

Technical Memorandum

Supplemental Investigation Tasks (August 2019)

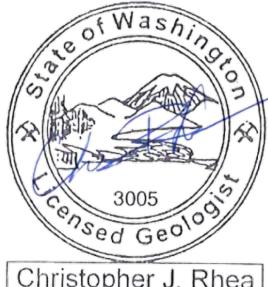
To: Frank Winslow, Washington Department of Ecology VCP

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Marisha Hamm, Christensen Inc.
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From: Daniele Peters, EI, Chris Rhea, LG, and Paul Ecker, LHG

Date: October 23, 2019

Regarding: DeBock's Texaco
100 West Wine Country Road, Grandview, Washington
Ecology Facility ID #94369212, Cleanup Site ID #6910, Voluntary Cleanup ID #CE0488
EES Project 2093-01



Christopher J. Rhea

This memorandum describes supplemental Remedial Investigation (RI) activities recently conducted at the former DeBock's Texaco site located at 100 West Wine Country Road in Grandview, Washington (Property). RI activities are being conducted in response to historic gasoline release(s) associated with former site-fueling operations. The supplemental investigative activities were conducted in accordance with the work plan dated July 5, 2019, as discussed with the Christensen Inc. team and Ecology's Voluntary Cleanup site manager, Frank Winslow.

The site location and key features are illustrated on Figures 1 and Figure set 2.

BACKGROUND

RI findings indicate that an upgradient source(s) may be contributing to the gasoline plume originating at the subject Property. As discussed with Ecology, further investigation was necessary to characterize plume conditions and the potential for historic and ongoing contamination originating from undefined upgradient sources. The purpose of this memorandum is to describe recent supplemental RI activities that address the identified data gaps, including temporary boring and well installation and additional source-area groundwater monitoring. The supplemental investigative tasks contribute to completion of the RI and support remedial action planning, in accordance with the Model Toxics Control Act ("MTCA"), Washington's environmental cleanup rules (WAC 173-340 and 173-360), and related published guidance (Ecology Publication 10-09-057, revised June 2016).

RI tasks conducted to date include historical review, site assessment, plume monitoring and characterization activities, and development of a preliminary conceptual site model, including beneficial water-use determination. Subsurface data developed between 2017 and 2019 supplement prior site

information and help to characterize contaminant sources and distribution. Supporting background information is summarized below and detailed in an RI status report dated January 4, 2019. Attached Figures 2A through 7 illustrate recent investigative findings.

Available RI data confirm that residual gasoline impacts in smear-zone soil (approximately 10 to 22 feet below ground surface) and shallow groundwater at the subject Property represent a continuing source of contamination throughout the site. Free-phase gasoline is present on the water table at monitoring well MW-2, located along the western (downgradient) Property boundary, but appears very localized and has not been identified at any other surrounding locations. Dissolved groundwater plume concentrations exceed MTCA cleanup levels throughout much of the subject Property and extend beyond Property boundaries at several locations.

Other than at well MW-2, where floating free product is observed, the greatest concentrations of dissolved gasoline and benzene in groundwater have been observed at boring B1, which is located at a former UST and piping area near the Property's northwestern corner. Although this B1/UST area represents a likely source originating on the subject Property, elevated gasoline concentrations in groundwater are observed at locations north of the subject Property, suggesting additional source(s) may also be present at upgradient locations where historic fueling and other operations occurred over many decades (see Figure 2C). All observed impacts are extensively degraded and consistent with the long history of fueling and maintenance activities on and near the subject Property.

SUPPLEMENTAL RI TASKS

Based on discussions with Ecology, and in view of MTCA requirements and the need "to fully characterize groundwater quality throughout the plume," EES conducted supplemental RI tasks at the DeBock's site in August 2019. The purpose of supplemental RI tasks described in this memo is (1) to evaluate groundwater conditions north of the DeBock's Property to determine whether gasoline-related sources may be present near those upgradient locations, and (2) establish a monitoring well for characterization of groundwater conditions at the B1/UST source area.

Findings from these efforts demonstrate that upgradient sources are contributing to the DeBock's gasoline plume, and a newly installed monitoring well (MW-13) aids in characterizing groundwater conditions at the B1/UST source area. Following a confirmatory monitoring event scheduled for March 2020, EES plans to submit a final RI Report. Implementation of interim cleanup actions including product removal from MW-2 will continue during this RI monitoring period while cleanup action planning is under development.

SOIL AND GROUNDWATER INVESTIGATION

Soil and groundwater investigation activities were completed at the DeBock's site in August 2019. During this field event, EES collected soil and groundwater samples at five temporary upgradient borings (B19 through B23) and at a new RI well (MW-13) installed at the Property's B1/UST location. Groundwater samples were also collected at several wells near MW-13 (MW-5, MW-10, MW-11, and

MW-12). Drilling and sampling activities are summarized below. Boring and well locations are illustrated on Figure 4.

UTILITY LOCATING

Before initiating subsurface drilling work, EES coordinated with public and private utility locators and City representatives to identify and avoid underground utilities at each of the proposed boring locations. During this research process, the City indicated the presence of a stormwater infiltration trench beneath the north side of Wine Country Road, as shown on Figure 2B. This feature is significant, because it contributes increased stormwater infiltration immediately north and up-gradient of the Debock's Property and may alter water-table conditions near local contaminant sources.

DRILLING AND WELL INSTALLATION

From August 6 through 8, 2019, five temporary soil borings were advanced (B19 through B23) upgradient of the DeBock's Property, north of Wine Country Road and within the City's sidewalk right-of-way. All right-of-way work was approved by the City of Grandview Public Works Director, Cus Arteaga. Boring B18 was drilled and converted to a re-usable monitoring well (MW-13) at a likely source area located on the northwestern corner of the Property where a gasoline UST was historically operated. Well MW-13 is intended to duplicate the former boring B1 sampling location.

Drilling and well installation activities were conducted by Cascade Drilling (Woodinville, Washington) using direct-push methods. Borings were initially hand-augered at shallow depths as a precaution to avoid subsurface infrastructure and unmarked features, then advanced to terminal depths of approximately 25 feet below ground surface (bgs). Well MW-13 was installed, developed, and surveyed in accordance with standard practices and Ecology criteria. Soil and groundwater samples were collected from each of the borings and submitted for laboratory analysis.

SUBSURFACE CONDITIONS

Subsurface conditions were relatively uniform across the boring locations and were consistent with previous observations at the site. Brown to gray native soil consisting of silty sands and sandy silts was observed extending to maximum depths explored of approximately 25 feet bgs. Soil samples were field screened for sheen and for volatile organic vapors using a photoionization detector (PID). Boring and well-construction logs are provided as Attachment A.

Saturated soils were observed at each of the borings at depths of approximately 15 to 17 feet bgs, with stable groundwater measured at approximately 18 to 20 feet bgs. Based on the observed groundwater conditions, new PVC well screens were placed at and above the water table in each borehole. Groundwater was purged until non-turbid, then samples were collected in laboratory-provided containers using a peristaltic pump with new polyethylene tubing.

At boring B18 (MW-13), field indications of petroleum contamination were identified between approximately 13 and 23 feet of the ground surface, which is consistent with conditions observed at B1 during the 2018 investigative drilling events and within the expected range of water table fluctuation and smear-zone conditions. Field observations also indicated obvious petroleum impacts within the

groundwater smear-zone at depths between approximately 13 and 20 feet at borings B19 and B21, located upgradient of the subject Property on the northwest and northeast corners of the Wine Country Road and Division Street intersection.

SUPPLEMENTAL GROUNDWATER SAMPLING

The first of two supplemental groundwater monitoring events was conducted on August 8, 2019, with the next event scheduled for March 2020. The limited additional groundwater monitoring is intended to characterize seasonal water table conditions surrounding the new, source-area monitoring well, MW-13. Groundwater testing at four adjacent wells (MW-5, MW-10, MW-11, and MW-12) provides a basis of comparison to the MW-13 and upgradient data.

Before conducting monitoring well purging and sampling, depth to water was measured across the site's full well network. The water table was observed at approximately 18 to 20 feet bgs and flowed to the southwest during the August monitoring event, which is consistent with site data collected since 2017. Depth to water measurements and corresponding water table elevations are provided in Table 2 and illustrated on Figure 6. Groundwater samples were collected from each monitoring well using a peristaltic pump and new disposable polyethylene tubing. Sampling was conducted in accordance with standard low-flow methods. Water quality redox and stability parameters (dissolved oxygen, oxygen reduction potential, ferrous iron, pH, temperature, and conductivity) are provided in Table 3.

INVESTIGATION-DERIVED WASTE

Investigation-derived soil cuttings and purge water were placed in sealed, labeled drums and stored temporarily at the subject Property. Waste profiling and disposal of soil is being coordinated for late 2019. Purge water will be temporarily stored at the subject Property and will be disposed of following the March 2020 groundwater sampling event. Disposal documentation will be provided to Christensen Inc. when available.

LABORATORY ANALYTICAL RESULTS

Soil and groundwater samples collected during the August sampling event were submitted to Apex Laboratories (Tigard, Oregon) for chemical analysis.

Soil samples were analyzed for gasoline-range organics by Method NWTPH-Gx and related volatile organic compounds (benzene, toluene, ethylbenzene, xylenes [BTEX], and naphthalene) by EPA Method 5035/8260. One vadose-zone soil sample per boring was analyzed from each of the five up-gradient locations (B19 through B23). Soil samples from four depth intervals were analyzed at the MW-13 (B18) boring location to characterize source-area soil conditions.

Groundwater samples collected from each of the temporary borings (B19 through B23) and select monitoring wells (MW-5 and MW-10 through MW-13) were analyzed for gasoline (Method NWTPH-Gx) and gasoline-related volatiles (Method EPA 8260). For source-area confirmatory characterization, the groundwater sample collected from MW-13 was also analyzed for diesel- and oil-range hydrocarbons (Method MWTPH-Dx).

Laboratory analytical results are summarized below, presented in Tables 1 and 4, and illustrated on Figures 5 and 7. A copy of the laboratory analytical report is provided as Attachment B.

UP-GRADIENT SOURCE AREA (B19-B23)

Gasoline contamination was identified at three of the five borings located north and northeast of the Debock's Property closest to Division Street (Tables 1 and 4 and Figures 5 and 7). Impacts were confirmed in smear-zone soils and groundwater, with the greatest gasoline concentrations identified directly upgradient of the DeBock's Property at B19, which is on the northwest corner of the Wine Country Road and Division Street intersection. Confirmatory laboratory testing was not conducted on shallow soils. These locations correspond with historical automotive and fueling operations as shown on Figure 2C.

- In soil, gasoline was detected at borings B19 and B21 at concentrations of 4,740 and 119 milligrams per kilogram (mg/kg), respectively, at depths between 14 and 15 feet bgs. These concentrations exceed the default MTCA Method A cleanup level of 30 mg/kg.
 - Gasoline-related volatile constituents were also detected at these two locations, but at relatively low concentrations. Only naphthalene (36 mg/kg) at B19 exceeded the Method A cleanup level of 5 mg/kg.
 - Gasoline and related constituents were not detected in laboratory-analyzed samples collected from the other right-of-way borings (B20, B22, and B23).
- In groundwater, gasoline was detected in groundwater samples collected from up-gradient borings B19, B20, and B21 at concentrations ranging between 1,130 and 4,160 micrograms per liter (ug/L), respectively, which all exceed the MTCA Method A cleanup level of 800 ug/L. Gasoline was not detected in samples collected from B22 or B23.
 - Gasoline-related constituents (BTEX and/or naphthalene) were detected in samples consistent with where gasoline was identified. Detected concentrations were all below MTCA Method A cleanup levels.
 - No free-phase hydrocarbons (LNAPL) were identified at the right-of-way boring locations.

ON-PROPERTY UST SOURCE-AREA (B18/MW-13)

Boring B18 was drilled and converted to monitoring well MW-13 at the former B1/UST source-area near the northwest corner of the subject Property. Soil analytical results confirmed gasoline contamination at B18 at depths between 15 and 20 feet bgs, from within the known groundwater smear-zone (between approximately 12 and 23 feet bgs based on historical site data), and consistent with conditions observed during the 2018 sampling in the similar B1 location (Table 1 and Figure 5). Gasoline impacts were not identified in shallower (10 foot) or deeper (25 foot) soil samples from B18, bracketing the vertical extent of contamination in this area.

Among the five wells sampled near the MW-13 well location in August 2019, dissolved-phase gasoline was detected in four of the five samples (Table 4 and Figure 7). The site's greatest dissolved gasoline concentration was detected at MW-13, confirming a likely source near this former UST area.

- In soil, gasoline was detected in samples collected at 15 and 20 feet bgs at concentrations of 1,600 and 1,210 mg/kg, respectively, which exceed the MTCA Method A cleanup level of 30 mg/kg.
 - Gasoline-related constituents (BTEX and/or naphthalene) were also identified at depths of 15 and 20 feet bgs. Soil concentrations of benzene (0.031 mg/kg at 20 feet) and naphthalene (7.3 mg/kg at 15 feet) slightly exceed the MTCA Method A cleanup levels of 0.03 mg/kg and 5 mg/kg, respectively.
 - No indications of petroleum contamination were observed above 10 feet bgs or below 23 feet bgs.
- Among groundwater samples collected on and immediately adjacent to the DeBock's Property (MW-10 through MW-13), concentrations of gasoline ranged from 115 to 2,580 micrograms per liter (ug/L). Of these detections, only one sample (2,580 ug/L at MW-13) exceeded the MTCA Method A cleanup level of 800 ug/L. Gasoline was not detected in the sample collected from downgradient well MW-5, located west of the Property boundary.
 - Gasoline-related constituents (BTEX and/or naphthalene) were detected in samples consistent with where gasoline was identified. Concentrations were generally below MTCA Method A cleanup levels, except for benzene at MW-13 (8.1 ug/L), which slightly exceeded the MTCA Method A cleanup level of 5 ug/L.
 - Although diesel-range hydrocarbons were identified in the sample collected from MW-13 at a concentration of 1,000 ug/L, the identified diesel concentration was estimated by the laboratory to be due to overlap expected from gasoline range organics and is not representative of a diesel source. Oil-range hydrocarbons were not detected in the MW-13 sample.
 - No LNAPL was identified in site wells except at MW-2, where ongoing product recovery is being conducted.

CONCLUSIONS

Based on the findings of this supplemental investigation, one or more sources of gasoline contamination originates north of Wine Country Road near Division Street and upgradient from the DeBock's facility. The identified upgradient contaminants are present in shallow groundwater at concentrations exceeding MTCA cleanup criteria and appear likely to migrate towards the DeBock's facility, where historic operations resulted in similar impacts to soil and groundwater that are currently being evaluated for cleanup. If migrating, these upgradient fuel source(s) present implications for possible recontamination and could impede cleanup of the DeBock's site.

Subject to the findings of an additional confirmatory monitoring event as planned for March 2020, EES believes that site characterization of the DeBock's site is adequately addressed and an RI report can be completed. If Ecology concurs that investigative data gaps are resolved for the DeBock's RI, then an action plan will be developed to address MTCA cleanup requirements attributable to the DeBock's facility. Upgradient source(s) will be considered as Christensen Inc. develops a cleanup action plan for the DeBock's Property. However, further investigation and cleanup of upgradient sources, which now have been reasonably demonstrated, will be the responsibility of other parties.

ATTACHMENTS

- Figure 1: Site Vicinity Map
- Figure 2A: Site Features
- Figure 2B: Utility Layout
- Figure 2C: Potential Historic Contaminant Sources
- Figure 3: Monitoring Well and Historic Sample Data
- Figure 4: Sample Locations (August 2019)
- Figure 5: Soil Analytical Results – March-August 2019
- Figure 6: Groundwater Elevation Contours (August 8, 2019)
- Figure 7: Groundwater Analytical Results – February 2018-August 2019

- Attachment A: Boring and Well Construction Logs
- Attachment B: Laboratory Analytical Results

Figures



SOURCE:
USGS, GRANDVIEW QUADRANGLE
WASHINGTON-YAKIMA CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



APPROXIMATE SCALE IN FEET

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EES

ENVIRONMENTAL CONSULTING, INC.

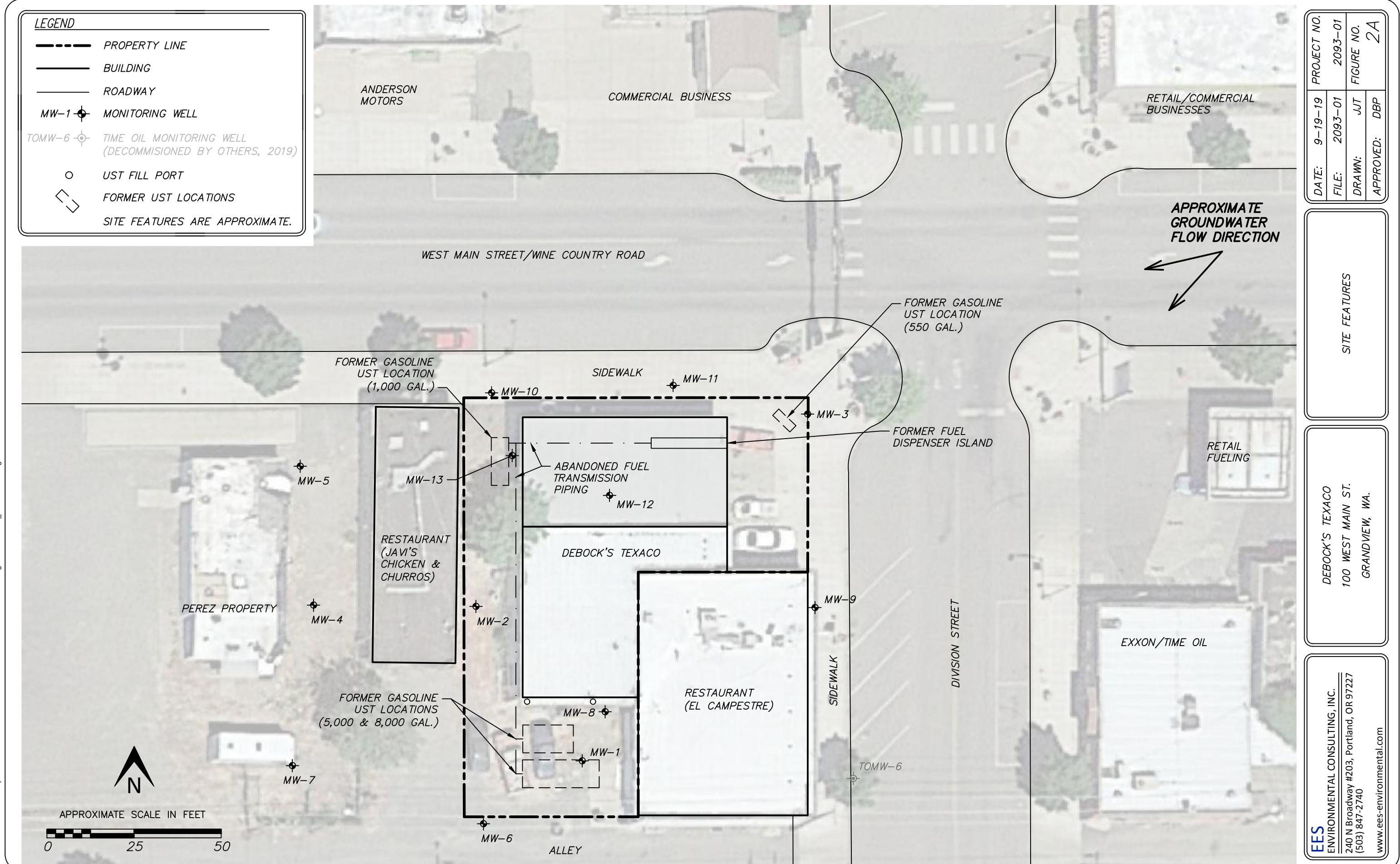
240 N Broadway #203, Portland, OR 97227
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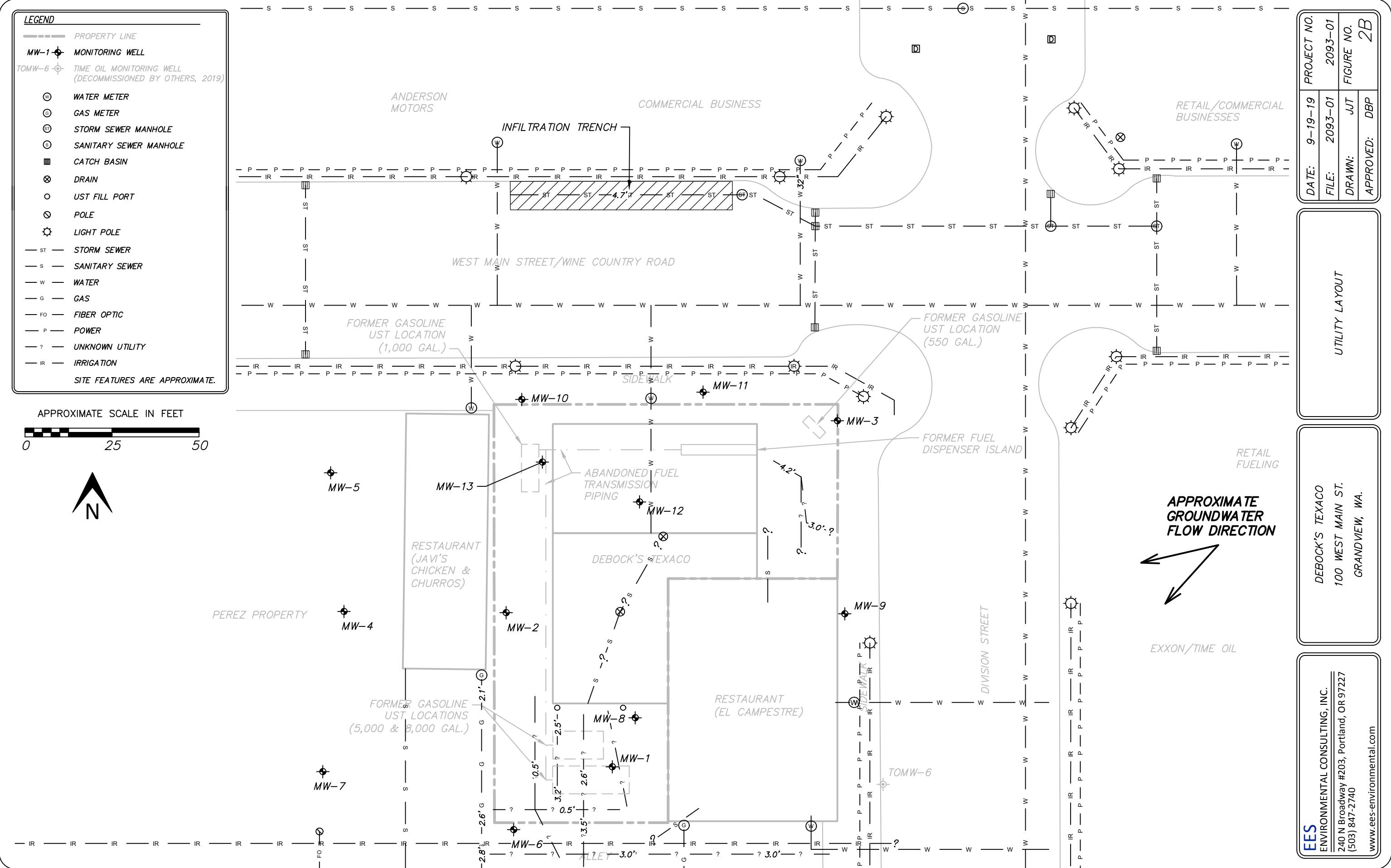
www.ees-environmental.com

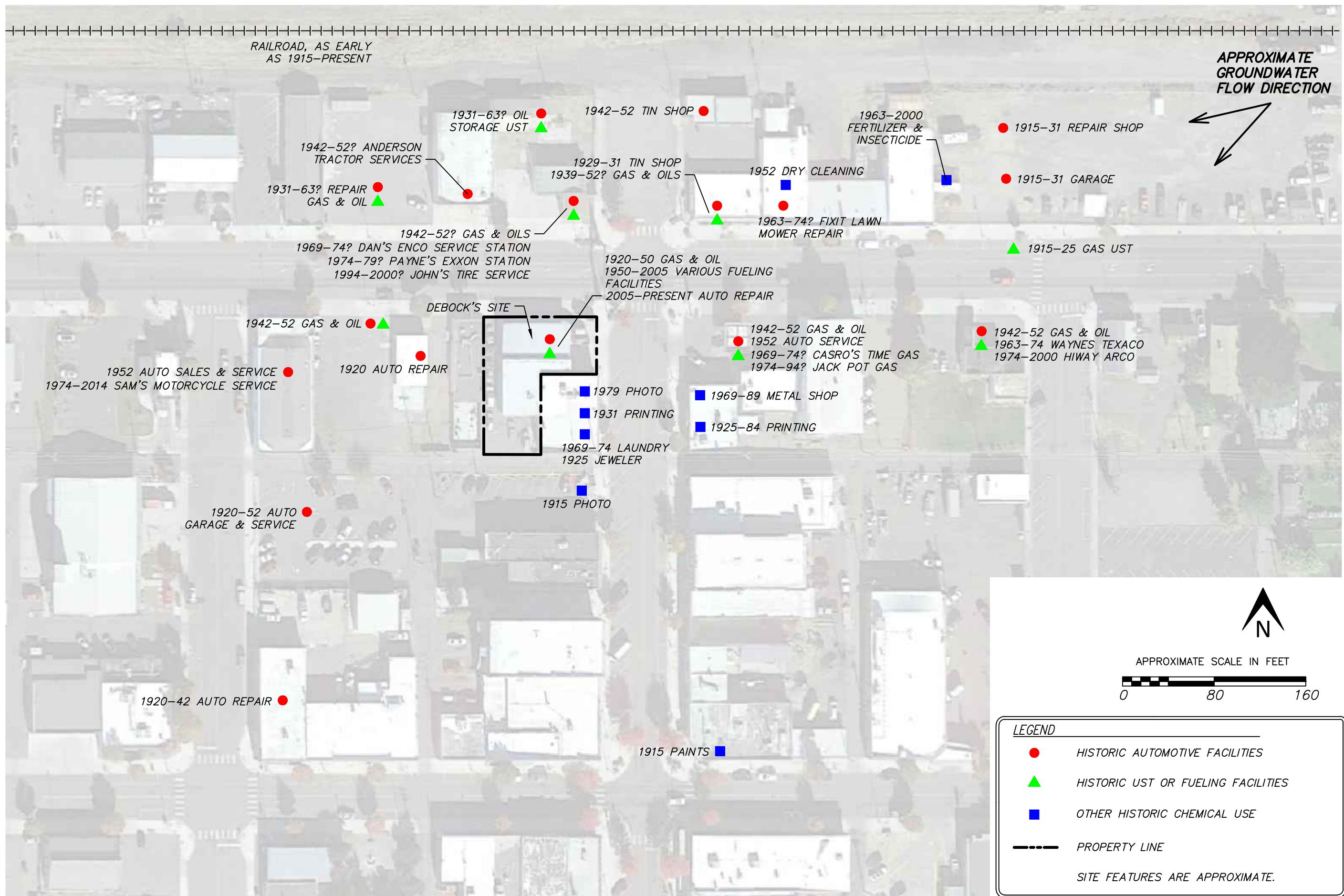
SITE VICINITY MAP

DEBOCK'S TEXACO
100 WEST MAIN ST.
GRANDVIEW, WA.

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APPROVED:	DBP	1





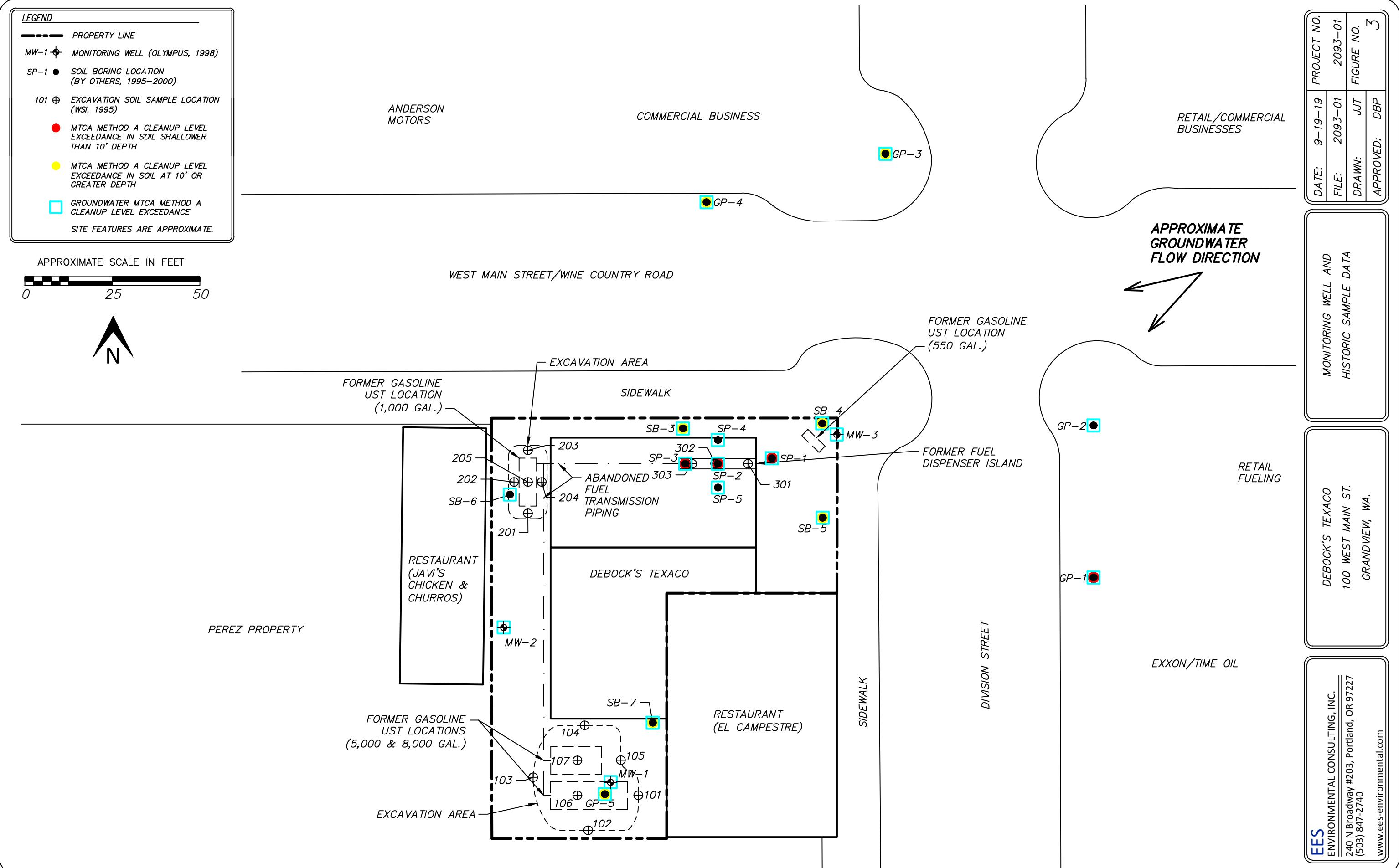


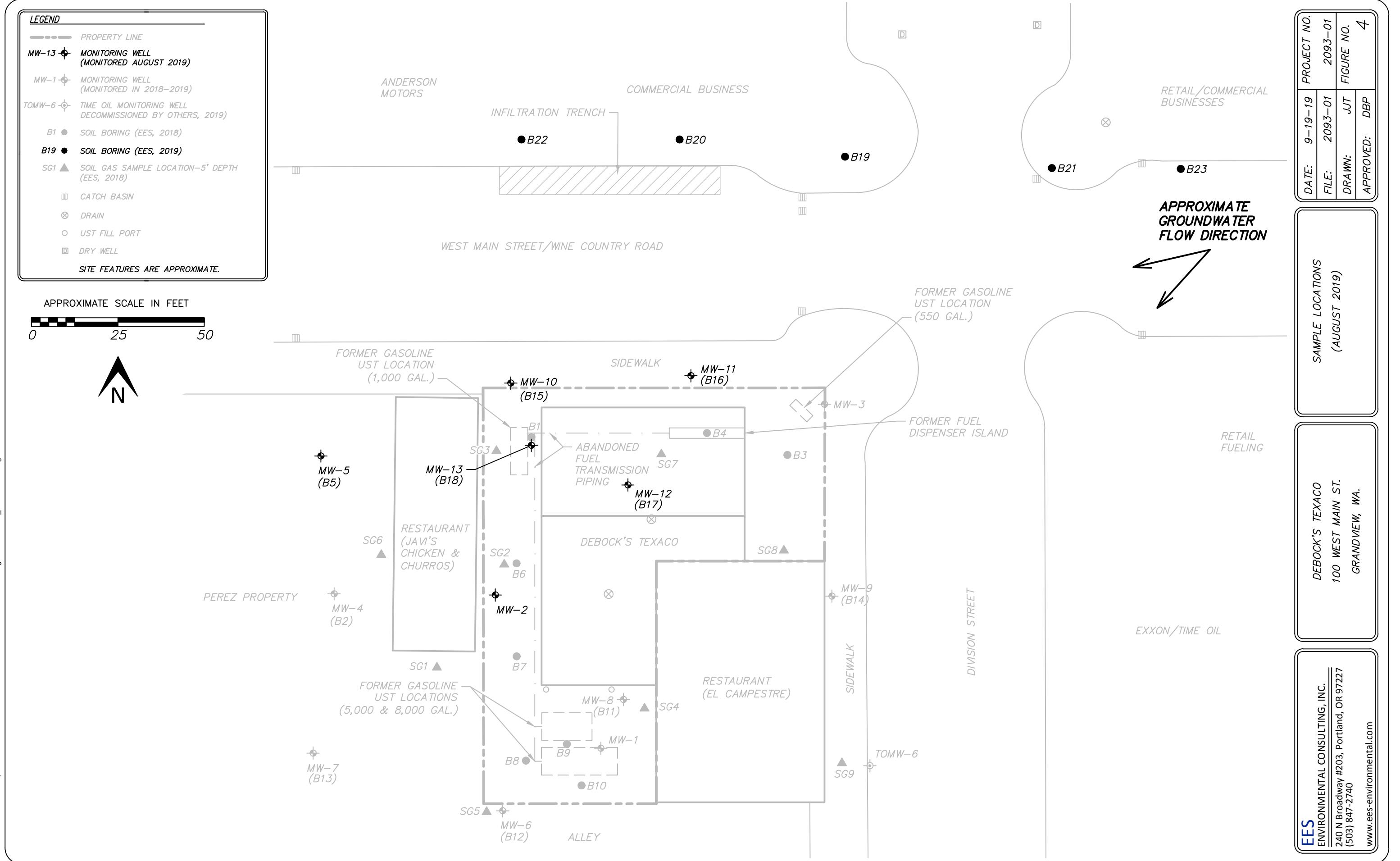
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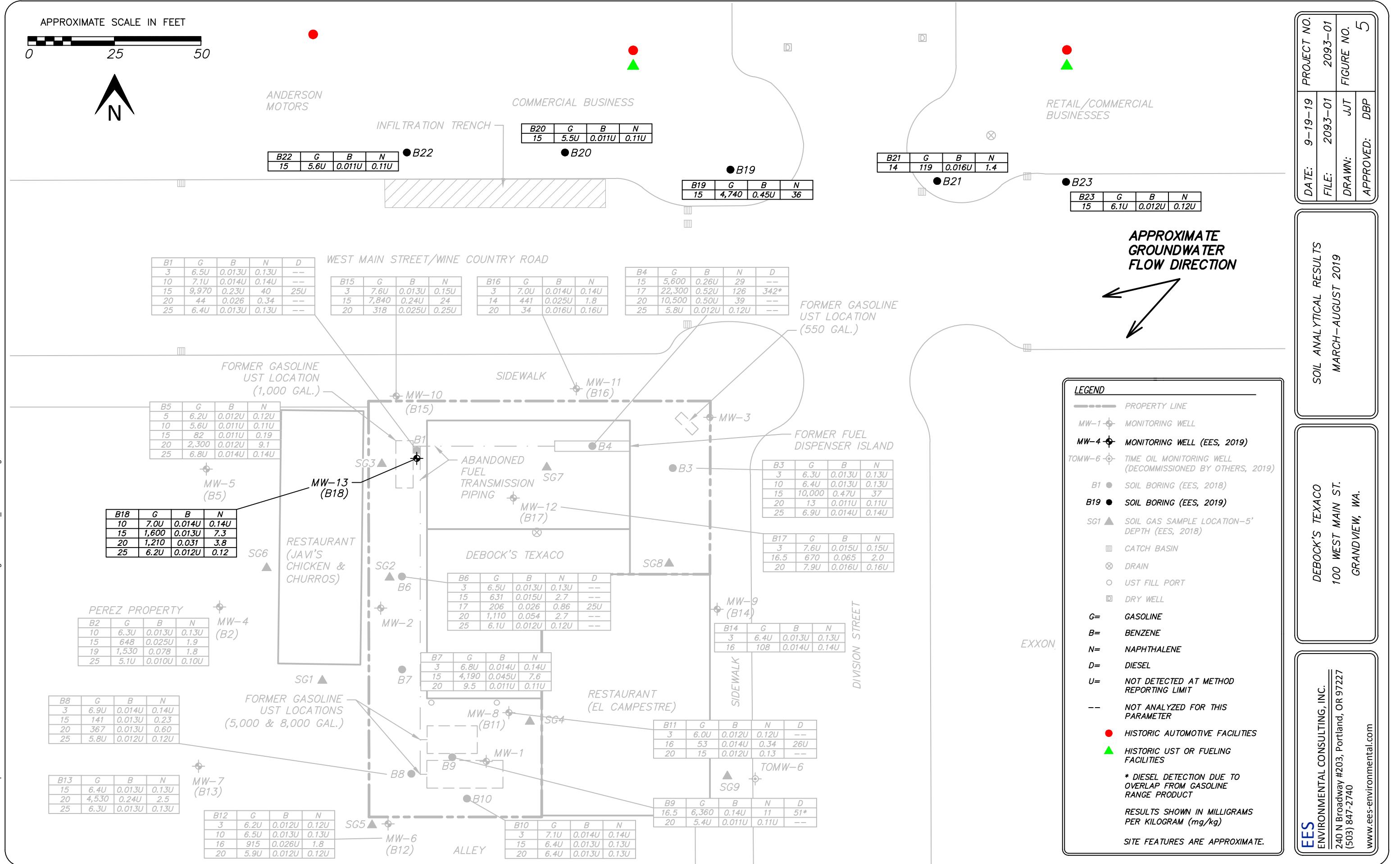
POTENTIAL HISTORIC CONTAMINANT SOURCES

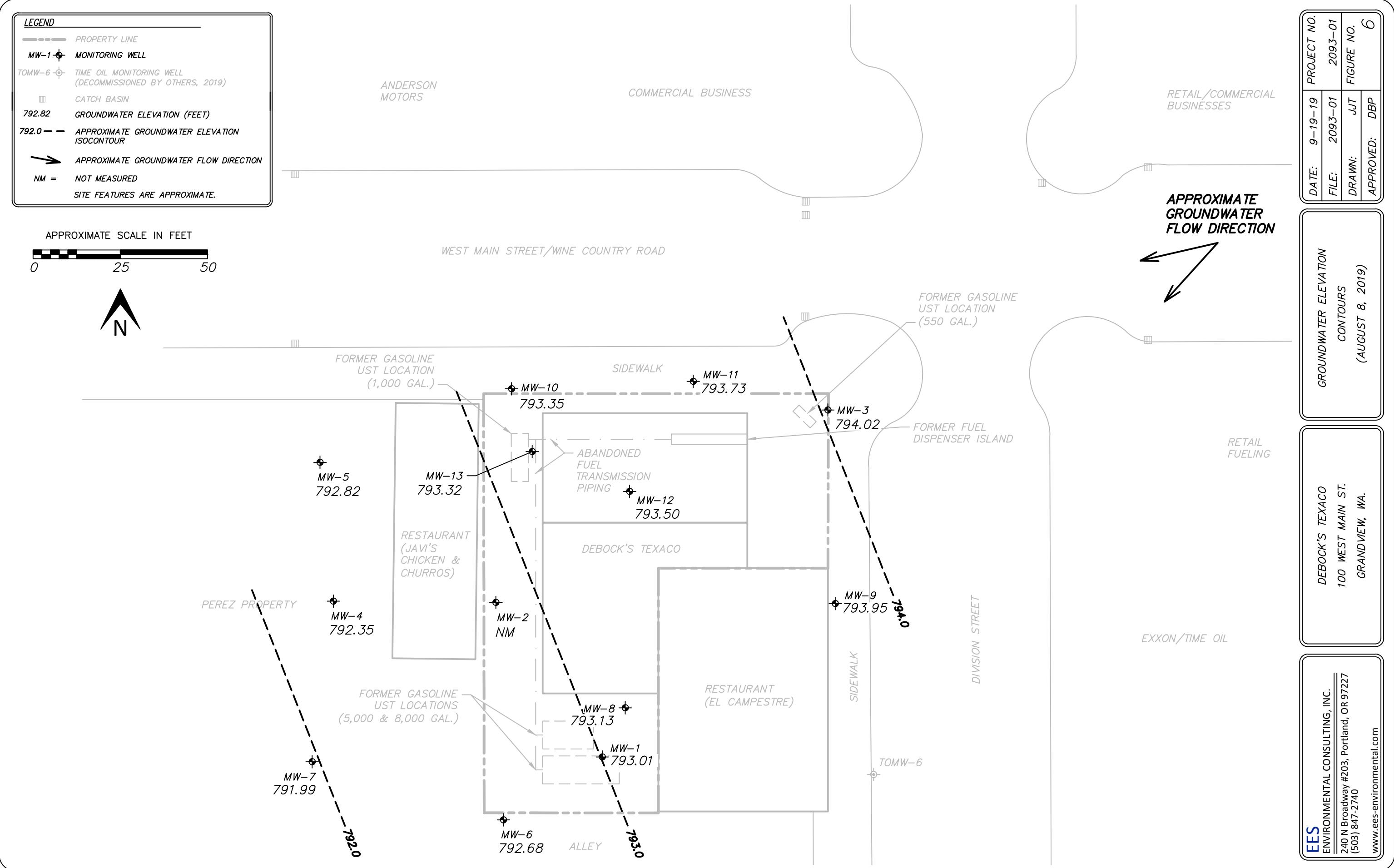
DEBOCK'S TEXACO
100 WEST MAIN ST.
GRANDVIEW, WA.

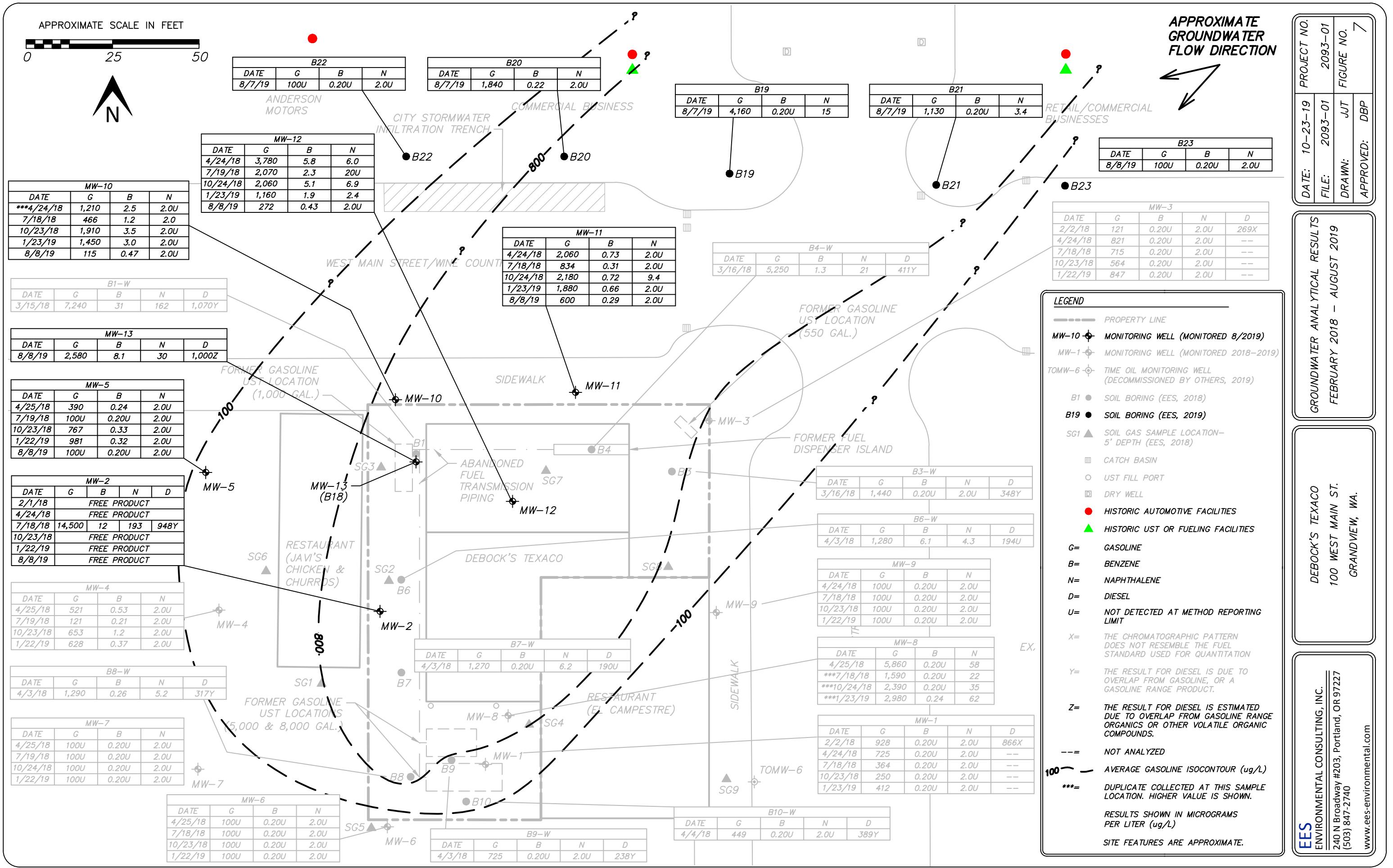
EES ENVIRONMENTAL CONSULTING, INC.
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Tables

TABLE 1
Soil Analytical Results - Fuels and Related Constituents (mg/kg)
DeBock's Texaco
Grandview, Washington

Location	Date	Depth (feet bgs)	Gasoline	Diesel	Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Lead ^d
MTCA Soil Screening Levels^a											
Method A Unrestricted Use			30 ^b	2,000	2,000	0.03	7	6	9	5	250
Method B Direct Contact				Combined Total 1,500 ^c		18	6,400	8,000	16,000	1,600	NA
Method B Vadose Zone Soil Leaching to Groundwater			NA	NA	NA	0.027	4.5	5.9	14	4.5	3,000
Method B Saturated Soil Leaching to Groundwater			NA	NA	NA	0.0017	0.27	0.34	0.83	0.24	150
B1-3	03/15/2018	3	6.5 UJ	-	-	0.013 U	0.065 U	0.032 UJ	0.097 UJ	0.13 UJ	-
B1-10	03/15/2018	10	7.1 UJ	-	-	0.014 U	0.071 U	0.035 UJ	0.11 UJ	0.14 UJ	-
B1-15	03/15/2018	15	9,970 J	25 U	50 U	0.23 U	1.2 U	36 J	85 J	40 J	12
B1-20	03/15/2018	20	44	-	-	0.026	0.054 U	0.027 U	0.080 U	0.34	-
B1-25	03/15/2018	25	6.4 UJ	-	-	0.013 U	0.064 U	0.032 UJ	0.096 UJ	0.13 UJ	-
B2-10	03/15/2018	10	6.3 UJ	-	-	0.013 U	0.063 U	0.032 UJ	0.095 UJ	0.13 UJ	-
B2-15	03/15/2018	15	648	-	-	0.025 U	0.12 U	0.80	1.3	1.9	-
B2-19	03/15/2018	19	1,530	-	-	0.078	0.34 U	1.8	1.9	1.8	-
B2-25	03/15/2018	25	5.1 UJ	-	-	0.010 U	0.051 U	0.026 UJ	0.077 UJ	0.10 UJ	-
B3-3	03/16/2018	3	6.3 UJ	-	-	0.013 U	0.063 U	0.032 UJ	0.095 UJ	0.13 UJ	-
B3-10	03/16/2018	10	6.4 UJ	-	-	0.013 U	0.064 U	0.032 UJ	0.096 UJ	0.13 UJ	-
B3-15	03/16/2018	15	10,000 J	-	-	0.47 U	2.3 U	73 J	374 J	37 J	-
B3-20	03/16/2018	20	13	-	-	0.011 U	0.054 U	0.027 U	0.082 U	0.11 U	-
B3-25	03/16/2018	25	6.9 UJ ²	-	-	0.014 U	0.069 U	0.035 UJ	0.10 UJ	0.14 UJ	-
B4-15	03/16/2018	15	5,600 J	-	-	0.26 U	7.8	40 J	342 J	29 J	-
B4-17	03/16/2018	17	22,300 J	342 J ¹	52 U	0.52 U	98	276 J	1,870 J	126 J	10
B4-20	03/16/2018	20	10,500 J	-	-	0.50 U	15	71 J	343 J	39 J	-
B4-25	03/16/2018	25	5.8 UJ ²	-	-	0.012 U	0.058 U	0.029 UJ	0.086 UJ	0.12 UJ	-
B5-5	03/16/2018	5	6.2 UJ ²	-	-	0.012 U	0.062 U	0.031 UJ	0.093 UJ	0.12 UJ	-
B5-10	03/16/2018	10	5.6 UJ ²	-	-	0.011 U	0.056 U	0.028 UJ	0.084 UJ	0.11 UJ	-
B5-15	03/16/2018	15	82 J	-	-	0.011 U	0.057 U	0.029 UJ	0.086 UJ	0.19 J	-
B5-20	03/16/2018	20	2,300	-	-	0.012 U	0.088	8.1	19	9.1	-
B5-25	03/16/2018	20	6.8 UJ ²	-	-	0.014 UJ ²	0.068 UJ ²	0.034 UJ ²	0.10 UJ ²	0.14 UJ ²	-
B6-3	04/02/2018	3	6.5 U	-	-	0.013 U	0.065 U	0.032 U	0.097 U	0.13 U	-
B6-15	04/02/2018	15	631	-	-	0.015 U	0.073 U	1.1	6.6	2.7	-
B6-17	04/02/2018	17	206	25 U	50 U	0.026	0.077	1.5	6.0	0.86	-
B6-20	04/02/2018	20	1,110	-	-	0.054	0.23 U	5.4	12	2.7	-
B6-25	04/02/2018	25	6.1 U ²	-	-	0.012 U ²	0.061 U ²	0.031 U ²	0.092 U ²	0.12 U ²	-
B7-3	04/02/2018	3	6.8 U	-	-	0.014 U	0.068 U	0.034 U	0.10 U	0.14 U	-
B7-15	04/02/2018	15	4,190	-	-	0.045 U	0.23 U	2.5	5.2	7.6	8.5
B7-20	04/02/2018	20	9.5	-	-	0.011 U	0.056 U	0.028 U	0.084 U	0.11 U	-

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 Grandview, Washington

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Method B Vadose Zone Soil Leaching to Groundwater			NA	NA	NA	0.027	4.5	5.9	14	4.5	3,000
Method B Saturated Soil Leaching to Groundwater			NA	NA	NA	0.0017	0.27	0.34	0.83	0.24	150
B8-3	04/02/2018	3	6.9 U	-	-	0.014 U	0.069 U	0.035 U	0.10 U	0.14 U	-
B8-15	04/02/2018	15	141	-	-	0.013 U	0.067 U	0.033 U	0.10 U	0.23	-
B8-20	04/02/2018	20	367	-	-	0.013 U	0.065 U	1.2	2.9	0.60	-
B8-25	04/02/2018	25	5.8 U ²	-	-	0.012 U ²	0.058 U ²	0.029 U ²	0.087 U ²	0.12 U ²	-
B9-16.5	04/03/2018	16.5	6,360	51 ¹	50 U	0.14 U	0.70 U	15	61	11	-
B9-20	04/03/2018	20	5.4 U	-	-	0.011 U	0.054 U	0.041	0.082 U	0.11 U	-
B10-3	04/03/2018	3	7.1 U	-	-	0.014 U	0.071 U	0.035 U	0.11 U	0.14 U	-
B10-15	04/03/2018	15	6.4 U	-	-	0.013 U	0.064 U	0.032 U	0.096 U	0.13 U	-
B10-20	04/03/2018	20	6.4 U	-	-	0.013 U	0.064 U	0.032 U	0.096 U	0.13 U	-
B11-3	04/03/2018	3	6.0 U	-	-	0.012 U	0.060 U	0.030 U	0.091 U	0.12 U	-
B11-16	04/03/2018	16	53	26 U	52 U	0.014 U	0.070 U	0.11	0.61	0.34	-
B11-20	04/03/2018	20	15	-	-	0.012 U	0.061 U	0.36	1.5	0.13	-
B12-3	04/03/2018	3	6.2 U	-	-	0.012 U	0.062 U	0.031 U	0.093 U	0.12 U	-
B12-10	04/03/2018	10	6.5 U	-	-	0.013 U	0.065 U	0.033 U	0.098 U	0.13 U	-
B12-16	04/03/2018	16	915	-	-	0.026 U	0.13 U	0.39	0.19 U	1.8	7.6
B12-20	04/03/2018	20	5.9 U	-	-	0.012 U	0.059 U	0.030 U	0.089 U	0.12 U	-
B13-15	04/03/2018	15	6.4 U	-	-	0.013 U	0.064 U	0.032 U	0.095 U	0.13 U	-
B13-20	04/03/2018	20	4,530	-	-	0.24 U	1.2 U	3.8	6.1	2.5	-
B13-25	04/03/2018	25	6.3 U	-	-	0.013 U	0.063 U	0.032 U	0.095 U	0.13 U	-
B14-3	04/04/2018	3	6.4 U	-	-	0.013 U	0.064 U	0.032 U	0.096 U	0.13 U	-
B14-16	04/04/2018	16	108	-	-	0.014 U	0.071 U	0.035 U	0.11 U	0.14 U	-
B15-3	04/04/2018	3	7.6 U	-	-	0.015 U	0.076 U	0.038 U	0.11 U	0.15 U	-
B15-15	04/04/2018	15	7,840	-	-	0.24 U	1.2 U	16	39	24	-
B15-20	04/04/2018	20	318	-	-	0.025 U	0.12 U	0.061 U	0.18 U	0.25 U	-
B16-3	04/05/2018	3	7.0 U	-	-	0.014 U	0.070 U	0.035 U	0.10 U	0.14 U	-
B16-14	04/05/2018	14	441	-	-	0.025 U	0.13 U	1.1	3.4	1.8	-
B16-20	04/05/2018	20	34	-	-	0.016 U	0.079 U	0.040 U	0.12 U	0.16 U	-
B17-3	04/05/2018	3	7.6 U	-	-	0.015 U	0.076 U	0.038 U	0.11 U	0.15 U	-
B17-16.5	04/05/2018	16.5	670	-	-	0.065	1.2	5.5	26	2.0	-
B17-20	04/05/2018	20	7.9 U	-	-	0.016 U	0.079 U	0.040 U	0.12 U	0.16 U	-

TABLE 1
Soil Analytical Results - Fuels and Related Constituents (mg/kg)
 DeBock's Texaco
 Grandview, Washington

Location	Date	Depth (feet bgs)	Gasoline	Diesel	Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Lead ^d
MTCA Soil Screening Levels^a											
Method A Unrestricted Use		30 ^b	2,000	2,000		0.03	7	6	9	5	250
Method B Direct Contact			Combined Total 1,500 ^c			18	6,400	8,000	16,000	1,600	NA
Method B Vadose Zone Soil Leaching to Groundwater		NA	NA	NA		0.027	4.5	5.9	14	4.5	3,000
Method B Saturated Soil Leaching to Groundwater		NA	NA	NA		0.0017	0.27	0.34	0.83	0.24	150
B18-10 (MW13-10)	08/06/2019	10	7.0 U	-	-	0.014 U	0.070 U	0.035 U	0.11 U	0.14 U	-
B18-15 (MW13-15)	08/06/2019	15	1,600	-	-	0.013 U	0.072 ³	4.0	8.8	7.3	-
B18-20 (MW13-20)	08/06/2019	20	1,210	-	-	0.031	0.078 ³	0.078 ³	0.22 ⁴	3.8	-
B18-25 (MW13-25)	08/06/2019	25	6.2 U	-	-	0.012 U	0.062 U	0.031 U	0.093 U	0.12 U	-
B19-15	08/07/2019	15	4,740	-	-	0.45 U	2.3 U	3.1	4.2	36	-
B20-15	08/07/2019	15	5.5 U	-	-	0.011 U	0.055 U	0.028 U	0.083 U	0.11 U	-
B21-14	08/07/2019	14	119	-	-	0.016 U	0.081 U	0.040 U	0.12 U	1.4	-
B22-15	08/07/2019	15	5.6 U	-	-	0.011 U	0.056 U	0.028 U	0.083 U	0.11 U	-
B23-15	08/08/2019	15	6.1 U	-	-	0.012 U	0.061 U	0.030 U	0.091 U	0.12 U	-

Notes:

Gasoline analyzed by NWTPH-Gx

Diesel and Oil analyzed by NWTPH-Dx

^a Model Toxics Control Act (MTCA) Cleanup Amendments, Soil Cleanup Levels (CLARC Tables, May 2019)

^b Per MTCA, the cleanup value for gasoline is 30 mg/kg if benzene is detected and/or if the sum of the toluene, ethylbenzene, and xylenes is greater than one percent of the gasoline concentration, and 100 mg/kg for all other gasoline mixtures.

^c Draft - Model Remedies for Sites with Petroleum Impacts to Groundwater (Ecology Publication #16-09-057, August 2017)

^d Lead background concentration = 17 mg/kg (WDOE, Natural Background Soil Metals Concentrations in Washington State, Table 1, October 1994)

¹ Diesel result is estimated due to overlap from gasoline range organics or a gasoline range product.

² Sample was analyzed past the recommended holding time.

³ Due to matrix interference, this analyte cannot be accurately quantified. The reported result may contain a high bias.

⁴ Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.

bgs = below ground surface

mg/kg = milligrams per kilogram

J = Data Validation Qualifier. The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U = undetected at method reporting limit shown

NA = Not Available

- = not analyzed for this parameter

BOLD values exceed the MTCA A screening level

Italicized reporting limits are above the MTCA A screening level

TABLE 2
Groundwater Elevation + Product Thickness Data
DeBock's Texaco
Grandview, Washington

Well Identification	TOC Elevation (feet)	Date Measured	Depth to Water (feet below TOC)	Depth to Product (feet below TOC)	Product Thickness (feet)	Groundwater Elevation ^a (feet)
MW-1	99.08	04/01/1998	17.34	-	0	81.74
		09/27/2000	14.26	-	0	84.82
		10/25/2017	18.59	-	0	80.49
		11/07/2017	18.88	-	0	80.20
		02/02/2018	20.18	-	0	78.90
		03/06/2018	20.59	-	0	791.78
		03/16/2018	20.71	-	0	791.66
		04/02/2018	20.93	-	0	791.44
		04/05/2018	20.96	-	0	791.41
		04/24/2018	21.14	-	0	791.23
		07/17/2018	20.40	-	0	791.97
		10/22/2018	19.07	-	0	793.30
		01/22/2019	20.64	-	0	791.73
		08/08/2019	19.36	-	0	793.01
MW-2	99.55	04/01/1998	17.93	-	0	81.62
		09/27/2000	14.66	-	0	84.89
		10/25/2017	19.91	19.05	0.86	80.26
		11/07/2017	20.13	19.22	0.91	80.08
		02/01/2018	21.81	20.67	1.14	78.56
		02/02/2018	21.31	21.18	0.13	78.33
		02/03/2018	21.14	20.89	0.25	78.59
		03/06/2018	21.61	21.22	0.39	791.58
		03/16/2018	21.73	21.32	0.41	791.48
		04/02/2018	22.03	21.53	0.50	791.24
		04/05/2018	22.03	21.56	0.47	791.22
		04/24/2018	22.32	21.73	0.59	791.01
		05/04/2018	22.42	21.83	0.59	790.91
		06/05/2018	21.80	21.67	0.13	791.20
		07/17/2018	21.00	-	0	791.91
		08/17/2018	20.53	20.40	0.13	792.47
		09/10/2018	19.86	19.78	0.08	793.11
		10/22/2018	19.73	19.63	0.10	793.25
		11/13/2018	20.13	20.06	0.07	792.83
		12/11/2018	20.65	20.57	0.08	792.32
		01/22/2019	21.32	21.26	0.06	791.63
		02/19/2019	21.62	21.56	0.06	791.33
		04/23/2019	22.08	21.60	0.48	791.18
		07/23/2019	20.21	20.20	0.01	792.71
MW-3	99.23	04/01/1998	16.29	-	0	82.94
		09/27/2000	13.01	-	0	86.22
		10/25/2017	17.92	-	0	81.31
		11/07/2017	18.18	-	0	81.05
		02/02/2018	19.58	-	0	79.65
		03/06/2018	19.99	-	0	792.75
		03/16/2018	21.02	-	0	791.72
		04/05/2018	20.38	-	0	792.36
		04/24/2018	20.62	-	0	792.12
		07/17/2018	19.83	-	0	792.91
		10/22/2018	18.40	-	0	794.34
		01/22/2019	20.05	-	0	792.69
		08/08/2019	18.72	-	0	794.02
		03/16/2018	21.04	-	0	-
		04/02/2018	21.27	-	0	-
		04/05/2018	21.30	-	0	-

TABLE 2
Groundwater Elevation + Product Thickness Data
DeBock's Texaco
Grandview, Washington

Well Identification	TOC Elevation (feet)	Date Measured	Depth to Water (feet below TOC)	Depth to Product (feet below TOC)	Product Thickness (feet)	Groundwater Elevation ^a (feet)
MW-4 (cont'd)	811.94	04/24/2018	21.48	-	0	790.46
		07/17/2018	20.66	-	0	791.28
		10/22/2018	19.27	-	0	792.67
		01/22/2019	20.90	-	0	791.04
		08/08/2019	19.59	-	0	792.35
MW-5	811.64	04/05/2018	20.83	-	0	-
		04/24/2018	20.99	-	0	790.65
		07/17/2018	19.91	-	0	791.73
		10/22/2018	18.56	-	0	793.08
		01/22/2019	20.40	-	0	791.24
		08/08/2019	18.82	-	0	792.82
MW-6	811.99	04/05/2018	20.96	-	0	-
		04/24/2018	21.10	-	0	790.89
		07/17/2018	20.34	-	0	791.65
		10/22/2018	19.02	-	0	792.97
		01/22/2019	20.60	-	0	791.39
		08/08/2019	19.31	-	0	792.68
MW-7	811.92	04/05/2018	22.82	-	0	-
		04/24/2018	21.75	-	0	790.17
		07/17/2018	20.99	-	0	790.93
		10/22/2018	19.65	-	0	792.27
		01/22/2019	21.20	-	0	790.72
		08/08/2019	19.93	-	0	791.99
MW-8	812.28	04/05/2018	20.77	-	0	-
		04/24/2018	20.94	-	0	791.34
		07/17/2018	20.20	-	0	792.08
		10/22/2018	18.84	-	0	793.44
		01/22/2019	20.41	-	0	791.87
		08/08/2019	19.15	-	0	793.13
MW-9	812.76	04/05/2018	21.02	-	0	-
		04/24/2018	20.69	-	0	792.07
		07/17/2018	19.92	-	0	792.84
		10/22/2018	18.56	-	0	794.20
		01/22/2019	20.15	-	0	792.61
		08/08/2019	18.81	-	0	793.95
MW-10	812.05	04/05/2018	20.91	-	0	-
		04/24/2018	20.70	-	0	791.35
		07/17/2018	19.79	-	0	792.26
		10/22/2018	18.38	-	0	793.67
		01/22/2019	20.10	-	0	791.95
		08/08/2019	18.70	-	0	793.35
MW-11	812.13	04/05/2018	-	-	0	-
		04/24/2018	20.29	-	0	791.84
		07/17/2018	19.47	-	0	792.66
		10/22/2018	18.05	-	0	794.08
		01/22/2019	19.68	-	0	792.45
		08/08/2019	18.40	-	0	793.73
MW-12	812.81	04/05/2018	-	-	0	-
		04/24/2018	21.18	-	0	791.63
		07/17/2018	20.38	-	0	792.43
		10/22/2018	18.93	-	0	793.88
		01/22/2019	20.62	-	0	792.19
		08/08/2019	19.31	-	0	793.50

TABLE 2
Groundwater Elevation + Product Thickness Data
DeBock's Texaco
Grandview, Washington

Well Identification	TOC Elevation (feet)	Date Measured	Depth to Water (feet below TOC)	Depth to Product (feet below TOC)	Product Thickness (feet)	Groundwater Elevation ^a (feet)
MW-13	812.72	08/08/2019	19.40	-	0	793.32

Notes:

^a Groundwater elevation is adjusted to account for floating gasoline product, where present.

Data prior to 2017 was obtained from historical reports.

Wells surveyed on 3/6/2018, 4/24/2018, and 8/7/2019 by PLSA of Yakima, Washington.

TOC = Top of Casing

- = Not measured

TABLE 3
Groundwater Field Parameters
 Debock's Texaco
 Grandview, Washington

Well Name	Date	Dissolved Oxygen (mg/L) DRI ^a	Oxidation Reduction Potential (mV) DRI ^a	Ferrous Iron (Fe 2+) (mg/L) HACH ^b	pH (unitless) DRI ^a	Turbidity (NTUs)	Specific Conductance (ms/cm) DRI ^a
MW-1	02/02/2018	3.6	74	0.0	7.1	8.2	1.676
	04/24/2018	1.1	25	0.0	6.9	4.8	1.586
	07/18/2018	1.8	4.4	0.5	7.0	5.3	1.747
	10/23/2018	0.29	85	0.0	7.0	3.0	1.208
	01/22/2019	0.93	48	0.0	7.1	3.9	1.694
MW-2	02/02/2018 ¹	-	-	-	-	-	-
	04/25/2018 ¹	-	-	-	-	-	-
	07/18/2018	1.2	-181	5.5 ^c	7.6	0.4	1.895
	10/22/2018 ¹	-	-	-	-	-	-
	01/22/2019 ¹	-	-	-	-	-	-
MW-3	02/02/2018	0.79	25	0.0	7.2	33	1.334
	04/24/2018	0.80	-41	1.0 ^c	6.9	2.7	1.321
	07/18/2018	1.2	-57	3.0 ^c	7.1	1.0	1.632
	10/23/2018	0.35	-23	2.5 ^c	6.9	12	1.132
	01/22/2019	0.74	21	1.0 ^c	6.9	6.4	1.677
MW-4	04/25/2018	0.84	142	0.0	6.9	0.0	1.626
	07/19/2018	1.4	138	0.0	7.3	3.9	2.068
	10/23/2018	0.34	-29	2.5 ^c	6.9	4.8	1.488
	01/22/2019	1.0	35	0.5 ^c	6.9	4.0	2.047
MW-5	04/25/2018	2.0	122	0.0	7.2	0.0	0.878
	07/19/2018	2.0	205	0.0	7.6	2.1	1.083
	10/23/2018	0.53	-47	1.0 ^c	7.1	5.2	0.857
	01/22/2019	0.97	26	0.5 ^c	7.2	2.1	1.152
	08/08/2019	2.0	-112	0.5	7.3	2.3	1.070
MW-6	04/25/2018	1.1	155	0.0	7.1	0.9	1.309
	07/18/2018	1.4	90	1.0 ^c	7.2	14	1.673
	10/23/2018	0.44	88	0.0	6.9	4.4	1.242
	01/22/2019	1.1	172	0.0	7.0	3.0	1.878
MW-7	04/25/2018	1.0	112	-	7.1	0.0	1.104
	07/19/2018	1.7	142	0.5	7.6	2.4	1.311
	10/24/2018	1.4	124	0.0	6.8	2.4	1.017
	01/22/2019	1.4	126	0.0	7.1	2.7	1.530
MW-8	04/25/2018	0.89	-38	0.5 ^c	7.0	50	1.612
	07/17/2018	1.5	-61	3.0 ^c	7.1	4.4	2.115
	10/24/2018	0.54	-64	6.5 ^c	6.9	3.9	1.443
	01/22/2019	1.6	-30	1.5 ^c	7.1	15	2.221
MW-9	04/24/2018	2.4	124	0.0	7.2	2.8	1.419
	07/18/2018	3.0	216	0.0	7.1	16	1.738
	10/23/2018	0.52	116	0.0	7.0	2.8	1.514
	01/22/2019	1.1	182	0.0	7.0	2.5	2.205
MW-10	04/24/2018	1.1	46	0.0	7.0	16	1.550
	07/18/2018	1.5	0.7	0.5 ^c	7.1	27	1.879
	10/23/2018	0.31	-9.9	0.5 ^c	6.9	3.9	1.345
	01/22/2019	0.83	35	1.0 ^c	7.1	2.4	2.042
	08/08/2019	1.8	-108	0.5	7.2	40	1.796
MW-11	04/24/2018	1.3	45	0.0	7.0	8.5	1.098
	07/18/2018	1.4	14	0.5 ^c	6.9	8.7	1.318
	10/24/2018	0.46	28	1.0 ^c	6.8	2.7	1.028
	01/22/2019	0.71	25	0.5 ^c	6.9	2.3	1.428

TABLE 3
Groundwater Field Parameters
 Debock's Texaco
 Grandview, Washington

Well Name	Date	Dissolved Oxygen (mg/L) DRI ^a	Oxidation Reduction Potential (mV) DRI ^a	Ferrous Iron (Fe 2+) (mg/L) HACH ^b	pH (unitless) DRI ^a	Turbidity (NTUs)	Specific Conductance (ms/cm) DRI ^a
MW-11 (cont'd)	08/08/2019	1.8	-121	1.0 ^c	7.0	16	1.317
MW-12	04/24/2018	0.97	-30	0.0	7.0	22	1.644
	07/19/2018	1.5	-59	3.0 ^c	6.9	3.9	1.856
	10/24/2018	0.82	-40	3.5 ^c	6.9	3.0	1.396
	01/22/2019	0.62	-21	2.0 ^c	7.0	2.5	2.056
	08/08/2019	1.9	-24	0.5	7.0	23	1.927
MW-13	08/08/2019	3.3	-130	0.0	7.1	18	1.894

Notes:

^a DRI = Direct-Read Instrument

^b HACH = Colorimetric "Hach" Field Kit

^c Field filtered sample

¹ Free product observed - not measured

mg/L = milligrams per liter

mV = millivolts

ms/cm = millisiemens per centimeter

NTU = nephelometric turbidity units

- = not measured

TABLE 4
Groundwater Analytical Results - Fuels, Volatile Organic Compounds and Lead (ug/L)
Debock's Texaco
Grandview, Washington

Location	Date	Gasoline	Diesel	Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Naphthalene	EDB	EDC	Total Lead	Dissolved Lead	
MTCA Groundwater Screening Levels															
Method A ^a		800	500	500	5	1,000	700	1,000	20	160	0.01	5	15	0.20 U	
Method B/MCL ^b		NA	NA	NA	5 ^c	640	700 ^c	1,600	24	160	0.05 ^c	0.48	15 ^c	15 ^c	
MW-1	02/02/2018	928	866 J⁷	385 U	0.20 U	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.033 U ^{2,4}	0.50 U	0.27	0.20 U	
	04/24/2018	725	-	-	0.20 U	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.020 U ^{2,3,4}	0.50 U	0.20 U	0.20	
	07/18/2018	364	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	0.20 U	-	
	10/23/2018	250	-	-	0.20 U	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.50 U	0.50 U	0.20 U	-	
	01/23/2019	412	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
MW-2 (free product)	02/01/2018 ^d	DET ¹	45,000,000 U ¹	90,100,000 U ¹	6,760 U	50,700	1,700,000	3,892,000	33,800 U	1,220,000	33,800 U	16,900 U	-	-	-
	04/24/2018 ^e	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2 (groundwater)	07/18/2018	14,500	948 J⁵	404 U	12	34	441	936	10 U	193	5.0 U	5.0 U	2.6	-	
	10/23/2018 ^e	-	-	-	-	-	-	-	-	-	-	-	-	-	
	01/22/2019 ^e	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-3	02/02/2018	121	269 J ⁷	377 U	0.20 U	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.010 U ^{2,3}	0.50 U	0.27	0.20 U	
	04/24/2018	821	-	-	0.20 U	1.0 U	5.0	13	1.0 U	2.0 U	0.020 U ^{2,3,4}	0.50 U	0.20 U	0.44	
	07/18/2018	715	-	-	0.20 U	1.0 U	12	20	-	2.0 U	-	-	0.20 U	-	
	10/23/2018	564	-	-	0.20 U	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.50 U	0.50 U	0.20 U	-	
	01/22/2019	847	-	-	0.20 U	1.0 U	4.7	13	-	2.0 U	-	-	-	-	
MW-4	04/25/2018	521	-	-	0.53	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.010 U ^{2,3}	0.50 U	0.93	0.64	
	07/19/2018	121	-	-	0.21	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
	10/23/2018	653	-	-	1.2	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.50 U	0.50 U	2.7	-	
	01/22/2019	628	-	-	0.37	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
MW-5	04/25/2018	390	-	-	0.24	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.010 U ^{2,3}	0.50 U	0.94	0.71	
	07/19/2018	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
	10/23/2018	767	-	-	0.33	1.0 U	1.3 J	2.2 J	1.0 U	2.0 U	0.50 U	0.50 U	1.1	-	
	01/22/2019	981	-	-	0.32	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
	08/08/2019	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
MW-6	04/25/2018	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.010 U ^{2,3}	0.50 U	0.82	0.23	
	07/18/2018	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
	10/23/2018	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.50 U	0.50 U	0.71	-	
	01/22/2019	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
MW-7	04/25/2018	100 U	-	-	0.20 U	1.0 U	0.74	1.5 U	1.0 U	2.0 U	0.010 U ^{2,3}	0.50 U	1.5	0.71	
	07/19/2018	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
	10/24/2018	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.50 U	0.50 U	0.63	-	
	01/22/2019	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
MW-8	04/25/2018	5,860	-	-	0.20 U	3.9	75	299	1.0 U	58	0.020 U ^{2,3,4}	0.50 U	3.8	0.66	
	07/18/2018	1,590	-	-	0.20 U	1.0 U	8.9	18	-	22	-	-	1.3	-	
MW-50 (DUP)	07/18/2018	1,410	-	-	0.20 U	1.0 U	8.9	16	-	17	-	-	-	-	
	10/24/2018	2,390	-	-	0.20 U	5.2	121 J	206 J	1.0 U	35 J	0.50 U	0.50 U	0.90	-	
MW-50 (DUP)	10/24/2018	2,170	-	-	0.20 U	4.9	112 J	190 J	1.0 U	32 J	0.50 U	0.50 U	0.92	-	
	01/23/2019	2,980	-	-	0.22	1.0 U	64	10	-	59	-	-	-	-	
MW-50 (DUP)	01/23/2019	2,920	-	-	0.24	1.0 U	72	11	-	62	-	-	-	-	
MW-9	04/24/2018	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.010 U ^{2,3}	0.50 U	2.5	0.20 U	
	07/18/2018	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
	10/23/2018	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	1.0 U	2.0 U	0.50 U	0.50 U	0.28	-	
	01/22/2019	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	
MW-10	04/24/2018	1,210	-	-	2.5	1.0 U	9.2	13	1.0 U	2.0 U	0.020 U ^{2,3,4}	0.50 U	1.1	1.1	
MW-50 (DUP)	04/24/2018	779	-	-	2.1	1.0 U	3.8	5.1	1.0 U	2.0 U	0.020 U ^{2,3,4,6}	0.50 U	0.95	0.85	
	07/18/2018	466	-	-	1.2	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	1.4	-	
	10/23/2018	1,910	-	-	3.5	1.0 U	2.3 J	3.0 J	1.0 U	2.0 U	0.50 U	0.50 U	1.8	-	
	01/23/2019	1,450	-	-	3.0	1.0 U	0.51	1.5 U	-	2.0 U	-	-	-	-	
	08/08/2019	115	-	-	0.47	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-	

TABLE 4
Groundwater Analytical Results - Fuels, Volatile Organic Compounds and Lead (ug/L)
Debock's Texaco
Grandview, Washington

Location	Date	Gasoline	Diesel	Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Naphthalene	EDB	EDC	Total Lead	Dissolved Lead
MTCA Groundwater Screening Levels														
Method A ^a		800	500	500	5	1,000	700	1,000	20	160	0.01	5	15	15
Method B/MCL ^b		NA	NA	NA	5 ^c	640	700 ^c	1,600	24	160	0.05 ^c	0.48	15 ^c	15 ^c
MW-11	04/24/2018	2,060	-	-	0.73	1.5	1.6	16	1.0 U	2.0 U	0.020 U ^{2,3,4}	0.50 U	0.72	0.61
	07/18/2018	834	-	-	0.31	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	0.59	-
	10/24/2018	2,180	-	-	0.72	1.0 U	4.8 J	3.2 J	1.0 U	9.4 J	0.50 U	0.50 U	0.77	-
	01/23/2019	1,880	-	-	0.66	1.0 U	0.73	1.7	-	2.0 U	-	-	-	-
	08/08/2019	600	-	-	0.29	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-
MW-12	04/24/2018	3,780	-	-	5.8	50	92	596	1.0 U	6.0	0.020 U ^{2,3,4}	0.50 U	0.91	1.1
	07/19/2018	2,070	-	-	2.3	10 U	15	281	-	20 U	-	-	0.51	-
	10/24/2018	2,060	-	-	5.1	2.5	17	59	1.0 U	6.9	0.50 U	0.50 U	0.60	-
	01/23/2019	1,160	-	-	1.9	1.0 U	0.95	4.1	-	2.4	-	-	-	-
	08/08/2019	272	-	-	0.43	1.0 U	0.50 U	1.8	-	2.0 U	-	-	-	-
MW-13	08/08/2019	2,580	1,000 ^{8,9}	374 U	8.1	1.5	13	25	-	30	-	-	-	-
B1-W	03/15/2018	7,240	1,070 J ⁵	1,960 U	31	6.9	98	195	5.0 U	162	2.5 U	2.5 U	7.6	1.3
B3-W	03/16/2018	1,440	348 J ⁵	388 U	0.20 U	1.0 U	9.9	35	1.0 U	2.0 U	0.50 U	0.50 U	18	2.0 U
B4-W	03/16/2018	5,250	411 J ⁵	388 U	1.3	66	92	588	5.0 U	21	2.5 U	2.5 U	13	1.0 U
B6-W	04/03/2018	1,280	194 U	388 U	6.1	5.2	36	125	1.0 U	4.3	0.50 U	0.50 U	28	1.1
B7-W	04/03/2018	1,270	190 U	381 U	0.20 U	1.4	28	40	1.0 U	6.2	0.50 U	0.50 U	27	0.26
B8-W	04/03/2018	1,290	317 ⁵	381 U	0.26	13	39	68	1.0 U	5.2	0.50 U	0.50 U	26	0.20 U
B9-W	04/03/2018	725	238 ⁵	392 U	0.20 U	2.3	18	39	1.0 U	2.0 U	0.50 U	0.50 U	11	0.20 U
B10-W	04/04/2018	449	389 ⁵	374 U	0.20 U	3.9	0.50 U	1.5 U	1.0 U	2.0 U	0.50 U	0.50 U	4.3	0.20 U
B19-W	08/07/2019	4,160	-	-	0.20 U	1.0 U	4.9	6.7	-	15	-	-	-	-
B20-W	08/07/2019	1,840	-	-	0.22	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-
B21-W	08/07/2019	1,130	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	3.4	-	-	-	-
B22-W	08/07/2019	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-
B23-W	08/08/2019	100 U	-	-	0.20 U	1.0 U	0.50 U	1.5 U	-	2.0 U	-	-	-	-

TABLE 4
Groundwater Analytical Results - Fuels, Volatile Organic Compounds and Lead (ug/L)
 Debock's Texaco
 Grandview, Washington

Notes:

^a Washington Department of Ecology (WDOE), Model Toxics Control Act (MTCA) Cleanup Amendments, Method A Groundwater Cleanup Levels (CLARC Database, May 2019)

^b MTCA Cleanup Amendments, Method B Groundwater Cleanup Levels or Washington State Maximum Contaminant Level (WDOE, CLARC Database, May 2019). For carcinogenic chemicals the Maximum Contaminant Level (MCL) is shown if the value is less than one in one hundred thousand excess cancer risk, otherwise the default MTCA Method B value is shown (WAC 173-340-705[5]). For all chemicals, the MCL is shown if it is less than the MTCA B value.

^c MCL value

^d Concentrations are shown in units of micrograms per kilogram (ug/kg) wet

^e Free product observed - not sampled

Gasoline analyzed by Method NWTPH-Gx

Diesel and Oil analyzed by Method NWTPH-Dx

Volatile Organic Compounds (VOCs) by EPA Method 8260C

Lead by EPA Method 200.8 (ICPMS)

¹ Gasoline, Diesel and Oil analyzed by Method NWTPH-HCID

² EDB was analyzed by EPA Method 8260C-SIM

³ Analyte was reported down to the method detection limit (MDL)

⁴ The reporting limit for this analyte has been raised to account for interference from coeluting compounds and/or matrix interference.

⁵ The result for diesel (diesel range organics, C12-C24) is due to overlap from gasoline or a gasoline range product.

⁶ The sample aliquot was taken from a vial with headspace (air bubble greater than 6mm diameter).

⁷ The chromatographic pattern does not resemble the fuel standard used for quantitation.

⁸ Analyte detected in an associated blank at a level between one-half the MRL and the MRL.

⁹ The result for diesel is estimated due to overlap from gasoline range organics or other VOCs.

MCL = Maximum Contaminant Level (Washington State)

MTBE = Methyl tert-butyl ether

EDB = 1,2-Dibromoethane

EDC = 1,2-Dichloroethane

J = Data Validation Qualifier. The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U = Undetected at method reporting limit shown

ug/L = micrograms per liter

NA = Not Available

- = Not analyzed for this parameter

BOLD values exceed the MTCA Method A screening level.

Italicized values indicate the reporting limit was higher than the MTCA Method A screening level.

Attachment A

START CARD RE18004

WELL ID MW-13

BORING NO.

B18

PAGE 1 OF 1

PROJECT

DeBock's Texaco

LOCATION

Grandview, Washington

PROJECT NO.

2093-01

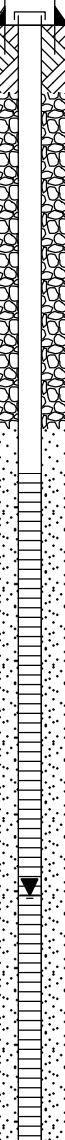
LOGGED BY

PCT

COORDINATES

SURFACE ELEVATION 812.98'

DATUM

SAMPLE INFORMATION						STRATA	DESCRIPTION	CONSTRUCTION DETAIL/ COMMENTS	ELEVATION FEET	
DEPTH FEET	LAB SAMPLE ID	pH	PID (ppmV)	SHEEN	RECOVERY %					
MW13-10	396	0.0	SLIGHT	100	100	Topsoil and grass. Brown SILT (ML), trace sand and gravel; medium stiff, dry, sand is fine, gravel is coarse. Becomes moist.		Well is sealed at the surface using concrete, a flush-mounted traffic-rated steel monument and locking cap.	5 10 15 20 25	
		0.0	VERY SLIGHT	100	100	Becomes without gravel, otherwise same as above. 0.5-inch-thick ash lens.				
		0.0	NO	100	100	Gray-brown silty SAND (SM); loose, moist, fine.				
		0.0	NO	100	100	Stratified brown medium sand, from 8' to 8.5'.				
		0.0	NO	100	100	Brown SILT (ML), trace gravel; stiff, moist.				
	2,633	0.0	MOD.	100	100	Stratified 1- to 2-inch-thick medium sand lenses every 1.5' to 2' from 13' to 18'.		Well constructed using two-inch diameter threaded schedule-40 PVC casing and screened with machine-cut 0.020-inch slots. Filter media consists of #8/12 sand. Ecology Well Tag ID: BLW 391		
		3.96	MOD.	100	100	Becomes gray (stained).				
		2,633	MOD.	100	100	Becomes saturated. Strong petroleum odor.				
		60.8	NO	100	100	Brown SAND (SP), trace silt; dense, saturated, fine.				
		73.7	NO	100	100	Brown SILT (ML), trace sand; soft, saturated, sand is fine.				
MW13-25		12.4	NO			Becomes stiff and moist.				
						Boring complete at 25 feet. Installed groundwater monitoring well.				

DRILLING CONTRACTOR

Cascade Drilling

DRILLING METHOD

Hand Auger/Direct Push

DRILLING EQUIPMENT

Geoprobe 7720DT

DRILLING STARTED

8/6/19

ENDED

8/6/19

REMARKS

Boring advanced from 0 to 5 feet bgs using hand auger, then advanced to terminal depth using direct-push tooling.

See key sheet for symbols and abbreviations used above.

EES

EES Environmental Consulting, Inc.

START CARD **SE65434**

WELL ID

BORING NO.

B19PAGE **1** OF **1**

COORDINATES

PROJECT

DeBock's Texaco

SURFACE ELEVATION

LOCATION

Grandview, Washington

PROJECT NO.

2093-01

LOGGED BY

DBP

SAMPLE INFORMATION						STRATA	DESCRIPTION	CONSTRUCTION DETAIL/ COMMENTS	ELEVATION FEET	
DEPTH FEET	LAB SAMPLE ID	pH	PID (ppmV)	SHEEN	RECOVERY %					
B19-15	1,812	0.0	NO	SLIGHT	100		Concrete	Installed temporary 3/4-inch Sch 40 PVC well screened from 15 to 25 feet with 0.010-inch slots. Conductor casing left in place from 0 to 15 feet during groundwater sampling. Collected groundwater sample B19W.		
							Brown sandy SILT (ML), minor gravel; medium stiff, moist, gravel is coarse, sand is fine.			
							Becomes without gravel, otherwise same as above.			
							Brown silty SAND (SM); medium dense, moist, fine to medium.			
							Brown sandy SILT (ML); medium stiff, moist, sand is fine to medium.			
							Becomes gray (stained).			
							Gray silty SAND (SM); medium dense, moist, fine to medium, sand and silt stratified in 4-inch-thick layers. Strong petroleum odor.			
							Gray-brown (stained) SILT (ML), minor sand; medium stiff, saturated, sand is fine.			
							Grades to tan from 17'-22'.			
							Becomes wet.			
20	256	0.0	NO	SLIGHT	100		Tan silty SAND (SM); dense, moist, fine.	▼		
							Becomes saturated.			
							Becomes tan.			
							Becomes loose.			
25	590	18.1	NO	NO	100		Becomes dense.			
							Boring complete at 25 feet, backfilled with bentonite chips, and finished at surface with concrete.			

DRILLING CONTRACTOR

Cascade Drilling

DRILLING METHOD

Hand Auger/Direct Push

DRILLING EQUIPMENT

Geoprobe 7720DT

DRILLING STARTED

8/7/19

ENDED

8/7/19

REMARKS

Boring advanced from 0 to 5 feet bgs using hand auger, then advanced to terminal depth using direct-push tooling.

See key sheet for symbols and abbreviations used above.

EES

EES Environmental Consulting, Inc.

START CARD **SE70846**

WELL ID

BORING NO.

B20PAGE **1** OF **1**

COORDINATES

PROJECT

DeBock's Texaco

SURFACE ELEVATION

LOCATION

Grandview, Washington

PROJECT NO.

2093-01

DATUM

LOGGED BY

DBP

SAMPLE INFORMATION						STRATA	DESCRIPTION	CONSTRUCTION DETAIL/ COMMENTS	ELEVATION FEET
DEPTH FEET	LAB SAMPLE ID	pH	PID (ppmV)	SHEEN	RECOVERY %				
B20-15						100	Concrete Gray silty GRAVEL (GM); dry, coarse (fill).	Installed temporary 3/4-inch Sch 40 PVC well screened from 15 to 25 feet with 0.010-inch slots. Conductor casing left in place from 0 to 15 feet during groundwater sampling. Collected groundwater sample B20W.	▼
		0.0	NO				Brown sandy SILT (ML); medium stiff, moist, sand is fine.		
		0.0	NO			100	0.5-inch-thick ash lens.		
		0.0	NO			100	Brown silty SAND (SM); medium dense, moist, fine to medium, sand and silt stratified in 4- to 6-inch-thick layers.		
		0.0	NO				Brown SILT (ML), minor sand; medium stiff, saturated, sand is fine.		
		0.0	NO			100	Brown silty SAND (SM); medium dense, saturated, sand is fine.		
		0.0	NO				Becomes tan.		
		1.5	NO			100	Becomes loose.		
		2.9	NO				Becomes dense.		
							Boring complete at 25 feet, backfilled with bentonite chips, and finished at the surface with concrete.		

DRILLING CONTRACTOR	Cascade Drilling
DRILLING METHOD	Hand Auger/Direct Push
DRILLING EQUIPMENT	Geoprobe 7720DT
DRILLING STARTED	8/7/19

REMARKS **Boring advanced from 0 to 5 feet bgs using hand auger, then advanced to terminal depth using direct-push tooling.**

See key sheet for symbols and abbreviations used above.

EES

EES Environmental Consulting, Inc.

START CARD **SE70846**

WELL ID

BORING NO.

B21PAGE **1** OF **1**

COORDINATES

PROJECT

DeBock's Texaco

SURFACE ELEVATION

LOCATION

Grandview, Washington

PROJECT NO.

2093-01

DATUM

LOGGED BY

DBP

SAMPLE INFORMATION						STRATA	DESCRIPTION	CONSTRUCTION DETAIL/ COMMENTS	ELEVATION FEET
DEPTH FEET	LAB SAMPLE ID	pH	PID (ppmV)	SHEEN	RECOVERY %				
B21-14	839	0.0	SLIGHT	100	100	Concrete	Installed temporary 3/4-inch Sch 40 PVC well screened from 15 to 25 feet with 0.010-inch slots. Conductor casing left in place from 0 to 15 feet during groundwater sampling. Collected groundwater sample B21W.		
					100	Gray silty GRAVEL (GM); dry, coarse (fill).			
					100	Brown sandy SILT (ML); medium stiff, moist, sand is fine.			
		0.0	SLIGHT	100	100	1-inch-thick ash lens.			
					100	4-inch-thick silty fine sand lens.			
					100	Brown silty SAND (SM); medium dense, moist.			
		4.8	VERY SLIGHT	100	100	5-inch-thick stiff silt lens.			
					100	Becomes gray (stained). Strong petroleum odor from 13.5' to 17.5'. 6-inch-thick medium stiff silt lens.			
		195	VERY SLIGHT	100	100	Becomes wet.			
					100	2-inch-thick fine sand lens.			
		12.3	NO	100	100	3-inch-thick fine to medium sand lens.			
					100	Gray-brown SILT (ML), trace sand; soft, saturated, sand is fine.			
		3.5	NO	100	100	Becomes tan and stiff.			
					100	Tan silty SAND (SM); loose, saturated, fine.			
		0.0	NO		100	Becomes medium dense.			
					100	Boring complete at 25 feet, backfilled with bentonite chips, and finished at surface with concrete.			

DRILLING CONTRACTOR	Cascade Drilling
DRILLING METHOD	Hand Auger/Direct Push
DRILLING EQUIPMENT	Geoprobe 7720DT
DRILLING STARTED	8/7/19

REMARKS **Boring advanced from 0 to 5 feet bgs using hand auger, then advanced to terminal depth using direct-push tooling.**

See key sheet for symbols and abbreviations used above.

EES

EES Environmental Consulting, Inc.

START CARD **SE70846**

WELL ID

BORING NO.

B22PAGE **1** OF **1**

COORDINATES

PROJECT

DeBock's Texaco

SURFACE ELEVATION

LOCATION

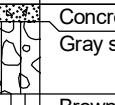
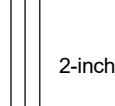
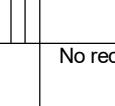
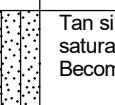
Grandview, Washington

PROJECT NO.

2093-01

LOGGED BY

DBP**SAMPLE INFORMATION**

DEPTH FEET	LAB SAMPLE ID	pH	PID (ppmV)	SHEEN	RECOVERY %	STRATA	DESCRIPTION	CONSTRUCTION DETAIL/ COMMENTS	ELEVATION FEET
B22-15		0.0	VERY SLIGHT	100			Concrete Gray silty GRAVEL (GM); dry, coarse (fill).	Installed temporary 3/4-inch Sch 40 PVC well screened from 15 to 25 feet with 0.010-inch slots. Conductor casing left in place from 0 to 15 feet during groundwater sampling. Collected groundwater sample B22W.	
							Brown sandy SILT (ML); medium stiff, moist, sand is fine. 1-inch-thick ash lens.		
		0.0	NO	100			3-inch-thick silty fine sand lens. * Not indicative of petroleum. 5-inch-thick fine sand lens.		
							2-inch-thick medium sand lens.		
		0.0	NO	100			1-inch-thick medium to coarse sand lens. Brown SILT (ML), minor sand; medium stiff, wet, sand is fine.		
							No recovery from 15' to 19'.		
		0.0	NO	20			Tan silty SAND (SM); medium dense, saturated, fine. Becomes loose.		
							Becomes medium dense. Becomes dense.		
		0.0	NO				Boring complete at 25 feet, backfilled with bentonite chips, and finished at surface with concrete.		

DRILLING CONTRACTOR

Cascade Drilling

DRILLING METHOD

Hand Auger/Direct Push

DRILLING EQUIPMENT

Geoprobe 7720DT

DRILLING STARTED

8/7/19

ENDED

8/7/19

REMARKS

Boring advanced from 0 to 5 feet bgs using hand auger, then advanced to terminal depth using direct-push tooling.

See key sheet for symbols and abbreviations used above.

START CARD **SE70846**

WELL ID

BORING NO.

B23

PROJECT

DeBock's Texaco

LOCATION

Grandview, Washington

PROJECT NO.

2093-01

COORDINATES

SURFACE ELEVATION

DATUM

LOGGED BY

DBP

SAMPLE INFORMATION						STRATA	DESCRIPTION	CONSTRUCTION DETAIL/ COMMENTS	ELEVATION FEET
DEPTH FEET	LAB SAMPLE ID	pH	PID (ppmV)	SHEEN	RECOVERY %				
B23-15		0.0	100	NO	100	Asphalt	<p>Gray silty GRAVEL (GM); dry, coarse (fill).</p> <p>Gray-brown sandy SILT (ML); medium stiff, moist, sand is fine. * Not indicative of petroleum.</p> <p>1-inch-thick ash lens.</p> <p>1-inch-thick medium sand lens.</p> <p>0.5-inch-thick medium sand lens.</p> <p>5-inch-thick medium sand lens.</p> <p>Sand becomes trace.</p> <p>Becomes sandy, sand is fine.</p> <p>Becomes stiff.</p> <p>Becomes saturated and soft.</p> <p>Becomes medium stiff.</p> <p>Becomes soft.</p> <p>Gray-brown silty SAND (SM); dense, saturated, fine.</p> <p>Boring complete at 25 feet, backfilled with bentonite chips, and finished at surface with asphalt.</p>	<p>Installed temporary 3/4-inch Sch 40 PVC well screened from 15 to 25 feet with 0.010-inch slots.</p> <p>Conductor casing left in place from 0 to 15 feet during groundwater sampling. Collected groundwater sample B23W.</p>	
						Very Slight*			
						NO			
						NO			
						NO			
						NO			
						NO			
						NO			
						NO			
						NO			

DRILLING CONTRACTOR

Cascade Drilling

DRILLING METHOD

Hand Auger/Direct Push

DRILLING EQUIPMENT

Geoprobe 7720DT

DRILLING STARTED

8/8/19

ENDED

8/8/19

REMARKS

Boring advanced from 0 to 5 feet bgs using hand auger, then advanced to terminal depth using direct-push tooling.

See key sheet for symbols and abbreviations used above.

Attachment B



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

Monday, August 26, 2019

Chris Rhea
EES Environmental Inc
240 N Broadway Ste 203
Portland, OR 97227

RE: A9H0318 - Debocks Texaco - 2093-01

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A9H0318, which was received by the laboratory on 8/9/2019 at 11:25:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: KFriscia@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of final reporting, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1

0.9 degC

Cooler #2

4.3 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



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A handwritten signature in black ink, appearing to read 'Kevin J. Friscia'.

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Kevin J. Friscia, Project Manager

Page 1 of 56



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-13-10	A9H0318-03	Soil	08/06/19 12:20	08/09/19 11:25
MW-13-15	A9H0318-04	Soil	08/06/19 12:25	08/09/19 11:25
MW-13-20	A9H0318-05	Soil	08/06/19 12:45	08/09/19 11:25
MW-13-25	A9H0318-06	Soil	08/06/19 13:00	08/09/19 11:25
B19-15	A9H0318-11	Soil	08/07/19 09:25	08/09/19 11:25
B19-W	A9H0318-15	Water	08/07/19 11:00	08/09/19 11:25
B20-15	A9H0318-18	Soil	08/07/19 11:35	08/09/19 11:25
B20-W	A9H0318-21	Water	08/07/19 12:45	08/09/19 11:25
B21-14	A9H0318-25	Soil	08/07/19 14:25	08/09/19 11:25
B22-15	A9H0318-31	Soil	08/07/19 15:55	08/09/19 11:25
B21-W	A9H0318-33	Water	08/07/19 16:00	08/09/19 11:25
B22-W	A9H0318-35	Water	08/07/19 17:00	08/09/19 11:25
B23-15	A9H0318-39	Soil	08/08/19 08:05	08/09/19 11:25
B23-W	A9H0318-42	Water	08/08/19 09:15	08/09/19 11:25
MW-12	A9H0318-43	Water	08/08/19 10:00	08/09/19 11:25
MW-10	A9H0318-44	Water	08/08/19 11:05	08/09/19 11:25
MW-11	A9H0318-45	Water	08/08/19 11:50	08/09/19 11:25
MW-5	A9H0318-46	Water	08/08/19 12:30	08/09/19 11:25
MW13-W	A9H0318-47	Water	08/08/19 13:05	08/09/19 11:25

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ANALYTICAL CASE NARRATIVE

Work Order: A9H0318

Amended Report Revision 1:

This report supersedes all previous reports.

The following sample name was changed per client request:

A9H0318-25: B21-15 is changed to B21-14

Kevin Friscia
Project Manager
8/23/2019

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Report ID:

Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW13-W (A9H0318-47)								
Diesel	1.00	---	0.187	mg/L	1	08/14/19 04:33	NWTPH-Dx	B-02, F-20
Oil	ND	---	0.374	mg/L	1	08/14/19 04:33	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: 105 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>08/14/19 04:33</i>	<i>NWTPH-Dx</i>	

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ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-13-10 (A9H0318-03)								
Gasoline Range Organics	ND	---	7.00	mg/kg dry	50	08/12/19 15:35	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 88 %	Limits: 50-150 %	1	08/12/19 15:35	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			79 %	50-150 %	1	08/12/19 15:35	NWTPH-Gx (MS)	
MW-13-15 (A9H0318-04RE2)								
Gasoline Range Organics	1600	---	64.8	mg/kg dry	500	08/14/19 16:33	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 102 %	Limits: 50-150 %	1	08/14/19 16:33	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			83 %	50-150 %	1	08/14/19 16:33	NWTPH-Gx (MS)	
MW-13-20 (A9H0318-05RE2)								
Gasoline Range Organics	1210	---	62.3	mg/kg dry	500	08/14/19 16:05	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 99 %	Limits: 50-150 %	1	08/14/19 16:05	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			80 %	50-150 %	1	08/14/19 16:05	NWTPH-Gx (MS)	
MW-13-25 (A9H0318-06RE1)								
Gasoline Range Organics	ND	---	6.21	mg/kg dry	50	08/19/19 14:50	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 97 %	Limits: 50-150 %	1	08/19/19 14:50	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			81 %	50-150 %	1	08/19/19 14:50	NWTPH-Gx (MS)	
B19-15 (A9H0318-11RE2)								
Gasoline Range Organics	4740	---	225	mg/kg dry	2000	08/14/19 17:27	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 93 %	Limits: 50-150 %	1	08/14/19 17:27	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			81 %	50-150 %	1	08/14/19 17:27	NWTPH-Gx (MS)	
B19-W (A9H0318-15)								
Gasoline Range Organics	4.16	---	0.100	mg/L	1	08/12/19 15:22	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 107 %	Limits: 50-150 %	1	08/12/19 15:22	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			105 %	50-150 %	1	08/12/19 15:22	NWTPH-Gx (MS)	
B20-15 (A9H0318-18)								
Gasoline Range Organics	ND	---	5.51	mg/kg dry	50	08/12/19 17:51	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 101 %	Limits: 50-150 %	1	08/12/19 17:51	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			82 %	50-150 %	1	08/12/19 17:51	NWTPH-Gx (MS)	
B20-W (A9H0318-21)								
				Matrix: Water			Batch: 9080853	

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EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Report ID:

Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B20-W (A9H0318-21)								
Gasoline Range Organics	1.84	---	0.100	mg/L	1	08/12/19 16:20	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 103 %	Limits: 50-150 %	1	08/12/19 16:20	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			104 %	50-150 %	1	08/12/19 16:20	NWTPH-Gx (MS)	
B21-14 (A9H0318-25)								
Gasoline Range Organics	119	---	8.09	mg/kg dry	50	08/12/19 18:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 96 %	Limits: 50-150 %	1	08/12/19 18:19	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			80 %	50-150 %	1	08/12/19 18:19	NWTPH-Gx (MS)	
B22-15 (A9H0318-31)								
Gasoline Range Organics	ND	---	5.55	mg/kg dry	50	08/12/19 18:46	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 88 %	Limits: 50-150 %	1	08/12/19 18:46	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			78 %	50-150 %	1	08/12/19 18:46	NWTPH-Gx (MS)	
B21-W (A9H0318-33)								
Gasoline Range Organics	1.13	---	0.100	mg/L	1	08/12/19 16:48	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 103 %	Limits: 50-150 %	1	08/12/19 16:48	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			104 %	50-150 %	1	08/12/19 16:48	NWTPH-Gx (MS)	
B22-W (A9H0318-35)								
Gasoline Range Organics	ND	---	0.100	mg/L	1	08/12/19 17:16	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 98 %	Limits: 50-150 %	1	08/12/19 17:16	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			105 %	50-150 %	1	08/12/19 17:16	NWTPH-Gx (MS)	
B23-15 (A9H0318-39)								
Gasoline Range Organics	ND	---	6.06	mg/kg dry	50	08/12/19 19:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 87 %	Limits: 50-150 %	1	08/12/19 19:13	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			78 %	50-150 %	1	08/12/19 19:13	NWTPH-Gx (MS)	
B23-W (A9H0318-42)								
Gasoline Range Organics	ND	---	0.100	mg/L	1	08/12/19 17:44	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 100 %	Limits: 50-150 %	1	08/12/19 17:44	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			106 %	50-150 %	1	08/12/19 17:44	NWTPH-Gx (MS)	
MW-12 (A9H0318-43)								
				Matrix: Water			Batch: 9080853	

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Project Number: **2093-01**

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A9H0318 - 08 26 19 0857

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-12 (A9H0318-43)								
Gasoline Range Organics	0.272	---	0.100	mg/L	1	08/12/19 18:11	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 99 %	Limits: 50-150 %	1	08/12/19 18:11	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			105 %	50-150 %	1	08/12/19 18:11	NWTPH-Gx (MS)	
MW-10 (A9H0318-44)								
Gasoline Range Organics	0.115	---	0.100	mg/L	1	08/12/19 18:39	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 102 %	Limits: 50-150 %	1	08/12/19 18:39	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			107 %	50-150 %	1	08/12/19 18:39	NWTPH-Gx (MS)	
MW-11 (A9H0318-45)								
Gasoline Range Organics	0.600	---	0.100	mg/L	1	08/12/19 19:06	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 101 %	Limits: 50-150 %	1	08/12/19 19:06	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			105 %	50-150 %	1	08/12/19 19:06	NWTPH-Gx (MS)	
MW-5 (A9H0318-46)								
Gasoline Range Organics	ND	---	0.100	mg/L	1	08/12/19 19:33	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 98 %	Limits: 50-150 %	1	08/12/19 19:33	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			108 %	50-150 %	1	08/12/19 19:33	NWTPH-Gx (MS)	
MW13-W (A9H0318-47)								
Gasoline Range Organics	2.58	---	0.100	mg/L	1	08/12/19 20:00	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			Recovery: 102 %	Limits: 50-150 %	1	08/12/19 20:00	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			103 %	50-150 %	1	08/12/19 20:00	NWTPH-Gx (MS)	

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Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-13-10 (A9H0318-03)								
Benzene	ND	---	14.0	ug/kg dry	50	08/12/19 15:35	5035A/8260C	
Toluene	ND	---	70.0	ug/kg dry	50	08/12/19 15:35	5035A/8260C	
Ethylbenzene	ND	---	35.0	ug/kg dry	50	08/12/19 15:35	5035A/8260C	
Xylenes, total	ND	---	105	ug/kg dry	50	08/12/19 15:35	5035A/8260C	
Naphthalene	ND	---	140	ug/kg dry	50	08/12/19 15:35	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>103 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>08/12/19 15:35</i>	<i>5035A/8260C</i>
<i>Toluene-d8 (Surr)</i>			<i>97 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 15:35</i>	<i>5035A/8260C</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>108 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 15:35</i>	<i>5035A/8260C</i>
MW-13-15 (A9H0318-04)								
Benzene	ND	---	13.0	ug/kg dry	50	08/12/19 16:30	5035A/8260C	
Toluene	72.3	---	64.8	ug/kg dry	50	08/12/19 16:30	5035A/8260C	M-04
Ethylbenzene	4010	---	32.4	ug/kg dry	50	08/12/19 16:30	5035A/8260C	
Xylenes, total	8780	---	97.2	ug/kg dry	50	08/12/19 16:30	5035A/8260C	
Naphthalene	7280	---	130	ug/kg dry	50	08/12/19 16:30	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>109 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>08/12/19 16:30</i>	<i>5035A/8260C</i>
<i>Toluene-d8 (Surr)</i>			<i>106 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 16:30</i>	<i>5035A/8260C</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 16:30</i>	<i>5035A/8260C</i>
MW-13-20 (A9H0318-05)								
Benzene	30.5	---	12.5	ug/kg dry	50	08/12/19 16:57	5035A/8260C	
Toluene	77.6	---	62.3	ug/kg dry	50	08/12/19 16:57	5035A/8260C	M-04
Ethylbenzene	77.8	---	31.1	ug/kg dry	50	08/12/19 16:57	5035A/8260C	M-04
Xylenes, total	224	---	93.4	ug/kg dry	50	08/12/19 16:57	5035A/8260C	M-02
Naphthalene	3790	---	125	ug/kg dry	50	08/12/19 16:57	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>109 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>08/12/19 16:57</i>	<i>5035A/8260C</i>
<i>Toluene-d8 (Surr)</i>			<i>106 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 16:57</i>	<i>5035A/8260C</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>110 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 16:57</i>	<i>5035A/8260C</i>
MW-13-25 (A9H0318-06RE1)								
Benzene	ND	---	12.4	ug/kg dry	50	08/19/19 14:50	5035A/8260C	
Toluene	ND	---	62.1	ug/kg dry	50	08/19/19 14:50	5035A/8260C	
Ethylbenzene	ND	---	31.1	ug/kg dry	50	08/19/19 14:50	5035A/8260C	
Xylenes, total	ND	---	93.2	ug/kg dry	50	08/19/19 14:50	5035A/8260C	

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A9H0318 - 08 26 19 0857

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-13-25 (A9H0318-06RE1)								
Naphthalene	ND	---	124	ug/kg dry	50	08/19/19 14:50	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 112 %	Limits: 80-120 %	1	08/19/19 14:50	5035A/8260C	
Toluene-d8 (Surr)			93 %	80-120 %	1	08/19/19 14:50	5035A/8260C	
4-Bromofluorobenzene (Surr)			110 %	80-120 %	1	08/19/19 14:50	5035A/8260C	
B19-15 (A9H0318-11RE2)								
Benzene	ND	---	449	ug/kg dry	2000	08/14/19 17:27	5035A/8260C	
Toluene	ND	---	2250	ug/kg dry	2000	08/14/19 17:27	5035A/8260C	
Ethylbenzene	3140	---	1120	ug/kg dry	2000	08/14/19 17:27	5035A/8260C	
Xylenes, total	4190	---	3370	ug/kg dry	2000	08/14/19 17:27	5035A/8260C	
Naphthalene	35600	---	4490	ug/kg dry	2000	08/14/19 17:27	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 106 %	Limits: 80-120 %	1	08/14/19 17:27	5035A/8260C	
Toluene-d8 (Surr)			100 %	80-120 %	1	08/14/19 17:27	5035A/8260C	
4-Bromofluorobenzene (Surr)			107 %	80-120 %	1	08/14/19 17:27	5035A/8260C	
B19-W (A9H0318-15)								
Benzene	ND	---	0.200	ug/L	1	08/12/19 15:22	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	08/12/19 15:22	EPA 8260C	
Ethylbenzene	4.92	---	0.500	ug/L	1	08/12/19 15:22	EPA 8260C	
Xylenes, total	6.68	---	1.50	ug/L	1	08/12/19 15:22	EPA 8260C	
Naphthalene	15.2	---	2.00	ug/L	1	08/12/19 15:22	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 102 %	Limits: 80-120 %	1	08/12/19 15:22	EPA 8260C	
Toluene-d8 (Surr)			101 %	80-120 %	1	08/12/19 15:22	EPA 8260C	
4-Bromofluorobenzene (Surr)			94 %	80-120 %	1	08/12/19 15:22	EPA 8260C	
B20-15 (A9H0318-18)								
Benzene	ND	---	11.0	ug/kg dry	50	08/12/19 17:51	5035A/8260C	
Toluene	ND	---	55.1	ug/kg dry	50	08/12/19 17:51	5035A/8260C	
Ethylbenzene	ND	---	27.5	ug/kg dry	50	08/12/19 17:51	5035A/8260C	
Xylenes, total	ND	---	82.6	ug/kg dry	50	08/12/19 17:51	5035A/8260C	
Naphthalene	ND	---	110	ug/kg dry	50	08/12/19 17:51	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 110 %	Limits: 80-120 %	1	08/12/19 17:51	5035A/8260C	
Toluene-d8 (Surr)			91 %	80-120 %	1	08/12/19 17:51	5035A/8260C	
4-Bromofluorobenzene (Surr)			111 %	80-120 %	1	08/12/19 17:51	5035A/8260C	

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Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Report ID:

Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B20-W (A9H0318-21)								
Benzene	0.220	---	0.200	ug/L	1	08/12/19 16:20	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	08/12/19 16:20	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	08/12/19 16:20	EPA 8260C	
Xylenes, total	ND	---	1.50	ug/L	1	08/12/19 16:20	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	08/12/19 16:20	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>103 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>08/12/19 16:20</i>	<i>EPA 8260C</i>
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 16:20</i>	<i>EPA 8260C</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>97 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 16:20</i>	<i>EPA 8260C</i>
B21-14 (A9H0318-25)								
Benzene	ND	---	16.2	ug/kg dry	50	08/12/19 18:19	5035A/8260C	
Toluene	ND	---	80.9	ug/kg dry	50	08/12/19 18:19	5035A/8260C	
Ethylbenzene	ND	---	40.4	ug/kg dry	50	08/12/19 18:19	5035A/8260C	
Xylenes, total	ND	---	121	ug/kg dry	50	08/12/19 18:19	5035A/8260C	
Naphthalene	1380	---	162	ug/kg dry	50	08/12/19 18:19	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>107 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:19</i>	<i>5035A/8260C</i>
<i>Toluene-d8 (Surr)</i>			<i>96 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:19</i>	<i>5035A/8260C</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>109 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:19</i>	<i>5035A/8260C</i>
B22-15 (A9H0318-31)								
Benzene	ND	---	11.1	ug/kg dry	50	08/12/19 18:46	5035A/8260C	
Toluene	ND	---	55.5	ug/kg dry	50	08/12/19 18:46	5035A/8260C	
Ethylbenzene	ND	---	27.7	ug/kg dry	50	08/12/19 18:46	5035A/8260C	
Xylenes, total	ND	---	83.2	ug/kg dry	50	08/12/19 18:46	5035A/8260C	
Naphthalene	ND	---	111	ug/kg dry	50	08/12/19 18:46	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>106 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:46</i>	<i>5035A/8260C</i>
<i>Toluene-d8 (Surr)</i>			<i>97 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:46</i>	<i>5035A/8260C</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>106 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:46</i>	<i>5035A/8260C</i>
B21-W (A9H0318-33)								
Benzene	ND	---	0.200	ug/L	1	08/12/19 16:48	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	08/12/19 16:48	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	08/12/19 16:48	EPA 8260C	
Xylenes, total	ND	---	1.50	ug/L	1	08/12/19 16:48	EPA 8260C	

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Project Number: **2093-01**

Report ID:

Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B21-W (A9H0318-33)								
Naphthalene	3.36	---	2.00	ug/L	1	08/12/19 16:48	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 103 %	Limits: 80-120 %	1	08/12/19 16:48	EPA 8260C	
Toluene-d8 (Surr)			101 %	80-120 %	1	08/12/19 16:48	EPA 8260C	
4-Bromofluorobenzene (Surr)			97 %	80-120 %	1	08/12/19 16:48	EPA 8260C	
B22-W (A9H0318-35)								
Benzene	ND	---	0.200	ug/L	1	08/12/19 17:16	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	08/12/19 17:16	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	08/12/19 17:16	EPA 8260C	
Xylenes, total	ND	---	1.50	ug/L	1	08/12/19 17:16	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	08/12/19 17:16	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 105 %	Limits: 80-120 %	1	08/12/19 17:16	EPA 8260C	
Toluene-d8 (Surr)			101 %	80-120 %	1	08/12/19 17:16	EPA 8260C	
4-Bromofluorobenzene (Surr)			96 %	80-120 %	1	08/12/19 17:16	EPA 8260C	
B23-15 (A9H0318-39)								
Benzene	ND	---	12.1	ug/kg dry	50	08/12/19 19:13	5035A/8260C	
Toluene	ND	---	60.6	ug/kg dry	50	08/12/19 19:13	5035A/8260C	
Ethylbenzene	ND	---	30.3	ug/kg dry	50	08/12/19 19:13	5035A/8260C	
Xylenes, total	ND	---	90.9	ug/kg dry	50	08/12/19 19:13	5035A/8260C	
Naphthalene	ND	---	121	ug/kg dry	50	08/12/19 19:13	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 107 %	Limits: 80-120 %	1	08/12/19 19:13	5035A/8260C	
Toluene-d8 (Surr)			97 %	80-120 %	1	08/12/19 19:13	5035A/8260C	
4-Bromofluorobenzene (Surr)			108 %	80-120 %	1	08/12/19 19:13	5035A/8260C	
B23-W (A9H0318-42)								
Benzene	ND	---	0.200	ug/L	1	08/12/19 17:44	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	08/12/19 17:44	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	08/12/19 17:44	EPA 8260C	
Xylenes, total	ND	---	1.50	ug/L	1	08/12/19 17:44	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	08/12/19 17:44	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 105 %	Limits: 80-120 %	1	08/12/19 17:44	EPA 8260C	
Toluene-d8 (Surr)			101 %	80-120 %	1	08/12/19 17:44	EPA 8260C	
4-Bromofluorobenzene (Surr)			95 %	80-120 %	1	08/12/19 17:44	EPA 8260C	

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Project Number: **2093-01**

Report ID:

Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-12 (A9H0318-43)								
Benzene	0.430	---	0.200	ug/L	1	08/12/19 18:11	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	08/12/19 18:11	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	08/12/19 18:11	EPA 8260C	
Xylenes, total	1.84	---	1.50	ug/L	1	08/12/19 18:11	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	08/12/19 18:11	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>105 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:11</i>	<i>EPA 8260C</i>
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:11</i>	<i>EPA 8260C</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:11</i>	<i>EPA 8260C</i>
MW-10 (A9H0318-44)								
Benzene	0.470	---	0.200	ug/L	1	08/12/19 18:39	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	08/12/19 18:39	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	08/12/19 18:39	EPA 8260C	
Xylenes, total	ND	---	1.50	ug/L	1	08/12/19 18:39	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	08/12/19 18:39	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>104 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:39</i>	<i>EPA 8260C</i>
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:39</i>	<i>EPA 8260C</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>96 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 18:39</i>	<i>EPA 8260C</i>
MW-11 (A9H0318-45)								
Benzene	0.290	---	0.200	ug/L	1	08/12/19 19:06	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	08/12/19 19:06	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	08/12/19 19:06	EPA 8260C	
Xylenes, total	ND	---	1.50	ug/L	1	08/12/19 19:06	EPA 8260C	
Naphthalene	ND	---	2.00	ug/L	1	08/12/19 19:06	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>105 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>08/12/19 19:06</i>	<i>EPA 8260C</i>
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 19:06</i>	<i>EPA 8260C</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>08/12/19 19:06</i>	<i>EPA 8260C</i>
MW-5 (A9H0318-46)								
Benzene	ND	---	0.200	ug/L	1	08/12/19 19:33	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	08/12/19 19:33	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	08/12/19 19:33	EPA 8260C	
Xylenes, total	ND	---	1.50	ug/L	1	08/12/19 19:33	EPA 8260C	

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A9H0318 - 08 26 19 0857

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-5 (A9H0318-46)								
Naphthalene	ND	---	2.00	ug/L	1	08/12/19 19:33	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 106 %	Limits: 80-120 %	1	08/12/19 19:33	EPA 8260C	
Toluene-d8 (Surr)			102 %	80-120 %	1	08/12/19 19:33	EPA 8260C	
4-Bromofluorobenzene (Surr)			93 %	80-120 %	1	08/12/19 19:33	EPA 8260C	
MW13-W (A9H0318-47)								
Benzene	8.08	---	0.200	ug/L	1	08/12/19 20:00	EPA 8260C	
Toluene	1.51	---	1.00	ug/L	1	08/12/19 20:00	EPA 8260C	
Ethylbenzene	12.9	---	0.500	ug/L	1	08/12/19 20:00	EPA 8260C	
Xylenes, total	24.5	---	1.50	ug/L	1	08/12/19 20:00	EPA 8260C	
Naphthalene	29.7	---	2.00	ug/L	1	08/12/19 20:00	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 103 %	Limits: 80-120 %	1	08/12/19 20:00	EPA 8260C	
Toluene-d8 (Surr)			102 %	80-120 %	1	08/12/19 20:00	EPA 8260C	
4-Bromofluorobenzene (Surr)			98 %	80-120 %	1	08/12/19 20:00	EPA 8260C	

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ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-13-10 (A9H0318-03)				Matrix: Soil			Batch: 9080878	
% Solids	75.7	---	1.00	% by Weight	1	08/13/19 07:33	EPA 8000C	
MW-13-15 (A9H0318-04)				Matrix: Soil			Batch: 9080921	
% Solids	80.3	---	1.00	% by Weight	1	08/14/19 07:16	EPA 8000C	
MW-13-20 (A9H0318-05)				Matrix: Soil			Batch: 9080921	
% Solids	79.0	---	1.00	% by Weight	1	08/14/19 07:16	EPA 8000C	
MW-13-25 (A9H0318-06)				Matrix: Soil			Batch: 9081148	
% Solids	78.0	---	1.00	% by Weight	1	08/21/19 07:44	EPA 8000C	
B19-15 (A9H0318-11)				Matrix: Soil			Batch: 9080921	
% Solids	81.2	---	1.00	% by Weight	1	08/14/19 07:16	EPA 8000C	
B20-15 (A9H0318-18)				Matrix: Soil			Batch: 9080921	
% Solids	82.8	---	1.00	% by Weight	1	08/14/19 07:16	EPA 8000C	
B21-14 (A9H0318-25)				Matrix: Soil			Batch: 9080921	
% Solids	76.3	---	1.00	% by Weight	1	08/14/19 07:16	EPA 8000C	
B22-15 (A9H0318-31)				Matrix: Soil			Batch: 9080921	
% Solids	82.0	---	1.00	% by Weight	1	08/14/19 07:16	EPA 8000C	
B23-15 (A9H0318-39)				Matrix: Soil			Batch: 9080878	
% Solids	79.7	---	1.00	% by Weight	1	08/13/19 07:33	EPA 8000C	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080890 - EPA 3510C (Fuels/Acid Ext.)												
Water												
Blank (9080890-BLK1)												
<u>NWTPH-Dx</u>												
Diesel	ND	---	0.182	mg/L	1	---	---	---	---	---	---	
Oil	ND	---	0.364	mg/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			Recovery: 102 %	Limits: 50-150 %			Dilution: 1x					
LCS (9080890-BS1)												
<u>NWTPH-Dx</u>												
Diesel	1.14	---	0.200	mg/L	1	1.25	---	91	58-115%	---	---	
Surr: o-Terphenyl (Surr)			Recovery: 101 %	Limits: 50-150 %			Dilution: 1x					
LCS Dup (9080890-BSD1)												
<u>NWTPH-Dx</u>												
Diesel	1.24	---	0.200	mg/L	1	1.25	---	100	58-115%	9	20%	
Surr: o-Terphenyl (Surr)			Recovery: 109 %	Limits: 50-150 %			Dilution: 1x					

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080853 - EPA 5030B												
Blank (9080853-BLK1)												
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	---	0.100	mg/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)												
Recovery: 100 % Limits: 50-150 % Dilution: 1x												
I,4-Difluorobenzene (Sur)												
109 % 50-150 % "												
LCS (9080853-BS2)												
Prepared: 08/12/19 09:27 Analyzed: 08/12/19 12:38												
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	0.488	---	0.100	mg/L	1	0.500	---	98	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)												
Recovery: 100 % Limits: 50-150 % Dilution: 1x												
I,4-Difluorobenzene (Sur)												
107 % 50-150 % "												
Duplicate (9080853-DUP1)												
Prepared: 08/12/19 09:27 Analyzed: 08/12/19 22:42												
<u>QC Source Sample: Non-SDG (A9H0287-08)</u>												
Gasoline Range Organics	10.9	---	0.500	mg/L	5	---	13.3	---	---	20	30%	
Surr: 4-Bromofluorobenzene (Sur)												
Recovery: 101 % Limits: 50-150 % Dilution: 1x												
I,4-Difluorobenzene (Sur)												
101 % 50-150 % "												
Duplicate (9080853-DUP2)												
Prepared: 08/12/19 09:27 Analyzed: 08/12/19 15:51												
<u>QC Source Sample: B19-W (A9H0318-15)</u>												
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	3.69	---	0.100	mg/L	1	---	4.16	---	---	12	30%	
Surr: 4-Bromofluorobenzene (Sur)												
Recovery: 102 % Limits: 50-150 % Dilution: 1x												
I,4-Difluorobenzene (Sur)												
102 % 50-150 % "												

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: 2093-01

Report ID:

Project Manager: Chris Rhea

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD RPD Limit	Notes
Batch 9080869 - EPA 5035A											
Blank (9080869-BLK1)											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 91 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
79 % 50-150 % "											
LCS (9080869-BS2)											
Prepared: 08/12/19 13:00 Analyzed: 08/12/19 14:34											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	23.2	---	5.00	mg/kg wet	50	25.0	---	93	80-120%	---	---
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 86 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
80 % 50-150 % "											
Duplicate (9080869-DUP1)											
Prepared: 08/06/19 12:20 Analyzed: 08/12/19 16:02											
<u>QC Source Sample: MW-13-10 (A9H0318-03)</u>											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	ND	---	7.47	mg/kg dry	50	---	ND	---	---	---	30%
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 86 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
78 % 50-150 % "											

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Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD RPD	Limit Notes
Batch 9080915 - EPA 5035A											
Blank (9080915-BLK1)											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 84 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
78 % 50-150 % "											
LCS (9080915-BS2)											
Prepared: 08/13/19 12:00 Analyzed: 08/13/19 15:39											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	22.2	---	5.00	mg/kg wet	50	25.0	---	89	80-120%	---	---
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 84 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
83 % 50-150 % "											
Duplicate (9080915-DUP1)											
Prepared: 08/12/19 13:15 Analyzed: 08/13/19 17:01											
<u>QC Source Sample: Non-SDG (A9H0380-01)</u>											
Gasoline Range Organics	ND	---	5.82	mg/kg dry	50	---	ND	---	---	---	30%
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 88 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
80 % 50-150 % "											

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Report ID:

Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD RPD Limit	Notes
Batch 9080960 - EPA 5035A											
Blank (9080960-BLK1)											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 91 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
79 % 50-150 % "											
LCS (9080960-BS2)											
Prepared: 08/14/19 10:00 Analyzed: 08/14/19 15:11											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	23.4	---	5.00	mg/kg wet	50	25.0	---	93	80-120%	---	---
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 85 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
79 % 50-150 % "											
Duplicate (9080960-DUP1)											
Prepared: 08/13/19 13:10 Analyzed: 08/14/19 21:32											
<u>QC Source Sample: Non-SDG (A9H0439-01)</u>											
Gasoline Range Organics	ND	---	6.31	mg/kg dry	50	---	ND	---	---	---	30%
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 87 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
77 % 50-150 % "											
Duplicate (9080960-DUP2)											
Prepared: 08/13/19 15:20 Analyzed: 08/15/19 00:14											
<u>QC Source Sample: Non-SDG (A9H0439-06)</u>											
Gasoline Range Organics	ND	---	6.61	mg/kg dry	50	---	ND	---	---	---	30%
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 89 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
77 % 50-150 % "											

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD RPD	Limit Notes
Batch 9081009 - EPA 5035A											
Blank (9081009-BLK1)											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 106 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
100 % 50-150 % "											
LCS (9081009-BS2)											
Prepared: 08/16/19 10:00 Analyzed: 08/16/19 11:52											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	27.6	---	5.00	mg/kg wet	50	25.0	---	110	80-120%	---	---
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 107 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
103 % 50-150 % "											
Duplicate (9081009-DUP1)											
Prepared: 08/16/19 10:44 Analyzed: 08/16/19 13:13											
V-15											
<u>QC Source Sample: Non-SDG (A9H0534-01)</u>											
Gasoline Range Organics	ND	---	8.13	mg/kg dry	50	---	ND	---	---	---	30%
Surr: 4-Bromofluorobenzene (Sur)											
Recovery: 110 % Limits: 50-150 % Dilution: 1x											
I,4-Difluorobenzene (Sur)											
101 % 50-150 % "											

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD RPD Limit	Notes
Batch 9081072 - EPA 5035A											
Blank (9081072-BLK1)											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 85 %</i>	<i>Limits: 50-150 %</i>			<i>Dilution: 1x</i>				
<i>1,4-Difluorobenzene (Sur)</i>			<i>76 %</i>	<i>50-150 %</i>			"				
LCS (9081072-BS2)											
Prepared: 08/19/19 10:00 Analyzed: 08/19/19 13:54											
<u>NWTPH-Gx (MS)</u>											
Gasoline Range Organics	23.1	---	5.00	mg/kg wet	50	25.0	---	92	80-120%	---	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 87 %</i>	<i>Limits: 50-150 %</i>			<i>Dilution: 1x</i>				
<i>1,4-Difluorobenzene (Sur)</i>			<i>82 %</i>	<i>50-150 %</i>			"				
Duplicate (9081072-DUP1)											
Prepared: 08/13/19 11:00 Analyzed: 08/19/19 21:09											
<u>QC Source Sample: Non-SDG (A9H0408-02)</u>											
Gasoline Range Organics	2430	---	91.3	mg/kg dry	500	---	2550	---	---	5	30%
<i>Surr: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 112 %</i>	<i>Limits: 50-150 %</i>			<i>Dilution: 1x</i>				
<i>1,4-Difluorobenzene (Sur)</i>			<i>82 %</i>	<i>50-150 %</i>			"				
Duplicate (9081072-DUP2)											
Prepared: 08/15/19 12:52 Analyzed: 08/19/19 22:30											
<u>QC Source Sample: Non-SDG (A9H0553-01)</u>											
Gasoline Range Organics	48.0	---	13.9	mg/kg dry	50	---	54.1	---	---	12	30%
<i>Surr: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 102 %</i>	<i>Limits: 50-150 %</i>			<i>Dilution: 1x</i>				
<i>1,4-Difluorobenzene (Sur)</i>			<i>79 %</i>	<i>50-150 %</i>			"				

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Project: **Debocks Texaco**

Project Number: 2093-01

Report ID:

Project Manager: Chris Rhea

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080853 - EPA 5030B												
Water												
Blank (9080853-BLK1)												
Prepared: 08/12/19 09:27 Analyzed: 08/12/19 13:05												
<u>EPA 8260C</u>												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 107 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>		"					
<i>4-Bromofluorobenzene (Surr)</i>			<i>96 %</i>		<i>80-120 %</i>		"					
LCS (9080853-BS1)												
Prepared: 08/12/19 09:27 Analyzed: 08/12/19 12:11												
<u>EPA 8260C</u>												
Benzene	19.4	---	0.200	ug/L	1	20.0	---	97	80-120%	---	---	
Toluene	18.2	---	1.00	ug/L	1	20.0	---	91	80-120%	---	---	
Ethylbenzene	18.9	---	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Xylenes, total	57.3	---	1.50	ug/L	1	60.0	---	96	80-120%	---	---	
Naphthalene	20.5	---	2.00	ug/L	1	20.0	---	102	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>		"					
<i>4-Bromofluorobenzene (Surr)</i>			<i>95 %</i>		<i>80-120 %</i>		"					
Duplicate (9080853-DUP1)												
Prepared: 08/12/19 09:27 Analyzed: 08/12/19 22:42												
<u>QC Source Sample: Non-SDG (A9H0287-08)</u>												
Benzene	193	---	1.00	ug/L	5	---	201	---	---	4	30%	
Toluene	5.55	---	5.00	ug/L	5	---	5.65	---	---	2	30%	
Ethylbenzene	83.6	---	2.50	ug/L	5	---	86.0	---	---	3	30%	
Xylenes, total	ND	---	7.50	ug/L	5	---	7.15	---	---	***	30%	
Naphthalene	342	---	10.0	ug/L	5	---	417	---	---	20	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>100 %</i>		<i>80-120 %</i>		"					
<i>4-Bromofluorobenzene (Surr)</i>			<i>96 %</i>		<i>80-120 %</i>		"					
Duplicate (9080853-DUP2)												
Prepared: 08/12/19 09:27 Analyzed: 08/12/19 15:51												

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Project: **Debocks Texaco**

Project Number: **2093-01**

Report ID:

Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-----------------	-------	----------	--------------	---------------	-------	--------------	-----	-----------	-------

Batch 9080853 - EPA 5030B

Water

Duplicate (9080853-DUP2)

Prepared: 08/12/19 09:27 Analyzed: 08/12/19 15:51

QC Source Sample: B19-W (A9H0318-15)

EPA 8260C

Benzene	ND	---	0.200	ug/L	1	---	ND	---	---	---	30%
Toluene	ND	---	1.00	ug/L	1	---	ND	---	---	---	30%
Ethylbenzene	5.05	---	0.500	ug/L	1	---	4.92	---	---	3	30%
Xylenes, total	6.82	---	1.50	ug/L	1	---	6.68	---	---	2	30%
Naphthalene	16.4	---	2.00	ug/L	1	---	15.2	---	---	7	30%

Surr: 1,4-Difluorobenzene (Surr)

Recovery: 102 % Dilution: 1x

Toluene-d8 (Surr)

101 % 80-120 %

4-Bromo fluoro benzene (Surr)

97 % 80-120 %

Matrix Spike (9080853-MS1)

Prepared: 08/12/19 09:27 Analyzed: 08/12/19 20:27

QC Source Sample: MW13-W (A9H0318-47)

EPA 8260C

Benzene	30.0	---	0.200	ug/L	1	20.0	8.08	110	79-120%	---	---
Toluene	21.4	---	1.00	ug/L	1	20.0	1.51	99	80-121%	---	---
Ethylbenzene	31.0	---	0.500	ug/L	1	20.0	12.9	91	79-121%	---	---
Xylenes, total	85.2	---	1.50	ug/L	1	60.0	24.5	101	79-121%	---	---
Naphthalene	44.8	---	2.00	ug/L	1	20.0	29.7	76	61-128%	---	---

Surr: 1,4-Difluorobenzene (Surr)

Recovery: 103 % Dilution: 1x

Toluene-d8 (Surr)

101 % 80-120 %

4-Bromo fluoro benzene (Surr)

96 % 80-120 %

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A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080869 - EPA 5035A												
Blank (9080869-BLK1)												
Prepared: 08/12/19 13:00 Analyzed: 08/12/19 15:02												
<u>5035A/8260C</u>												
Benzene	ND	---	6.67	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	50.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 106 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>97 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>108 %</i>		<i>80-120 %</i>		<i>"</i>					
LCS (9080869-BS1)												
Prepared: 08/12/19 13:00 Analyzed: 08/12/19 14:07												
<u>5035A/8260C</u>												
Benzene	992	---	10.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Toluene	917	---	50.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
Ethylbenzene	983	---	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Xylenes, total	2820	---	75.0	ug/kg wet	50	3000	---	94	80-120%	---	---	
Naphthalene	1110	---	100	ug/kg wet	50	1000	---	111	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>97 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>105 %</i>		<i>80-120 %</i>		<i>"</i>					
Duplicate (9080869-DUP1)												
Prepared: 08/06/19 12:20 Analyzed: 08/12/19 16:02												
QC Source Sample: MW-13-10 (A9H0318-03)												
<u>5035A/8260C</u>												
Benzene	ND	---	14.9	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	74.7	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	37.4	ug/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	112	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	149	ug/kg dry	50	---	ND	---	---	---	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>107 %</i>		<i>80-120 %</i>		<i>"</i>					

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240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Report ID:

Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD RPD	Limit Notes
Batch 9080869 - EPA 5035A											
Soil											
Matrix Spike (9080869-MS1)											
Prepared: 08/08/19 08:05 Analyzed: 08/12/19 19:41											
<u>QC Source Sample: B23-15 (A9H0318-39)</u>											
<u>5035A/8260C</u>											
Benzene	1210	---	12.1	ug/kg dry	50	1210	ND	100	77-121%	---	---
Toluene	1070	---	60.6	ug/kg dry	50	1210	ND	88	77-121%	---	---
Ethylbenzene	1180	---	30.3	ug/kg dry	50	1210	ND	97	76-122%	---	---
Xylenes, total	3360	---	90.9	ug/kg dry	50	3640	ND	92	78-124%	---	---
Naphthalene	1330	---	121	ug/kg dry	50	1210	ND	110	62-129%	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 107 %</i>		<i>Limits: 80-120 %</i>			<i>Dilution: 1x</i>			
<i>Toluene-d8 (Surr)</i>			<i>96 %</i>		<i>80-120 %</i>			"			
<i>4-Bromofluorobenzene (Surr)</i>			<i>109 %</i>		<i>80-120 %</i>			"			

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Kevin J. Friscia, Project Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: 2093-01

Report ID:

Project Manager: Chris Rhea

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080915 - EPA 5035A												
Blank (9080915-BLK1)												
Prepared: 08/13/19 12:00 Analyzed: 08/13/19 16:06												
<u>5035A/8260C</u>												
Benzene	ND	---	6.67	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	50.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 104 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>107 %</i>		<i>80-120 %</i>		<i>"</i>					
LCS (9080915-BS1)												
Prepared: 08/13/19 12:00 Analyzed: 08/13/19 15:12												
<u>5035A/8260C</u>												
Benzene	962	---	10.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Toluene	869	---	50.0	ug/kg wet	50	1000	---	87	80-120%	---	---	
Ethylbenzene	955	---	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Xylenes, total	2750	---	75.0	ug/kg wet	50	3000	---	92	80-120%	---	---	
Naphthalene	1070	---	100	ug/kg wet	50	1000	---	107	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 105 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>95 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>109 %</i>		<i>80-120 %</i>		<i>"</i>					
Duplicate (9080915-DUP1)												
Prepared: 08/12/19 13:15 Analyzed: 08/13/19 17:01												
<u>QC Source Sample: Non-SDG (A9H0380-01)</u>												
Benzene	ND	---	11.6	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	58.2	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	29.1	ug/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	87.4	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	116	ug/kg dry	50	---	ND	---	---	---	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 104 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>98 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>106 %</i>		<i>80-120 %</i>		<i>"</i>					
Matrix Spike (9080915-MS1)												
Prepared: 08/13/19 10:20 Analyzed: 08/13/19 18:51												

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Report ID:

Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD RPD	Limit Notes
Batch 9080915 - EPA 5035A											
Soil											
Matrix Spike (9080915-MS1)											
Prepared: 08/13/19 10:20 Analyzed: 08/13/19 18:51											
QC Source Sample: Non-SDG (A9H0380-04)											
5035A/8260C											
Benzene	1170	---	12.0	ug/kg dry	50	1200	ND	97	77-121%	---	---
Toluene	1070	---	60.0	ug/kg dry	50	1200	ND	89	77-121%	---	---
Ethylbenzene	1170	---	30.0	ug/kg dry	50	1200	ND	98	76-122%	---	---
Xylenes, total	3380	---	89.9	ug/kg dry	50	3600	ND	94	78-124%	---	---
Naphthalene	1380	---	120	ug/kg dry	50	1200	ND	115	62-129%	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>			<i>Dilution: 1x</i>			
<i>Toluene-d8 (Surr)</i>			<i>98 %</i>		<i>80-120 %</i>			"			
<i>4-Bromofluorobenzene (Surr)</i>			<i>105 %</i>		<i>80-120 %</i>			"			

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A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080960 - EPA 5035A												
Blank (9080960-BLK1)												
Prepared: 08/14/19 10:00 Analyzed: 08/14/19 15:38												
<u>5035A/8260C</u>												
Benzene	ND	---	6.67	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	50.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 106 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>97 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>108 %</i>		<i>80-120 %</i>		<i>"</i>					
LCS (9080960-BS1)												
Prepared: 08/14/19 10:00 Analyzed: 08/14/19 14:44												
<u>5035A/8260C</u>												
Benzene	960	---	10.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Toluene	863	---	50.0	ug/kg wet	50	1000	---	86	80-120%	---	---	
Ethylbenzene	942	---	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
Xylenes, total	2720	---	75.0	ug/kg wet	50	3000	---	91	80-120%	---	---	
Naphthalene	1080	---	100	ug/kg wet	50	1000	---	108	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 104 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>95 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>109 %</i>		<i>80-120 %</i>		<i>"</i>					
Duplicate (9080960-DUP1)												
Prepared: 08/13/19 13:10 Analyzed: 08/14/19 21:32												
QC Source Sample: Non-SDG (A9H0439-01)												
Benzene	ND	---	12.6	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	63.1	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	31.6	ug/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	94.7	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	126	ug/kg dry	50	---	ND	---	---	---	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 105 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>98 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>108 %</i>		<i>80-120 %</i>		<i>"</i>					
Duplicate (9080960-DUP2)												
Prepared: 08/13/19 15:20 Analyzed: 08/15/19 00:14												

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EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: 2093-01

Report ID:

Project Manager: Chris Rhea

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080960 - EPA 5035A												
Duplicate (9080960-DUP2)												
Prepared: 08/13/19 15:20 Analyzed: 08/15/19 00:14												
QC Source Sample: Non-SDG (A9H0439-06)												
Benzene	ND	---	13.2	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	66.1	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	33.0	ug/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	99.1	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	132	ug/kg dry	50	---	ND	---	---	---	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 106 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>98 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>106 %</i>		<i>80-120 %</i>		<i>"</i>					
Matrix Spike (9080960-MS1)												
Prepared: 08/13/19 15:30 Analyzed: 08/15/19 01:08												
QC Source Sample: Non-SDG (A9H0439-07)												
S035A/8260C												
Benzene	1420	---	13.9	ug/kg dry	50	1390	ND	102	77-121%	---	---	
Toluene	1190	---	69.4	ug/kg dry	50	1390	ND	86	77-121%	---	---	
Ethylbenzene	1290	---	34.7	ug/kg dry	50	1390	ND	93	76-122%	---	---	
Xylenes, total	3700	---	104	ug/kg dry	50	4160	ND	89	78-124%	---	---	
Naphthalene	1610	---	139	ug/kg dry	50	1390	ND	116	62-129%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 111 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>93 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>111 %</i>		<i>80-120 %</i>		<i>"</i>					

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A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9081009 - EPA 5035A												
Blank (9081009-BLK1)												
Prepared: 08/16/19 10:00 Analyzed: 08/16/19 12:19												
<u>5035A/8260C</u>												
Benzene	ND	---	6.67	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	50.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>101 %</i>		<i>80-120 %</i>		<i>"</i>					
LCS (9081009-BS1)												
Prepared: 08/16/19 10:00 Analyzed: 08/16/19 11:25												
<u>5035A/8260C</u>												
Benzene	1010	---	10.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Toluene	998	---	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Ethylbenzene	1030	---	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Xylenes, total	3190	---	75.0	ug/kg wet	50	3000	---	106	80-120%	---	---	
Naphthalene	1080	---	100	ug/kg wet	50	1000	---	108	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>100 %</i>		<i>80-120 %</i>		<i>"</i>					
Duplicate (9081009-DUP1)												
Prepared: 08/16/19 10:44 Analyzed: 08/16/19 13:13												
QC Source Sample: Non-SDG (A9H0534-01)												
Benzene	ND	---	16.3	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	81.3	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	40.7	ug/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	122	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	163	ug/kg dry	50	---	ND	---	---	---	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 104 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>100 %</i>		<i>80-120 %</i>		<i>"</i>					
Matrix Spike (9081009-MS1)												
Prepared: 08/16/19 10:44 Analyzed: 08/16/19 14:07												
V-15												

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Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD RPD	Limit Notes
Batch 9081009 - EPA 5035A											
Matrix Spike (9081009-MS1)											
Prepared: 08/16/19 10:44 Analyzed: 08/16/19 14:07											
QC Source Sample: Non-SDG (A9H0534-02)											
5035A/8260C											
Benzene	1510	---	15.0	ug/kg dry	50	1500	ND	101	77-121%	---	---
Toluene	1450	---	74.8	ug/kg dry	50	1500	ND	97	77-121%	---	---
Ethylbenzene	1510	---	37.4	ug/kg dry	50	1500	ND	101	76-122%	---	---
Xylenes, total	4710	---	112	ug/kg dry	50	4490	ND	105	78-124%	---	---
Naphthalene	1640	---	150	ug/kg dry	50	1500	ND	110	62-129%	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>			<i>Dilution: 1x</i>			
<i>Toluene-d8 (Surr)</i>			<i>98 %</i>		<i>80-120 %</i>			"			
<i>4-Bromofluorobenzene (Surr)</i>			<i>100 %</i>		<i>80-120 %</i>			"			

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EES Environmental Inc

240 N Broadway Ste 203

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A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9081072 - EPA 5035A												
Blank (9081072-BLK1)												
Prepared: 08/19/19 10:00 Analyzed: 08/19/19 14:21												
<u>5035A/8260C</u>												
Benzene	ND	---	6.67	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	33.3	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	16.7	ug/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	50.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	66.7	ug/kg wet	50	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 105 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>98 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>105 %</i>		<i>80-120 %</i>		<i>"</i>					
LCS (9081072-BS1)												
Prepared: 08/19/19 10:00 Analyzed: 08/19/19 13:27												
<u>5035A/8260C</u>												
Benzene	992	---	10.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Toluene	909	---	50.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
Ethylbenzene	967	---	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Xylenes, total	2790	---	75.0	ug/kg wet	50	3000	---	93	80-120%	---	---	
Naphthalene	1090	---	100	ug/kg wet	50	1000	---	109	80-120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 106 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>99 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>108 %</i>		<i>80-120 %</i>		<i>"</i>					
Duplicate (9081072-DUP1)												
Prepared: 08/13/19 11:00 Analyzed: 08/19/19 21:09												
QC Source Sample: Non-SDG (A9H0408-02)												
Benzene	ND	---	183	ug/kg dry	500	---	ND	---	---	---	30%	
Toluene	1220	---	913	ug/kg dry	500	---	1330	---	---	8	30%	
Ethylbenzene	3970	---	456	ug/kg dry	500	---	4260	---	---	7	30%	
Xylenes, total	14900	---	1370	ug/kg dry	500	---	15700	---	---	5	30%	
Naphthalene	5280	---	1830	ug/kg dry	500	---	5560	---	---	5	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 115 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>					
<i>Toluene-d8 (Surr)</i>			<i>93 %</i>		<i>80-120 %</i>		<i>"</i>					
<i>4-Bromofluorobenzene (Surr)</i>			<i>114 %</i>		<i>80-120 %</i>		<i>"</i>					
Duplicate (9081072-DUP2)												
Prepared: 08/15/19 12:52 Analyzed: 08/19/19 22:30												

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

EES Environmental Inc

Project: **Debocks Texaco**

240 N Broadway Ste 203

Project Number: 2093-01

Portland, OR 97227

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9081072 - EPA 5035A											Soil	
Duplicate (9081072-DUP2)											Prepared: 08/15/19 12:52 Analyzed: 08/19/19 22:30	
<u>QC Source Sample: Non-SDG (A9H0553-01)</u>												
Benzene	ND	---	27.8	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	258	---	139	ug/kg dry	50	---	167	---	---	43	30%	Q-05
Ethylbenzene	ND	---	69.6	ug/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	209	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	278	ug/kg dry	50	---	161	---	---	***	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 113 %</i>			<i>Limits: 80-120 %</i>			<i>Dilution: 1x</i>			
									"			
<i>Toluene-d8 (Surr)</i>			<i>93 %</i>			<i>80-120 %</i>						
									"			
<i>4-Bromofluorobenzene (Surr)</i>			<i>115 %</i>			<i>80-120 %</i>						
<u>Matrix Spike (9081072-MS1)</u>												
Prepared: 08/15/19 12:52 Analyzed: 08/19/19 22:57												
<u>QC Source Sample: Non-SDG (A9H0553-01)</u>												
<u>5035A/8260C</u>												
Benzene	2680	---	26.6	ug/kg dry	50	2660	ND	101	77-121%	---	---	
Toluene	2330	---	133	ug/kg dry	50	2660	167	81	77-121%	---	---	
Ethylbenzene	2400	---	66.5	ug/kg dry	50	2660	ND	90	76-122%	---	---	
Xylenes, total	6980	---	200	ug/kg dry	50	7980	ND	87	78-124%	---	---	
Naphthalene	3040	---	266	ug/kg dry	50	2660	161	108	62-129%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 113 %</i>			<i>Limits: 80-120 %</i>			<i>Dilution: 1x</i>			
									"			
<i>Toluene-d8 (Surr)</i>			<i>91 %</i>			<i>80-120 %</i>						
									"			
<i>4-Bromofluorobenzene (Surr)</i>			<i>112 %</i>			<i>80-120 %</i>						

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Karen Stein

Kevin J. Friscia, Project Manager



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Report ID:

Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080878 - Total Solids (Dry Weight)												
Duplicate (9080878-DUP1) Prepared: 08/12/19 16:09 Analyzed: 08/13/19 07:33												
<u>QC Source Sample: Non-SDG (A9G0573-06)</u>												
% Solids	85.0	---	1.00	% by Weight	1	---	83.7	---	---	1	10%	
Duplicate (9080878-DUP2) Prepared: 08/12/19 16:09 Analyzed: 08/13/19 07:33												
<u>QC Source Sample: Non-SDG (A9H0258-03)</u>												
% Solids	90.5	---	1.00	% by Weight	1	---	90.3	---	---	0.3	10%	
Duplicate (9080878-DUP3) Prepared: 08/12/19 16:09 Analyzed: 08/13/19 07:33												
<u>QC Source Sample: Non-SDG (A9H0260-29)</u>												
% Solids	83.6	---	1.00	% by Weight	1	---	83.9	---	---	0.4	10%	
Duplicate (9080878-DUP4) Prepared: 08/12/19 16:09 Analyzed: 08/13/19 07:33												
<u>QC Source Sample: Non-SDG (A9H0290-07)</u>												
% Solids	53.5	---	1.00	% by Weight	1	---	53.2	---	---	0.5	10%	
Duplicate (9080878-DUP5) Prepared: 08/12/19 16:09 Analyzed: 08/13/19 07:33												
<u>QC Source Sample: Non-SDG (A9H0319-01)</u>												
% Solids	79.6	---	1.00	% by Weight	1	---	80.1	---	---	0.6	10%	
Duplicate (9080878-DUP6) Prepared: 08/12/19 18:38 Analyzed: 08/13/19 07:33												
<u>QC Source Sample: Non-SDG (A9H0356-02)</u>												
% Solids	68.3	---	1.00	% by Weight	1	---	68.0	---	---	0.5	10%	
Duplicate (9080878-DUP7) Prepared: 08/12/19 18:38 Analyzed: 08/13/19 07:33												
<u>QC Source Sample: Non-SDG (A9H0361-02)</u>												
% Solids	87.4	---	1.00	% by Weight	1	---	90.1	---	---	3	10%	
Duplicate (9080878-DUP8) Prepared: 08/12/19 18:38 Analyzed: 08/13/19 07:33												
<u>QC Source Sample: Non-SDG (A9H0364-02)</u>												
% Solids	79.3	---	1.00	% by Weight	1	---	79.6	---	---	0.4	10%	

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Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-----------------	-------	----------	--------------	---------------	-------	--------------	-----	-----------	-------

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9080921 - Total Solids (Dry Weight)												
Duplicate (9080921-DUP1) Prepared: 08/13/19 16:54 Analyzed: 08/14/19 07:16												
<u>QC Source Sample: Non-SDG (A9H0093-04)</u>												
% Solids	96.0	---	1.00	% by Weight	1	---	95.8	---	---	0.3	10%	
Duplicate (9080921-DUP2) Prepared: 08/13/19 16:54 Analyzed: 08/14/19 07:16												
<u>QC Source Sample: Non-SDG (A9H0280-02)</u>												
% Solids	81.6	---	1.00	% by Weight	1	---	80.4	---	---	1	10%	
Duplicate (9080921-DUP3) Prepared: 08/13/19 16:54 Analyzed: 08/14/19 07:16												
<u>QC Source Sample: Non-SDG (A9H0288-01)</u>												
% Solids	85.1	---	1.00	% by Weight	1	---	84.9	---	---	0.3	10%	
Duplicate (9080921-DUP4) Prepared: 08/13/19 16:54 Analyzed: 08/14/19 07:16												
<u>QC Source Sample: B22-15 (A9H0318-31)</u>												
<u>EPA 8000C</u>												
% Solids	81.1	---	1.00	% by Weight	1	---	82.0	---	---	1	10%	
Duplicate (9080921-DUP5) Prepared: 08/13/19 16:54 Analyzed: 08/14/19 07:16												
<u>QC Source Sample: Non-SDG (A9H0322-07)</u>												
% Solids	79.9	---	1.00	% by Weight	1	---	80.3	---	---	0.5	10%	
Duplicate (9080921-DUP6) Prepared: 08/13/19 16:54 Analyzed: 08/14/19 07:16												
<u>QC Source Sample: Non-SDG (A9H0380-03)</u>												
% Solids	89.5	---	1.00	% by Weight	1	---	88.9	---	---	0.7	10%	
Duplicate (9080921-DUP7) Prepared: 08/13/19 17:19 Analyzed: 08/14/19 07:16												
<u>QC Source Sample: Non-SDG (A9H0399-01)</u>												
% Solids	94.8	---	1.00	% by Weight	1	---	94.0	---	---	0.8	10%	
Duplicate (9080921-DUP8) Prepared: 08/13/19 19:51 Analyzed: 08/14/19 07:16												
<u>QC Source Sample: Non-SDG (A9H0410-01)</u>												
% Solids	92.5	---	1.00	% by Weight	1	---	92.6	---	---	0.09	10%	

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Project Manager: **Chris Rhea**

A9H0318 - 08 26 19 0857

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD RPD Limit	Notes
Batch 9080921 - Total Solids (Dry Weight)											

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9081148 - Total Solids (Dry Weight)												
Duplicate (9081148-DUP1) Prepared: 08/20/19 09:34 Analyzed: 08/21/19 07:44												
<u>QC Source Sample: MW-13-25 (A9H0318-06)</u>												
<u>EPA 8000C</u>												
% Solids	78.0	---	1.00	% by Weight	1	---	78.0	---	---	0.02	10%	
Duplicate (9081148-DUP2) Prepared: 08/20/19 09:34 Analyzed: 08/21/19 07:44												
<u>QC Source Sample: Non-SDG (A9H0552-10)</u>												
% Solids	91.0	---	1.00	% by Weight	1	---	88.2	---	---	3	10%	
Duplicate (9081148-DUP4) Prepared: 08/20/19 19:24 Analyzed: 08/21/19 07:44												
<u>QC Source Sample: Non-SDG (A9H0640-02)</u>												
% Solids	78.8	---	1.00	% by Weight	1	---	79.1	---	---	0.4	10%	
Duplicate (9081148-DUP5) Prepared: 08/20/19 19:24 Analyzed: 08/21/19 07:44												
<u>QC Source Sample: Non-SDG (A9H0647-01)</u>												
% Solids	97.7	---	1.00	% by Weight	1	---	95.4	---	---	2	10%	
Duplicate (9081148-DUP6) Prepared: 08/20/19 19:24 Analyzed: 08/21/19 07:44												
<u>QC Source Sample: Non-SDG (A9H0652-02)</u>												
% Solids	88.5	---	1.00	% by Weight	1	---	88.6	---	---	0.2	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)		Sample	Default	RL Prep			
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 9080890</u>							
A9H0318-47	Water	NWTPH-Dx	08/08/19 13:05	08/13/19 09:39	1070mL/5mL	1000mL/5mL	0.94

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030B		Sample	Default	RL Prep			
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 9080853</u>							
A9H0318-15	Water	NWTPH-Gx (MS)	08/07/19 11:00	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-21	Water	NWTPH-Gx (MS)	08/07/19 12:45	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-33	Water	NWTPH-Gx (MS)	08/07/19 16:00	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-35	Water	NWTPH-Gx (MS)	08/07/19 17:00	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-42	Water	NWTPH-Gx (MS)	08/08/19 09:15	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-43	Water	NWTPH-Gx (MS)	08/08/19 10:00	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-44	Water	NWTPH-Gx (MS)	08/08/19 11:05	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-45	Water	NWTPH-Gx (MS)	08/08/19 11:50	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-46	Water	NWTPH-Gx (MS)	08/08/19 12:30	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-47	Water	NWTPH-Gx (MS)	08/08/19 13:05	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00

Prep: EPA 5035A		Sample	Default	RL Prep			
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 9080869</u>							
A9H0318-03	Soil	NWTPH-Gx (MS)	08/06/19 12:20	08/06/19 12:20	6.12g/5mL	5g/5mL	0.82
A9H0318-18	Soil	NWTPH-Gx (MS)	08/07/19 11:35	08/07/19 11:35	6.75g/5mL	5g/5mL	0.74
A9H0318-25	Soil	NWTPH-Gx (MS)	08/07/19 14:25	08/07/19 14:25	5.01g/5mL	5g/5mL	1.00
A9H0318-31	Soil	NWTPH-Gx (MS)	08/07/19 15:55	08/07/19 15:55	6.85g/5mL	5g/5mL	0.73
A9H0318-39	Soil	NWTPH-Gx (MS)	08/08/19 08:05	08/08/19 08:05	6.56g/5mL	5g/5mL	0.76
<u>Batch: 9080960</u>							
A9H0318-04RE2	Soil	NWTPH-Gx (MS)	08/06/19 12:25	08/06/19 12:25	5.93g/5mL	5g/5mL	0.84
A9H0318-05RE2	Soil	NWTPH-Gx (MS)	08/06/19 12:45	08/06/19 12:45	6.45g/5mL	5g/5mL	0.78
A9H0318-11RE2	Soil	NWTPH-Gx (MS)	08/07/19 09:25	08/07/19 09:25	6.91g/5mL	5g/5mL	0.72
<u>Batch: 9081072</u>							
A9H0318-06RE1	Soil	NWTPH-Gx (MS)	08/06/19 13:00	08/06/19 13:00	6.67g/5mL	5g/5mL	0.75

BTEX+N Compounds by EPA 8260C

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SAMPLE PREPARATION INFORMATION

BTEX+N Compounds by EPA 8260C

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 9080853</u>							
A9H0318-15	Water	EPA 8260C	08/07/19 11:00	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-21	Water	EPA 8260C	08/07/19 12:45	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-33	Water	EPA 8260C	08/07/19 16:00	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-35	Water	EPA 8260C	08/07/19 17:00	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-42	Water	EPA 8260C	08/08/19 09:15	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-43	Water	EPA 8260C	08/08/19 10:00	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-44	Water	EPA 8260C	08/08/19 11:05	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-45	Water	EPA 8260C	08/08/19 11:50	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-46	Water	EPA 8260C	08/08/19 12:30	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00
A9H0318-47	Water	EPA 8260C	08/08/19 13:05	08/12/19 09:27	5mL/5mL	5mL/5mL	1.00

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 9080869</u>							
A9H0318-03	Soil	5035A/8260C	08/06/19 12:20	08/06/19 12:20	6.12g/5mL	5g/5mL	0.82
A9H0318-04	Soil	5035A/8260C	08/06/19 12:25	08/06/19 12:25	5.93g/5mL	5g/5mL	0.84
A9H0318-05	Soil	5035A/8260C	08/06/19 12:45	08/06/19 12:45	6.45g/5mL	5g/5mL	0.78
A9H0318-18	Soil	5035A/8260C	08/07/19 11:35	08/07/19 11:35	6.75g/5mL	5g/5mL	0.74
A9H0318-25	Soil	5035A/8260C	08/07/19 14:25	08/07/19 14:25	5.01g/5mL	5g/5mL	1.00
A9H0318-31	Soil	5035A/8260C	08/07/19 15:55	08/07/19 15:55	6.85g/5mL	5g/5mL	0.73
A9H0318-39	Soil	5035A/8260C	08/08/19 08:05	08/08/19 08:05	6.56g/5mL	5g/5mL	0.76
<u>Batch: 9080960</u>							
A9H0318-11RE2	Soil	5035A/8260C	08/07/19 09:25	08/07/19 09:25	6.91g/5mL	5g/5mL	0.72
<u>Batch: 9081072</u>							
A9H0318-06RE1	Soil	5035A/8260C	08/06/19 13:00	08/06/19 13:00	6.67g/5mL	5g/5mL	0.75

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 9080878</u>							
A9H0318-03	Soil	EPA 8000C	08/06/19 12:20	08/12/19 18:38			NA
A9H0318-39	Soil	EPA 8000C	08/08/19 08:05	08/12/19 18:38			NA
<u>Batch: 9080921</u>							
A9H0318-04	Soil	EPA 8000C	08/06/19 12:25	08/13/19 16:54			NA

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: Debocks Texaco

Project Number: 2093-01

Project Manager: Chris Rhea

Report ID:

A9H0318 - 08 26 19 0857

SAMPLE PREPARATION INFORMATION

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A9H0318-05	Soil	EPA 8000C	08/06/19 12:45	08/13/19 16:54			NA
A9H0318-11	Soil	EPA 8000C	08/07/19 09:25	08/13/19 16:54			NA
A9H0318-18	Soil	EPA 8000C	08/07/19 11:35	08/13/19 16:54			NA
A9H0318-25	Soil	EPA 8000C	08/07/19 14:25	08/13/19 16:54			NA
A9H0318-31	Soil	EPA 8000C	08/07/19 15:55	08/13/19 16:54			NA
<u>Batch: 9081148</u>							
A9H0318-06	Soil	EPA 8000C	08/06/19 13:00	08/20/19 09:34			NA

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Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

- B-02** Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
- F-20** Result for Diesel is Estimated due to overlap from Gasoline Range Organics or other VOCs.
- M-02** Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
- M-04** Due to matrix interference, this analyte cannot be accurately quantified. The reported result may contain a high bias.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- S-06** Surrogate recovery is outside of established control limits.
- V-15** Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

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A handwritten signature in black ink, appearing to read "Kevin J. Friscia".

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Project Number: **2093-01**

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Report ID:

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

- DET Analyte DETECTED at or above the detection or reporting limit.
ND Analyte NOT DETECTED at or above the detection or reporting limit.
NR Result Not Reported
RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).

If no value is listed ('----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

- Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as "dry", "wet", or " " (blank) designation.
- "dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.
- "wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
- " " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

- "---" QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- "***" Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to $\frac{1}{2}$ the Reporting Limit (RL).

-For Blank hits falling between $\frac{1}{2}$ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

For further details, please request a copy of this document.

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EES Environmental Inc

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Portland, OR 97227

Project: Debocks Texaco

Project Number: 2093-01

Project Manager: Chris Rhea

Report ID:

A9H0318 - 08 26 19 0857

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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Kevin J. Friscia, Project Manager

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

LABORATORY ACCREDITATION INFORMATION

TNI Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
--------	----------	--------	---------	--------	---------------

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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Kevin J. Friscia, Project Manager

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

EES Environmental Inc
240 N Broadway Ste 203
Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

CHAIN OF CUSTODY

APEX LABS

2232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

2232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: EES ENVIRONMENTAL	Project Mgr: CHRIS RHEA	Project Name: 2093-01	Project #: 2093-01
Address: 240 N BROADWAY, STE 203 PORTLAND OR	Phone: 503-947-7740	Fax: -	Email: CHRISEES@EES-FIN.COM
Sampled by: DANIELE PETERS & PIEZCE THIEME			
ANALYSIS REQUEST			
Site Location: OR	WA	DATE	TIME
Other: _____		SAMPLE ID	# OF CONTAINERS
1 MW-13-2	8/6/9	W50	3
2 MW-13-5	12/00	S	3
3 MW-13-10	12/20	S	3
4 MW-13-15	12/29	S	3
5 MW-13-20	1/2/95	S	3
6 MW-13-25	1/3/0	S	3
7 MW-13-17	✓	1/3/0	S
8 B19-2	8-7-9	0945	S
9 B19-5		0900	S
10 B19-10	✓	0945	S
Normal Turn Around Time (TAT) = 10 Business Days			
TAT Requested (circle)	1 Day	2 Day	3 Day
	4 DAY	5 DAY	Other: _____
SAMPLES ARE HELD FOR 30 DAYS			
RELINQUISHED BY:	RECEIVED BY:	RECEIVED BY:	
Signature: <i>Danielle Peters</i> Date: 8-9-99	Signature: <i>John Head</i> Date: 8-9-99	Signature: _____	Date: _____
Printed Name: DANIELE P. PETERS Time: 1125	Printed Name: JOHN HEAD Time: 1125	Printed Name: _____	Date: _____
Company: EES	Company: <i>Alpha</i>	Company: _____	Company: _____

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Kevin J. Friscia, Project Manager

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

CHAIN OF CUSTODY		Lab # <i>KH0318</i>		COC Z of 5	
Company: EES ENVIRONMENTAL	Project Mgr: CHRIS RHEA	Project Name: Debocks Texaco	Project #: 2093-01		
Address: 240 N Broadway Ste 203 Portland, OR	Phone: 503-718-2323	Email: (CHES@EES.ENV)	PO #		
Sampled by: DANIELLE PETEES & PLEBE THIEME					
Site Location: OR WA CA AK ID —					
SAMPLE ID	LAB ID #	DATE	TIME	# OF CONTAINERS	Matrix
B19-15	8-19	0925	3	3	W
B19-20	0440	S	3	3	S
B19-25	1000	S	3	3	S
B20-2	1055	S	3	3	S
B19-W	1100	W	3	3	W
B20-5	1105	S	3	3	S
B20-10	1125	S	3	3	S
B20-15	1135	S	3	3	S
B20-20	1145	S	3	3	S
B20-25	1155	S	3	3	S
Normal Turn Around Time (TAT) = 10 Business Days					
TAT Requested (circle):	1 DAY	2 DAY	3 DAY	SPECIAL INSTRUCTIONS:	
	4 DAY	5 DAY	Other: _____		
SAMPLES ARE HELD FOR 30 DAYS					
RELINQUISHED BY:	RElinquished By:	Date:	Date:	RECEIVED BY:	Date:
Signature: <i>Danielle B. Petees</i>	Signature: <i>Danielle B. Petees</i>	Date: <i>8-9-19</i>	Date: <i>8/9/19</i>	Signature: <i>Kevin J. Friscia</i>	Date: <i>8/9/19</i>
Printed Name: <i>DANIELLE B. PETEES</i>	Printed Name: <i>DANIELLE B. PETEES</i>	Time:	Time:	Printed Name:	Time:
Company: <i>EES</i>	Company: <i>EES</i>	Company:	Company:	Company:	Company:

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503-718-2323

EPA ID: OR01039

EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

CHAIN OF CUSTODY		Lab #	KJF0248	COC 3 of 9
Company: EES ENVIRONMENTAL	Project Manager: DANIELLE B. PETERS	Project Name: Debocks Texaco	Project #: 2093-01	
Address: 240 N Broadway Ste 203 Portland, OR	Phone: 503-871-2140	Email: CHRISS@EES-ENV.COM	PO #	
Sampled by: DANIELLE B. PETERS & PIERCE THIEME				
Site Location:				
OR <input checked="" type="radio"/> CA	AK ID _____	LAB ID #	DATE	TIME
B20-W		8-7-19	1245	W 3
B21-2		(345)	S 3	
B21-5		1405	S 3	
B21-10		145	S 3	
B21-15		1425	S 3	
B21-20		1440	S 3	
B21-25		1455	S 3	
B22-2		1505	S 3	
B22-5		1510	S 3	
B22-10		1540	S 3	
Normal Turn Around Time (TAT) = 10 Business Days				
TAT Requested (circle):	1 Day	2 Day	3 Day	
	4 DAY	5 DAY	Other: _____	
SAMPLES ARE HELD FOR 30 DAYS				
RElinquished By:	RECEIVED BY:	RElinquished By:	RECEIVED BY:	
Signature: 	Date: 8-9-19	Signature: 	Date: 8-9-19	
Printed Name: DANIELLE B. PETERS	Time: 1125	Printed Name: KEVIN J. FRISIA	Time: 1115	
Company: EES		Company: EES		Company: EES
SPECIAL INSTRUCTIONS:				
TCLP Metals (8) Priority Metals (13) RCRA Metals (8) 8081 Pesticides 8082 PCBs 8270 Semivolatiles Full List 8270 SIM PAHS 8260 VOCs Full List 8260 Halogenated VOCs 8260 RBDM VOCs 8260 BTEx NWTPh-Gx NWTPh-Dx # OF CONTAINERS MATRIX				

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EPA ID: OR01039

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240 N Broadway Ste 203

Portland, OR 97227

Project: **Debooks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

CHAIN OF CUSTODY		Lab # A9H0318	COC 9 of 6
Sampled by: DANIELE PETERS & PIERRE THIEME	Site Location: OR WA CA AK ID _____	Project Name: Debooks Texaco	Project #: 2093-01
Address: 240 N BROADWAY STE 203 PORTLAND, OR 97227 Phone: 503-221-2441 Email: CHES@EES-ENV.COM			
ANALYSIS REQUEST			
SAMPLE ID	LAB ID #	DATE	TIME
B22-15	97191555	S 3	MATRIX
B22-20	1005	S 3	# OF CONTAINERS
B21-N	1680	W 3	NWTPH-HClD
B22-25	1620	S 3	NWTPH-Gx
B22-W	1700	W 3	8260 BTEx
B23-2	8890325	S 3	8260 RBBM VOCs
B23-5	0445	S 3	8260 HALO VOCs
B23-10	0800	S 3	8270 SEMI-VOL Full List
B23-15	0805	S 3	8270 SIM PATHS
B23-20	0815	S 3	8280 VOCs Full List
Normal Turn Around Time (TAT) = 10 Business Days			
SPECIAL INSTRUCTIONS:			
TAT Requested (circle)		1 Day	2 Day
		3 Day	
		4 DAY	5 DAY
		Other: _____	
SAMPLES ARE HELD FOR 30 DAYS			
RELINQUISHED BY:		RECEIVED BY:	RECEIVED BY:
Signature: Danielle B. Peters	Date: 8-9-19	Signature: John Paul	Date: 8/9/19
Printed Name: DANIELE B. PETERS	Time: 1125	Printed Name: John Paul	Time: 1125
Company: EES	Company: EES	Company: EES	Company: EES

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240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

CHAIN OF CUSTODY									
APEX LABS		Lab # <u>A9H0318</u>		PO#		coc 5 of 5			
Company: EES ENVIRONMENTAL Project Mgr: CHRIS RHEA		Project Name: DEBOCKS TEXACO		Project # 2093-01					
Address: 240 N BROADWAY STE 203, PORTLAND, OR		Phone: 503.947.7340 Fax: -		Email: CHRIS@EEST-ENV.COM					
Sampled by: DANIELE PEREZ & PERCE THIENE									
SAMPLE ID	Site location: OR <input checked="" type="radio"/> WA <input type="radio"/>	Other: _____	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTH-HCD	NWTH-DD
1	B23-L5		8-8-19 0825	S	3			NWTH-Gx	NWTH-Gx
2	B23-W		8-8-19 0825	W	3				
3	MW-12		10-00	W	3				
4	MW-10		1105	W	3				
5	MW-11		1150	W	3				
6	MW-5		1230	W	3				
7	MW13-W		1305	W	7				
8	TRIP BLANK A		-	-	W	1			
9	TRIP BLANK B		-	-	W	1			
10									
Normal Turn Around Time (TAT) = 10 Business Days <input checked="" type="radio"/> YES <input type="radio"/> NO									
TAT Requested (circle) 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: _____									
SAMPLES ARE HELD FOR 30 DAYS									
RELINQUISHED BY: RECEIVED BY:									
Signature: <u>Danielle Perez</u> Date: <u>8-9-19</u> Signature: <u>Kevin J. Friscia</u> Date: <u>8-9-19</u>									
Printed Name: <u>DANIELE B. PEREZ</u> Printed Name: <u>KEVIN J. FRISCIA</u>									
Time: _____									
Company: <u>EES</u> Company: <u>Apex</u>									
SPECIAL INSTRUCTIONS: THE 4 LITER AMBER OF MW13-W NEEDS TO BE TRANSFERRED TO AN HE PRESERVED AMBER UPON ARRIVAL AT THE LAB									

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EPA ID: OR01039

EES Environmental Inc

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Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

CHAIN OF CUSTODY		Lab #	Lab #	Lab #
		A9H0318		COC 1 of 5
Site Location:	OR	WA	WA	WA
Other:				
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX
1 MW-13-2	869	150	5	# OF CONTAINERS
2 MW-13-5		1200	5	
3 MW-13-10		1220	5	
4 MW-13-15		1225	5	
5 MW-13-20		1245	5	
6 MW-13-25		1300	5	
7 MW-13-17		1310	5	
8 B19-2	8-19-0915	5	3	
9 B19-5	0900	5	3	
10 B19-10	0915	5	3	
Normal Turn Around Time (TAT) = 10 Business Days				
<input checked="" type="radio"/> YES <input type="radio"/> NO				
TAT Requested (circle)	1 Day	2 Day	3 Day	
	4 DAY	5 DAY	Other: _____	
SAMPLES ARE HELD FOR 30 DAYS				
RELINQUISHED BY:				
RECEIVED BY:				
Signature: <i>Daniel B. Peters</i> Date: 9-19 Signature: <i>Kevin J. Friscia</i> Date: 9-19 Printed Name: <i>DANIEL B. PETERS</i> Time: 11:25 Printed Name: <i>KEVIN J. FRISCIA</i> Time: 11:25 Company: <i>EES</i> Company: <i>Apex</i>				

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Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

CHAIN OF CUSTODY									
Company: EES ENVIRONMENTAL Project Mgr: CHRIS RHEA		Project Name: DEBOCKS TEXACO		Lab #: A9H0318 coc 2 of 2 Revised		Project #: 2093-01			
Address: 240 N Broadway Ste 203 Portland, OR		Phone: 503-718-2323 Email: CHRISE@EES-ENV.COM							
Sampled by: DANIELLE BETTES & PIERRE THIEME									
Site Location: OR (WA) CA AK ID _____									
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTF-HCII	NWTF-HDX	NWTF-GX	NWTF-HCII
B19-15	8449	0925	S 3	X	X				
B19-20		0940	S 3						
B19-25		1000	S 3						
B20-2		1055	S 3						
B19-W		1100	W 3	XX					
B20-5		1105	S 3						
B20-10		1125	S 3						
B20-15		1135	S 3	XX					
B20-20		1145	S 3						
B20-25		1155	S 3						
Normal Turn Around Time (TAT) = 10 Business Days									
SPECIAL INSTRUCTIONS:									
TAT Requested (circle)									
1 Day		2 Day		3 Day					
4 DAY		5 DAY		Other: _____					
SAMPLES ARE HELD FOR 30 DAYS									
RElinquished By:	Received By:	RElinquished By:	Received By:	RElinquished By:	Received By:	RElinquished By:	Received By:	RElinquished By:	Received By:
Signature: <i>Daniel B. Pettes</i>	Date: 8-9-19	Signature: <i>Daniel B. Pettes</i>	Date: 8/9/19	Signature: <i>Daniel B. Pettes</i>	Date: 8/9/19	Signature: <i>Daniel B. Pettes</i>	Date: 8/9/19	Signature: <i>Daniel B. Pettes</i>	Date: 8/9/19
Printed Name: DANIEL B. PETTES	Time:	Printed Name: DANIEL B. PETTES	Time:	Printed Name: DANIEL B. PETTES	Time:	Printed Name: DANIEL B. PETTES	Time:	Printed Name: DANIEL B. PETTES	Time:
Company: EES	Company:	Company:	Company:	Company:	Company:	Company:	Company:	Company:	Company:

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

EES Environmental Inc

240 N Broadway Ste 203

Portland, OR 97227

Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

APEX LABS		CHAIN OF CUSTODY		Lab # A9H0318 coc 3 of 9 Revised	
Company: EES ENVIRONMENTAL	Project Mgr: CT215 BETH	Project Name: Debocks Texaco	Phone: 503-947-1540	Email: chris@ees-env.com	Project #: 2093-01
ANALYSIS REQUEST					
Site Location:	OR (WA) CA	AK ID: _____	Sample ID	LAB ID #	DATE
DANIELLE PETERS	CA		B20-W	87-191245	W 3
PIERCE THIEME	AK		B21-2	1345	S 2
			B21-5	1405	S 3
			B21-10	1415	S 3
			B21-15	1425	S 3
			B21-20	1440	S 3
			B21-25	1455	S 3
			B21-2	1505	S 3
			B22-5	1510	S 3
			B22-10	1540	S 3
Normal Turn Around Time (TAT) = 10 Business Days					
TAT Requested (circle)					
1 Day		2 Day		3 Day	
4 DAY		5 DAY		Other: _____	
SAMPLES ARE HELD FOR 30 DAYS					
RELINQUISHED BY: RECEIVED BY: RECEIVED BY:					
Signature:	Date:	Signature:	Date:	Signature:	Date:
Danielle B Peters	8-19-19	Shawn Head	8/19/19	Shawn Head	8/19/19
Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:
DANIELLE B. PETERS		Shawn Head	W/15		
Company:		Company:		Company:	
EES		Joseph			

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Kevin J. Friscia, Project Manager

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CHAIN OF CUSTODY		Lab #	A9H0318 coc A-6 revised	
Company: EES ENVIRONMENTAL Project Manager: HELENE PETERS	Address: 240 N BROADWAY, STE 203 PORTLAND, OR 97227 Phone: 503-844-2340	Project Name: Debocks Texaco	Project #: 2093-01	PO #
ANALYSIS REQUEST				
SAMPLE ID	LAB ID #	DATE	TIME	# OF CONTAINERS
B22-15	02141555	S	0105	S
B22-20			1600	W
B21-W			1600	W
B22-25			1620	S
B22-W		1700	W	2
B23-2	02191635	S	0135	S
B23-5	0245	S	0145	S
B23-10			0700	S
B23-15			0805	S
B23-20			0915	S
Normal Turn Around Time (TAT) = 10 Business Days				
SPECIAL INSTRUCTIONS:				
TAT Requested (circle)				
1 Day 2 Day 3 Day				
4 DAY 5 DAY Other: _____				
SAMPLES ARE HELD FOR 30 DAYS				
RELINQUISHED BY: RECEIVED BY: RECEIVED BY:				
Signature: <i>Danielle B. Peters</i>	Date: <i>8-9-19</i>	Signature: <i>Samuel Judd</i>	Date: <i>8/9/19</i>	Signature: _____
Printed Name: <i>Danielle B. Peters</i>	Time: <i>10:00 AM</i>	Printed Name: <i>Samuel Judd</i>	Time: <i>10:00 AM</i>	Printed Name: _____
Company: <i>EES</i>	Company: <i>Indepex</i>	Company: <i>Indepex</i>	Company: <i>Indepex</i>	Company: _____

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Project Manager: **Chris Rhea**

Report ID:

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CHAIN OF CUSTODY

Lab# 1010318 COC 5 of 5 Dated 10/10/18

Company: EES ENVIRONMENTAL Project Mgr: CHRIS RHEA		Project Name: DEBOCKS TEXACO		PO#		Project # 2093-01	
Address: 240 N BROADWAY STE 203, PORTLAND, OR		Phone: 503.847.7740 Fax: -		Email: CHRIS@ESEN-ENV.COM			
Sampled by: MARIELE PETEET & PIERRE THIENE							
Site Location:	OR	WA	DATE	MATRIX	# OF CONTAINERS	ANALYSIS REQUEST	
SAMPLE ID	LAB ID #						
1 B23-25	89874	08925	S	3			
2 B23-W		0915	W	3	X		
3 MW-12		1000	W	3	X		
4 MW - 10		1105	W	3	X		
5 MW - 11		1150	W	3	X		
6 MW - 5		1230	W	3	X		
7 MW13-W		1305	W	7	X		
8 TRIP BLANK-A	-	-	W	1	X		
9 TRIP BLANK-B	-	-	W	1	X		
10							
Normal Turn Around Time (TAT) = 10 Business Days							
TAT Requested (circle) YES NO							
1 Day 2 Day 3 Day							
4 DAY 5 DAY Other: _____							
SAMPLES ARE HELD FOR 40 DAYS							
RELINQUISHED BY:				RECEIVED BY:			
Signature: <u>Danielle B. Petree</u> Date: <u>8-24-19</u> Signature: _____				Signature: _____ Date: _____			
Printed Name: <u>DANIELLE B. PETREE</u> Title: <u>Analyst</u>				Printed Name: _____ Title: _____			
Company: <u>EES</u>				Company: _____			

SPECIAL INSTRUCTIONS:
THE LITTER AMBER OF MW13-W NEEDS
TO BE TRANSFERRED TO AN HE PRESERVED
AMBER VIAL ON ARRIVAL AT THE LAB

1200-Z
1200-COLS
TOTAL DIS. TCLP
Hg, Me, Cd, Cu, Pb, Zn,
Se, As, Ni, Cr, Mn, Co, Ba,
Al, Si, As, Be, Br, Cd,
TCLP Metals (6)
RCRA Metals (6)
600 TTO
8082 PCBs
8270 SIM PAHS
8270 VOCs
8260 BTX VOCs
8260 HVOCs
8260 RBDM VOCs
8260 VOCs Filled
NWTPh-HCD
NWTPh-Dx
NWTPh-Gx

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Project: **Debocks Texaco**

Project Number: **2093-01**

Project Manager: **Chris Rhea**

Report ID:

A9H0318 - 08 26 19 0857

APEX LABS COOLER RECEIPT FORM

Client: EES

Element WO#: A9 H0318

Project/Project #: Debocks Texaco

Delivery Info:

Date/time received: 8/9/19 @ 1125 By: (Signature)

Delivered by: Apex Client ESS FedEx UPS Swift Senvoy SDS Other

Cooler Inspection Date/time inspected: 8/9/19 @ 1125 By: (Signature)

Chain of Custody included? Yes No Custody seals? Yes No

Signed/dated by client? Yes No

Signed/dated by Apex? Yes No

Cooler #1 **Cooler #2** **Cooler #3** **Cooler #4** **Cooler #5** **Cooler #6** **Cooler #7**

Temperature (°C) 0.9 4.3 _____

Received on ice? (Y/N) Y Y _____

Temp. blanks? (Y/N) Y Y _____

Ice type: (Gel/Real/Other) real real _____

Condition: good good _____

Cooler out of temp? (Y/N) Possible reason why:

If some coolers are in temp and some out, were green dots applied to out of temperature samples? Yes/No/NA

Out of temperature samples form initiated? Yes/No/NA

Samples Inspection: Date/time inspected: 8/10/19 @ 1020 By: (Signature)

All samples intact? Yes No Comments: MW-11 Y3 HCL voas received broken

Bottle labels/COCs agree? Yes No Comments: B21-15 reads B21-14 on all conts.

COC/container discrepancies form initiated? Yes No NA

Containers/volumes received appropriate for analysis? Yes No Comments: _____

Do VOA vials have visible headspace? Yes No NA

Comments: ✓

Water samples: pH checked: Yes No NA pH appropriate? Yes No NA

Comments: B19-W, B20-W, B21-W, B22-W MW-13W pH ~7

Additional information: TB #2014 - TRIP BLANK A TB#2090-TRIP

BLANK B

Labeled by: (Signature)

Witness: (Signature)

Cooler Inspected by: (Signature)

See Project Contact Form: Y

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