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September 21, 2018
Project 2004-004.002

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

Re: Third 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 third 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 August 23, 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).

GROUNDWATER MONITORING

On August 23, 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-6, MW-8, and MW-9. Depth-to-water measurements and groundwater elevation data are provided in Table 1. On August 21, 2018, approximately 36-hours prior to the monitoring event, operation of the air injection system was suspended.

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. At the request of Ecology, the groundwater sample from MW-8 was also analyzed for: full list volatile organic compounds (VOCs) by USEPA Method 8260B, carcinogenic polynuclear aromatic hydrocarbons (cPAHs) by USEPA Method 8270D Selected Ion Monitoring (SIM), total lead by USEPA Method 6010D, and polychlorinated biphenyls (PCBs) by USEPA Method 8082A. 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 August 23, 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 August 23, 2018 groundwater monitoring event.

Groundwater Analytical Results

A summary of select laboratory analytical results for groundwater samples collected from monitoring wells MW-1, MW-6, MW-8, and MW-9 on August 23, 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-6, MW-8, and MW-9 on August 23, 2018 indicated the following:

Diesel Range Hydrocarbons

- TPH-d was reported above the laboratory MRL in the groundwater samples collected from well MW-8, and the primary and duplicate samples collected from well MW-9 at concentrations ranging from 450 micrograms per liter (µg/L) in the groundwater sample collected from monitoring well MW-8 to 790 µg/L in the primary groundwater sample collected from monitoring well MW-9. The reported results for the primary and duplicate samples collected from MW-9 were above the Ecology MTCA Method A CUL (500 µg/L).

  TPH-d was not reported at, or above, the laboratory MRL in the groundwater samples collected from monitoring wells MW-1 and MW-6.

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-6, MW-8 and MW-9.

Total Diesel and Oil Range Hydrocarbons

- Total TPH-d and TPH-o was reported above the Ecology MTCA Method A CUL (500 µg/L) in the primary and duplicate groundwater samples collected from well MW-9 at concentrations of 790 and 700 µg/L, respectively.

- Total TPH-d and TPH-o was reported above the laboratory MRL but below the Ecology MTCA Method A CUL in the groundwater sample collected from well MW-8 at a concentration of 450 µg/L.

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

VOCs

- VOCs were not reported at, or above, the laboratory MRL in the groundwater sample collected from well MW-8.

cPAHs

- cPAHs were not reported at, or above, the laboratory MRL in the groundwater sample collected from well MW-8.

PCBs

- PCBs were not reported at, or above, the laboratory MRL in the groundwater sample collected from well MW-8.

Total Lead

- Total lead was not reported at, or above, the laboratory MRL in the groundwater sample collected from wells MW-8.

REMEDIAL SYSTEM OPERATION

On August 9, 2018, the air sparging system was inspected, and flow and pressure operational data collected. On August 21, 2018 at 11:00 AM, operation of the air injection system was suspended for the August 23, 2018 groundwater monitoring event. Following completion of the monitoring event, a system maintenance event was completed. The external filter for the air sparging system blower was replaced and the internal air filters were cleaned. The air sparging system resumed operations after completion of the maintenance event. Copies of the air sparging treatment system data sheets (TSDS) are provided as Attachment C.

Dissolved oxygen data collected during the August 2018 monitoring event (Table 1) indicate lower concentrations in groundwater downgradient of the injection wells, indicative of microbial activity in the subsurface.

Based on the August 2018 monitoring results, air injection system operation will continue until a conditional NFA has been completed at the Site. Continued operation will provide subsurface oxygen to enhance the natural attenuation of residual petroleum hydrocarbons in soil and groundwater near MW-1, MW-4, MW-6, and MW-9.

SCHEDULED ACTIONS

The fourth quarter groundwater monitoring event is scheduled to occur in November 2018. Groundwater level measurements were be collected from monitoring wells MW-1 through MW-9. Groundwater samples will be collected from monitoring wells MW-1, MW-6, MW-8, and MW-9 and analyzed for TPH-d and TPH-o.

If there are any questions regarding this report please call.

Sincerely,

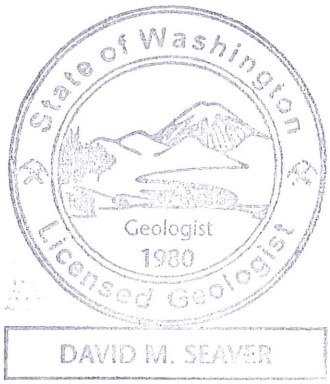
Environmental Technologies Group, Inc.

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

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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
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

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
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

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
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
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
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
	06/16/17	0.28	4.21	55.49	-0.54
	09/05/17	0.34	5.31	54.39	-1.10
	12/20/17	1.39	3.78	55.92	1.53

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 Continued	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
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

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	--	--	--	--
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	--	--	--	--
	NS	8/23/2018	--	--	--	--	--	--	--	--

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-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	--	--	--	--	--	--	--	--
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	--	--	--	--
	EW-051718-8	5/17/2018	--	<400	<400	<400	--	--	--	--
	NS	8/23/2018	--	--	--	--	--	--	--	--

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-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	--	--	--	--	--	--	--	--
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	--	--	--	--
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	--	--	--	--	--	--	--	--
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	--	--	--	--
	NA	9/5/2017	--	160	<250	160	--	--	--	--
	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

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-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**	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[a]			**800/1,000[b]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**

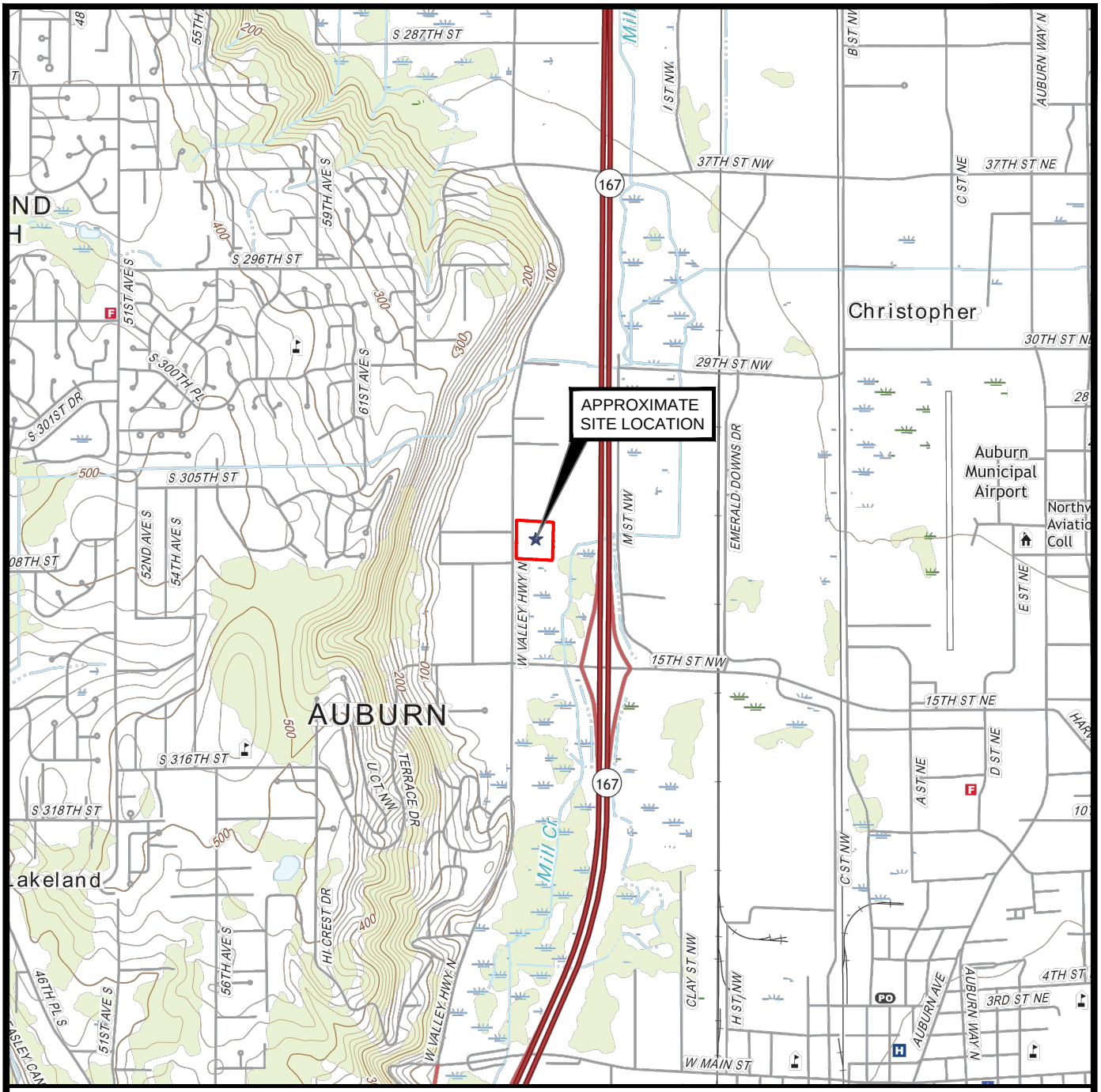
Notes:

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	THIRD QUARTER 2018 GROUNDWATER MONITORING REPORT
CLIENT	ESTES EXPRESS LINES, INC.
LOCATION	FORMER PROVISIONERS EXPRESS FACILITY 2102 WEST VALLEY HIGHWAY NORTH, AUBURN, WASHINGTON

DATE	9/13/18
SCALE	AS SHOWN
DESIGNED BY	DJL
APPROVED BY	DJL
DRAWN BY	SRM
PROJECT NUMBER	2004-004.002
FIGURE NUMBER	1

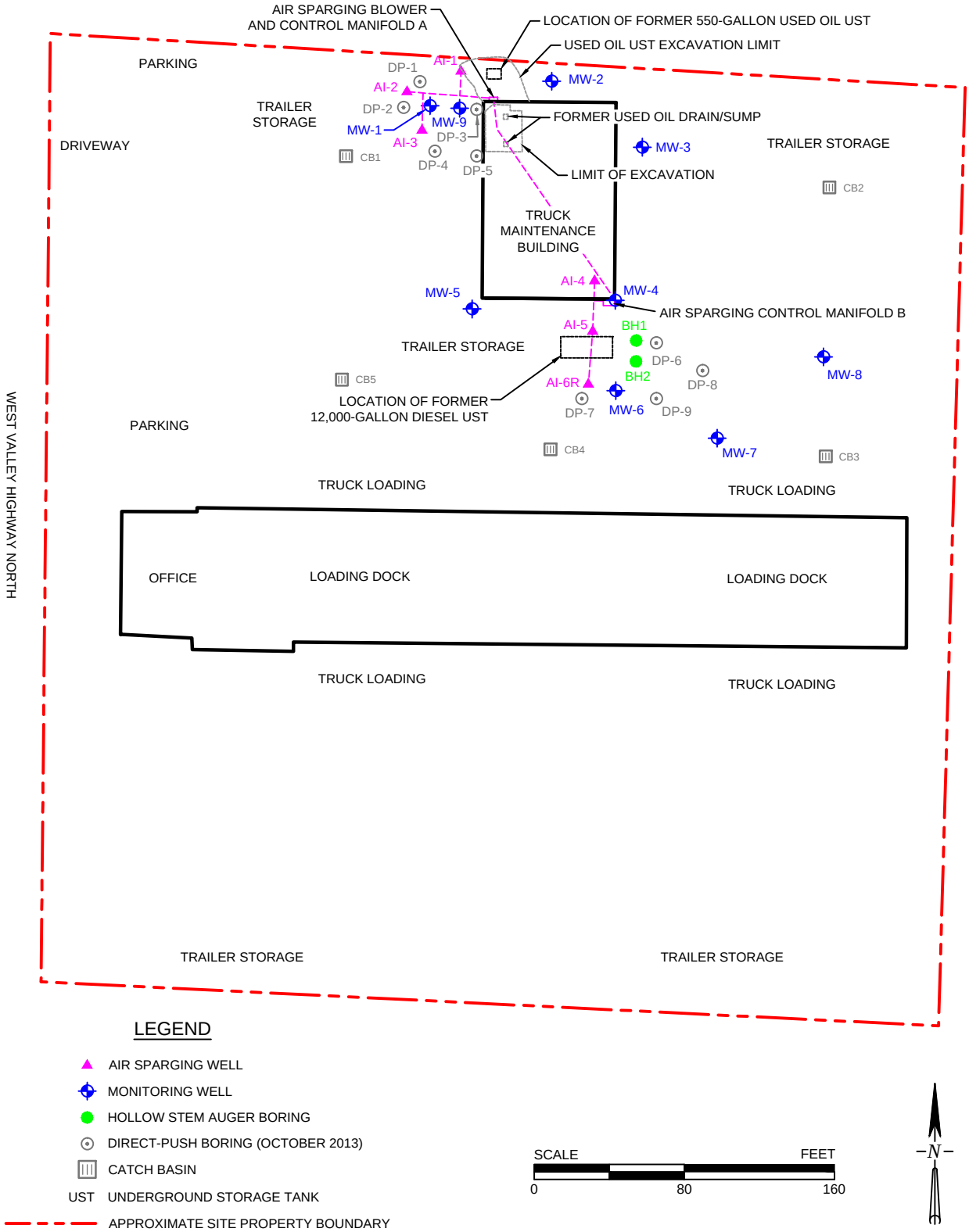


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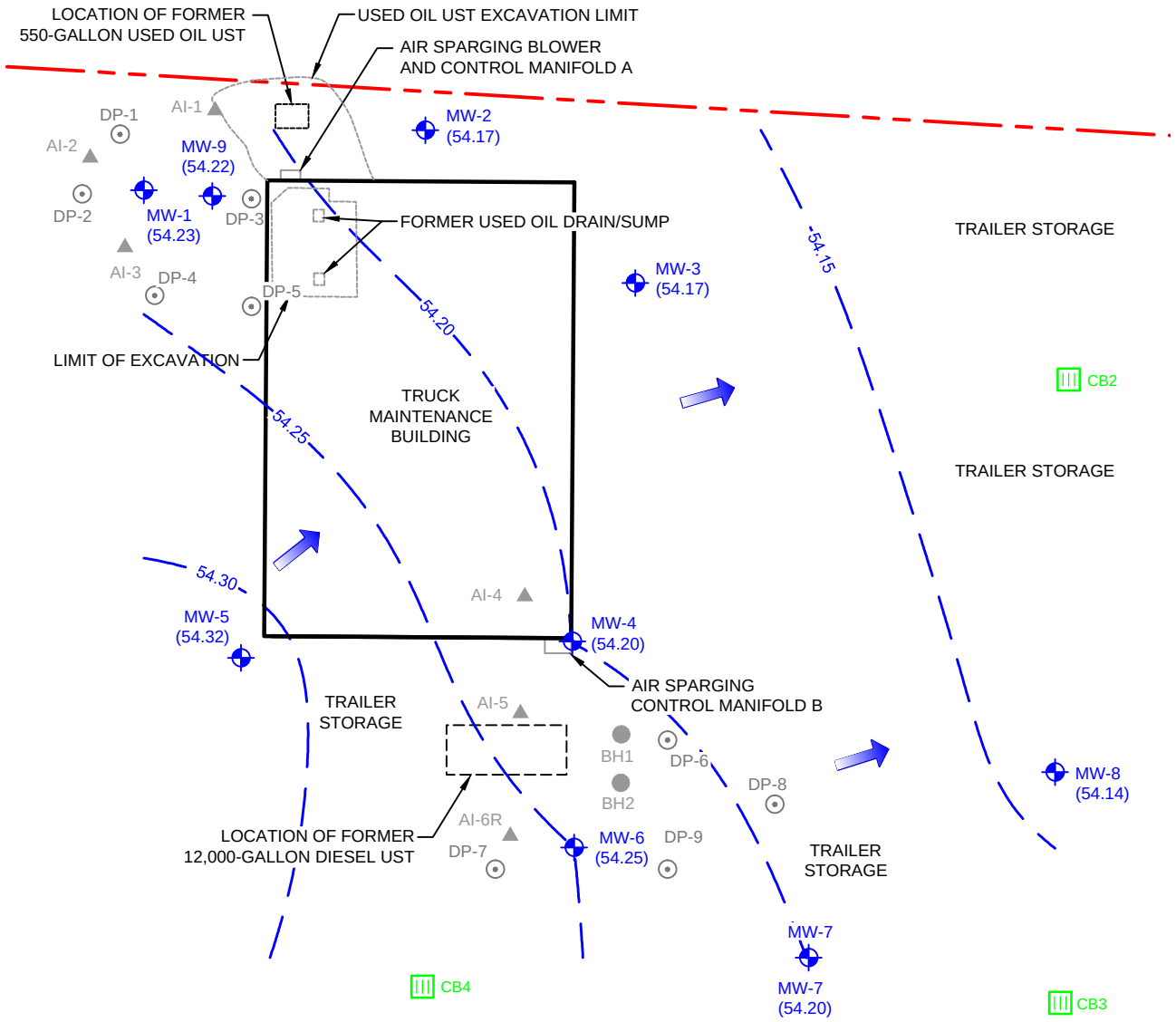
FIGURE TITLE	***SITE MAP***
DOCUMENT TITLE	THIRD QUARTER 2018 GROUNDWATER MONITORING REPORT
CLIENT	ESTES EXPRESS LINES, INC.
LOCATION	FORMER PROVISIONERS EXPRESS FACILITY 2102 WEST VALLEY HIGHWAY NORTH, AUBURN, WASHINGTON

DATE	9/19/18
SCALE	AS SHOWN
DESIGNED BY	DJL
APPROVED BY	DJL
DRAWN BY	SRM
PROJECT NUMBER	2004-004.002
FIGURE NUMBER	2



LEGEND

- 54.30 — GROUNDWATER ELEVATION CONTOUR
- (54.32) 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
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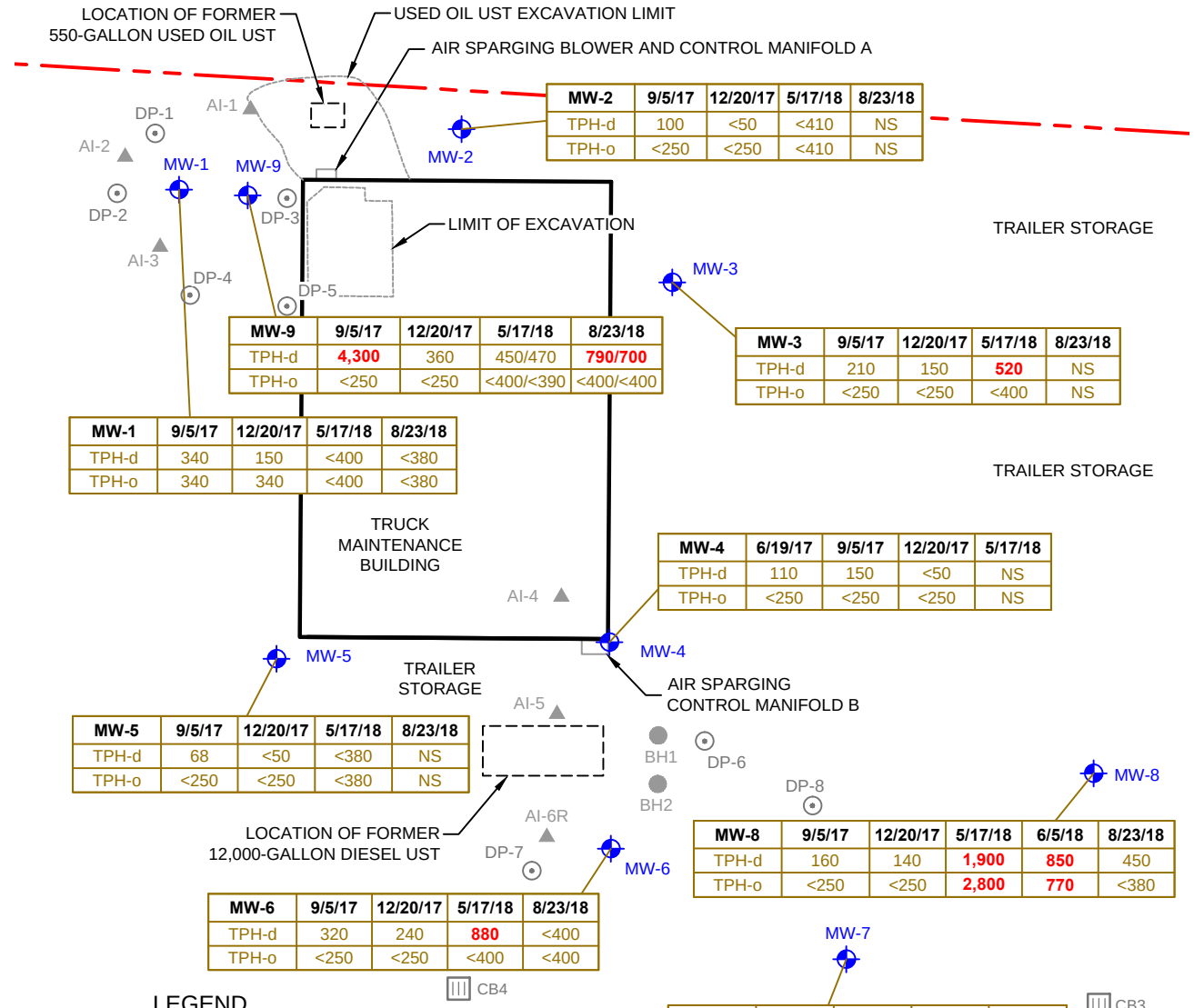
fax: 541-743-2471
www.etgroupinc.com

FIGURE TITLE	***GROUNDWATER CONTOUR AUGUST 23, 2018***
DOCUMENT TITLE	THIRD QUARTER 2018 GROUNDWATER MONITORING REPORT
CLIENT	ESTES EXPRESS LINES, INC.
LOCATION	FORMER PROVISIONERS EXPRESS FACILITY 2102 WEST VALLEY HIGHWAY NORTH, AUBURN, WASHINGTON

DATE	9/19/18
SCALE	AS SHOWN
DESIGNED BY	DJL
APPROVED BY	DJL
DRAWN BY	SRM
PROJECT NUMBER	2004-004.002
FIGURE NUMBER	3



MW-2	9/5/17	12/20/17	5/17/18	8/23/18
TPH-d	100	<50	<410	NS
TPH-o	<250	<250	<410	NS

MW-9	9/5/17	12/20/17	5/17/18	8/23/18
TPH-d	4,300	360	450/470	790/700
TPH-o	<250	<250	<400/<390	<400/<400

MW-3	9/5/17	12/20/17	5/17/18	8/23/18
TPH-d	210	150	520	NS
TPH-o	<250	<250	<400	NS

MW-1	9/5/17	12/20/17	5/17/18	8/23/18
TPH-d	340	150	<400	<380
TPH-o	340	340	<400	<380

MW-4	6/19/17	9/5/17	12/20/17	5/17/18
TPH-d	110	150	<50	NS
TPH-o	<250	<250	<250	NS

MW-5	9/5/17	12/20/17	5/17/18	8/23/18
TPH-d	68	<50	<380	NS
TPH-o	<250	<250	<380	NS

MW-8	9/5/17	12/20/17	5/17/18	6/5/18	8/23/18
TPH-d	160	140	1,900	850	450
TPH-o	<250	<250	2,800	770	<380

MW-6	9/5/17	12/20/17	5/17/18	8/23/18
TPH-d	320	240	880	<400
TPH-o	<250	<250	<400	<400

MW-7	9/5/17	12/20/17	5/17/18	8/23/18
TPH-d	59	99	<380	NS
TPH-o	<250	<250	<380	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

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FIGURE TITLE: ***GROUNDWATER ANALYTICAL RESULTS***

DOCUMENT TITLE: THIRD QUARTER 2018 GROUNDWATER MONITORING REPORT

CLIENT: ESTES EXPRESS LINES, INC.

LOCATION: FORMER PROVISIONERS EXPRESS FACILITY
2102 WEST VALLEY HIGHWAY NORTH, AUBURN, WASHINGTON

DATE	9/19/18
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

DUPLICATE

PROJECT NAME: ESTES West WELL ID: MW-9

SITE ADDRESS: Auburn, WA LABEL CODE: EW-08 23 18- 1

DUPLICATE ID: EW-082318-2

Wind From	N	NE	E	SE	S	SW	W	NW	Light	Medium	Heavy
Weather	Sunny		Cloudy		Rain		_____?		Temperature:	55 °F	____ °C

~~HEAVY~~ LIGHT

WELL DATA

Date	Time	Casing Diameter	DT-Product	DT-Water	Product Thickness
8/23/18		2	—	6.69	—

PUMP/INTAKE DEPTH (ft btoc): _____

WATER QUALITY DATA

Time	Liters	PH	Temp	DO	Spec. Cond.	Redox *	Turbidity
0920	0.5	6.52	18.9	0.78	387	+8	CLEAR w/ yellow TINT
0922	0.7	6.56	19.1	0.97	378	-16	
0924	0.9	6.50	19.1	0.98	373	-8	
0926	1.1	6.48	19.1	1.01	373	-7	
0928	1.3	6.49	19.1	1.03	371	-8	

GROUNDWATER SAMPLE DATA

Sample Date: 8/23/18

Sample Time: 0930

DUPLICATE TIME 0910

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	(x) 2			

Notes: PUMP RATE 70 ML/MIN. NO ODOR. DTW HELD @ 6.89'

* ORP WENT OUT OF CALIBRATION & WOULD NOT CALIBRATE. UNRELIABLE READINGS.

DTB = 13.0', CALIBRATE MATRIX pH, ORP, DO, COND.

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-08 23 18- 3

DUPLICATE ID: _____

Wind From	N	NE	E	SE	S	SW	W	NW	Light	Medium	Heavy
Weather	Sunny		Cloudy		Rain		_____?		Temperature:	60 °F	____°C

WELL DATA

Date	Time	Casing Diameter	DT-Product	DT-Water	Product Thickness
8/23/18		2	—	6.54	—

PUMP/INTAKE DEPTH (ft btoc): _____

WATER QUALITY DATA

Time	Liters	PH	Temp	DO	Spec. Cond.	Redox	Turbidity
0945	0.5	6.50	19.0	3.19	206	* —	CLEAR
0949	0.7	6.46	19.1	3.34	206	—	↓
0953	0.9	6.42	19.1	3.38	206	—	
0957	1.1	6.45	19.1	3.37	205	—	

GROUNDWATER SAMPLE DATA

Sample Date: 8/23/18

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: POOR RECOVERY. PUMP @ SLOWEST PUMP RATE OF 50 ml/min

* ORP METER MALFUNCTION

DTB = 14.49'

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-08 23 18- 4

DUPLICATE ID: _____

Wind From	N	NE	E	SE	S	SW	(W)	NW	Light	Medium	Heavy
Weather	Sunny		(Cloudy)		(Rain)		_____?		Temperature:	60 °F	____ °C

WELL DATA

Date	Time	Casing Diameter	DT-Product	DT-Water	Product Thickness
8/23/18		2	—	6.51	—

PUMP/INTAKE DEPTH (ft btoc): _____

WATER QUALITY DATA

Time	Liters	PH	Temp	DO	Spec. Cond.	Redox	Turbidity
1044	1	6.41	20.5	0.52	440	* —	CLEAR W/
1046	2	6.34	19.9	0.48	447	—	SLIGHT YELLOW TINT
1048	3	6.36	19.9	0.48	447	—	
1050	4	6.34	19.8	0.48	449	—	↓

GROUNDWATER SAMPLE DATA

Sample Date: 8/23/18

Sample Time: 1055

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

* ORP METER MALFUNCTION

DTB = 14.81'

Sampled By: Steve McCray Signature: Steve McCray

FIELD SAMPLING DATA SHEET
LOW-FLOW GROUNDWATER SAMPLING

PROJECT NAME: ESTES West WELL ID: MW-8

SITE ADDRESS: Auburn, WA LABEL CODE: EW-08 23 18- 5

DUPLICATE ID: _____

Wind From	N	NE	E	SE	S	SW	W	NW	Light	Medium	Heavy
Weather	Sunny		Cloudy		Rain		_____?		Temperature:	60 °F	____°C

WELL DATA

Date	Time	Casing Diameter	DT-Product	DT-Water	Product Thickness
8/23/18		2	—	5.56	—

PUMP/INTAKE DEPTH (ft btoc): _____

WATER QUALITY DATA

Time	Liters	PH	Temp	DO	Spec. Cond.	Redox	Turbidity
1104	0.5	6.30	23.2	0.96	709	* —	CLEAR W/
1106	1.1	6.31	23.2	0.93	710	—	YELLOW TINT
1108	1.7	6.31	23.2	0.94	710	—	↓
1110	2.3	6.31	23.2	0.93	710	—	↓

GROUNDWATER SAMPLE DATA

Sample Date: 8/23/18

Sample Time: 1120

Bottle Type	√	Amount & Volume		Preservative	Filter	
VOA Glass		6	40 ml	HCl	No	
Amber Glass		2	250 ml	HCl	No	
Poly	√	1	250 ml	HNO_3	NO	
AMBER GLASS	√	4	1L	NONE	NO	
Total Bottles						

Notes: PUMP RATE 0.3 LPM. ORP METER CALIBRATION.
* ORP METER MALFUNCTION

Sampled By: Steve McCray Signature: _____

ESTES WEST GW SAMPLE
& BLOWER SERVICE

8/23/18

0645 ETG ONSITE. COLLECT COOLER FROM CHRIS HARRISON (ESTES).
PREP FOR SAMPLING & BLOWER SVC.

0720 REPLACE EXTERNAL BLOWER FILTER & BLOW OUT/CLEAN 3 INTERNAL FILTERS. BOLTS (3/16 ALLEN WRENCH) VERY TIGHT.

0840 FILL OUT AIR SPARGE TREATMENT SYSTEM DATA SHEET.
NO SYSTEM MUST BE ON. WILL DO AFTER GW SAMPLE.
BEGIN WATER LEVEL READINGS

	WELL	DTW		WELL	DTW
*	MW-1	6.54	*	MW-6	6.51
	MW-2	6.68		MW-7	5.67
	MW-3	6.63	*	MW-8	5.56
	MW-4	6.73	*	MW-9	6.69
	MW-5	6.58			

* = SAMPLED GW

1200 FINISH GW SAMPLING. DUMP PURGE H2O.
FILL OUT AIR SPARGE SYS DATA SHEET AFTER TURNING ON SYSTEM

1300 ETG OFFSITE TO SHIP SAMPLES

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS

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

September 07, 2018

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

RE: Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

Dear Dan Landry:
Enclosed are the analytical results for sample(s) received by the laboratory on August 24, 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: Dave Seaver, Environmental Technologies Group, Inc.

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

CERTIFICATIONS

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

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: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10444920001	**EW-082318-1**	Water	08/23/18 09:30	08/24/18 10:00
10444920002	**EW-082318-2**	Water	08/23/18 09:10	08/24/18 10:00
10444920003	**EW-082318-3**	Water	08/23/18 10:00	08/24/18 10:00
10444920004	**EW-082318-4**	Water	08/23/18 10:55	08/24/18 10:00
10444920005	**EW-082318-5**	Water	08/23/18 11:20	08/24/18 10:00
10444920006	**Trip Blank**	Water	08/23/18 00:00	08/24/18 10:00

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10444920001	**EW-082318-1**	NWTPH-Dx	JVM	4	PASI-M
10444920002	**EW-082318-2**	NWTPH-Dx	JVM	4	PASI-M
10444920003	**EW-082318-3**	NWTPH-Dx	JVM	4	PASI-M
10444920004	**EW-082318-4**	NWTPH-Dx	JVM	4	PASI-M
10444920005	**EW-082318-5**	EPA 8082A	RAG	9	PASI-M
		NWTPH-Dx	JVM	4	PASI-M
		NWTPH-Gx	AG1	2	PASI-M
		EPA 6010D	IP	1	PASI-M
		EPA 8270D by SIM	JLR	19	PASI-M
		EPA 8260B	DS2	69	PASI-M

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

ANALYTICAL RESULTS

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

Sample: EW-082318-1 **Lab ID: 10444920001** Collected: 08/23/18 09:30 Received: 08/24/18 10:00 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	**0.79**	mg/L	0.40	1	08/29/18 13:35	09/01/18 18:17	68334-30-5	
Motor Oil Range	ND	mg/L	0.40	1	08/29/18 13:35	09/01/18 18:17		
Surrogates								
o-Terphenyl (S)	82	%.	50-150	1	08/29/18 13:35	09/01/18 18:17	84-15-1	
n-Triacontane (S)	76	%.	50-150	1	08/29/18 13:35	09/01/18 18:17	638-68-6	

Sample: EW-082318-2 **Lab ID: 10444920002** Collected: 08/23/18 09:10 Received: 08/24/18 10:00 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	**0.70**	mg/L	0.40	1	08/29/18 13:35	09/01/18 18:28	68334-30-5	
Motor Oil Range	ND	mg/L	0.40	1	08/29/18 13:35	09/01/18 18:28		
Surrogates								
o-Terphenyl (S)	82	%.	50-150	1	08/29/18 13:35	09/01/18 18:28	84-15-1	
n-Triacontane (S)	79	%.	50-150	1	08/29/18 13:35	09/01/18 18:28	638-68-6	

Sample: EW-082318-3 **Lab ID: 10444920003** Collected: 08/23/18 10:00 Received: 08/24/18 10:00 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	08/29/18 13:35	09/01/18 18:40	68334-30-5	
Motor Oil Range	ND	mg/L	0.38	1	08/29/18 13:35	09/01/18 18:40		
Surrogates								
o-Terphenyl (S)	91	%.	50-150	1	08/29/18 13:35	09/01/18 18:40	84-15-1	
n-Triacontane (S)	90	%.	50-150	1	08/29/18 13:35	09/01/18 18:40	638-68-6	

Sample: EW-082318-4 **Lab ID: 10444920004** Collected: 08/23/18 10:55 Received: 08/24/18 10:00 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	08/29/18 13:35	09/01/18 18:51	68334-30-5	
Motor Oil Range	ND	mg/L	0.40	1	08/29/18 13:35	09/01/18 18:51		
Surrogates								
o-Terphenyl (S)	83	%.	50-150	1	08/29/18 13:35	09/01/18 18:51	84-15-1	
n-Triacontane (S)	80	%.	50-150	1	08/29/18 13:35	09/01/18 18:51	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: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

Sample: EW-082318-5 **Lab ID: 10444920005** Collected: 08/23/18 11:20 Received: 08/24/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082A GCS PCB	Analytical Method: EPA 8082A Preparation Method: EPA Mod. 3510C							
PCB-1016 (Aroclor 1016)	ND	ug/L	0.10	1	09/04/18 18:39	09/07/18 08:40	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	0.10	1	09/04/18 18:39	09/07/18 08:40	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.10	1	09/04/18 18:39	09/07/18 08:40	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.10	1	09/04/18 18:39	09/07/18 08:40	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.10	1	09/04/18 18:39	09/07/18 08:40	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.10	1	09/04/18 18:39	09/07/18 08:40	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.10	1	09/04/18 18:39	09/07/18 08:40	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	58	%.	30-125	1	09/04/18 18:39	09/07/18 08:40	877-09-8	
Decachlorobiphenyl (S)	71	%.	30-125	1	09/04/18 18:39	09/07/18 08:40	2051-24-3	
NWTPH-Dx GCS LV	Analytical Method: NWTPH-Dx Preparation Method: EPA Mod. 3510C							
Diesel Fuel Range	**0.45**	mg/L	0.38	1	08/29/18 13:35	09/01/18 19:03	68334-30-5	
Motor Oil Range	ND	mg/L	0.38	1	08/29/18 13:35	09/01/18 19:03		
Surrogates								
o-Terphenyl (S)	88	%.	50-150	1	08/29/18 13:35	09/01/18 19:03	84-15-1	
n-Triacontane (S)	92	%.	50-150	1	08/29/18 13:35	09/01/18 19:03	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		08/30/18 22:49		
Surrogates								
a,a,a-Trifluorotoluene (S)	87	%.	50-150	1		08/30/18 22:49	98-08-8	
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010							
Lead	ND	ug/L	10.0	1	08/29/18 09:50	08/30/18 13:58	7439-92-1	
8270D MSSV CPAH by SIM	Analytical Method: EPA 8270D by SIM Preparation Method: EPA Mod. 3510C							
1-Methylnaphthalene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	90-12-0	
2-Methylnaphthalene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	91-57-6	
Acenaphthene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	83-32-9	
Acenaphthylene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	208-96-8	
Anthracene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	50-32-8	
Benzo(g,h,i)perylene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	191-24-2	
Chrysene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	53-70-3	
Dibenzofuran	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	132-64-9	
Fluoranthene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	206-44-0	
Fluorene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	193-39-5	
Naphthalene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	91-20-3	
Phenanthrene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	85-01-8	
Pyrene	ND	ug/L	0.042	1	08/28/18 10:29	08/29/18 16:23	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	72	%.	52-125	1	08/28/18 10:29	08/29/18 16:23	321-60-8	
p-Terphenyl-d14 (S)	74	%.	63-125	1	08/28/18 10:29	08/29/18 16:23	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

Sample: EW-082318-5 **Lab ID: 10444920005** Collected: 08/23/18 11:20 Received: 08/24/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B VOC	Analytical Method: EPA 8260B							
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/28/18 16:39	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	4.0	1		08/28/18 16:39	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		08/28/18 16:39	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/28/18 16:39	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		08/28/18 16:39	76-13-1	
1,1-Dichloroethane	ND	ug/L	1.0	1		08/28/18 16:39	75-34-3	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/28/18 16:39	75-35-4	
1,1-Dichloropropene	ND	ug/L	1.0	1		08/28/18 16:39	563-58-6	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		08/28/18 16:39	87-61-6	
1,2,3-Trichloropropane	ND	ug/L	4.0	1		08/28/18 16:39	96-18-4	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		08/28/18 16:39	120-82-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		08/28/18 16:39	95-63-6	
1,2-Dibromo-3-chloropropane	ND	ug/L	10.0	1		08/28/18 16:39	96-12-8	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/28/18 16:39	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		08/28/18 16:39	95-50-1	
1,2-Dichloroethane	ND	ug/L	1.0	1		08/28/18 16:39	107-06-2	
1,2-Dichloropropane	ND	ug/L	4.0	1		08/28/18 16:39	78-87-5	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		08/28/18 16:39	108-67-8	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		08/28/18 16:39	541-73-1	
1,3-Dichloropropane	ND	ug/L	1.0	1		08/28/18 16:39	142-28-9	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		08/28/18 16:39	106-46-7	
2,2-Dichloropropane	ND	ug/L	4.0	1		08/28/18 16:39	594-20-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		08/28/18 16:39	78-93-3	
2-Chlorotoluene	ND	ug/L	1.0	1		08/28/18 16:39	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		08/28/18 16:39	106-43-4	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		08/28/18 16:39	108-10-1	
Acetone	ND	ug/L	20.0	1		08/28/18 16:39	67-64-1	
Allyl chloride	ND	ug/L	4.0	1		08/28/18 16:39	107-05-1	
Benzene	ND	ug/L	1.0	1		08/28/18 16:39	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		08/28/18 16:39	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		08/28/18 16:39	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		08/28/18 16:39	75-27-4	
Bromoform	ND	ug/L	4.0	1		08/28/18 16:39	75-25-2	
Bromomethane	ND	ug/L	4.0	1		08/28/18 16:39	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		08/28/18 16:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		08/28/18 16:39	108-90-7	
Chloroethane	ND	ug/L	1.0	1		08/28/18 16:39	75-00-3	
Chloroform	ND	ug/L	1.0	1		08/28/18 16:39	67-66-3	
Chloromethane	ND	ug/L	4.0	1		08/28/18 16:39	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		08/28/18 16:39	124-48-1	
Dibromomethane	ND	ug/L	4.0	1		08/28/18 16:39	74-95-3	
Dichlorodifluoromethane	ND	ug/L	1.0	1		08/28/18 16:39	75-71-8	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	1		08/28/18 16:39	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		08/28/18 16:39	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		08/28/18 16:39	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/28/18 16:39	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		08/28/18 16:39	1634-04-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

Sample: EW-082318-5 **Lab ID: 10444920005** Collected: 08/23/18 11:20 Received: 08/24/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B VOC	Analytical Method: EPA 8260B							
Methylene Chloride	ND	ug/L	4.0	1		08/28/18 16:39	75-09-2	
Naphthalene	ND	ug/L	4.0	1		08/28/18 16:39	91-20-3	
Styrene	ND	ug/L	1.0	1		08/28/18 16:39	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/28/18 16:39	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	1		08/28/18 16:39	109-99-9	
Toluene	ND	ug/L	1.0	1		08/28/18 16:39	108-88-3	
Trichloroethene	ND	ug/L	0.40	1		08/28/18 16:39	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/28/18 16:39	75-69-4	
Vinyl chloride	ND	ug/L	0.20	1		08/28/18 16:39	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		08/28/18 16:39	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	4.0	1		08/28/18 16:39	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		08/28/18 16:39	10061-01-5	
n-Butylbenzene	ND	ug/L	1.0	1		08/28/18 16:39	104-51-8	
n-Propylbenzene	ND	ug/L	1.0	1		08/28/18 16:39	103-65-1	
p-Isopropyltoluene	ND	ug/L	1.0	1		08/28/18 16:39	99-87-6	
sec-Butylbenzene	ND	ug/L	1.0	1		08/28/18 16:39	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		08/28/18 16:39	98-06-6	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/28/18 16:39	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		08/28/18 16:39	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%.	75-125	1		08/28/18 16:39	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		08/28/18 16:39	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125	1		08/28/18 16:39	460-00-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

QC Batch: 560124 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Water
Associated Lab Samples: 10444920005

METHOD BLANK: 3040718 Matrix: Water
Associated Lab Samples: 10444920005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	08/30/18 18:29	
a,a,a-Trifluorotoluene (S)	%.	90	50-150	08/30/18 18:29	

METHOD BLANK: 3040719 Matrix: Water
Associated Lab Samples: 10444920005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	08/30/18 18:47	
a,a,a-Trifluorotoluene (S)	%.	87	50-150	08/30/18 18:47	

LABORATORY CONTROL SAMPLE & LCSD: 3040720 3040721

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	991	1080	99	108	41-137	9	20	
a,a,a-Trifluorotoluene (S)	%.				92	94	50-150			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3040779 3040780

Parameter	Units	10445211009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH as Gas	ug/L	<19.6	1000	1000	1110	1080	111	108	30-145	3	30	
a,a,a-Trifluorotoluene (S)	%.						97	94	50-150			

SAMPLE DUPLICATE: 3041425

Parameter	Units	10445211008 Result	Dup Result	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	<19.6	ND		30	
a,a,a-Trifluorotoluene (S)	%.	88	88	0		

SAMPLE DUPLICATE: 3041426

Parameter	Units	10445211010 Result	Dup Result	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	<19.6	ND		30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

SAMPLE DUPLICATE: 3041426

Parameter	Units	10445211010 Result	Dup Result	RPD	Max RPD	Qualifiers
a,a,a-Trifluorotoluene (S)	%.	86	92	7		

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QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

QC Batch: 559599 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010 Analysis Description: 6010D Water
Associated Lab Samples: 10444920005

METHOD BLANK: 3038099 Matrix: Water
Associated Lab Samples: 10444920005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	ug/L	ND	10.0	08/30/18 12:55	

LABORATORY CONTROL SAMPLE: 3038100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	1000	983	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3038101 3038102

Parameter	Units	10445211002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	ug/L	<2.0	1000	1000	988	999	99	100	75-125	1	20	

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QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

QC Batch: 559487 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV 465 W
Associated Lab Samples: 10444920005

METHOD BLANK: 3037234 Matrix: Water
Associated Lab Samples: 10444920005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	08/28/18 14:01	
1,1,1-Trichloroethane	ug/L	ND	4.0	08/28/18 14:01	MN
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	08/28/18 14:01	
1,1,2-Trichloroethane	ug/L	ND	1.0	08/28/18 14:01	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	08/28/18 14:01	
1,1-Dichloroethane	ug/L	ND	1.0	08/28/18 14:01	
1,1-Dichloroethene	ug/L	ND	1.0	08/28/18 14:01	
1,1-Dichloropropene	ug/L	ND	1.0	08/28/18 14:01	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	08/28/18 14:01	
1,2,3-Trichloropropane	ug/L	ND	4.0	08/28/18 14:01	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	08/28/18 14:01	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	08/28/18 14:01	
1,2-Dibromo-3-chloropropane	ug/L	ND	10.0	08/28/18 14:01	MN
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	08/28/18 14:01	
1,2-Dichlorobenzene	ug/L	ND	1.0	08/28/18 14:01	
1,2-Dichloroethane	ug/L	ND	1.0	08/28/18 14:01	
1,2-Dichloropropane	ug/L	ND	4.0	08/28/18 14:01	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	08/28/18 14:01	
1,3-Dichlorobenzene	ug/L	ND	1.0	08/28/18 14:01	
1,3-Dichloropropane	ug/L	ND	1.0	08/28/18 14:01	
1,4-Dichlorobenzene	ug/L	ND	1.0	08/28/18 14:01	
2,2-Dichloropropane	ug/L	ND	4.0	08/28/18 14:01	
2-Butanone (MEK)	ug/L	ND	5.0	08/28/18 14:01	
2-Chlorotoluene	ug/L	ND	1.0	08/28/18 14:01	
4-Chlorotoluene	ug/L	ND	1.0	08/28/18 14:01	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	08/28/18 14:01	
Acetone	ug/L	ND	20.0	08/28/18 14:01	
Allyl chloride	ug/L	ND	4.0	08/28/18 14:01	
Benzene	ug/L	ND	1.0	08/28/18 14:01	
Bromobenzene	ug/L	ND	1.0	08/28/18 14:01	
Bromochloromethane	ug/L	ND	1.0	08/28/18 14:01	
Bromodichloromethane	ug/L	ND	1.0	08/28/18 14:01	
Bromoform	ug/L	ND	4.0	08/28/18 14:01	
Bromomethane	ug/L	ND	4.0	08/28/18 14:01	
Carbon tetrachloride	ug/L	ND	1.0	08/28/18 14:01	
Chlorobenzene	ug/L	ND	1.0	08/28/18 14:01	
Chloroethane	ug/L	ND	1.0	08/28/18 14:01	
Chloroform	ug/L	ND	1.0	08/28/18 14:01	
Chloromethane	ug/L	ND	4.0	08/28/18 14:01	
cis-1,2-Dichloroethene	ug/L	ND	4.0	08/28/18 14:01	MN
cis-1,3-Dichloropropene	ug/L	ND	4.0	08/28/18 14:01	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

METHOD BLANK: 3037234 Matrix: Water
Associated Lab Samples: 10444920005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/L	ND	1.0	08/28/18 14:01	
Dibromomethane	ug/L	ND	4.0	08/28/18 14:01	
Dichlorodifluoromethane	ug/L	ND	1.0	08/28/18 14:01	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	08/28/18 14:01	
Ethylbenzene	ug/L	ND	1.0	08/28/18 14:01	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	08/28/18 14:01	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	08/28/18 14:01	
Methyl-tert-butyl ether	ug/L	ND	1.0	08/28/18 14:01	
Methylene Chloride	ug/L	ND	4.0	08/28/18 14:01	
n-Butylbenzene	ug/L	ND	1.0	08/28/18 14:01	
n-Propylbenzene	ug/L	ND	1.0	08/28/18 14:01	
Naphthalene	ug/L	ND	4.0	08/28/18 14:01	
p-Isopropyltoluene	ug/L	ND	1.0	08/28/18 14:01	
sec-Butylbenzene	ug/L	ND	1.0	08/28/18 14:01	
Styrene	ug/L	ND	1.0	08/28/18 14:01	
tert-Butylbenzene	ug/L	ND	1.0	08/28/18 14:01	
Tetrachloroethene	ug/L	ND	1.0	08/28/18 14:01	
Tetrahydrofuran	ug/L	ND	10.0	08/28/18 14:01	
Toluene	ug/L	ND	1.0	08/28/18 14:01	
trans-1,2-Dichloroethene	ug/L	ND	1.0	08/28/18 14:01	
trans-1,3-Dichloropropene	ug/L	ND	4.0	08/28/18 14:01	
Trichloroethene	ug/L	ND	0.40	08/28/18 14:01	
Trichlorofluoromethane	ug/L	ND	1.0	08/28/18 14:01	
Vinyl chloride	ug/L	ND	0.20	08/28/18 14:01	
Xylene (Total)	ug/L	ND	3.0	08/28/18 14:01	
1,2-Dichloroethane-d4 (S)	%.	98	75-125	08/28/18 14:01	
4-Bromofluorobenzene (S)	%.	99	75-125	08/28/18 14:01	
Toluene-d8 (S)	%.	97	75-125	08/28/18 14:01	

LABORATORY CONTROL SAMPLE: 3037235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.3	107	75-125	
1,1,1-Trichloroethane	ug/L	20	21.3	107	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	21.5	107	75-129	
1,1,2-Trichloroethane	ug/L	20	21.7	109	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	20	20.2	101	74-125	
1,1-Dichloroethane	ug/L	20	21.8	109	75-127	
1,1-Dichloroethene	ug/L	20	20.5	103	73-125	
1,1-Dichloropropene	ug/L	20	20.3	102	75-125	
1,2,3-Trichlorobenzene	ug/L	20	19.8	99	74-126	
1,2,3-Trichloropropane	ug/L	20	21.3	106	75-125	
1,2,4-Trichlorobenzene	ug/L	20	19.3	97	75-125	
1,2,4-Trimethylbenzene	ug/L	20	21.8	109	75-125	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

LABORATORY CONTROL SAMPLE: 3037235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	50	48.5	97	64-129	
1,2-Dibromoethane (EDB)	ug/L	20	21.9	109	75-125	
1,2-Dichlorobenzene	ug/L	20	20.5	103	75-125	
1,2-Dichloroethane	ug/L	20	20.9	105	74-125	
1,2-Dichloropropane	ug/L	20	21.8	109	75-125	
1,3,5-Trimethylbenzene	ug/L	20	21.3	107	75-125	
1,3-Dichlorobenzene	ug/L	20	21.6	108	75-125	
1,3-Dichloropropane	ug/L	20	21.3	107	75-125	
1,4-Dichlorobenzene	ug/L	20	21.2	106	75-125	
2,2-Dichloropropane	ug/L	20	22.5	113	70-125	
2-Butanone (MEK)	ug/L	100	102	102	57-130	
2-Chlorotoluene	ug/L	20	20.8	104	75-125	
4-Chlorotoluene	ug/L	20	21.4	107	75-125	
4-Methyl-2-pentanone (MIBK)	ug/L	100	100	100	69-137	
Acetone	ug/L	100	101	101	32-150	
Allyl chloride	ug/L	20	20.0	100	64-135	
Benzene	ug/L	20	21.8	109	75-126	
Bromobenzene	ug/L	20	21.7	109	75-125	
Bromochloromethane	ug/L	20	22.5	112	75-126	
Bromodichloromethane	ug/L	20	21.4	107	75-125	
Bromoform	ug/L	20	19.6	98	67-125	
Bromomethane	ug/L	20	16.4	82	30-150	
Carbon tetrachloride	ug/L	20	20.4	102	75-125	
Chlorobenzene	ug/L	20	20.8	104	75-125	
Chloroethane	ug/L	20	19.0	95	64-142	
Chloroform	ug/L	20	20.0	100	75-125	
Chloromethane	ug/L	20	16.6	83	40-150	
cis-1,2-Dichloroethene	ug/L	20	21.3	107	75-125	
cis-1,3-Dichloropropene	ug/L	20	22.2	111	75-125	
Dibromochloromethane	ug/L	20	19.9	100	75-125	
Dibromomethane	ug/L	20	20.3	102	75-125	
Dichlorodifluoromethane	ug/L	20	18.2	91	61-132	
Diethyl ether (Ethyl ether)	ug/L	20	19.2	96	74-125	
Ethylbenzene	ug/L	20	20.6	103	75-125	
Hexachloro-1,3-butadiene	ug/L	20	21.0	105	75-125	
Isopropylbenzene (Cumene)	ug/L	20	20.1	100	75-125	
Methyl-tert-butyl ether	ug/L	20	20.7	104	73-129	
Methylene Chloride	ug/L	20	18.0	90	72-125	
n-Butylbenzene	ug/L	20	19.8	99	75-125	
n-Propylbenzene	ug/L	20	20.1	100	75-125	
Naphthalene	ug/L	20	18.6	93	65-126	
p-Isopropyltoluene	ug/L	20	21.4	107	75-125	
sec-Butylbenzene	ug/L	20	20.0	100	75-125	
Styrene	ug/L	20	21.5	108	75-125	
tert-Butylbenzene	ug/L	20	21.6	108	75-125	
Tetrachloroethene	ug/L	20	21.4	107	75-125	
Tetrahydrofuran	ug/L	200	239	120	30-150	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

LABORATORY CONTROL SAMPLE: 3037235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	20.0	100	74-125	
trans-1,2-Dichloroethene	ug/L	20	20.1	100	70-126	
trans-1,3-Dichloropropene	ug/L	20	22.2	111	75-125	
Trichloroethene	ug/L	20	20.4	102	75-125	
Trichlorofluoromethane	ug/L	20	18.7	94	71-131	
Vinyl chloride	ug/L	20	19.7	99	65-137	
Xylene (Total)	ug/L	60	66.4	111	75-125	
1,2-Dichloroethane-d4 (S)	%.			100	75-125	
4-Bromofluorobenzene (S)	%.			101	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3037424 3037425

Parameter	Units	10445150001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	22.5	19.6	112	98	69-130	13	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	21.9	20.1	110	101	72-133	9	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	21.7	19.0	108	95	60-137	13	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	22.0	20.0	110	100	70-128	10	30	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	20	20	21.2	19.8	106	99	64-147	7	30	
1,1-Dichloroethane	ug/L	ND	20	20	22.3	20.1	111	100	64-136	10	30	
1,1-Dichloroethene	ug/L	ND	20	20	21.2	19.9	106	100	67-139	6	30	
1,1-Dichloropropene	ug/L	ND	20	20	21.4	19.5	107	98	69-131	9	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	20.8	17.7	104	89	60-138	16	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	21.8	19.7	109	98	67-129	10	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	20.4	17.7	102	89	71-125	14	30	
1,2,4-Trimethylbenzene	ug/L	ND	20	20	23.1	19.5	115	98	67-130	17	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	50	50	50.4	44.1	101	88	52-141	13	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	22.4	20.3	112	102	66-130	10	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	21.6	18.7	108	93	72-126	15	30	
1,2-Dichloroethane	ug/L	ND	20	20	20.7	19.0	104	95	64-125	8	30	
1,2-Dichloropropane	ug/L	ND	20	20	22.3	20.5	112	103	65-128	8	30	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	22.4	19.3	112	97	63-139	15	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	23.4	19.8	117	99	70-128	17	30	
1,3-Dichloropropane	ug/L	ND	20	20	21.5	19.8	108	99	70-131	8	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	22.2	19.3	111	97	74-125	14	30	
2,2-Dichloropropane	ug/L	ND	20	20	24.3	21.2	122	106	58-137	13	30	
2-Butanone (MEK)	ug/L	ND	100	100	98.6	90.4	99	90	45-132	9	30	
2-Chlorotoluene	ug/L	ND	20	20	22.0	18.8	110	94	66-134	16	30	
4-Chlorotoluene	ug/L	ND	20	20	23.1	19.6	115	98	70-132	16	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	97.9	91.0	98	91	54-143	7	30	
Acetone	ug/L	57.4	100	100	165	141	108	83	51-150	16	30	
Allyl chloride	ug/L	ND	20	20	20.1	18.3	101	92	52-150	9	30	
Benzene	ug/L	ND	20	20	21.7	20.2	108	101	62-140	7	30	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3037424 3037425

Parameter	Units	10445150001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Bromobenzene	ug/L	ND	20	20	22.2	19.1	111	96	70-128	15	30	
Bromochloromethane	ug/L	ND	20	20	23.3	20.4	116	102	65-131	13	30	
Bromodichloromethane	ug/L	ND	20	20	22.4	20.3	112	101	74-127	10	30	
Bromoform	ug/L	ND	20	20	20.2	17.9	101	90	59-125	12	30	
Bromomethane	ug/L	ND	20	20	15.8	16.0	79	80	30-149	1	30	
Carbon tetrachloride	ug/L	ND	20	20	20.8	18.9	104	95	67-134	10	30	
Chlorobenzene	ug/L	ND	20	20	21.6	19.7	108	99	72-131	9	30	
Chloroethane	ug/L	ND	20	20	18.6	17.5	93	87	55-150	6	30	
Chloroform	ug/L	ND	20	20	20.6	18.9	103	95	67-125	9	30	
Chloromethane	ug/L	ND	20	20	16.8	15.7	84	78	43-148	7	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	21.6	19.7	108	99	62-132	9	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	23.1	20.9	116	105	63-129	10	30	
Dibromochloromethane	ug/L	ND	20	20	20.1	18.7	100	93	67-127	7	30	
Dibromomethane	ug/L	ND	20	20	21.6	19.3	108	97	68-132	11	30	
Dichlorodifluoromethane	ug/L	ND	20	20	18.5	16.8	93	84	59-144	10	30	
Diethyl ether (Ethyl ether)	ug/L	ND	20	20	19.1	17.6	96	88	52-139	8	30	
Ethylbenzene	ug/L	ND	20	20	21.5	19.7	108	99	75-131	9	30	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	22.0	18.9	110	95	58-146	15	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	21.4	19.0	107	95	71-132	12	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	20.9	19.3	104	97	65-130	8	30	
Methylene Chloride	ug/L	ND	20	20	18.6	16.7	93	84	66-125	10	30	
n-Butylbenzene	ug/L	ND	20	20	21.1	18.2	106	91	57-141	15	30	
n-Propylbenzene	ug/L	ND	20	20	21.4	18.7	107	93	70-131	14	30	
Naphthalene	ug/L	ND	20	20	20.0	17.5	100	88	48-134	13	30	
p-Isopropyltoluene	ug/L	ND	20	20	22.8	19.9	114	100	66-136	13	30	
sec-Butylbenzene	ug/L	ND	20	20	21.4	18.6	107	93	69-134	14	30	
Styrene	ug/L	ND	20	20	22.2	19.8	111	99	65-134	11	30	
tert-Butylbenzene	ug/L	ND	20	20	23.1	19.4	116	97	71-130	18	30	
Tetrachloroethene	ug/L	ND	20	20	22.6	20.2	113	101	69-135	12	30	
Tetrahydrofuran	ug/L	ND	200	200	257	217	129	109	48-150	17	30	
Toluene	ug/L	ND	20	20	21.1	19.0	105	95	68-132	10	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.6	19.0	103	95	61-134	8	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	22.4	20.4	112	102	66-125	9	30	
Trichloroethene	ug/L	ND	20	20	22.6	20.3	111	100	64-136	10	30	
Trichlorofluoromethane	ug/L	ND	20	20	19.3	17.4	97	87	65-146	10	30	
Vinyl chloride	ug/L	ND	20	20	19.8	18.3	99	91	51-150	8	30	
Xylene (Total)	ug/L	ND	60	60	69.7	62.1	116	104	69-135	12	30	
1,2-Dichloroethane-d4 (S)	%.						99	100	75-125			
4-Bromofluorobenzene (S)	%.						101	98	75-125			
Toluene-d8 (S)	%.						100	100	75-125			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

QC Batch: 560662 Analysis Method: EPA 8082A
QC Batch Method: EPA Mod. 3510C Analysis Description: 8082A GCS PCB
Associated Lab Samples: 10444920005

METHOD BLANK: 3043877 Matrix: Water
Associated Lab Samples: 10444920005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	ND	0.10	09/07/18 08:09	
PCB-1221 (Aroclor 1221)	ug/L	ND	0.10	09/07/18 08:09	
PCB-1232 (Aroclor 1232)	ug/L	ND	0.10	09/07/18 08:09	
PCB-1242 (Aroclor 1242)	ug/L	ND	0.10	09/07/18 08:09	
PCB-1248 (Aroclor 1248)	ug/L	ND	0.10	09/07/18 08:09	
PCB-1254 (Aroclor 1254)	ug/L	ND	0.10	09/07/18 08:09	
PCB-1260 (Aroclor 1260)	ug/L	ND	0.10	09/07/18 08:09	
Decachlorobiphenyl (S)	%.	83	30-125	09/07/18 08:09	
Tetrachloro-m-xylene (S)	%.	56	30-125	09/07/18 08:09	

LABORATORY CONTROL SAMPLE & LCSD: 3043878 3043879

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	2	1.5	1.4	74	72	47-125	3	20	
PCB-1260 (Aroclor 1260)	ug/L	2	1.5	1.5	75	73	54-125	3	20	
Decachlorobiphenyl (S)	%.				77	75	30-125			
Tetrachloro-m-xylene (S)	%.				66	61	30-125			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

QC Batch: 559362 Analysis Method: EPA 8270D by SIM
QC Batch Method: EPA Mod. 3510C Analysis Description: 8270D CPAH by SIM MSSV
Associated Lab Samples: 10444920005

METHOD BLANK: 3036720 Matrix: Water
Associated Lab Samples: 10444920005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	ND	0.040	08/28/18 23:36	
2-Methylnaphthalene	ug/L	ND	0.040	08/28/18 23:36	
Acenaphthene	ug/L	ND	0.040	08/28/18 23:36	
Acenaphthylene	ug/L	ND	0.040	08/28/18 23:36	
Anthracene	ug/L	ND	0.040	08/28/18 23:36	
Benzo(a)anthracene	ug/L	ND	0.040	08/28/18 23:36	
Benzo(a)pyrene	ug/L	ND	0.040	08/28/18 23:36	
Benzo(g,h,i)perylene	ug/L	ND	0.040	08/28/18 23:36	
Chrysene	ug/L	ND	0.040	08/28/18 23:36	
Dibenz(a,h)anthracene	ug/L	ND	0.040	08/28/18 23:36	
Dibenzofuran	ug/L	ND	0.040	08/28/18 23:36	
Fluoranthene	ug/L	ND	0.040	08/28/18 23:36	
Fluorene	ug/L	ND	0.040	08/28/18 23:36	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	08/28/18 23:36	
Naphthalene	ug/L	ND	0.040	08/28/18 23:36	
Phenanthrene	ug/L	ND	0.040	08/28/18 23:36	
Pyrene	ug/L	ND	0.040	08/28/18 23:36	
2-Fluorobiphenyl (S)	%.	64	52-125	08/28/18 23:36	
p-Terphenyl-d14 (S)	%.	77	63-125	08/28/18 23:36	

LABORATORY CONTROL SAMPLE & LCSD: 3036721 3036722

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1-Methylnaphthalene	ug/L	3	1.9	2.2	63	72	48-125	13	20	
2-Methylnaphthalene	ug/L	3	1.6	1.8	53	59	48-125	12	20	
Acenaphthene	ug/L	3	1.8	2.1	61	69	50-125	13	20	
Acenaphthylene	ug/L	3	1.7	1.9	55	64	40-125	14	20	
Anthracene	ug/L	3	2.0	2.1	68	70	42-125	3	20	
Benzo(a)anthracene	ug/L	3	2.2	2.2	74	74	64-125	0	20	
Benzo(a)pyrene	ug/L	3	2.3	2.3	77	77	64-125	0	20	
Benzo(g,h,i)perylene	ug/L	3	2.5	2.5	82	82	65-125	0	20	
Chrysene	ug/L	3	2.4	2.4	80	80	67-125	0	20	
Dibenz(a,h)anthracene	ug/L	3	2.5	2.5	84	84	68-125	0	20	
Dibenzofuran	ug/L	6	3.8	4.3	63	71	56-125	13	20	
Fluoranthene	ug/L	3	2.3	2.3	76	77	66-125	1	20	
Fluorene	ug/L	3	1.9	2.1	65	71	57-125	10	20	
Indeno(1,2,3-cd)pyrene	ug/L	3	2.5	2.5	82	82	66-125	0	20	
Naphthalene	ug/L	3	1.6	1.8	53	59	42-125	11	20	
Phenanthrene	ug/L	3	2.2	2.3	74	76	64-125	3	20	
Pyrene	ug/L	3	2.3	2.3	75	76	68-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

LABORATORY CONTROL SAMPLE & LCSD: 3036721 3036722

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
2-Fluorobiphenyl (S)	%.				55	63	52-125			
p-Terphenyl-d14 (S)	%.				71	70	63-125			

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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

QC Batch: 559762 Analysis Method: NWTPH-Dx
QC Batch Method: EPA Mod. 3510C Analysis Description: NWTPH-Dx GCS LV
Associated Lab Samples: 10444920001, 10444920002, 10444920003, 10444920004, 10444920005

METHOD BLANK: 3038724 Matrix: Water
Associated Lab Samples: 10444920001, 10444920002, 10444920003, 10444920004, 10444920005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range	mg/L	ND	0.40	09/01/18 17:31	
Motor Oil Range	mg/L	ND	0.40	09/01/18 17:31	
n-Triacontane (S)	%.	66	50-150	09/01/18 17:31	
o-Terphenyl (S)	%.	73	50-150	09/01/18 17:31	

LABORATORY CONTROL SAMPLE & LCSD: 3038725 3038726

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/L	2	1.9	1.7	97	85	50-150	14	20	
Motor Oil Range	mg/L	2	1.9	1.7	96	84	50-150	14	20	
n-Triacontane (S)	%.				90	78	50-150			
o-Terphenyl (S)	%.				91	78	50-150			

SAMPLE DUPLICATE: 3038727

Parameter	Units	10445164001 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range	mg/L	100	100	0	30	
Motor Oil Range	mg/L	5.6	6.3	12	30	
n-Triacontane (S)	%.	0	0			S4
o-Terphenyl (S)	%.	0	0			S4

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: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

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

BATCH QUALIFIERS

Batch: 559571

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 561344

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

MN	The reporting limit has been raised in accordance with Minnesota Statutes 4740.2100 Subpart 8. C, D. Reporting Limit Evaluation Rule.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
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Minneapolis, MN 55414
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METHOD CROSS REFERENCE TABLE

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

Parameter	Matrix	Analytical Method	Preparation Method
8260B VOC	Water	SW-846 8260B/5030B	N/A

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2004-004.002/3 Estes West Truc
Pace Project No.: 10444920

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10444920005	**EW-082318-5**	EPA Mod. 3510C	560662	EPA 8082A	561344
10444920001	**EW-082318-1**	EPA Mod. 3510C	559762	NWTPH-Dx	560418
10444920002	**EW-082318-2**	EPA Mod. 3510C	559762	NWTPH-Dx	560418
10444920003	**EW-082318-3**	EPA Mod. 3510C	559762	NWTPH-Dx	560418
10444920004	**EW-082318-4**	EPA Mod. 3510C	559762	NWTPH-Dx	560418
10444920005	**EW-082318-5**	EPA Mod. 3510C	559762	NWTPH-Dx	560418
10444920005	**EW-082318-5**	NWTPH-Gx	560124		
10444920005	**EW-082318-5**	EPA 3010	559599	EPA 6010D	559724
10444920005	**EW-082318-5**	EPA Mod. 3510C	559362	EPA 8270D by SIM	559571
10444920005	**EW-082318-5**	EPA 8260B	559487		

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Docun

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

WO# : 10444920

10444920

2271138

Section A Required Client Information:

Company:	ETG
Address:	1176 W 7TH AVE
	EUGENE, OR 97402
Email To:	dlandry@etginc.com
Phone:	541 743-2600
Fax:	
Requested Due Date/TAT:	STANDARD

Section B Required Project Information:

Report To:	DAN LANDRY
Copy To:	
Purchase Order No.:	
Project Name:	ESTES WEST TRUCKING
Project Number:	2004-004.00 2/3

Section C Invoice Information:

Attention:	
Company Name:	ETG
Address:	1176 W 7TH AVE
Pace Quote Reference:	
Pace Project Manager:	Jennifer Gross
Pace Profile #:	32919 #1

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)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	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	NW-TPH-Dx	VOCs Full List (8260)	TOTAL LEAD	PCBs	NWTPH-Gx	cPAHs				Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	EW-082318-1	WT	G			8/23/18	0930		2				X						X										001
2	-2						0910		2				X						X										002
3	-3						1000		2				X						X										003
4	-4						1055		2				X						X										004
5	~~TRIP BLANK~~																												
6	EW-082318-5	WT	G			8/23/18	1120		13	X		X	X						X	X	X	X	X	X					005
7	TRIP BLANK								3																HOLD				006
8																													
9																													
10																													
11																													
12																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
PLEASE RUN NWTPH-Dx CHROMATOGRAPHS.	STEVE McCRAY / ETG	8/23/18	1300	[illegible] - PACE	8/24/18	10:00	3.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: | DATE Signed (MM/DD/YY):

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

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.

Pace Analytical	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 02May2018 Page 1 of 2
	Document No.: **F-MN-L-213-rev.23**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: ET6

Project #: **WO#: 10444920**

PM: JMG **Due Date: 08/31/18**

CLIENT: ET Group

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

Tracking Number: 7475 9394 7365

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): 3.9 **Cooler Temp Corrected (°C):** 3.9 **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:** 8/24/18 JT

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 # 5:1/1 Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☑Yes	☐No	☐N/A	14. See exception sheet
Trip Blank Present? Trip Blank Custody Seals Present? Pace Trip Blank Lot # (if purchased): 159663	☑Yes ☑Yes	☐No ☐No	☐N/A ☐N/A	15.

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐Yes ☐No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Jenni Gross **Date:** 08/27/18

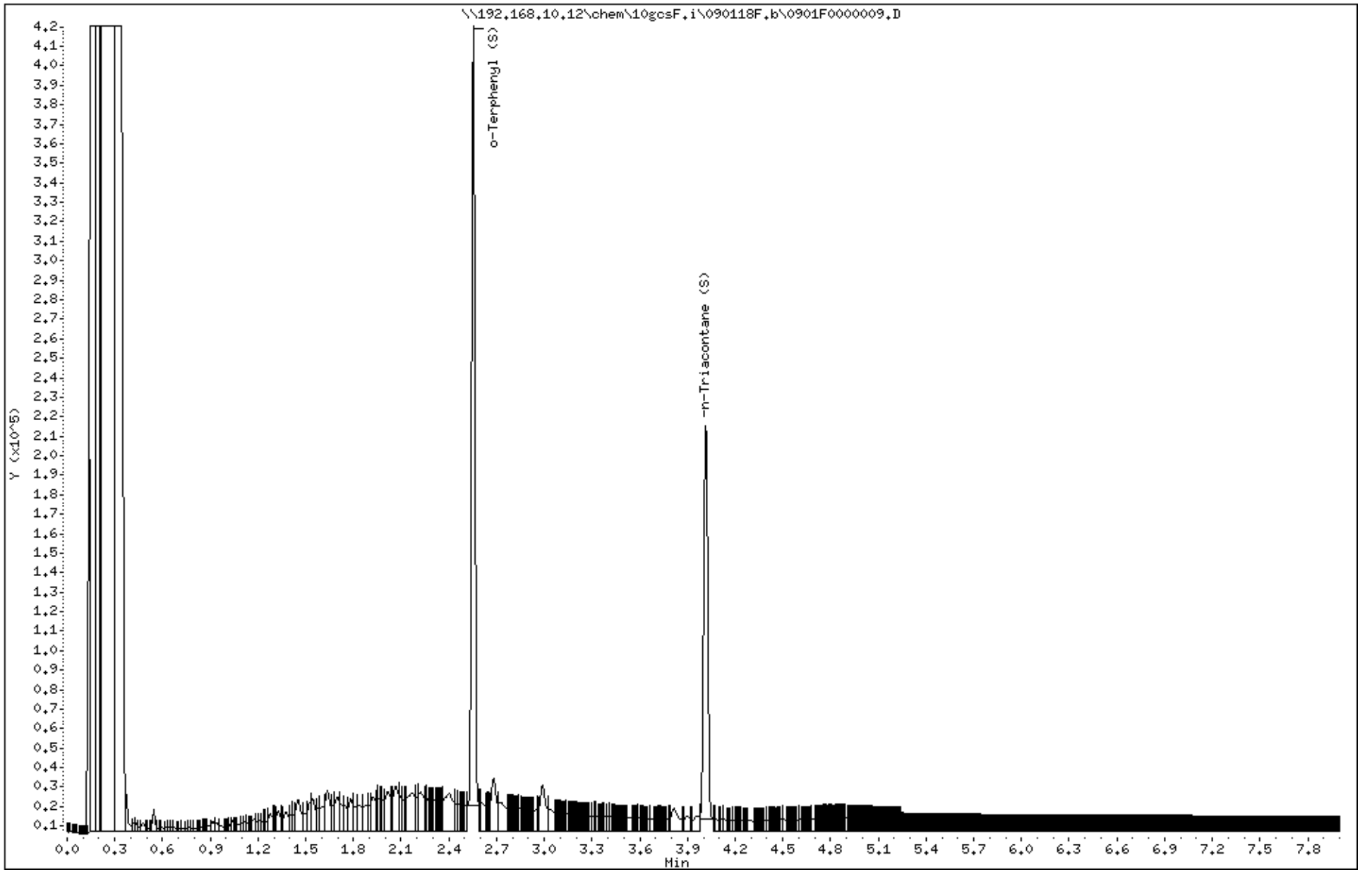
Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect con

Pace Analytical	Document Name: **Headspace Exception**	Document Revised: 06Nov2017 Page 1 of 1
	Document No.: **F-MN-C-276-Rev.00**	Issuing Authority: Pace Minnesota Quality Office

Sample ID	Headspace > 6mm	Headspace < 6mm	No Headspace	Total Vials
EW-08231S-S	0	6	0	6
Trip Blank	1	0	2	3

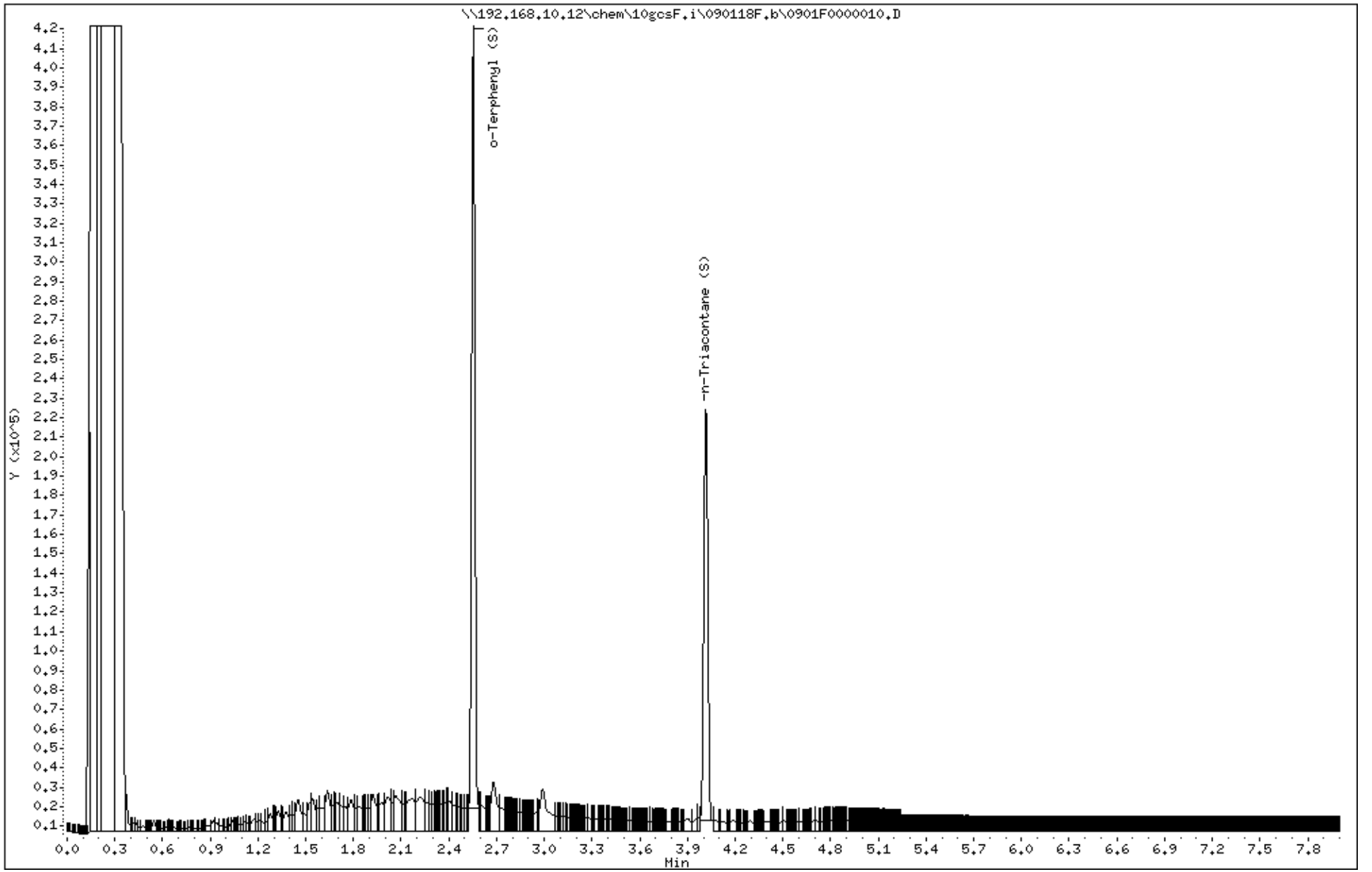
Data File: \\192.168.10.12\chem\10gcsF.i\090118F.b\0901F0000009.D
Date : 01-SEP-2018 18:17
Client ID:
Sample Info: 10444920001
Volume Injected (uL): 1.0
Column phase: DB-5-US17520019

Instrument: 10gcsF.i
Operator: JVM
Column diameter: 0.32



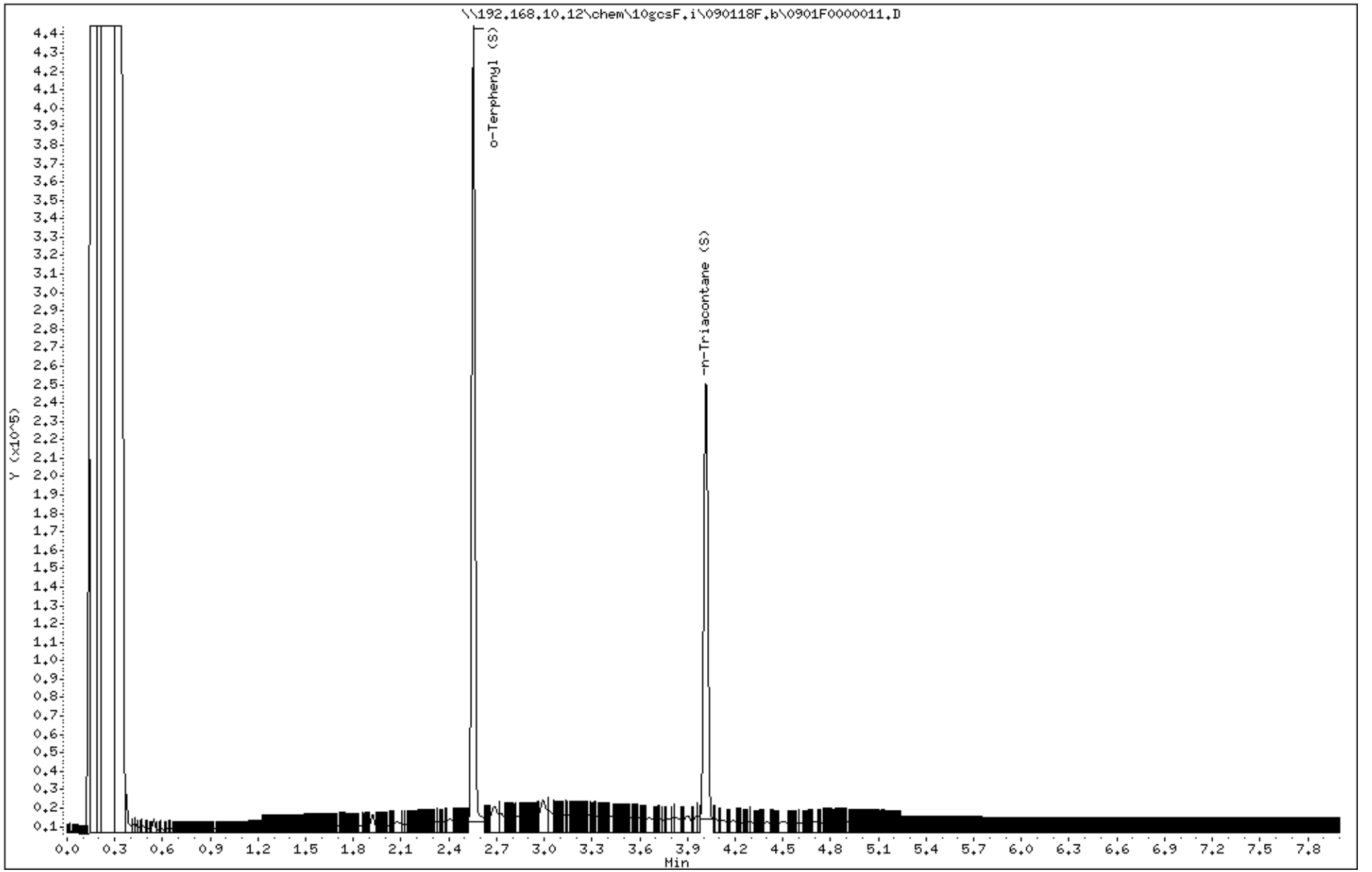
Data File: \\192.168.10.12\chem\10gcsF.i\090118F.b\0901F0000010.D
Date : 01-SEP-2018 18:28
Client ID:
Sample Info: 10444920002
Volume Injected (uL): 1.0
Column phase: DB-5-US17520019

Instrument: 10gcsF.i
Operator: JVM
Column diameter: 0.32



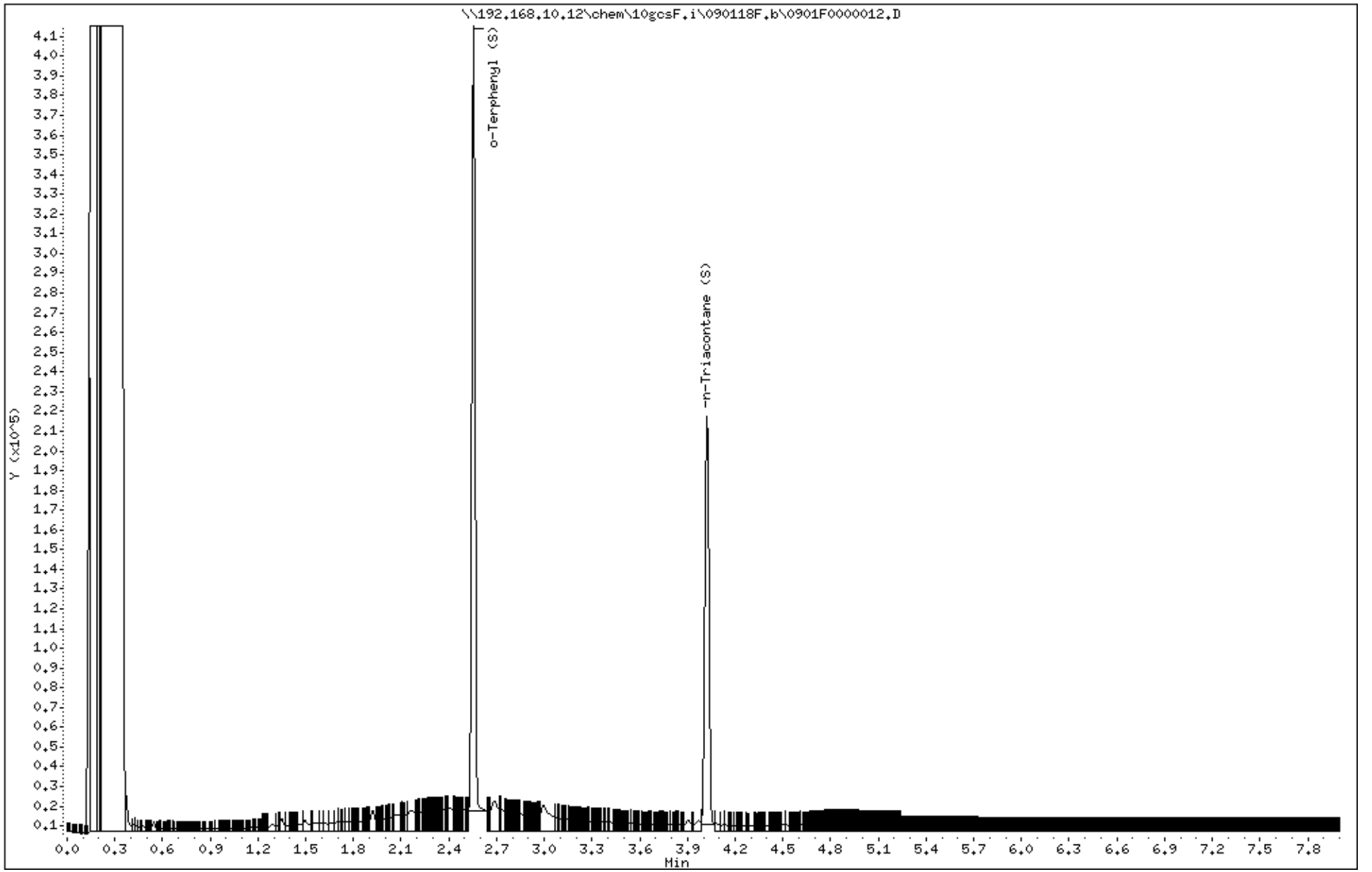
Data File: \\192.168.10.12\chem\10gcsF.i\090118F.b\0901F0000011.D
Date : 01-SEP-2018 18:40
Client ID:
Sample Info: 10444920003
Volume Injected (uL): 1.0
Column phase: DB-5-US17520019

Instrument: 10gcsF.i
Operator: JVM
Column diameter: 0.32



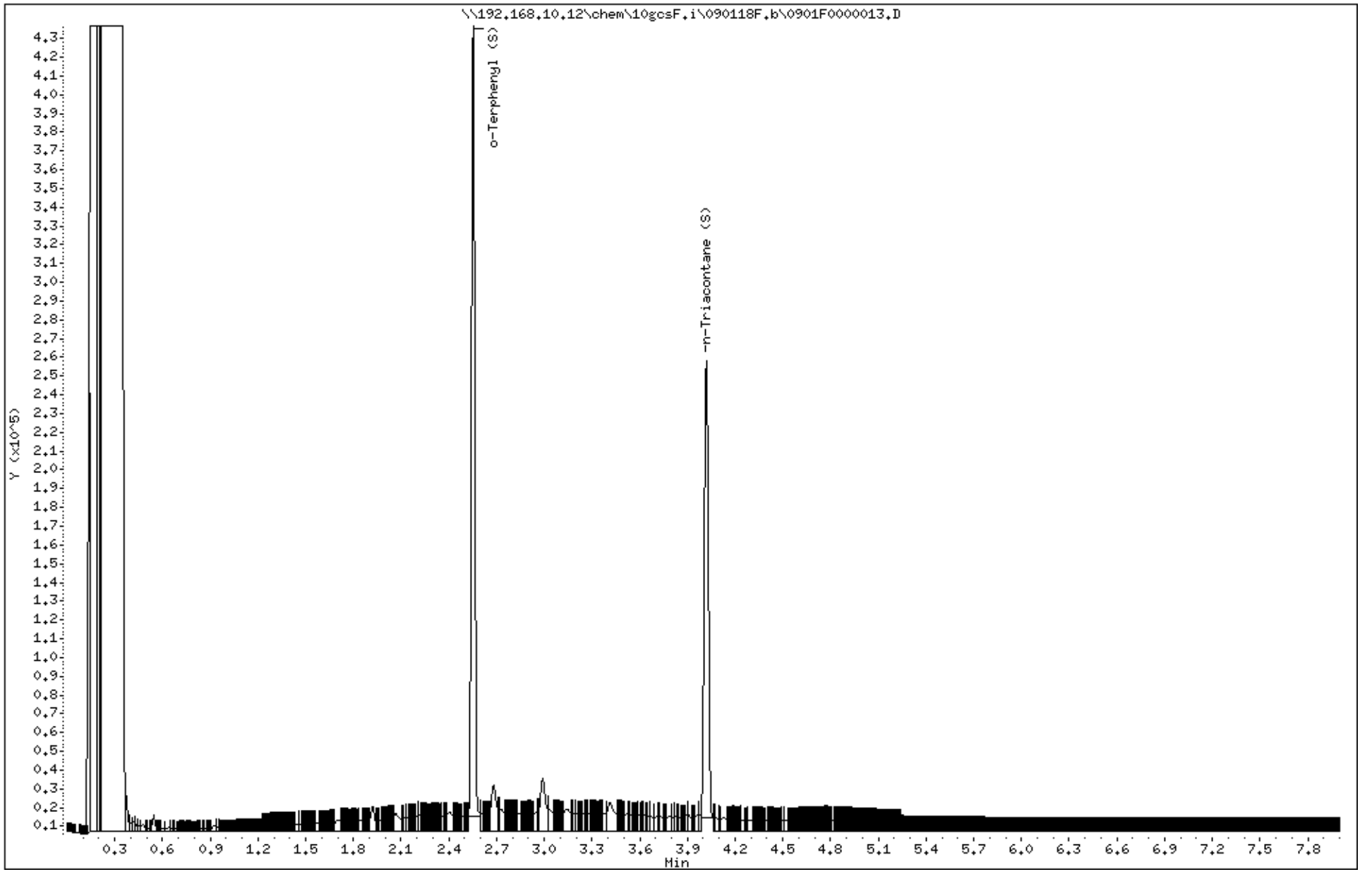
Data File: \\192.168.10.12\chem\10gcsF.i\090118F.b\0901F0000012.D
Date : 01-SEP-2018 18:51
Client ID:
Sample Info: 10444920004
Volume Injected (uL): 1.0
Column phase: DB-5-US17520019

Instrument: 10gcsF.i
Operator: JVM
Column diameter: 0.32



Data File: \\192.168.10.12\chem\10gcsF.i\090118F.b\0901F0000013.D
Date : 01-SEP-2018 19:03
Client ID:
Sample Info: 10444920005
Volume Injected (uL): 1.0
Column phase: DB-5-US17520019

Instrument: 10gcsF.i
Operator: JVM
Column diameter: 0.32



ATTACHMENT C
TREATMENT SYSTEM DATA SHEETS

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

Date: 8-9-18 ***Time:*** 11:35

Operation Parameters:

AS Blower Pressure 12 psi

Air Sparging Wells:	AS Well ID	Pressure (psi)	Flow Rate (cfm)
Manifold A	AS-1	11	<0.5
	AS-2	8.5	1.5
	AS-3	11	0.75
Manifold B	AS-3	10.5	2
	AS-4	19	2
	AS-5	15.75	1.5

System Inspection Checks:

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

Comments: Need new blower filter.

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

Date: 8/23/18 ***Time:*** ~~0940~~ 1200

Operation Parameters:

AS Blower Pressure 12.2 psi

Air Sparging Wells:	AS Well ID	Pressure (psi)	Flow Rate (cfm)
Manifold A	AS-1	10.5	<0.5
	AS-2	10.75	0.5
	AS-3	10.75	0.5
Manifold B	AS-3	11	<2
	AS-4	18.5	<2
	AS-5	15.5	<2

System Inspection Checks:

Condensate Drain Blow Down (Manifold A) X X
Condensate Drain Blow Down (Manifold B) X
Inspect AS Blower Filter X (ALSO CLEANED 3 INTERNAL FILTERS)
Inspect AS Blower Enclosure Cooling Fan X

Comments: CHANGED EXTERNAL BLOWER FILTER, CLEANED (BLEW OUT) THREE INTERNAL FILTERS.