001	**EW-111518-1**	Water	11/15/18 08:10	11/16/18 11:30
10455808002	**EW-111518-2**	Water	11/15/18 08:35	11/16/18 11:30
10455808003	**EW-111518-3**	Water	11/15/18 09:00	11/16/18 11:30
10455808004	**EW-111518-4**	Water	11/15/18 09:10	11/16/18 11:30
10455808005	**EW-111518-5**	Water	11/15/18 09:35	11/16/18 11:30
10455808006	**EW-111518-6**	Water	11/15/18 10:00	11/16/18 11:30

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 2004-004.002 Estes West Trucki
Pace Project No.: 10455808

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10455808001	**EW-111518-1**	NWTPH-Dx	EC2	4	PASI-M
10455808002	**EW-111518-2**	NWTPH-Dx	EC2	4	PASI-M
10455808003	**EW-111518-3**	NWTPH-Dx	EC2	4	PASI-M
10455808004	**EW-111518-4**	NWTPH-Dx	EC2	4	PASI-M
10455808005	**EW-111518-5**	NWTPH-Dx	EC2	4	PASI-M
10455808006	**EW-111518-6**	NWTPH-Dx	EC2	4	PASI-M

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 2004-004.002 Estes West Trucki
Pace Project No.: 10455808

Sample: EW-111518-1 **Lab ID: 10455808001** Collected: 11/15/18 08:10 Received: 11/16/18 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS LV	Analytical Method: NWTPH-Dx		Preparation Method: EPA Mod. 3510C					
Diesel Fuel Range	ND	mg/L	0.39	1	11/19/18 18:03	11/20/18 11:31	68334-30-5	
Motor Oil Range	ND	mg/L	0.39	1	11/19/18 18:03	11/20/18 11:31		
Surrogates								
o-Terphenyl (S)	81	%.	50-150	1	11/19/18 18:03	11/20/18 11:31	84-15-1	
n-Triacontane (S)	83	%.	50-150	1	11/19/18 18:03	11/20/18 11:31	638-68-6	

Sample: EW-111518-2 **Lab ID: 10455808002** Collected: 11/15/18 08:35 Received: 11/16/18 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS LV	Analytical Method: NWTPH-Dx		Preparation Method: EPA Mod. 3510C					
Diesel Fuel Range	ND	mg/L	0.40	1	11/19/18 18:03	11/20/18 11:42	68334-30-5	
Motor Oil Range	ND	mg/L	0.40	1	11/19/18 18:03	11/20/18 11:42		
Surrogates								
o-Terphenyl (S)	78	%.	50-150	1	11/19/18 18:03	11/20/18 11:42	84-15-1	
n-Triacontane (S)	80	%.	50-150	1	11/19/18 18:03	11/20/18 11:42	638-68-6	

Sample: EW-111518-3 **Lab ID: 10455808003** Collected: 11/15/18 09:00 Received: 11/16/18 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS LV	Analytical Method: NWTPH-Dx		Preparation Method: EPA Mod. 3510C					
Diesel Fuel Range	ND	mg/L	0.38	1	11/19/18 18:03	11/20/18 11:54	68334-30-5	
Motor Oil Range	ND	mg/L	0.38	1	11/19/18 18:03	11/20/18 11:54		
Surrogates								
o-Terphenyl (S)	80	%.	50-150	1	11/19/18 18:03	11/20/18 11:54	84-15-1	
n-Triacontane (S)	83	%.	50-150	1	11/19/18 18:03	11/20/18 11:54	638-68-6	

Sample: EW-111518-4 **Lab ID: 10455808004** Collected: 11/15/18 09:10 Received: 11/16/18 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS LV	Analytical Method: NWTPH-Dx		Preparation Method: EPA Mod. 3510C					
Diesel Fuel Range	ND	mg/L	0.39	1	11/19/18 18:03	11/20/18 12:05	68334-30-5	
Motor Oil Range	ND	mg/L	0.39	1	11/19/18 18:03	11/20/18 12:05		
Surrogates								
o-Terphenyl (S)	65	%.	50-150	1	11/19/18 18:03	11/20/18 12:05	84-15-1	
n-Triacontane (S)	67	%.	50-150	1	11/19/18 18:03	11/20/18 12:05	638-68-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 2004-004.002 Estes West Trucki
Pace Project No.: 10455808

Sample: EW-111518-5 **Lab ID: 10455808005** Collected: 11/15/18 09:35 Received: 11/16/18 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS LV	Analytical Method: NWTPH-Dx Preparation Method: EPA Mod. 3510C							
Diesel Fuel Range	ND	mg/L	0.40	1	11/19/18 18:03	11/20/18 12:16	68334-30-5	
Motor Oil Range	ND	mg/L	0.40	1	11/19/18 18:03	11/20/18 12:16		
Surrogates								
o-Terphenyl (S)	76	%.	50-150	1	11/19/18 18:03	11/20/18 12:16	84-15-1	
n-Triacontane (S)	80	%.	50-150	1	11/19/18 18:03	11/20/18 12:16	638-68-6	

Sample: EW-111518-6 **Lab ID: 10455808006** Collected: 11/15/18 10:00 Received: 11/16/18 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS LV	Analytical Method: NWTPH-Dx Preparation Method: EPA Mod. 3510C							
Diesel Fuel Range	ND	mg/L	0.40	1	11/19/18 18:03	11/20/18 12:28	68334-30-5	
Motor Oil Range	ND	mg/L	0.40	1	11/19/18 18:03	11/20/18 12:28		
Surrogates								
o-Terphenyl (S)	70	%.	50-150	1	11/19/18 18:03	11/20/18 12:28	84-15-1	
n-Triacontane (S)	74	%.	50-150	1	11/19/18 18:03	11/20/18 12:28	638-68-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 2004-004.002 Estes West Trucki
Pace Project No.: 10455808

QC Batch: 576472 Analysis Method: NWTPH-Dx
QC Batch Method: EPA Mod. 3510C Analysis Description: NWTPH-Dx GCS LV
Associated Lab Samples: 10455808001, 10455808002, 10455808003, 10455808004, 10455808005, 10455808006

METHOD BLANK: 3128264 Matrix: Water
Associated Lab Samples: 10455808001, 10455808002, 10455808003, 10455808004, 10455808005, 10455808006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range	mg/L	ND	0.40	11/20/18 10:12	
Motor Oil Range	mg/L	ND	0.40	11/20/18 10:12	
n-Triacontane (S)	%.	85	50-150	11/20/18 10:12	
o-Terphenyl (S)	%.	84	50-150	11/20/18 10:12	

LABORATORY CONTROL SAMPLE & LCSD: 3128265 3128266

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/L	2	1.6	1.6	78	78	50-150	1	20	
Motor Oil Range	mg/L	2	1.6	1.7	81	83	50-150	2	20	
n-Triacontane (S)	%.				84	80	50-150			
o-Terphenyl (S)	%.				81	83	50-150			

SAMPLE DUPLICATE: 3128267

Parameter	Units	10455695001 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/L	0.56	0.55	2	30	
Motor Oil Range	mg/L	ND	ND		30	
n-Triacontane (S)	%.	80	83	8		
o-Terphenyl (S)	%.	77	80	8		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 2004-004.002 Estes West Trucki
Pace Project No.: 10455808

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2004-004.002 Estes West Trucki
Pace Project No.: 10455808

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10455808001	**EW-111518-1**	EPA Mod. 3510C	576472	NWTPH-Dx	576634
10455808002	**EW-111518-2**	EPA Mod. 3510C	576472	NWTPH-Dx	576634
10455808003	**EW-111518-3**	EPA Mod. 3510C	576472	NWTPH-Dx	576634
10455808004	**EW-111518-4**	EPA Mod. 3510C	576472	NWTPH-Dx	576634
10455808005	**EW-111518-5**	EPA Mod. 3510C	576472	NWTPH-Dx	576634
10455808006	**EW-111518-6**	EPA Mod. 3510C	576472	NWTPH-Dx	576634

CHAIN-OF-CUSTODY / Analytical Request Document

Pace Analytical® www.pacelabs.com

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

2301710

Section A Required Client Information:

Company: ETG
Address: 1176 W. 7th Ave
Eugene, OR
Email To: dlandry@etgroupinc.com
Phone: 541-743-2600 Fax:
Requested Due Date/TAT: STANDARD

Section B Required Project Information:

Report To:
Copy To:
Purchase Order No.:
Project Name: ESTES WEST TRUCKING
Project Number: 2004-004.002

Section C Invoice Information:

Attention:
Company Name: ETG
Address: 1176 W. 7th Ave
Pace Quote Reference:
Pace Project Manager: JENNIFER GROSS
Pace Profile #: 27530

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: WA

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE)

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

WO# : 10455808

10455808

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: NWTPH-Dx (Diesel and Motor Oil)	Resi	Pace Project No./ Lab I.D.
1	EW-111518-1	WT	G			11/15/18	0810		2				X					X		001
2	EW-111518-2						0835						X					X		002
3	EW-111518-3						0900						X					X		003
4	EW-111518-4						0910						X					X		004
5	EW-111518-5						0935						X					X		005
6	EW-111518-6						1000						X					X		006
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Steve McCray / ETG	11/15/18	1030	PACE	11/16/18	1130	20 4 4 4

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: STEVE MCCRAY

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 11/15/18

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
20	4	4	4

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-C-010-rev.00, 09Nov2017

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 31Oct2018 Page 1 of 2
	Document No.: **F-MN-L-213-rev.24**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: ETCT

Project #: **WO#: 10455808**

PM: JMG **Due Date: 11/27/18**

CLIENT: ET Group

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ SpeeDee ☐ Other:

Tracking Number: 448677900453

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No **Seals Intact?** ☒ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☒ Yes ☐ No

Thermometer Used: ☐ G87A9170600254 ☒ G87A9155100842 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Dry ☐ Melted

Cooler Temp Read (°C): 2.0 **Cooler Temp Corrected (°C):** 2.0 **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Correction Factor:** True **Date and Initials of Person Examining Contents:** AS 11/16/18

USDA Regulated Soil (☒ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present?	☒ Yes	☐ No		1.
Chain of Custody Filled Out?	☒ Yes	☐ No		2.
Chain of Custody Relinquished?	☒ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		6.
Rush Turn Around Time Requested?	☐ Yes	☒ No		7.
Sufficient Volume?	☒ Yes	☐ No		8.
Correct Containers Used? -Pace Containers Used?	☒ Yes ☒ Yes	☐ No ☐ No		9.
Containers Intact?	☒ Yes	☐ No		10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11. Note if sediment is visible in the dissolved container
Is sufficient information available to reconcile the samples to the COC? Matrix: WT	☒ Yes	☐ No		12.
All containers needing acid/base preservation have been checked? All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐ Yes ☐ Yes ☒ Yes	☐ No ☐ No ☐ No	☒ N/A ☒ N/A ☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH Positive for Res. Chlorine? Y N Sample # Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Present? Trip Blank Custody Seals Present? Pace Trip Blank Lot # (if purchased): N/A	☐ Yes ☐ Yes	☐ No ☐ No	☒ N/A ☒ N/A	15.

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: Date/Time: **Field Data Required?** ☐ Yes ☐ No

Comments/Resolution:

Project Manager Review: Date: 11/16/2018

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: AS

ATTACHMENT C
TREATMENT SYSTEM DATA SHEETS

Air Sparging Treatment System Data Sheet
Former Provisioners Express Facility
Auburn, Washington

Date: 11/15/18 ***Time:*** 10:40

Operation Parameters:

AS Blower Pressure 11.75 psi

Air Sparging Wells:	AS Well ID	Pressure (psi)	Flow Rate (cfm)
Manifold A	AS-1	14	< 0.5
	AS-2	11	< 0.5
	AS-3	11.5	< 0.5
Manifold B	AS-3	11.75	< 2
	AS-4	19	< 2
	AS-5	16	< 2

System Inspection Checks:

Condensate Drain Blow Down (Manifold A) ✓ ✓
Condensate Drain Blow Down (Manifold B) ✓
Inspect AS Blower Filter ✓ *
Inspect AS Blower Enclosure Cooling Fan ✓

Comments: * EXTERNAL BLOWER FILTER APPEARS CLEAN