Chevron Environmental Management Company

Site Summary Report

Former Standard Oil Bulk Plant No. 206196
815 NE College Avenue
Pullman, Washington

Facility Site ID 75237695

Cleanup Site ID 14553

TAP Number PEA2681

April 28, 2025

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Acronyms and Abbreviations

µg/L	microgram per liter
Arcadis	Arcadis U.S.
amsl	above mean sea level
AST	aboveground storage tank
bgs	below ground surface
btoc	below top of casing
BTEX	benzene, toluene, ethylbenzene, xylenes
CEMC	Chevron Environmental Management Company
COC	constituents of concern
CUL	cleanup levels
DPE	dual-phase extraction
EFR	enhanced fluid recovery
ft	feet
LNAPL	light non-aqueous phase liquid
MNA	monitored natural attenuation
MTBE	methyl tertiary butyl ether (MTBE
MTCA	Model Toxics Control Act
O&M	operations and maintenance
PLIA	Pollution Liability Insurance Agency
PVC	polyvinyl chloride
RIFS	Remedial Investigation Report/Focused Feasibility Study Report
site	Former Standard Oil Bulk Plant No. 206196
TPH-GRO	total petroleum hydrocarbons as gasoline
TPH-HO	total petroleum hydrocarbons as heavy oil
TPH-DRO	total petroleum hydrocarbons as diesel
UST	underground storage tank
WSDOT	Washington State Department of Transportation
WSU	Washington State University

1 Introduction

On behalf of Chevron Environmental Management Company (CEMC), Arcadis U.S., (Arcadis) has prepared this *Site Summary Report* (Report) for Former Standard Oil Bulk Plant No. 206196, located on 815 NE College Avenue in Pullman, Washington (site) per request of Pollution Liability Insurance Agency (PLIA) for a summary report after acceptance into PLIA. The site was enrolled in the PLIA Technical Assistance Program (TAP) on August 3, 2023 with TAP Project No. PEA2681. A site location map and site plan are shown on Figures 1 and 2, respectively.

2 Background

2.1 Site Description and Background

The site is located immediately north of Highway 270, on the campus of Washington State University (WSU). The site is bounded to the north by NE College Avenue followed by an inactive coal power plant; an embankment on the east rising approximately 20 feet in elevation to SE Tacoma Street; the East Main Street (Highway 270) overpass embankment is located to the south; and to the west by the Blue Mountain Railroad spur line. E Spring Street and a city park are located further to the west (Leidos 2014b).

Standard Oil Company of California (Standard Oil; Chevron's predecessor) owned the property and operated the bulk plant from approximately 1921 to 1981. In 1981, the facility was decommissioned, and the property was sold to WSU in October 1982. Former bulk plant facilities included an office building, a garage, a warehouse, eight aboveground storage tanks (ASTs, no specified volumes), an underground septic tank, 500-gallon fuel oil underground storage tank (UST), pumping equipment, loading rack, and an unloading header (SAIC 2010). The ASTs stored various petroleum products including heating oil, diesel, unleaded gasoline, and supreme gasoline (SAIC 2010). The property is currently fenced and includes the original bulk plant garage; a storage building; a dual-phase extraction (DPE) system housed in storage containers; nine groundwater monitoring wells (MW-2, MW-7, MW-8, MW-10A, MW-13, MW-14, MW-15, MW-17, and MW-21), two DPE wells (DPE-1 and DPE-2), one air sparge well (AS-1), and four piezometers (PZ-1A, PZ-1B, PZ-2A, and PZ-2B); and ten groundwater monitoring wells located down gradient (MW-6A, MW-9A, MW-11, MW-12, MW-16, MW-18, MW-19, MW-20, MW-22, and MW-23) to the west and northwest (Figure 2) Boring logs and well construction logs are included in Appendix C. The remainder of the property is covered by gravel and grass.

3 Subsurface Conditions

3.1 Geology

The geology of the site is characterized by fluvial sediments and flood plain deposits from the South Fork of the Palouse River, which overlies the Miocene age Wanapum Formation Priest Rapids Member basalt. Overlying the fluvial deposits is fill material that consists of silty sand and gravel with metal and concrete debris (SAIC 2010). The fill material is approximately 3 feet thick beneath the former bulk plant and increases up to 9 feet in thickness toward the west near MW-20. Underlying the fill material, fluvial sediments and flood plain deposits are up to 12 feet in thickness and consist of sandy silt and clay with occasional organic-rich silt layers. The Wanapum

unit has been observed to a depth of 2,210 feet below ground surface (bgs) (SAIC 2010). Previous geologic cross-sections spanning the site are presented on Figures 3a through 3d.

3.2 Hydrogeology

A perched water bearing zone overlies the basalt, typically two to eight feet bgs, but has varied from 0.95 feet to 14.80 feet bgs depending on the season (Leidos, 2014). The groundwater flow direction is generally to the northwest towards the South Fork of the Palouse River, which is located approximately 600 feet west of the site (Figure 1).

WSU developed a Wellhead Protection Plan for its four municipal wells in 1998 (WSU 1998). The deep aquifer wells are approximately 0.66 miles from the site and supply WSU and the City of Pullman. The aquifers range in depth from 273 feet to 530 feet bgs (Leidos 2014b). The City of Pullman also has two municipal wells located approximately 0.1 miles south of the site and three wells approximately 0.88-mile upgradient to the south, which draw from aquifers approximately 150 feet to 231 feet bgs (Leidos 2014b).

4 Previous Investigation and Remediation Activities

Petroleum hydrocarbons were first discovered at the site in August 1991 during a geotechnical investigation for the Washington State Department of Transportation (WSDOT). Petroleum impacted soils and groundwater were encountered in borings drilled for the proposed construction of the Highway 270 bridge (RZA-AGRA, 1992; SAIC 2010).

4.1 Soil Sampling & Results

Between 1991 and 1993 site investigations were conducted including the drilling of several soil borings (B-7, B-8, and B-9) and installing monitoring wells MW-1 through MW-10. Constituents of concern (COCs) such as total petroleum hydrocarbons as gasoline (TPH-GRO), total petroleum hydrocarbons as diesel (TPH-DRO), total petroleum hydrocarbons as heavy oil (TPH-HO), benzene, toluene, ethylbenzene, and total xylenes (BTEX) were detected at concentrations above the Washington Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A cleanup levels (CULs) in soil beneath the former bulk plant property and off-site to the west and northwest (RZA-AGRA, 1992).

In November 2000, a site investigation was performed which included the installation of four monitoring wells and one soil boring (MW-9A, MW-10A, MW-13, MW-14, and B-10 respectively) to further characterize the extent of petroleum hydrocarbons in soil and groundwater. TPH-GRO, TPH-DRO, and benzene were detected at concentrations exceeding MTCA Method A CULs at a depth of 5 feet bgs at MW-14 and B-10 (KHM 2001).

Between November 2001 and March 2002, four additional monitoring wells (MW-15, MW-16, MW-17, and MW-6A) were installed. TPH-GRO, benzene, and total xylenes were detected at concentrations exceeding the MTCA Method A CULs at B-15, and B-17 locations (Delta, 2002). TPH-DRO was detected at concentrations exceeding MTCA Method A CULs at B-6A and B-17 (Delta, 2002). TPH-HO was detected at a concentration exceeding MTCA Method A CULs at B-6A (Delta, 2002). Ethylbenzene was detected at a concentration exceeding the MTCA Method A CULs at B-17 (Delta, 2002).

In September 2008, three monitoring wells (MW-18, MW-19, MW-20) were installed to delineate the downgradient extent of the groundwater plume and soil samples were collected. No COCs were detected in the soil samples collected (SAIC 2010).

Based on the investigation results, petroleum impacted soils were present across a significant portion of the property, occurring primarily in the smear zone between 2 and 18 feet bgs. The vertical extent of impacts was limited by the basalt layer (Leidos 2014b). The extent of petroleum impacted soil is shown in Figure 4. Historical soil analytical results are presented in Table 1.

4.2 Groundwater Sampling & Monitoring Well Installation

Between 1991 and 2010, a total of 26 groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-6A, MW-7, MW-8, MW-9, MW-9A, MW-10, MW-10A, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22, and MW-23) were installed onsite and offsite (SAIC 2010). A total of seven groundwater monitoring wells were destroyed between 1994 and 1995 (MW-1, MW-3, MW-4, MW-5, MW-6, MW-9, and MW-10). Monitoring well MW-7 is unable to be located (SAIC 2010).

Between 1991 and 1993, detections of TPH-GRO, TPH-DRO, and BTEX exceeded MTCA Method A CULs in groundwater beneath the former bulk plant property and off-site to the west and northwest (RZA-AGRA, 1992). In 2000, TPH-GRO, TPH-DRO and benzene were detected at concentrations exceeding MTCA Method A CULs in groundwater. In 2008, there were no detections of COCs in newly installed down-gradient monitoring wells (MW-18, MW-19, and MW-20) (SAIC 2010).

As of 2014, TPH-GRO and benzene were widespread in groundwater across the site and extended down-gradient beneath the railroad tracks. TPH-DRO was less widespread but did extend down-gradient towards the corner of the city park (Leidos 2014b). The site is located hydrologically upgradient from most potential off-site sources of contamination. Offsite sources were considered to be an unlikely contributor to petroleum impacts at the site, with the exception of historical TPH-DRO and TPH-HO detected in MW-11, approximately 450 feet northwest of the site. At the time, the source of this contamination was thought to have been from ASTs at the inactive coal power plant. The current extent of COCs in groundwater is discussed in Section 7.

4.3 Excavation

In 1995, approximately 1,200 cubic yards of contaminated soil were removed from the site during the WSDOT bridge construction project. An additional 300 cubic yards of contaminated soil was stockpiled on the property and later removed. The soil was excavated from the southwest corner of the former bulk plant property, just southeast of MW-2 (SAIC 2010).

4.4 Enhanced Fluid Recovery

In 2000, enhanced fluid recovery (EFR) was performed at wells MW-8, MW-09A, and MW-14 simultaneously for a period of seven hours. Well production was qualitatively evaluated by observing extracted fluid through vacuum hoses. Well MW-8 appeared to have the greatest yield, producing a dark colored fluid. Wells MW-10A and MW-13 were developed using vacuum extraction for a minimum of 45 minutes. Minimal amounts of fluid were recovered from these wells during well development. A total of 1,994 gallons of fluid was recovered through EFR (KHM 2001).

4.5 LNAPL Removal

A light non-aqueous phase liquid (LNAPL) plume consisting primarily of leaded gasoline with a lesser percent of diesel extended across the central portion of the former bulk plant property (Leidos 2014a). Multiple events have historically occurred to remove LNAPL. In June 1993, passive skimmers were placed in MW-8 and MW-10. In December 1996, hand bailing of LNAPL was initiated in MW-9. Approximately 5.8 gallons of LNAPL were removed from the three wells in the period between June 1993 and May 1997 (SAIC 2010). Operations and maintenance (O&M) reports indicated the skimmers were operating properly and left in place; however, records indicating when they were removed could not be found. Starting before April 2009, select monitoring wells were sampled quarterly and LNAPL was bailed during those events from MW-8, MW-9A, MW-14 and MW-16 (SAIC 2010). As of 2014, it was estimated that approximately 224 gallons of LNAPL had been removed during bailing activities (Leidos 2014b). Bailing activities were ceased in May 2023.

4.6 Dual Phase Extraction & Air Sparge System

In October 2011, a DPE and air sparge pilot test was conducted at the site. Results from this activity indicated that smear zone dewatering could likely be achieved under acceptable groundwater extraction rates and initial mass removal rates would be relatively high (Leidos 2014b). A DPE system was installed at the site to meet the site remedial objectives as outlined in the Remedial Implementation Proposal (Leidos 2014a). Additional details on DPE system installation are discussed below in Section 9.

5 Semi-Annual Groundwater Monitoring

Water level measurements were collected semi-annually from 2021 through 2024 Depth to water measurements were subtracted from the surveyed well top-of-casing elevations to obtain the groundwater elevation at each well during each event. Depth to groundwater and groundwater elevations and gradient are summarized in Section 6 and included in Table 2. Groundwater contours and approximate flow direction for the most recent monitoring event (June 2024) are presented on Figure 5.

During each groundwater monitoring event, groundwater samples were collected from all accessible wells and analyzed for TPH-GRO, TPH-DRO, TPH-HO, BTEX, and methyl tertiary butyl ether (MTBE). Analytical results are summarized in Section 7 and presented in Table 2.

5.1 Analytical Methods and Screening Criteria

Groundwater samples were analyzed for a suite of constituents based on the results of historical investigations. The analytical suite for the semiannual groundwater monitoring events summarized in this Report were selected using the guidance provided in Table 830-1 of the MTCA regulation. The full list of analytical methods used for the semiannual events is listed below. The constituents analyzed in groundwater samples collected over the course of semiannual monitoring events over the past four years are listed below.

- TPH-GRO by Northwest Method NWTPH-Gx
- TPH-DRO by Northwest Method NWTPH-Dx
- TPH-HO by Northwest Method NWTPH-Dx
- BTEX and MTBE by Method 8260D

6 Groundwater Gradient and Direction

Arcadis measured the depth to groundwater from the top of casing at monitoring wells during each semi-annual event. The depth to groundwater and groundwater elevations are presented in Table 2. Groundwater elevation contours from the June 2024 monitoring event are presented on Figure 5. Groundwater elevations remained relatively consistent throughout the monitoring period and the groundwater flow direction was to the northwest with an approximate hydraulic gradient of 0.057 ft/ft. The range of depth to water measured for each semi-annual event from March 2020 to June 2024 is presented in the bullets below.

- During the first semi-annual event in March 2020, 7 monitoring wells were gauged with depth to water (DTW) ranging from 2.40 ft btoc (MW-6A) to 6.88 ft btoc (MW-12).
- During the first semiannual event in May 2021, 21 monitoring wells were gauged with DTW ranging from 2.87 ft btoc (MW-6A) to 9.38 ft btoc (MW-15).
- During the second semiannual event in November 2021, 19 monitoring wells were gauged with DTW ranging from 3.24 ft btoc (MW-18) to 9.60 ft btoc (MW-15).
- During the first semiannual event in June 2022, 19 monitoring wells were gauged with DTW ranging from 0.30 ft btoc (MW-6A) to 7.03 ft btoc (MW-10A).
- During the second semiannual event in December 2022, 7 monitoring wells were gauged with DTW ranging from 2.96 ft btoc (MW-18) to 7.99 ft btoc (MW-15).
- During the first semiannual event in May 2023, 19 monitoring wells were gauged with DTW ranging from 2.60 ft btoc (MW-6A) to 8.86 ft btoc (MW-10A).
- During the second semiannual event in November 2023, 22 monitoring wells were gauged with DTW ranging from 3.33 ft btoc (MW-6A) to 10.25 ft btoc (MW-16).
- During the first quarterly event in April 2024, 22 monitoring wells were gauged with DTW ranging from 0.93 ft btoc (MW-6A) to 9.89 ft btoc (MW-16).
- During the second quarterly event in June 2024, 21 monitoring wells were gauged with DTW ranging from 1.96 ft btoc (MW-6A) to 9.76 ft btoc (MW-16).

7 Groundwater Analytical Results

A summary of the groundwater analytical results from each sampling event is presented below. Analytical results from the June 2024 groundwater sampling event are presented on Figure 6. Laboratory analytical reports are presented in Appendix A and groundwater sampling field forms are presented in Appendix B.

7.1 Annual Event, March 2020

Seven groundwater samples collected in March 2020 were analyzed for TPH-GRO, TPH-DRO, BTEX, and MTBE (Table 2). The results are summarized below.

- TPH-GRO was detected in all wells sampled but did not exceed the MTCA Method A CUL (800/1,000 micrograms per liter (µg/L)).
- Benzene was not detected.
- TPH-DRO was detected in three wells (MW-6A, MW-22, and MW-23) but did not exceed the MTCA Method A CUL (500 µg/L).
- Toluene, ethylbenzene, and total xylenes were not detected.

- TPH-HO, and MTBE were not detected.

7.2 First Semiannual Event, May 2021

Eight groundwater samples (seven parent samples, one field duplicate sample) collected in May 2021 were analyzed for TPH-GRO, TPH-DRO, TPH-HO, BTEX, and MTBE (Table 2). The results are summarized below.

- TPH-GRO was detected above the MTCA Method A CUL (800/1,000 micrograms per liter (µg/L)) in MW-2 and MW-15 at concentrations of 2,140 µg/L and 4,120 µg/L, respectively.
- Benzene was detected above the MTCA Method A CUL (5 µg/L) in MW-2 and MW-15 at concentrations of 143 µg/L and 205 µg/L, respectively.
- TPH-DRO was detected in two wells (MW-2, and MW-15) but did not exceed the MTCA Method A CUL (500 µg/L).
- Toluene, ethylbenzene, and total xylenes in four wells (MW-2, MW-12, MW-15, and MW-23) were either not detected or detected less than MTCA Method A CULs (1,000 µg/L, 700 µg/L, 1,000 µg/L, respectively).
- TPH-HO, and MTBE were not detected.

7.3 Second Semiannual Event, November 2021

Ten groundwater samples, and one duplicate sample, collected in November 2021 were analyzed for TPH-GRO, TPH-DRO, TPH-HO, BTEX, and MTBE (Table 2). The results are summarized below.

- TPH-GRO was detected above the MTCA Method A CUL (800/1,000 µg/L) in MW-17 (and duplicate sample) (5,170 µg/L and MW-8 (6,650 µg/L).
- Benzene was detected above the MTCA Method A CUL (5 µg/L) at three locations (MW-8, MW-17, and MW-23) with concentrations ranging from 75.7 µg/L (MW-23) to 314 µg/L (MW-8).
- TPH-DRO was detected in three wells (MW-8, MW-15, and MW-17) but did not exceed the MTCA Method A CUL (500 µg/L).
- Toluene, ethylbenzene, and total xylenes were detected in two (MW-8 and MW-17) wells but did not exceed MTCA Method A CULs (1,000 µg/L, 700 µg/L, 1,000 µg/L, respectively).
- TPH-HO, and MTBE were not detected.

7.4 First Semiannual Event, June 2022

Nine groundwater samples, and one duplicate sample, collected in June 2022 were analyzed for TPH-GRO, TPH-DRO, TPH-HO, BTEX, and MTBE (Table 2). The results are summarized below.

- TPH-GRO was detected above the MTCA Method A CUL (800/1,000 µg/L) in MW-17 with a concentration of 2,670 µg/L.
- Benzene was detected above the MTCA Method A cleanup levels CUL (5 µg/L) in MW-17 with a concentration of 16.2 µg/L.
- TPH-DRO was detected in one well (MW-17) but did not exceed the MTCA Method A CUL (500 µg/L).

- Toluene, ethylbenzene, and total xylenes were detected in MW-17, but did not exceed the MTCA Method A CULs (1,000 µg/L, 700 µg/L, 1,000 µg/L, respectively).
- TPH-HO, and MTBE were not detected.

7.5 Second Semiannual Event, December 2022

Three groundwater samples, and one duplicate sample, collected in December 2022 were analyzed for TPH-GRO, TPH-DRO, TPH-HO, BTEX, and MTBE (Table 2). The results are summarized below.

- TPH-GRO was detected above the MTCA Method A CUL (800/1,000 µg/L) in MW-8 (and duplicate) at a concentration of 10,400 µg/L [9,850 µg/L].
- TPH-DRO was detected above the MTCA Method A CUL (500 µg/L) in MW-8 (and duplicate) with a concentration of 684 µg/L [519 µg/L].
- Benzene was detected above the MTCA Method A CUL (5 µg/L) in MW-8 (and duplicate) at a concentration of 2,530 µg/L [2,530 µg/L].
- Toluene and ethylbenzene were detected in MW-8 and total xylenes were detected in MW-8 and MW-18, but did not exceed the MTCA Method A CULs (1,000 µg/L, 700 µg/L, 1,000 µg/L, respectively).
- TPH-HO, and MTBE were not detected.

7.6 First Semiannual Event, May 2023

Nine groundwater samples, and one duplicate sample, collected in May 2023 were analyzed for TPH-GRO, TPH-HO, BTEX, and MTBE (Table 2). The results are summarized below.

- TPH-GRO was detected above the MTCA Method A CUL (800/1,000 µg/L) in MW-23 and MW-17 at concentrations of 1,680 µg/L and 2,960 µg/L, respectively.
- Benzene was detected above the MTCA Method A CUL (5 µg/L) in MW-17 at a concentration of 15.5 µg/L.
- Toluene, ethylbenzene, and total xylenes were detected were detected in two wells (MW-17 and MW-23 but did not exceed the MTCA Method A CULs (1,000 µg/L, 700 µg/L, 1,000 µg/L, respectively).
- TP-HO was detected in six wells (MW-6A, MW-17, MW-18, MW-20, MW-22, MW-23) but did not exceed the MTCA Method A CULs (500 µg/L).
- MTBE was not detected.

7.7 Second Semiannual Event, November 2023

Nine groundwater samples, and one duplicate sample, collected in November 2023 were analyzed for TPH-GRO, TPH-HO, BTEX, and MTBE (Table 2). The results are summarized below.

- TPH-GRO was detected above the MTCA Method A CUL (800/1,000 µg/L) in MW-23 and MW-17 at concentrations of 900 µg/L and 2,620 µg/L, respectively.
- Benzene was detected above the MTCA Method A CUL (5 µg/L) in MW-23 at a concentration of 128 µg/L.
- Toluene, ethylbenzene, and total xylenes were detected in six wells (MW-10A, MW-12, MW-17, MW-18 MW-20, MW-23), but the concentrations did not exceed the MTCA Method A CULs (500 µg/L, 1,000 µg/L, 700 µg/L, and 1,000 µg/, respectively).

- TPH-HO was detected above the MTCA Method A CUL (500 µg/L) in MW-23 at a concentration of 734 µg/L.
- MTBE was not detected.

7.8 First Quarter Event, April 2024

Ten groundwater samples, and one duplicate sample, collected in April 2024 were analyzed for TPH-GRO, TPH-DRO, TPH-HO, BTEX, and MTBE (Table 2). Sampling frequency changed to quarterly at the beginning of 2024. The results are summarized below.

- TPH-GRO was detected above the MTCA Method A CUL (800/1,000 µg/L) in two wells, MW-8 and MW-17, at concentrations of 12,800 µg/L and 1,390 µg/L, respectively.
- TPH-HO was detected above the MTCA Method A CUL (500 µg/L) in MW-8 at a concentration of 3,090 µg/L.
- Benzene was detected above the MTCA Method A CUL (5 µg/L) in two wells, MW-8 and MW-17, at concentrations of 2,870 µg/L and 8.00 µg/L, respectively.
- Ethylbenzene and Total Xylenes were detected in two wells, both above the MTCA Method A CULs (700 µg/L and 1,000 µg/, respectively) in MW-8, at concentrations of 708 µg/L and 1,330 µg/L, respectively.
- TPH-DRO was detected in one well (MW-19) but did not exceed the MTCA Method A CUL (500 µg/L).
- Toluene was detected in one well (MW-17) but did not exceed the MTCA Method A CUL (1,000 µg/L).
- MTBE was not detected.

7.9 Second Quarter Event, June 2024

Nine groundwater sample and one duplicate sample collected in June 2024 were analyzed for TPH-GRO, TPH-DRO, TPH-HO, BTEX, and MTBE (Table 2). The results are summarized below.

- TPH-GRO was detected above the MTCA Method A CUL (800/1,000 µg/L) in well MW-17, at a concentration of 1,180 µg/L.
- TPH-DRO was detected above the MTCA Method A cleanup levels (500 µg/L) in well MW-23 with a concentration of 754 µg/L.
- Benzene was detected above the MTCA Method A CUL (5 µg/L) in two wells, MW-17 and MW-23, at concentrations of 14.3 µg/L and 5.22 µg/L, respectively.
- TPH-HO was detected in six wells (MW-6A, MW-17, MW-18, MW-20, MW-22, MW-23) and toluene, ethylbenzene, and total xylenes were detected in two wells (MW-17 and MW-23),but the concentrations did not exceed the MTCA Method A CULs (500 µg/L, 1,000 µg/L, 700 µg/L, and 1,000 µg/, respectively).
- MTBE was not detected.

8 LNAPL Plume

Historically, the LNAPL plume consisting primarily of leaded gasoline with a lesser percent of diesel (Leidos, 2014) extended across the western portion of the former bulk plant property in wells MW-8, MW-9A, MW-14, MW-16, MW-21, DPE-2, and PZ-1B. The LNAPL plume has remained stable and has not been observed in offsite, downgradient wells MW-2, MW-22 or MW-23.

9 DPE System

The DPE system was designed to remediate residual petroleum impacts in soil and groundwater resulting from the former bulk plant. At some point in the future, we understand WSU plans to redevelop the property with new campus department buildings. The remedial objectives for the site are as follows:

- LNAPL removal to the extent practicable.
- Sufficient contaminant mass reduction to allow monitored natural attenuation (MNA) to achieve MTCA Method A CULs.
- Elimination of potential vapor intrusion risk that may affect future redevelopment of the property by WSU.

9.1 DPE Installation

To meet cleanup levels and points of compliance outlined in the pre-engineered DPE treatment system previously operated at another facility was selected for use. Installation of concrete pad, placement of the DPE system on the pad, and installation of process piping was completed between October 9 and November 29, 2023. DPE installation field notes with photos are included as Appendix D. Final connection to power was completed on February 8, 2024, following delays due to weather and permitting. The system controls, process piping, and treatment equipment within the shipping containers were tested in March 2024 by Arcadis and subcontractors to evaluate if repairs and/or component replacements to the system were needed before startup. Several pieces of equipment were identified for replacement including the programmable logic controls, blower, piping, and totalizers. Arcadis is currently working with subcontractors to order equipment and make repairs in 2024. Process and instrumentation diagrams (P&ID) are presented as Figures 7a and 7b. Remediation compound layout figures are presented as Figures 8a and 8b. After necessary repairs and/or upgrades are completed, an updated P&ID, system as-builts, and system O&M manual will be prepared.

9.2 DPE Operation

The DPE system is connected to wells DPE-1 and DPE-2. The pumps in these wells will depress the groundwater table and simultaneously apply vapor extraction to remove hydrocarbon impacts from the exposed soils. Each extraction phase (groundwater and soil vapor) will be treated separately within the compound, which includes the system equipment and controls housed within a prefabricated building consisting of one 50-foot-long modified shipping container. The DPE system is equipped with an electric catalytic oxidizer to treat petroleum hydrocarbons in the vapor stream extracted from the subsurface. From the vapor manifold, a combined flow manifold header leads to an air-water separator, through the system blower, is treated with a catalytic oxidizer, and discharged to ambient air. Discharge vapor will be monitored to meet the requirements of the Notice of Construction permit issued by Ecology for this system. The extracted groundwater will then be collected within a main header pipe and collected in a batch tank. A pump will then transfer the collected groundwater through two sets of two bag filters in parallel before being treated through a minimum of four 1000 pound granular activated carbon vessels and discharged to the sanitary sewer. The discharged water will be monitored to meet the requirements of the Industrial User Permit issued by Ecology. The system will operate continuously.

Routine O&M of the system will be performed on a weekly basis. During the O&M events, data will be collected, and tasks will be performed to track remedial progress, verify operational compliance, and perform any needed

maintenance. The DPE system will be capable of real time monitoring and alarm notification that will notify Arcadis personnel of abnormal operating conditions.

To confirm that the DPE system is effectively capturing groundwater and extracting vapor-phase petroleum hydrocarbons, semi-annual groundwater gauging of monitoring wells and piezometers and collection of vacuum measurements in piezometers within the design radius of influence will be performed. Semi-annual potentiometric surface maps and tabulated estimates for the mass removal rates and total mass removal will be created.

10 Recommendations

From 2020 through 2024, groundwater monitoring results continue to show stable or decreasing (MW-6A, MW-17) COC concentrations and the extent of LNAPL has remained consistent with historical observations. In addition, groundwater flow directions and gradients are consistent with historical data.

Based on the 2024 groundwater data and DPE system installation schedule, Arcadis recommends the following:

- Conduct quarterly groundwater monitoring to further evaluate groundwater quality and concentration trends.
- Complete system startup and O&M of DPE system.
- Monitor remedial progress to evaluate potential expansion of the extraction well network.

11 References

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WSU 1998. Wellhead Protection Plan. October 6.

Tables

Table 1. Soil Analytical Results
Former Standard Oil Bulk Plant No. 206196
815 NE College Avenue
Pullman, Washington

Sample No.	Sample Location	Depth (ft)	Sample Date	TPH-DRO	TPH-HO (mg/kg)	TPH-GRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)	cPAH (mg/kg)	Naphthalene (mg/kg)	EDB (mg/kg)	EDC (mg/kg)
MTCA Method A Cleanup Levels				**2,000**	**2,000**	**30**	**0.03**	**7**	**6**	**9**	**0.1**	**250**	**0.1**	**5**	**0.005**	**NA**
Current Method[1]:				**NWTPH-Dx***		**NWTPH-Gx**	**USEPA Method 8260**					**USEPA Method 6020**	**USEPA Method 8270C/9310**		**USEPA Method 8260B**	
MW-1 ,S-2	MW-1	5 - 6.5	1992	**1889**	--	--	**1.45**	ND	**0.925**	**0.559**	--	--	--	--	--	--
MW-1, S-4	MW-1	10 - 11.5	1992	ND	--	--	ND	**0.041**	**0.005**	**0.017**	--	**19.2**	--	--	--	--
MW-2,S-3	MW-2	7.5 - 9	1992	ND	--	--	**0.006**	ND	**0.054**	**0.079**	--	**17.9**	--	--	--	--
MW-2,S-5	MW-2	12.5 - 13.2	1992	ND	--	--	ND	ND	ND	ND	--	**15.3**	--	--	--	--
MW-3, S-2	MW-3	7.5 - 9	1992	ND	--	--	ND	ND	ND	ND	--	**23.3**	--	--	--	--
MW-3,S-3	MW-3	12 - 13.4	1992	ND	--	--	ND	ND	ND	ND	--	**15.4**	--	--	--	--
MW-4,S-1	MW-4	2.5 - 4	1992	ND	--	--	ND	ND	ND	ND	--	**52.7**	--	--	--	--
MW-4, S-2	MW-4	7.5-9	1992	ND	--	--	ND	ND	ND	ND	--	**23.5**	--	--	--	--
MW-5, S-1	MW-5	6-7.5	1992	ND	--	--	ND	ND	ND	ND	--	**44.8**	--	--	--	--
B-7, S-2	B-7	5-6.5	1992	ND	--	--	**0.106**	ND	**0.536**	**0.216**	--	**32.6**	--	--	--	--
B-7, S-3	B-7	7.5-9	1992	**700**	--	--	--	--	--	--	--	--	--	--	--	--
B-7, S-5	B-7	12.5 - 14	1992	ND	--	--	ND	ND	**0.538**	**0.218**	--	**21.7**	--	--	--	--
B-8, S-2	B-8	7-8.5	1992	ND	--	--	ND	ND	ND	ND	--	**28.1**	--	--	--	--
B-8, S-3	B-8	12-13.2	1992	ND	--	--	ND	ND	ND	ND	--	**20**	--	--	--	--
B-9, S-2	B-9	7.5-9	1992	**428**	--	--	**0.038**	ND	ND	ND	--	**19.2**	--	--	--	--
B-9, S-3	B-9	12.5 - 14	1992	ND	--	--	ND	ND	ND	ND	--	**19.1**	--	--	--	--
TP-9, S-1	TP-9	5-5.5	1992	**533**	--	--	**5.35**	**2.3**	**2.17**	**21.1**	--	--	--	--	--	--
TP-9, S-2	TP-9	6-7	1992	**1,129**	--	--	**0.065**	**2.77**	**1.33**	**5.0**	--	--	--	--	--	--
B-6A-5	MW-6A	5	11/12/2001	**560**	**8,100**	<1.0	<0.0050	<0.0050	<0.0050	<0.015	<0.050	--	--	--	--	--
B-15-10	MW-15	10	11/13/2001	**41**	**33**	**270**	**3.1**	**0.75**	**8.9**	**27**	**1.5**	--	--	--	--	--
B-16-10	MW-16	10	11/13/2001	**140**	<50	**58**	**0.21**	<0.050	**0.26**	<0.50	<0.50	--	--	--	--	--
B-17-5	MW-17	5	11/13/2001	**3,500**	<1000	**4,700**	**19**	**63**	**7.3**	**65**	**11**	--	--	--	--	--
B-18-10	B-18	10	11/13/2001	<3.0	<10	<1.0	<0.0050	<0.0050	<0.0050	<0.015	<0.050	--	--	--	--	--
MW-9A-5	MW-9A	5	11/17/2000	**14.6**	<25	**62.3**	**0.487**	**1.25**	**1.84**	**6.46**	--	**19.5**	--	--	--	--
MW-10A-5	MW-10A	5	11/17/2000	<10	<25	<5.00	**0.0596**	**0.181**	<0.0500	**0.176**	--	**32.2**	--	--	--	--
B-10-5	B-10	5	11/17/2000	**3,240**	**306**	**3,290**	**24.2**	**8.95**	**76.7**	**171**	--	**27.5**	--	--	--	--
MW-14-5	MW-14	5	11/17/2000	**45**	<25	**165**	**0.903**	**0.298**	**1.0**	**5.0**	--	<12.5	--	--	--	--
MW-13-5	MW-13	5	11/17/2000	<10	<25	<5.00	<0.0500	**0.0919**	<0.0500	**0.11**	--	<12.5	--	--	--	--
MW-19-4	MW-19	4	9/9/2008	<3.7	<12	<1.2	**0.001**	<0.001	<0.001	<0.001	<0.0006	--	--	--	--	--
MW-19-9.5	MW-19	9.5	9/9/2008	<4.2	<14	<1.7	**0.0009**	<0.001	<0.001	<0.001	<0.0006	--	--	--	--	--
MW-19-14	MW-19	14	9/9/2008	<3.5	<12	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	--	--	--	--
MW-20-4	MW-20	4	9/9/2008	<4.3	<14	<1.8	**0.001**	0.004	<0.001	<0.001	<0.0007	--	--	--	--	--
MW-20-6.5	MW-20	6.5	9/9/2008	<4.1	<14	<1.5	**0.0009**	<0.001	<0.001	<0.001	<0.0006	--	--	--	--	--
MW-20-12	MW-20	12	9/9/2008	<3.5	**15**	<1.1	<0.0004	<0.0009	<0.0009	<0.0009	<0.0004	--	--	--	--	--

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Sample No.	Sample Location	Depth (ft)	Sample Date	TPH-DRO	TPH-HO (mg/kg)	TPH-GRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)	cPAH (mg/kg)	Naphthalene (mg/kg)	EDB (mg/kg)	EDC (mg/kg)
MW-18-4	MW-18	4	9/10/2008	**46**	**190**	**3.7**	**0.002**	<0.002	<0.002	<0.002	<0.001	--	--	--	--	--
MW-18-6	MW-18	6	9/10/2008	<4.2	<14	<1.6	**0.001**	<0.001	<0.001	<0.001	<0.0006	--	--	--	--	--
MW-18-10	MW-18	10	9/10/2008	<3.5	<12	<1.1	<0.0005	<0.001	<0.001	<0.001	<0.0005	--	--	--	--	--
SB-2-4	SB-2	4	10/22/2009	**280**	<26	**1,200**	<0.031	<0.061	**1.3**	**0.12**	--	--	--	--	--	--
SB-2-7.5	SB-2	7.5	10/22/2009	**140**	<14	**1,200**	<0.038	<0.076	**1.2**	**0.32**	--	--	--	--	--	--
SB-7-4	SB-7	4	10/22/2009	**590**	<70	**3,100**	**2.2**	**1.5**	**110**	**79**	--	--	--	--	--	--
SB-8-4	SB-8	4	10/23/2009	**110**	**51**	**6,600**	**48**	**13**	**380**	**1,100**	--	--	**0.0057810**	**6.7**	--	--
SB-9-6	SB-9	6	10/23/2009	**430**	<140	**2,100**	**11**	**27**	**26**	**110**	--	--	--	--	--	--
SB-13-6	SB-13	6	10/23/2009	**430**	**280**	**450**	**0.89**	**0.22**	**0.18**	**0.93**	--	--	--	--	--	--
SB-1-8	SB-1	8	10/27/2009	**160**	**58**	**730**	<0.035	<0.070	<0.070	<0.070	--	--	--	--	--	--
SB-1-10	SB-1	10	10/27/2009	**190**	**210**	**310**	<0.032	<0.063	<0.063	<0.063	--	--	--	--	--	--
SB-2-9	SB-2	9	10/27/2009	**120**	<13	**710**	<0.034	<0.067	<0.067	<0.067	--	--	--	--	--	--
SB-3-4	SB-3	4	10/27/2009	**5,000**	<630	**3,500**	<0.34	<0.68	**11**	**2.6**	--	--	--	--	--	--
SB-3-9	SB-3	9	10/27/2009	**380**	<26	**3,300**	**1.9**	**1.9**	**86**	**420**	--	--	**0.001517**	**1.3**	--	--
SB-3-14	SB-3	14	10/27/2009	<4.0	<13	**19**	**0.01**	**0.002**	**0.003**	**0.004**	--	--	--	--	--	--
SB-4-8	SB-4	8	10/27/2009	**420**	<29	**2,200**	**0.34**	**0.13**	**5.4**	**0.2**	--	--	--	--	--	--
SB-5-4.5	SB-5	4.5	10/27/2009	**57**	<13	**650**	**0.731**	**0.092**	**22.3**	**7.3**	**0.812**	**17.7**	**0**	**1.1**	<0.074	<0.074
SB-5-8	SB-5	8	10/27/2009	**5.7**	<14	**290**	<0.38	<0.076	**3.1**	**2.4**	--	--	--	--	--	--
SB-6-7	SB-6	7	10/27/2009	**240**	**33**	**3,600**	**0.88**	**0.21**	**210**	**96**	--	--	--	--	--	--
SB-7-12	SB-7	12	10/27/2009	<3.8	<13	**7.8**	**0.012**	**0.011**	**0.33**	**0.11**	--	--	--	--	--	--
SB-9-13	SB-9	13	10/27/2009	**6.7**	<13	**510**	**2**	**0.5**	**15**	**4.9**	--	--	--	--	--	--
SB-9-15	SB-9	15	10/27/2009	<3.4	<11	**17**	**0.018**	**0.014**	**0.22**	**0.15**	--	--	--	--	--	--
SB-11-4	SB-11	4	10/27/2009	**2,400**	<660	**2,400**	**0.24**	<0.13	**63**	**51**	**--**	--	**0.05021**	**9.2**	--	--
SB-11-11	SB-11	11	10/27/2009	**270**	<23	**1,100**	<0.034	<0.067	<0.067	<0.067	--	--	--	--	--	--
SB-13-8	SB-13	8	10/27/2009	**1200**	<72	**1,800**	**0.22**	**1.45**	**0.91**	**2.1**	**1.02**	**95.3**	**0.0001**	**1.8**	<0.092	<0.092
MW-22-6	MW-22	6	10/28/2009	**54**	**58**	**32**	**0.0009**	<0.001	<0.001	<0.001	--	--	--	--	--	--
MW-23-6	MW-23	6	10/28/2009	**41**	<14	**2,000**	<0.17	<0.33	**15**	**0.42**	--	--	--	--	--	--
MW-23-13	MW-23	13	10/28/2009	<3.5	<12	<1.3	**0.051**	**0.004**	**0.024**	**0.0005**	--	--	--	--	--	--
SB-4-10	SB-4	10	10/28/2009	130	<12	**740**	**0.3**	**0.059**	**1.3**	**0.19**	--	--	--	--	--	--
SB-4-14	SB-4	14	10/28/2009	<3.4	<11	<1.1	**0.008**	<0.0009	<0.0009	<0.0009	--	--	--	--	--	--
SB-5-11	SB-5	11	10/28/2009	**6.3**	<12	**490**	**0.49**	**0.089**	**6.3**	**1.1**	--	--	--	--	--	--
SB-6-15	SB-6	15	10/28/2009	<3.5	<12	**2.2**	**0.001**	<0.0009	**0.013**	**0.002**					--	--
SB-8-14	SB-8	14	10/28/2009	<3.7	<12	<3.3	**0.26**	**0.009**	**0.06**	**0.031**					--	--
SB-10-4	SB-10	4	10/28/2009	**740**	<120	**430**	**0.1**	**0.13**	**0.12**	**0.21**	--	--	--	--	--	--
SB-13-13	SB-13	13	10/28/2009	<3.5	<12	**2.5**	**0.008**	<0.0008	**0.002**	<0.0008	--	--	--	--	--	--
SB-14-6	SB-14	6	10/28/2009	<3.7	<12	**5.7**	**0.0008**	<0.001	<0.001	<0.001	--	--	--	--	--	--
SB-14-11	SB-14	11	10/28/2009	<4.0	<13	**840**	**0.34**	<0.075	**1.1**	**0.21**	--	--	--	--	--	--

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SB-14-13	SB-14	13	10/28/2009	<3.5	<12	**1.5**	**0.039**	**0.003**	**0.007**	**0.002**	--	--	--	--	--	--
SB-15-2	SB-15	2	10/28/2009	**350**	**830**	**360**	**0.41**	**0.45**	**0.52**	**3.4**	--	--	--	--	--	--
SB-15-8	SB-15	8	10/28/2009	**39**	<14	**870**	**0.4**	**0.14**	**6**	**0.63**	--	--	--	--	--	--
SB-15-12	SB-15	12	10/28/2009	<3.4	<11	**3.1**	**0.091**	**0.004**	**0.092**	**0.02**	--	--	--	--	--	--
SB-12-4	SB-12	4	10/29/2009	**2,800**	**400**	**860**	**0.21**	**0.096**	**6**	**14**	--	--	--	--	--	--
SB-12-9	SB-12	9	10/29/2009	**2,200**	<140	**2,800**	**4.3**	**1.2**	**31**	**46**	--	--	--	--	--	--
SB-12-14	SB-12	14	10/29/2009	<3.4	<11	**8.1**	**0.002**	<0.001	**0.01**	**0.004**	--	--	--	--	--	--
MW-22-8	MW-22	8	10/29/2009	**150**	<14	**47**	**0.009**	<0.001	**0.002**	**0.003**	--	--	--	--	--	--
MW-22-13	MW-22	13	10/29/2009	<3.6	<12	<1.2	**0.012**	<0.0009	<0.0009	<0.0009					--	--
SB-16-8	SB-16	8	10/29/2009	**37**	<14	**150**	**0.003**	<0.001	**0.041**	**0.038**	--	--	--	--	--	--
SB-16-9	SB-16	9	10/29/2009	**700**	<63	**1,600**	<0.039	<0.078	**0.66**	**0.7**	--	--	--	--	--	--
SB-16-12	SB-16	12	10/29/2009	**120**	<13	**160**	**0.0008**	<0.001	<0.001	<0.001	--	--	--	--	--	--
SB-17-4	SB-17	4	10/29/2009	**120**	**130**	**24**	**0.012**	**0.002**	**0.34**	**0.033**	--	--	--	--	--	--
SB-17-12	SB-17	12	10/29/2009	**58**	**65**	**110**	**0.059**	**0.002**	**0.041**	**0.012**	--	--	--	--	--	--
SB-18-2	SB-18	2	10/29/2009	**3,700**	<310	**1,500**	**2.2**	**0.38**	**17**	**3.1**	--	--	--	--	--	--
SB-18-9	SB-18	9	10/29/2009	**130**	**31**	**890**	**1.4**	<0.092	**6.8**	**0.36**	--	--	--	--	--	--
SB-18-13	SB-18	13	10/29/2009	**13**	<13	**2.2**	**0.035**	**0.002**	**0.042**	**0.003**	--	--	--	--	--	--
EX-2-4	EX-2	4	5/16/2011	**200**	**53**	**210**	**2.7**	**0.35**	**2.2**	**1.8**	--	**71.5**	--	--	--	--
PZ-2A-6	PZ-2A	6	5/16/2011	**270**	**43**	**2,200**	**12**	**2.7**	**52**	**180**	--	**43.8**	--	--	--	--
PZ-2B-6	PZ-2B	6	5/16/2011	**20**	<14	**1,400**	**11**	**2.4**	**69**	**240**	--	**26.9**	--	--	--	--
PZ-1B-4	PZ-1B	4	5/17/2011	**21,000**	<1,400	**2,500**	**6.2**	**1.0**	**13**	**42**	--	**27.3**	--	--	--	--
PZ-1A-4	PZ-1A	4	9/26/2011	**1,300**	<130	**940**	<0.037	**0.11**	<0.074	**0.65**	--	--	--	--	--	--
PZ-1A-6	PZ-1A	6	9/26/2011	**2,800**	<300	**130**	**0.049**	**0.002**	**0.037**	**0.35**	--	--	--	--	--	--
DPE-1-4	DPE-1	4	9/26/2011	**5,500**	<640	**620**	<0.34	<0.68	<0.68	<0.68	--	--	--	--	--	--
DPE-1-6	DPE-1	6	9/26/2011	**1,800**	<150	**470**	<0.087	<0.17	<0.17	**0.22**	--	--	--	--	--	--
AS-1-2	AS-1	2	9/26/2011	**9,700**	<610	**2,600**	<0.30	<0.60	**3.9**	**15**	--	--	--	--	--	--
AS-1-4	AS-1	4	9/26/2011	**560**	<29	**530**	**0.26**	<0.24	**1.6**	**1.6**	--	--	--	--	--	--
AS-1-8	AS-1	8	9/26/2011	**81**	<13	**130**	**0.042**	**0.004**	**0.046**	**0.051**	--	--	--	--	--	--
PZ-1A-9.5	PZ-1A	9.5	9/27/2011	**380**	<61	**1,900**	**0.38**	**0.13**	**4.5**	**2.3**	--	--	--	--	--	--
PZ-1A-14.5	PZ-1A	14.5	9/27/2011	**11**	<12	**52**	**<0.050**	<0.10	<0.10	<0.10	--	--	--	--	--	--
AS-1-13	AS-1	13	9/27/2011	**1,100**	<130	**2,700**	**0.53**	<0.62	**5.9**	<0.62	--	--	--	--	--	--
AS-1-14	AS-1	14	9/27/2011	**25**	<11	**230**	<0.027	<0.054	<0.054	<0.054	--	--	--	--	--	--
PZ-1B-11	PZ-B1	11	9/28/2011	**940**	<59	**1,800**	**0.45**	<0.66	**4.5**	**4.6**	--	--	--	--	--	--
PZ-1B-13	PZ-B1	13	9/28/2011	<3.5	<12	**19**	**0.015**	<0.001	**0.042**	**0.004**	--	--	--	--	--	--
DPE-1-10	DPE-1	10	9/28/2011	**1,700**	<280	**2,200**	**0.56**	**0.11**	**2.7**	**0.29**	--	--	--	--	--	--
DPE-1-14	DPE-1	14	9/28/2011	**36**	<13	**29**	**0.005**	<0.001	**0.024**	**0.004**	--	--	--	--	--	--
DPE-1-19	DPE-1	19	9/28/2011	140	<11	**610**	<0.25	<0.50	<0.50	<0.50	--	--	--	--	--	--

Table 1. Soil Analytical Results
Former Standard Oil Bulk Plant No. 206196
815 NE College Avenue
Pullman, Washington

Sample No.	Sample Location	Depth (ft)	Sample Date	TPH-DRO	TPH-HO (mg/kg)	TPH-GRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)	cPAH (mg/kg)	Naphthalene (mg/kg)	EDB (mg/kg)	EDC (mg/kg)
DPE-2-8	DPE-2	8	9/28/2011	**30**	<13	**2,700**	**7.6**	**2.7**	**86**	**120**	--	--	--	--	--	--
DPE-2-10	DPE-2	10	9/28/2011	**9.0**	<26	**1,800**	**3.1**	**0.58**	**17**	**27**	--	--	--	--	--	--
DPE-2-13	DPE-2	13	9/28/2011	<6.7	<22	**8.2**	**0.021**	**0.002**	**0.067**	**0.11**	--	--	--	--	--	--
PZ-2A-9	PZ-2A	9	9/29/2011	<6.9	<23	**34**	**0.15**	**0.018**	**0.23**	**0.15**	--	--	--	--	--	--
PZ-2A-12	PZ-2A	12	9/29/2011	<7.0	<23	**360**	**0.52**	**0.17**	**2.9**	**1.1**	--	--	--	--	--	--
PZ-2B-10	PZ-2B	10	9/29/2011	**33**	<26	**3,800**	**19**	**4.6**	**120**	**390**	--	--	--	--	--	--
PZ-2B-13	PZ-2B	13	9/29/2011	**15**	<25	**400**	**2.8**	**0.78**	**23**	**75**	--	--	--	--	--	--
PZ-2B-16	PZ-2B	16	9/29/2011	<6.8	<23	<1.0	**0.032**	<0.001	**0.004**	**0.004**	--	--	--	--	--	--

Abbreviations:
cPAH = Carcinogenic polycyclic aromatic hydrocarbons
CUL = Cleanup Level
EDB = 1,2-Dibromoethane
EDC = 1,2-Dichloroethane
ft = feet
MDL = Method Detection Limit
RDL = Reported Detection Limit
MTBE = Methyl Tertiary Butyl Ether
MTCA = Model Toxics Control Act
ND - Not Detected
No. = Number
NWTPH = Northwest Total Petroleum Hydrocarbon
TPH = Total Petroleum Hydrocarbons
TPH-DRO = TPH as Diesel-Range Organics
TPH-GRO = TPH as Gasoline-Range Organics
TPH-HO = TPH as Heavy Oil Organics
USEPA = United States Environmental Protection Agency
< = Analyte not detected at or above the laboratory reporting limit
-- = not measured/not analyzed
mg/kg = milligrams per kilogram

Notes:
1 Laboratory analytical methods for historical data may not be consistent with list of current analytical methods. When necessary, consult original laboratory reports to verify methods used.
* 2009 Analytical data analysed by Method NWTPH-Dx Extended Range w/ Silica-gel Cleanup.
BOLD = Laboratory RDL is greater than the MTCA Method A CUL
BOLD and shaded = Concentration detected above MTCA Method A CUL

Reference:
Leidos Engineering, LLC. 2014. Remedial Investigation Report/Focused Feasibility Study Report. Pullman, Washington. April.

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-2	3/29/1992	2354.29	--	--	--	--	--	--	ND	--	**950**	24	25	5.0	--	**120**	--
MW-2	4/23/1992	2354.29	--	8.38	2,345.91	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	12/17/1992	2354.29	--	8.72	2,345.57	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	12/18/1992	2354.29	--	--	--	--	**4,300**	**4,300**	**2,400**	--	**1,300**	53	310	160	--	**29**	ND
MW-2	2/23/1993	2354.29	--	8.16	2,346.13	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	3/9/1993	2354.29	--	7.71	2,346.58	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	4/10/1993	2354.29	--	6.97	2,347.32	--	ND	630	400	--	**260**	5.9	33	--	--	--	--
MW-2	5/11/1993	2354.29	--	6.31	2,347.98	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	6/17/1993	2354.29	--	9.10	2,345.19	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	7/16/1993	2354.29	--	9.22	2,345.07	--	**5,000**	**2,900**	**1,300**	--	**1,500**	34	230	29	--	--	ND
MW-2	8/13/1993	2354.29	--	9.92	2,344.37	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	9/15/1993	2354.29	--	10.40	2,343.89	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	10/29/1993	2354.29	--	10.87	2,343.42	--	**4,700**	**2,600**	**3,800**	--	**1,300**	54	110	49	--	--	ND
MW-2	3/4/1994	2354.29	--	8.77	2,345.52	--	**1,700**	**1,600**	**1,300**	--	**500**	18	66	32	--	--	--
MW-2	6/8/1994	2354.29	--	9.18	2,345.11	--	**6,000**	**1,100**	**1,300**	--	**730**	24	49	28	--	--	ND
MW-2	9/14/1994	2354.29	--	10.97	2,343.32	--	6.0	**3,220**	**9,210**	--	**870**	33	27	39	--	**132**	ND
MW-2	1/25/1995	2354.29	--	10.96	2,343.33	--	--	423	280	--	**54**	1.0	ND	4.0	--	--	ND
MW-2	11/4/1997	2354.29	--	7.41	2,346.88	--	--	ND	ND	ND	0.529	ND	ND	ND	--	--	--
MW-2	5/5/1998	2354.29	--	8.40	2,345.89	--	--	**2,060**	--	--	**204**	7.37	39.2	20.4	--	--	--
MW-2	3/18/1999	2354.29	--	6.54	2,347.75	--	--	159	--	--	**66.1**	2.09	20.7	2.64	ND	--	--
MW-2	6/30/1999	2354.29	--	8.47	2,345.82	--	--	**1,170**	--	--	**119**	ND	ND	ND	ND	--	--
MW-2	9/3/1999	2354.29	--	8.18	2,346.11	--	--	**1,300**	ND	ND	**31.0**	3.88	1.56	ND	--	--	--
MW-2	11/21/1999	2354.29	--	8.25	2,346.04	--	--	**946**	ND	ND	**40.8**	7.72	2.14	6.47	--	--	--
MW-2	02/19-20/00	2354.29	--	5.85	2,348.44	--	--	**1,540**	ND	ND	**627**	25.8	166	34.3	--	--	--
MW-2	5/6/2000	--	--	7.34	--	--	--	658	ND	ND	**140**	5.32	37.4	7.36	--	--	--
MW-2	8/8/2000	--	--	8.26	--	--	--	**1,690**	ND	ND	**312**	22.6	23.9	21.4	--	--	--
MW-2	11/12/2000	--	--	8.10	--	--	--	**2,100**	**627**	ND	**251**	11.9	12.7	22.8	--	--	--
MW-2	2/22/2001	--	--	6.59	--	--	--	**6,950**	ND	ND	**534**	24.9	134	28.1	--	--	--
MW-2	5/22/2001	--	--	6.68	--	--	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--
MW-2	8/13/2001	--	--	8.57	--	--	--	**3,460**	<250	<750	**141**	9.35	12.2	11.3	--	--	--
MW-2	11/11/2001	--	--	8.76	--	--	--	**3,700**	<250	<750	**170**	18.8	<10.0	17.2	--	--	--
MW-2	1/31/2002	--	--	5.49	--	--	--	147	349	<750	**10.7**	<2.00	1.82	<1.50	--	--	--
MW-2	6/3/2002	--	--	7.42	--	--	--	**1,400**	**950**	<750	**360**	17	110	17	--	--	--
MW-2	8/28/2002	--	--	8.09	--	--	--	**2,000**	**910**	<250	**230**	12	31	8.9	--	--	--
MW-2	11/19/2002	--	--	9.31	--	--	--	**--**	**--**	--	--	--	--	--	--	--	--
MW-2	2/20/2003	--	--	5.21	--	--	--	<50	<250	<250	0.71	<0.50	<0.50	<1.5	<2.5	--	--
MW-2	5/17/2003	--	--	6.19	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	8/22/2003	--	--	7.95	--	--	--	**1,100**	**990**	<250	**190**	7.5	22	7.5	--	--	--
MW-2	11/28/2003	--	--	8.31	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	2/17/2004	--	--	5.08	--	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-2	6/9/2004	--	--	6.05	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	8/11/2004	--	--	7.25	--	--	--	**840**	**3,000**	**680**	**210**	6.1	24	17	--	--	--
MW-2	11/21/2004	--	--	7.38	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	2/20/2005	--	--	7.05	--	--	--	**880**	**10,000**	**970**	**270**	9.3	28	12	--	--	--
MW-2	5/29/2005	--	--	6.35	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	8/18/2005	--	--	7.65	--	--	--	400	**600**	<250	**15**	0.9	<0.5	1.5	--	--	--
MW-2	11/26/2005	--	--	7.46	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	2/20/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	5/12/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	8/6/2006	--	--	7.63	--	--	--	720	**590**	110	**180**	2.6	16	<1.5	--	--	--
MW-2	8/6/2007	--	--	7.42	--	--	--	660	**1,300**	190	**82**	2.3	8.7	2.7	--	--	--
MW-2	8/19/2008	--	--	8.05	--	--	--	**1,100**	**590**	440	**110**	5.7	9.8	4.4	--	--	--
MW-2	4/1/2009	2354.29	--	8.03	2,346.26	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	6/4/2009	2354.29	--	6.62	2,347.67	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	7/31/2009	2354.29	--	7.99	2,346.30	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	8/27/2009	2354.29	--	7.65	2,346.64	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	12/8/2009	2354.29	--	6.41	2,347.88	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	4/29/2010	2354.29	--	5.92	2,348.37	--	--	--	--	--	--	--	--	--	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-2	5/24/2010	2354.29	--	6.66	2,347.63	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	7/30/2010	2354.29	--	8.22	2,346.07	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	9/16/2010	2354.29	--	8.67	2,345.62	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	11/16/2010	2354.29	--	7.61	2,346.68	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	5/18/2011	2354.29	--	3.70	2,350.59	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	8/4/2011	2354.29	--	5.70	2,348.59	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	10/9/2011	2354.29	--	--	2,354.29	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	5/24/2012	2354.29	--	6.38	2,347.91	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	8/8/2012	2354.29	--	7.79	2,346.50	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	5/3/2013	2354.29	--	5.42	2,348.87	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	5/18/2021	2354.29	--	6.98	2,347.31	--	--	**2,140**	**73.3 J**	<250	**143**	**3.76**	**17.7**	**3.87**	<1.00	--	--
MW-2	11/11/2021	2354.29	--	7.38	2,346.91	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	6/15/2022	2354.29	--	3.42	2,350.87	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	12/7/2022	2354.29	--	5.62	2,348.67	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	5/17/2023	2354.29	--	4.46	2,349.83	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	1/31/2002	2348.83	INACCESSIBLE - DUE TO SNOW AND ICE				--	--	--	--	--	--	--	--	--	--	--
MW-6A	6/3/2002	2348.83	--	3.66	2,345.17	--	--	**640**	**980**	<750	**460**	3.1	9.1	12	--	--	<1.2
MW-6A	8/28/2002	2348.83	--	4.06	2,344.77	--	--	**1,100**	**1,400**	**3,500**	**310**	1.9	2.9	6.5	--	--	3.1
MW-6A	11/19/2002	2348.83	--	5.28	2,343.55	--	--	**1,000**	**600**	**860**	**200**	2.1	5.0	<15	--	--	--
MW-6A	2/20/2003	2348.83	--	2.31	2,346.52	--	--	**910**	420	<250	**280**	2.4	4.9	10	<5.0	--	--
MW-6A	5/17/2003	2348.83	--	3.31	2,345.52	--	--	400	**620**	480	**140**	0.9	3.0	3.6	--	--	--
MW-6A	8/22/2003	2348.83	--	3.73	2,345.10	--	--	**1,400**	**1,000**	270	**330**	1.6	8.9	11	--	--	--
MW-6A	11/28/2003	2348.83	--	4.28	2,344.55	--	--	**800**	<800	<1,000	**120**	0.9	1.7	3.0	--	--	--
MW-6A	2/17/2004	2348.83	--	2.19	2,346.64	--	--	**820**	**610**	320	**140**	1.6	2.3	7.1	--	--	--
MW-6A	6/9/2004	2348.83	--	2.68	2,346.15	--	--	230	<400	<500	**76**	0.7	1.5	2.4	--	--	--
MW-6A	8/11/2004	2348.83	--	3.31	2,345.52	--	--	510	**910**	490	**130**	1.3	1.8	5.5	--	--	--
MW-6A	11/21/2004	2348.83	--	3.44	2,345.39	--	--	560	<250	<250	**70**	0.8	1.4	3.5	--	--	--
MW-6A	2/20/2005	2348.83	--	3.27	2,345.56	--	--	610	<250	<250	**65**	0.8	1.7	5.1	--	--	--
MW-6A	5/29/2005	2348.83	--	2.74	2,346.09	--	--	<50	<250	<250	1.1	<0.5	<0.5	<1.5	--	--	--
MW-6A	8/18/2005	2348.83	--	3.52	2,345.31	--	--	360	480	380	**33**	0.5	0.8	1.7	--	--	--
MW-6A	11/26/2005	2348.83	--	3.53	2,345.30	--	--	<48	<88	<110	0.6	<0.5	<0.5	<1.5	--	--	--
MW-6A	2/20/2006	2348.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	5/12/2006	2348.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	8/6/2006	2348.83	--	3.55	2,345.28	--	--	140	260	<99	**12**	<0.5	<0.5	<1.5	--	--	--
MW-6A	8/6/2007	2348.83	--	3.38	2,345.45	--	--	510	**670**	200	**35**	1	1.2	<5.0	--	--	--
MW-6A	8/19/2008	2348.83	--	3.67	2,345.16	--	--	730	**760**	480	**64**	<0.5	2.1	6.0	--	--	--
MW-6A	9/11/2008	2348.83	--	3.64	2,345.19	--	--	220	<81	390	**7.5**	<2.0	<0.5	<1.5	--	--	--
MW-6A	4/1/2009	2348.83	--	3.64	2,345.19	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	6/4/2009	2348.83	--	2.86	2,345.97	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	7/31/2009	2348.83	--	3.69	2,345.14	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	8/27/2009	2348.83	--	3.38	2,345.45	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	4/29/2010	2348.83	--	2.69	2,346.14	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	5/24/2010	2348.83	--	2.81	2,346.02	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	7/30/2010	2348.83	--	3.62	2,345.21	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	9/16/2010	2348.83	--	4.20	2,344.63	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	11/16/2010	2348.83	--	3.48	2,345.35	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	5/18/2011	2348.83	--	1.39	2,347.44	--	--	400	76	<74	**32**	<5.0	1.2	2.7	--	--	--
MW-6A	8/4/2011	2348.83	--	2.68	2,346.15	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	10/9/2011	2348.83	--	4.50	2,344.33	--	--	<50	36	250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-6A	5/24/2012	2348.83	--	3.15	2,345.68	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	8/8/2012	2348.83	--	3.53	2,345.30	--	--	<50	62	87	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-6A	5/3/2013	2348.83	--	2.12	2,346.71	--	--	<50	66	120	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-6A	3/13/2018	2348.83	--	1.89	2,346.94	--	--	<50	66	120	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-6A	3/11/2020	2348.83	--	2.40	2,346.43	--	--	116	69	--	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-6A	5/17/2021	2348.83	--	2.87	2,345.96	--	--	--	--	--	--	--	--	--	--	--	--
MW-6A	11/12/2021	2348.83	--	3.51	2,345.32	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-6A	6/15/2022	2348.83	--	0.30	2,348.53	--	--	152	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-6A	5/17/2023	2348.83	--	2.60	2,346.23	--	--	<100	--	119 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-6A	11/6/2023	2348.83	--	3.33	2,345.50	--	--	<100	--	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-6A	4/9/2024	2354.29	--	0.93	2,353.36	0.00	--	41.8 J	--	285	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-6A	6/11/2024	2354.29	--	1.96	2,352.33	0.00	--	40.8 J	338	234 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-7	2/17/1992	2347.72	--	4.21	2,343.51	--	ND	580	**1,600**	--	**200**	8.1	70	23	--	**2,500**	ND
MW-7	3/9/1993	2347.72	--	3.43	2,344.29	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	4/10/1993	2347.72	--	3.10	2,344.62	--	**1,300**	**4,500**	300	--	**590**	61	580	--	--	--	--
MW-7	5/11/1993	2347.72	--	2.60	2,345.12	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	6/17/1993	2347.72	--	4.05	2,343.67	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/16/1993	2347.72	--	4.48	2,343.24	--	ND	300	260	--	**200**	5.1	24	1.0	--	--	ND
MW-7	8/13/1993	2347.72	--	4.68	2,343.04	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	9/15/1993	2347.72	--	4.93	2,342.79	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/29/1993	2347.72	--	5.18	2,342.54	--	ND	220	ND	--	**64**	1.6	0.7	2.0	--	--	ND
MW-7	3/4/1994	2347.72	--	4.04	2,343.68	--	ND	210	ND	--	**51**	1.2	0.5	1.4	--	--	--
MW-7	6/8/1994	2347.72	--	4.45	2,343.27	--	ND	130	ND	--	**44**	2.2	0.5	1.0	--	--	ND
MW-7	9/14/1994	2347.72	--	5.32	2,342.40	--	ND	87	67	--	**49**	ND	ND	ND	--	**19**	ND
MW-7	1/25/1995	2347.72	--	3.05	2,344.67	--	--	**2,900**	130	--	**281**	29	326	649	--	--	ND
MW-7	11/4/1997	2347.72	--	3.90	2,343.82	--	--	**2,620**	310	ND	**501**	11.9	383	91.8	--	--	--
MW-7	5/5/1998	2347.72	--	3.99	2,343.73	--	--	**1,820**	--	--	**488**	12.9	295	77.8	--	--	--
MW-7	3/18/1999	2347.72	--	3.72	2,344.00	--	--	**5,090**	--	--	**649**	32.5	**815**	719	ND	--	--
MW-7	6/30/1999	2347.72	--	4.45	2,343.27	--	--	ND	--	--	**636**	ND	41.4	25.2	ND	--	--
MW-7	9/3/1999	2347.72	--	3.59	2,344.13	--	--	682	ND	ND	**621**	11.3	9.13	21.3	--	--	--
MW-7	11/21/1999	2347.72	--	2.49	2,345.23	--	--	401	ND	ND	**10.2**	11.1	1.56	10.5	--	--	--
MW-7	02/19-20/00	2347.72	--	1.76	2,345.96	--	--	**5,050**	ND	ND	**769**	41.8	**1,040**	527	--	--	--
MW-7	5/6/2000	2347.72	--	2.41	2,345.31	--	--	**2,820**	ND	ND	**345**	27.3	520	103	--	--	--
MW-7	8/8/2000	2347.72	--	2.84	2,344.88	--	--	**996**	ND	ND	**558**	8.96	21.5	29.4	--	--	--
MW-7	11/12/2000	2347.72	--	2.57	2,345.15	--	--	**1,350**	424	ND	**534**	20.0	22.4	33.8	--	--	--
MW-7	2/22/2001	2347.72	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--	--	--	--
MW-7	5/22/2001	2347.72	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--	--	--	--
MW-7	8/13/2001	2347.72	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--	--	--	--
MW-7	11/11/2001	2347.72	--	3.79	2,343.93	--	--	**3,880**	<250	<750	**610**	8.57	12.9	29.9	--	--	--
MW-7	1/31/2002	2347.72	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--	--	--	--
MW-7	6/3/2002	2347.72	--	4.03	2,343.69	--	SAMPLED SEMIANNUALLY										
MW-7	8/28/2002	2347.72	--	3.10	2,344.62	--	--	**1,200**	450	<250	**750**	5.5	20	21	--	--	--
MW-7	11/19/2002	2347.72	--	4.39	2,343.33	--	SAMPLED SEMIANNUALLY										
MW-7	2/20/2003	2347.72	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--	--	--	--
MW-7	5/17/2003	2347.72	--	4.04	2,343.68	--	SAMPLED SEMIANNUALLY										
MW-7	8/22/2003	2347.72	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--	--	--	--
MW-7	11/28/2003	2347.72	--	3.47	2,344.25	--	SAMPLED SEMIANNUALLY										
MW-7	2/17/2004	2347.72	INACCESSIBLE - WELL IN GATED AREA				--	--	--	--	--	--	--	--	--	--	--
MW-7	6/9/2004	2347.72	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	8/11/2004	2347.72	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	11/21/2004	2347.72	UNABLE TO LOCATE - COVERED BY LANDSCAPING					--	--	--	--	--	--	--	--	--	--
MW-7	2/20/2005	2347.72	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	5/29/2005	2347.72	UNABLE TO LOCATE - COVERED BY LANDSCAPING					--	--	--	--	--	--	--	--	--	--
MW-7	8/18/2005	2347.72	UNABLE TO LOCATE - COVERED BY LANDSCAPING					--	--	--	--	--	--	--	--	--	--
MW-7	11/26/2005	2347.72	UNABLE TO LOCATE - COVERED BY LANDSCAPING					--	--	--	--	--	--	--	--	--	--
MW-7	2/20/2006	2347.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	5/12/2006	2347.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	8/6/2006	2347.72	UNABLE TO LOCATE - COVERED BY LANDSCAPING					--	--	--	--	--	--	--	--	--	--
MW-7	8/6/2007	2347.72	UNABLE TO LOCATE - COVERED BY LANDSCAPING					--	--	--	--	--	--	--	--	--	--
MW-7	8/19/2008	2347.72	UNABLE TO LOCATE - COVERED BY LANDSCAPING					--	--	--	--	--	--	--	--	--	--
MW-7	9/11/2008	2347.72	UNABLE TO LOCATE - COVERED BY LANDSCAPING					--	--	--	--	--	--	--	--	--	--
MW-8	12/16/1992	2355.45	--	--	--	--	**270,000**	**29,000**	**8,700**	--	**1,200**	620	**1,600**	**3,200**	--	**47**	3.2
MW-8	12/17/1992	2355.45	--	8.66	2,346.79	--	**79,000**	**16,000**	**200,000**	--	**1,600**	320	**2,100**	**3,400**	--	**190**	11
MW-8	2/23/1993	2355.45	--	8.32	2,347.13	--	--	--	--	--	--	--	--	--	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-8	3/9/1993	2355.45	--	7.70	2,347.75	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	4/10/1993	2355.45	6.99	7.24	2,348.01	0.25	--	--	--	--	--	--	--	--	--	--	--
MW-8	5/11/1993	2355.45	6.23	7.18	2,347.51	0.95	--	--	--	--	--	--	--	--	--	--	--
MW-8	6/17/1993	2355.45	9.42	9.80	2,345.35	0.38	--	--	--	--	--	--	--	--	--	--	--
MW-8	7/16/1993	2355.45	10.21	10.53	2,344.66	0.32	--	--	--	--	--	--	--	--	--	--	--
MW-8	8/13/1993	2355.45	--	10.45	2,345.00	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	9/15/1993	2355.45	--	10.59	2,344.86	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	10/29/1993	2355.45	--	10.72	2,344.73	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	6/8/1994	2355.45	9.78	9.82	2,345.60	0.04	--	--	--	--	--	--	--	--	--	--	--
MW-8	9/14/1994	2355.45	11.60	11.89	2,343.33	0.29	--	--	--	--	--	--	--	--	--	--	--
MW-8	1/25/1995	2355.45	--	8.57	2,346.88	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	5/16/1995	2355.45	--	9.34	2,346.09	0.02	--	--	--	--	--	--	--	--	--	--	--
MW-8	8/8/1995	2355.45	10.00	10.20	2,345.09	0.20	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/14/1995	2355.45	--	8.81	2,346.64	--	--	**270,000**	**120,000**	**12,000**	**840**	ND	**2,500**	**7,800**	--	--	9.0
MW-8	2/13/1996	2355.45	--	5.39	2,350.06	--	--	**1,800,000**	**63,000**	**7,600**	**1,600**	840	**23,000**	**77,000**	--	--	10
MW-8	5/16/1997	2355.45	6.35	6.37	2,349.06	0.02	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/4/1997	2355.45	--	7.90	2,347.55	Sheen	--	--	--	--	--	--	--	--	--	--	6.95
MW-8	5/5/1998	2355.45	8.46	8.48	2,346.95	0.02	--	--	--	--	--	--	--	--	--	--	--
MW-8	3/18/1999	2355.45	6.78	6.79	2,348.65	0.01	--	--	--	--	--	--	--	--	--	--	--
MW-8	6/30/1999	2355.45	8.84	8.99	2,346.34	0.15	--	--	--	--	--	--	--	--	--	--	--
MW-8	9/3/1999	2355.45	8.22	8.35	2,347.00	0.13	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/21/1999	2355.45	7.59	7.66	2,347.73	0.07	--	--	--	--	--	--	--	--	--	--	--
MW-8	02/19-20/2000	2355.45	5.13	5.33	2,349.96	0.20	--	**39,400**	**12,900**	**1,570**	**1,670**	38.9	**2,950**	**11,600**	--	--	--
MW-8	5/6/2000	2355.45	7.29	7.58	2,347.64	0.29	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	8/8/2000	2355.45	8.14	8.37	2,346.90	0.23	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	11/12/2000	2355.45	7.93	8.05	2,347.30	0.12	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	2/22/2001	2355.45	6.24	6.30	2,349.10	0.06	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	5/22/2001	2355.45	6.04	7.04	2,347.61	1.00	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	8/13/2001	2355.45	8.59	9.04	2,346.05	0.45	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	11/11/2001	2355.45	8.62	9.00	2,346.15	0.38	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	1/31/2002	2355.45	5.09	5.61	2,349.42	0.52	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	6/3/2002	2355.45	7.38	7.58	2,347.71	0.20	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	8/2/2002	2355.45	8.38	8.71	2,346.48	0.33	--	--	--	--	--	--	--	--	--	--	--
MW-8	8/28/2002	2355.45	8.31	8.46	2,346.87	0.15	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	9/20/2002	2355.45	8.71	8.98	2,346.25	0.27	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/6/2002	2355.45	8.71	9.13	2,345.98	0.42	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/19/2002	2355.45	9.86	10.86	2,343.79	1.00	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	1/3/2003	2355.45	9.71	10.28	2,344.71	0.57	--	--	--	--	--	--	--	--	--	--	--
MW-8	1/30/2003	2355.45	8.59	9.32	2,345.55	0.73	--	--	--	--	--	--	--	--	--	--	--
MW-8	2/20/2003	2355.45	5.02	5.49	2,349.58	0.47	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	3/21/2003	2355.45	9.84	10.45	2,344.51	0.61	--	--	--	--	--	--	--	--	--	--	--
MW-8	5/6/2003	2355.45	6.76	7.07	2,348.13	0.31	--	--	--	--	--	--	--	--	--	--	--
MW-8	5/17/2003	2355.45	6.81	7.10	2,348.12	0.29	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	6/29/2003	2355.45	7.06	7.39	2,347.80	0.33	--	--	--	--	--	--	--	--	--	--	--
MW-8	7/28/2003	2355.45	8.03	8.30	2,346.93	0.27	--	--	--	--	--	--	--	--	--	--	--
MW-8	8/22/2003	2355.45	8.34	8.60	2,346.64	0.26	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	9/23/2003	2355.45	8.60	8.88	2,346.35	0.28	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/1/2003	2355.45	8.22	8.47	2,346.78	0.25	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/28/2003	2355.45	8.96	9.25	2,345.97	0.29	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	12/29/2003	2355.45	--	--	--	--	INACCESSIBLE DUE TO WEATHER										
MW-8	2/2/2004	2355.45	6.67	6.91	2,348.35	0.24	--	--	--	--	--	--	--	--	--	--	--
MW-8	2/17/2004	2355.45	4.96	5.10	2,350.22	0.16	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	6/9/2004	2355.45	6.04	6.12	2,349.27	0.08	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	8/11/2004	2355.45	7.40	7.54	2,347.80	0.14	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	11/21/2004	2355.45	7.02	7.16	2,348.18	0.14	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	2/20/2005	2355.45	6.92	7.10	2,348.21	0.18	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	5/29/2005	2355.45	6.35	6.52	2,348.79	0.17	NOT SAMPLED DUE TO THE PRESENCE OF SPH										
MW-8	8/18/2005	2355.45	7.92	8.29	2,346.86	0.37	NOT SAMPLED DUE TO THE PRESENCE OF SPH										

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-8	11/26/2005	2355.45	7.00	7.24	2,348.02	0.24					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	2/20/2006	2355.45	6.78	6.99	2,348.29	0.21					SAMPLED ANNUALLY						
MW-8	5/12/2006	2355.45	6.11	7.20	2,347.38	1.09					SAMPLED ANNUALLY						
MW-8	8/6/2006	2355.45	7.77	8.02	2,347.23	0.25					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	8/6/2007	2355.45	7.32	7.37	2,348.04	0.05					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	8/19/2008	2355.45	7.95	8.23	2,347.00	0.28					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	9/11/2008	2355.45	8.50	8.27	2,346.97	0.26					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	4/1/2009	2355.45	--	--	--	<0.01					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	6/4/2009	2355.45	--	--	--	<0.01					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	7/31/2009	2355.45	--	--	--	<0.01					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	8/27/2009	2355.45	--	--	--	<0.01					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	4/29/2010	2355.45	--	--	--	<0.01					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	5/24/2010	2355.45	--	--	--	<0.01					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	7/30/2010	2355.45	--	--	--	<0.01					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	9/16/2010	2355.45	--	--	--	0.12					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	11/16/2010	2355.45	--	--	--	0.00					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	5/18/2011	2355.45	4.48	4.51	2,350.92	0.03					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	8/4/2011	2355.45	--	--	--	0.39					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	10/9/2011	2355.45	--	--	--	--					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	5/24/2012	2355.45	6.40	6.42	2,349.01	0.02					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	8/8/2012	2355.45	--	8.08	2,347.37	0.00	--	--	--	--	--	--	--	--	--	--	--
MW-8	8/25/2013	2355.45	--	7.06	2,348.39	0.00					WELL IS PART OF ACTIVE MONITORING AND LNAPL BAILING PROGRAM						
MW-8	3/13/2018	2355.45	4.39	4.41	2,351.02	0.02					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	5/17/2021	2355.45	--	6.56	2,348.89	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/11/2021	2355.45	--	8.00	2,347.45	0.00	--	**6,650**	447 J3	<250	**314**	15.7	44.4	30.8	<1.00	--	--
MW-8	6/15/2022	2355.45	3.48	3.51	2,351.96	0.03					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-8	12/7/2022	2355.45	--	5.00	2,350.45	0.00	--	**10,400**	**684**	<250	**2,530**	7.75	399	569	<5.00	--	--
MW-8 (DUP)	12/7/2022	--	--	--	--	--	--	**9,850**	**519**	<250	**2,340**	7.02 J	429	444	<20.0	--	--
MW-8	5/17/2023	2355.45	5.77	5.81	2,349.67	0.04	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/6/2023	2355.45	7.05	7.09	2,348.39	0.04	--	--	--	--	--	--	--	--	--	--	--
MW-8	4/9/2024	2355.45	--	3.88	2,351.57	0.00	--	**12,800**	--	**3,090**	**2,870**	<100	**708**	**1,330**	**<100 C3**	--	--
MW-8	6/10/2024	2355.45	5.23	5.52	2,350.16	0.29	--	--	--	--	--	--	--	--	--	--	--
MW-9A	2/22/2001	2353.68	5.45	6.31	2,348.06	0.86					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	5/22/2001	2353.68	--	--	--	10.64					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	8/13/2001	2353.68	6.70	7.76	2,346.77	1.06					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	11/11/2001	2353.68	6.75	7.70	2,346.74	0.95					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	1/31/2002	2353.68	INACCESSIBLE - DUE TO SNOW AND ICE				--	--	--	--	--	--	--	--	--	--	--
MW-9A	6/3/2002	2353.68	5.72	6.90	2,347.72	1.18					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	8/2/2002	2353.68	6.59	7.70	2,346.87	1.11	--	--	--	--	--	--	--	--	--	--	--
MW-9A	8/28/2002	2353.68	6.88	7.45	2,346.69	0.57					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	9/20/2002	2353.68	6.82	7.91	2,346.64	1.09	--	--	--	--	--	--	--	--	--	--	--
MW-9A	11/6/2002	2353.68	7.42	8.06	2,346.13	0.64	--	--	--	--	--	--	--	--	--	--	--
MW-9A	11/19/2002	2353.68	8.11	8.50	2,345.49	0.39					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	1/3/2003	2353.68	8.04	8.46	2,345.56	0.42	--	--	--	--	--	--	--	--	--	--	--
MW-9A	1/30/2003	2353.68	6.94	7.43	2,346.64	0.49	--	--	--	--	--	--	--	--	--	--	--
MW-9A	2/20/2003	2353.68	3.39	3.96	2,350.18	0.57					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	3/21/2003	2353.68	8.13	8.51	2,345.47	0.38	--	--	--	--	--	--	--	--	--	--	--
MW-9A	5/6/2003	2353.68	5.03	5.60	2,348.54	0.57	--	--	--	--	--	--	--	--	--	--	--
MW-9A	5/17/2003	2353.68	3.62	4.14	2,349.96	0.52					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	6/29/2003	2353.68	5.33	5.88	2,348.24	0.55	--	--	--	--	--	--	--	--	--	--	--
MW-9A	7/28/2003	2353.68	7.01	7.51	2,346.57	0.50	--	--	--	--	--	--	--	--	--	--	--
MW-9A	8/22/2003	2353.68	6.50	7.86	2,346.91	1.36					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	9/23/2003	2353.68	6.40	6.91	2,347.18	0.51	--	--	--	--	--	--	--	--	--	--	--
MW-9A	11/1/2003	2353.68	7.21	7.69	2,346.37	0.48	--	--	--	--	--	--	--	--	--	--	--
MW-9A	11/28/2003	2353.68	7.10	7.41	2,346.52	0.31					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	12/29/2003	2353.68	--	--	--	--					INACCESSIBLE DUE TO WEATHER						
MW-9A	2/2/2004	2353.68	5.52	5.99	2,348.07	0.47	--	--	--	--	--	--	--	--	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-9A	2/17/2004	2353.68	4.35	4.67	2,349.27	0.32					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	6/9/2004	2353.68	4.15	5.60	2,349.24	1.45					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	8/11/2004	2353.68	2.97	4.44	2,350.42	1.47					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	11/21/2004	2353.68	4.19	5.67	2,349.19	1.48					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	2/20/2005	2353.68	2.56	4.02	2,350.83	1.46					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	5/29/2005	2353.68	2.43	3.46	2,351.04	1.03					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	8/18/2005	2353.68	6.30	7.63	2,347.11	1.33					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	11/26/2005	2353.68	4.44	5.76	2,348.98	1.32					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	2/20/2006	2353.68	2.69	3.98	2,350.75	1.31					SAMPLED ANNUALLY						
MW-9A	5/12/2006	2353.68	2.63	3.92	2,350.79	1.29					SAMPLED ANNUALLY						
MW-9A	8/6/2006	2353.68	3.23	4.44	2,350.21	1.21					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	8/6/2007	2353.68	5.05	7.33	2,348.17	2.28					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	8/19/2008	2353.68	5.50	7.49	2,347.78	1.99					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	9/11/2008	2353.68	6.95	6.27	2,347.96	0.69					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	4/1/2009	2353.68	--	--	--	<0.01					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	6/4/2009	2353.68	--	--	--	2.09					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	7/31/2009	2353.68	--	--	--	0.14					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	8/27/2009	2353.68	--	--	--	0.22					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	4/29/2010	2353.68	--	--	--	1.60					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	5/24/2010	2353.68	--	--	--	0.22					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	7/30/2010	2353.68	--	--	--	0.25					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	9/16/2010	2353.68	--	--	--	0.09					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	11/16/2010	2353.68	--	--	--	0.01					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	5/18/2011	2353.68	3.03	3.11	--	0.08					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	8/4/2011	2353.68	--	--	--	1.16					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	10/9/2011	2353.68	--	--	--	--					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	5/24/2012	2353.68	4.59	6.89	2,348.63	2.30					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	8/8/2012	2353.68	6.86	8.51	2,346.49	1.65					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-9A	5/3/2013	2353.68	4.25	6.14	2,349.05	1.89					WELL IS PART OF ACTIVE MONITORING AND LNAPL BAILING PROGRAM						
MW-9A	3/12/2018	2353.68	--	3.55	2,350.13						WELL IS PART OF ACTIVE MONITORING AND LNAPL BAILING PROGRAM						
MW-9A	8/25/2013	2353.68	7.06	7.36	2,346.56	0.30					WELL IS PART OF ACTIVE MONITORING AND LNAPL BAILING PROGRAM						
MW-9A	5/17/2021	2353.68									BAILER/SKIMMER PRESENT IN WELL						
MW-9A	11/6/2023	2353.68	6.46	6.59	2,347.19	0.13	--	--	--	--	--	--	--	--	--	--	--
MW-9A	4/8/2024	2353.68	2.78	3.09	2,350.84	0.31	--	--	--	--	--	--	--	--	--	--	--
MW-9A	6/10/2024	2353.68	4.06	4.64	2,349.50	0.58	--	--	--	--	--	--	--	--	--	--	--
MW-10A	2/22/2001	2355.03	--	8.58	2,346.45	--	--	487	**1,620**	ND	0.693	0.959	ND	ND	--	--	--
MW-10A	5/22/2001	2355.03	--	8.51	2,346.52	--	--	219	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--
MW-10A	8/13/2001	2355.03	--	8.23	2,346.80	--	--	135	266	<750	1.81	<0.500	<0.500	<1.00	--	--	--
MW-10A	11/11/2001	2355.03	--	9.48	2,345.55	--	--	283	<250	<750	1.82	<1.00	<1.00	<1.50	--	--	--
MW-10A	1/31/2002	2355.03	INACCESSIBLE - DUE TO SNOW AND ICE				--	--	--	--	--	--	--	--	--	--	--
MW-10A	6/3/2002	2355.03	--	8.56	2,346.47	--					SAMPLED SEMIANNUALLY						
MW-10A	8/28/2002	2355.03	--	8.81	2,346.22	--	--	<50	<250	<250	0.61	<0.50	<0.50	<1.5	--	--	--
MW-10A	11/19/2002	2355.03	--	9.74	2,345.29	--					SAMPLED SEMIANNUALLY						
MW-10A	2/20/2003	2355.03	--	7.90	2,347.13	--	--	<50	<250	<250	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
MW-10A	5/17/2003	2355.03	--	8.22	2,346.81	--					SAMPLED SEMIANNUALLY						
MW-10A	8/22/2003	2355.03	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--	--	--	--
MW-10A	11/28/2003	2355.03	--	9.02	2,346.01	--					SAMPLED SEMIANNUALLY						
MW-10A	2/17/2004	2355.03	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--	--	--	--
MW-10A	6/9/2004	2355.03	--	8.80	2,346.23	--					SAMPLED SEMIANNUALLY						
MW-10A	8/11/2004	2355.03	--	7.80	2,347.23	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-10A	11/21/2004	2355.03	--	7.89	2,347.14	--					SAMPLED SEMIANNUALLY						
MW-10A	2/20/2005	2355.03	--	8.33	2,346.70	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-10A	5/29/2005	2355.03	--	8.88	2,346.15	--					SAMPLED SEMIANNUALLY						
MW-10A	8/18/2005	2355.03	--	8.58	2,346.45	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-10A	11/26/2005	2355.03	--	7.93	2,347.10	--					SAMPLED SEMIANNUALLY						
MW-10A	2/20/2006	2355.03	MONITORED/SAMPLED ANNUALLY				--	--	--	--	--	--	--	--	--	--	--
MW-10A	5/12/2006	2355.03	MONITORED/SAMPLED ANNUALLY				--	--	--	--	--	--	--	--	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-10A	8/6/2006	2355.03	--	8.71	2,346.32	--	--	62	96	<100	1.8	0.6	<0.5	<1.5	--	--	--
MW-10A	8/6/2007	2355.03	--	8.19	2,346.84	--	--	61	160	<98	2.7	<0.5	<0.5	<1.5	--	--	--
MW-10A	8/19/2008	2355.03	UNABLE TO LOCATE - BURIED UNDER GRAVEL					--	--	--	--	--	--	--	--	--	--
MW-10A	4/1/2009	2355.03	--	6.74	2,348.29	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	6/4/2009	2355.03	--	8.58	2,346.45	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	7/31/2009	2355.03	--	8.49	2,346.54	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	8/27/2009	2355.03	--	8.62	2,346.41	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	4/29/2010	2355.03	--	8.11	2,346.92	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	5/24/2010	2355.03	--	8.67	2,346.36	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	7/30/2010	2355.03	--	8.02	2,347.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	9/16/2010	2355.03	--	8.75	2,346.28	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	11/16/2010	2355.03	--	8.33	2,346.70	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	5/18/2011	2355.03	--	7.51	2,347.52	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	8/4/2011	2355.03	--	5.62	2,349.41	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	10/9/2011	2355.03	--	--	2,355.03	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	5/24/2012	2355.03	--	8.77	2,346.26	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	8/8/2012	2355.03	--	8.57	2,346.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	5/3/2013	2355.03	--	8.76	2,346.27	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	3/13/2018	2355.03	UNABLE TO LOCATE - BURIED UNDER GRAVEL														
MW-10A	11/11/2021	2355.03	--	8.50	2,346.53	--	--	54.3 B J	<200 J3	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-10A	6/15/2022	2355.03	--	7.03	2,348.00	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-10A	5/17/2023	2355.03	--	8.86	2,346.17	--	--	<100	--	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-10A	11/6/2023	2355.03	--	8.15	2,346.88	--	--	<100	--	<250	<1.00	<1.00	<1.00	0.323 J	<1.00	--	--
MW-10A [DUP]	11/6/2023	--	--	--	--	--	--	<100	--	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-10A	4/9/2024	2355.03	--	7.52	2,347.51	0.00	--	<100	--	226 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-10A	6/11/2024	2355.03	--	7.89	2,347.14	0.00	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-11	2/23/1993	2345.24	--	4.06	2,341.18	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	--
MW-11	3/9/1993	2345.24	--	3.98	2,341.26	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	4/10/1993	2345.24	--	3.90	2,341.34	--	ND	ND	ND	--	ND	ND	ND	--	--	--	--
MW-11	5/11/1993	2345.24	--	3.89	2,341.35	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	6/17/1993	2345.24	--	4.28	2,340.96	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	7/16/1993	2345.24	--	4.27	2,340.97	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-11	8/13/1993	2345.24	--	4.46	2,340.78	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	9/15/1993	2345.24	--	4.63	2,340.61	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	10/29/1993	2345.24	--	4.89	2,340.35	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-11	3/4/1994	2345.24	--	4.13	2,341.11	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	--
MW-11	6/8/1994	2345.24	--	4.29	2,340.95	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-11	9/14/1994	2345.24	--	5.03	2,340.21	--	ND	ND	ND	--	ND	700	ND	ND	--	15	ND
MW-11	1/25/1995	2345.24	--	3.87	2,341.37	--	--	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-11	5/16/1995	2345.24	--	4.27	2,340.97	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	8/8/1995	2345.24	--	4.38	2,340.86	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-11	11/14/1995	2345.24	--	3.84	2,341.40	--	--	ND	ND	ND	ND	ND	ND	1.3	--	--	ND
MW-11	2/13/1996	2345.24	--	3.54	2,341.70	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	ND
MW-11	5/16/1997	2345.24	--	3.89	2,341.35	--	--	ND	ND	--	ND	ND	ND	ND	--	7.9	--
MW-11	11/4/1997	2345.24	--	3.80	2,341.44	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-11	5/5/1998	2345.24	--	4.04	2,341.20	--	--	ND	--	--	ND	ND	ND	ND	--	--	--
MW-11	3/18/1999	2345.24	--	3.37	2,341.87	--	--	ND	--	--	ND	ND	ND	ND	ND	--	--
MW-11	6/30/1999	2345.24	--	3.88	2,341.36	--	--	ND	--	--	ND	ND	ND	ND	ND	--	--
MW-11	9/3/1999	2345.24	--	3.83	2,341.41	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-11	11/21/1999	2345.24	--	3.50	2,341.74	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-11	02/19-20/00	2345.24	--	2.95	2,342.29	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-11	5/6/2000	2345.24	--	3.47	2,341.77	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-11	8/8/2000	2345.24	--	3.66	2,341.58	--	--	127	ND	ND	1.04	ND	ND	ND	--	--	--
MW-11	11/12/2000	2345.24	--	3.40	2,341.84	--	SAMPLED SEMIANNUALLY										
MW-11	2/22/2001	2345.24	--	3.34	2,341.90	--	--	52.9	ND	ND	0.888	ND	0.506	ND	--	--	--
MW-11	5/22/2001	2345.24	--	3.11	2,342.13	--	SAMPLED SEMIANNUALLY										
MW-11	8/13/2001	2345.24	--	3.68	2,341.56	--	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-11	11/11/2001	2345.24	--	4.41	2,340.83	--					SAMPLED SEMIANNUALLY						
MW-11	1/31/2002	2345.24							INACCESSIBLE - DUE TO SNOW AND ICE								
MW-11	6/3/2002	2345.24	--	4.65	2,340.59	--					SAMPLED SEMIANNUALLY						
MW-11	8/28/2002	2345.24	--	4.68	2,340.56	--	--	<50	<250	**750**	<0.50	<0.50	<0.50	<1.5	--	--	--
MW-11	11/19/2002	2345.24	--	4.58	2,340.66	--					SAMPLED SEMIANNUALLY						
MW-11	2/20/2003	2345.24	--	3.68	2,341.56	--	--	<50	**1,000**	**6,800**	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
MW-11	5/17/2003	2345.24	--	3.95	2,341.29	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	8/22/2003	2345.24	--	4.02	2,341.22	--	--	<50	**720**	**3,500**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	11/28/2003	2345.24	--	4.04	2,341.20	--	--	<50	<800	**1,500**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	2/17/2004	2345.24	--	3.68	2,341.56	--	--	<50	<250	**770**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	6/9/2004	2345.24	--	3.72	2,341.52	--	--	<50	<250	**770**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	8/11/2004	2345.24	--	4.15	2,341.09	--	--	<50	320	**1,900**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	11/21/2004	2345.24	--	4.31	2,340.93	--	--	<50	<250	320	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	2/20/2005	2345.24	--	4.02	2,341.22	--	--	<50	<800	**5,700**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	5/29/2005	2345.24	--	3.93	2,341.31	--	--	<50	270	**1,100**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	8/18/2005	2345.24	--	4.35	2,340.89	--	--	<50	**1,200**	**4,800**	<0.5	0.8	<0.5	<1.5	--	--	--
MW-11	11/26/2005	2345.24	--	4.44	2,340.80	--	--	<48	330	**1,300**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	2/20/2006	2345.24							MONITORED/SAMPLED ANNUALLY								
MW-11	5/12/2006	2345.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	8/6/2006	2345.24	--	4.30	2,340.94	--	--	<48	<8,000	**49,000**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	8/6/2007	2345.24	--	4.40	2,340.84	--	--	<50	300	**1,600**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	8/19/2008	2345.24	--	4.35	2,340.89	--	--	<50	<400	**1,700**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-11	4/1/2009	2345.24	NOT MONITORED OR SAMPLED				--	--	--	--	--	--	--	--	--	--	--
MW-12	2/23/1993	2351.43	--	8.46	2,342.97	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	--
MW-12	3/9/1993	2351.43	--	8.30	2,343.13	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	4/10/1993	2351.43	--	8.11	2,343.32	--	ND	ND	ND	--	ND	ND	ND	--	--	--	--
MW-12	5/11/1993	2351.43	--	7.86	2,343.57	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	6/17/1993	2351.43	--	9.49	2,341.94	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	7/16/1993	2351.43	--	10.21	2,341.22	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-12	8/13/1993	2351.43	--	10.72	2,340.71	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	9/15/1993	2351.43	--	11.31	2,340.12	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	10/29/1993	2351.43	--	11.44	2,339.99	--	--	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-12	3/4/1994	2351.43	--	9.03	2,342.40	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	--
MW-12	6/8/1994	2351.43	--	9.31	2,342.12	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-12	9/14/1994	2351.43	--	11.96	2,339.47	--	ND	ND	ND	--	ND	ND	ND	ND	--	**241**	ND
MW-12	1/25/1995	2351.43	--	7.82	2,343.61	--	--	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-12	5/16/1995	2351.43	--	9.38	2,342.05	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	8/8/1995	2351.43	--	10.56	2,340.87	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	--
MW-12	11/14/1995	2351.43	--	14.80	2,336.63	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	ND
MW-12	2/13/1996	2351.43	--	6.65	2,344.78	--	--	ND	260	ND	ND	ND	ND	ND	--	--	ND
MW-12	5/16/1997	2351.43	--	8.52	2,342.91	--	--	ND	ND	--	ND	ND	ND	ND	--	**48.2**	ND
MW-12	11/4/1997	2351.43	--	8.30	2,343.13	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-12	5/5/1998	2351.43	--	9.05	2,342.38	--	--	ND	--	--	ND	ND	ND	ND	--	--	--
MW-12	3/18/1999	2351.43	--	8.11	2,343.32	--	--	ND	--	--	ND	ND	ND	ND	ND	--	--
MW-12	6/30/1999	2351.43	--	9.40	2,342.03	--	--	ND	--	--	ND	ND	ND	ND	ND	--	--
MW-12	9/3/1999	2351.43	--	9.32	2,342.11	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-12	11/21/1999	2351.43	--	8.50	2,342.93	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-12	02/19-20/00	2351.43	--	7.59	2,343.84	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-12	5/6/2000	2351.43	--	8.52	2,342.91	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-12	8/8/2000	2351.43	--	8.85	2,342.58	--	--	ND	ND	ND	ND	ND	ND	1.00	--	--	--
MW-12	11/12/2000	2351.43	--	8.35	2,343.08	--					SAMPLED SEMIANNUALLY						
MW-12	2/22/2001	2351.43	--	8.34	2,343.09	--	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
MW-12	5/22/2001	2351.43	--	8.21	2,343.22	--					SAMPLED SEMIANNUALLY						
MW-12	8/13/2001	2351.43	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	11/11/2001	2351.43	--	9.44	2,341.99	--					SAMPLED SEMIANNUALLY						
MW-12	1/31/2002	2351.43	--	7.86	2,343.57	--	--	<100	<250	<750	<0.500	<2.00	<1.00	<1.50	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-12	6/3/2002	2351.43	--	9.71	2,341.72	--					SAMPLED SEMIANNUALLY						
MW-12	8/28/2002	2351.43	--	9.64	2,341.79	--	--	<50	<250	<250	<0.50	<0.50	<0.50	<1.5	--	--	--
MW-12	11/19/2002	2351.43	--	9.55	2,341.88	--					SAMPLED SEMIANNUALLY						
MW-12	2/20/2003	2351.43	--	7.53	2,343.90	--	--	<50	<250	<250	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
MW-12	5/17/2003	2351.43	--	8.19	2,343.24	--					SAMPLED SEMIANNUALLY						
MW-12	8/22/2003	2351.43	--	8.49	2,342.94	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	11/28/2003	2351.43	--	8.53	2,342.90	--					SAMPLED SEMIANNUALLY						
MW-12	2/17/2004	2351.43	--	7.74	2,343.69	--	--	<50	<800	<1,000	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	6/9/2004	2351.43	--	7.78	2,343.65	--					SAMPLED SEMIANNUALLY						
MW-12	8/11/2004	2351.43	--	9.00	2,342.43	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	11/21/2004	2351.43	--	9.12	2,342.31	--					SAMPLED SEMIANNUALLY						
MW-12	2/20/2005	2351.43	--	8.86	2,342.57	--	--	<50	<250	370	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	5/29/2005	2351.43	--	8.75	2,342.68	--					SAMPLED SEMIANNUALLY						
MW-12	8/18/2005	2351.43	--	7.59	2,343.84	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	11/26/2005	2351.43	--	8.38	2,343.05	--					SAMPLED SEMIANNUALLY						
MW-12	2/20/2006	2351.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	5/12/2006	2351.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	8/6/2006	2351.43	INACCESSIBLE - DUE TO A HORNET NEST					--	--	--	--	--	--	--	--	--	--
MW-12	8/6/2007	2351.43	--	9.16	2,342.27	--	--	<50	100	<100	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	8/19/2008	2351.43	--	9.28	2,342.15	--	--	<50	<79	<99	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	9/11/2008	2349.03	--	6.88	2,342.15	--	--	<50	<79	<99	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	4/1/2009	2349.03	--	4.69	2,344.34	--	--	<50	<29	<68	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	6/4/2009	2349.03	--	6.52	2,342.51	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	7/31/2009	2349.03	--	6.90	2,342.13	--	--	<50	<29	<68	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	8/27/2009	2349.03	--	6.49	2,342.54	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	4/29/2010	2349.03	--	6.49	2,342.54	--	--	<50	<31	<72	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	5/24/2010	2349.03	--	6.50	2,342.53	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	7/30/2010	2349.03	--	7.09	2,341.94	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	9/16/2010	2349.03	--	6.78	2,342.25	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	11/16/2010	2349.03	--	6.08	2,342.95	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	5/18/2011	2349.03	--	5.42	2,343.61	--	--	<50	<33	<77	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	8/4/2011	2349.03	--	4.12	2,344.91	--	--	--	--	<78	--	--	--	--	--	--	--
MW-12	10/9/2011	2349.03	--	7.42	2,341.61	--	--	<50	<29	<79	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	5/24/2012	2349.03	--	6.23	2,342.80	--	--	--	--	<80	--	--	--	--	--	--	--
MW-12	8/8/2012	2349.03	--	7.21	2,341.82	--	--	<50	<29	<81	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	5/3/2013	2349.03	--	6.16	2,342.87	--	--	<50	<30	<82	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-12	3/13/2018	2349.03	--	5.30	2,343.73	--	--	<50	<47	<110	<0.5	<0.5	<0.5		<2.5	--	--
MW-12	3/12/2020	2349.03	--	6.88	2,342.15	--	--	48	<67	--	<0.5	<0.5	<0.5	<1.5	<0.5	--	--
MW-12	5/18/2021	2349.03	--	6.59	2,342.44	--	--	**41.6 J**	<200	<250	**0.559 J**	<1.00	<1.00	**0.261 J**	<1.00		
MW-12	11/12/2021	2349.03	--	5.65	2,343.38	--	--	51.2 B J	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-12	6/15/2022	2349.03	--	4.65	2,344.38	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-12	5/17/2023	2349.03	--	6.32	2,342.71	0	--	<100	--	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-12	11/6/2023	2349.03	--	5.43	2,343.60	0	--	<100	--	<250	<1.00	<1.00	<1.00	0.188 J	<1.00	--	--
MW-12	4/9/2024	2349.03	--	5.05	2,343.98	0.00	--	<100	--	140 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-12	6/11/2024	2349.03	--	5.72	2,343.31	0.00	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-13	2/22/2001	2353.93	UNABLE TO LOCATE - COVERED BY GRAVEL					--	--	--	--	--	--	--	--	--	--
MW-13	5/22/2001	2353.93	UNABLE TO LOCATE - COVERED BY GRAVEL					--	--	--	--	--	--	--	--	--	--
MW-13	8/13/2001	2353.93	UNABLE TO LOCATE - COVERED BY GRAVEL					--	--	--	--	--	--	--	--	--	--
MW-13	11/11/2001	2353.93	UNABLE TO LOCATE - COVERED BY GRAVEL					--	--	--	--	--	--	--	--	--	--
MW-13	1/31/2002	2357.30	--	5.78	2,351.52	--	--	<100	<250	<750	<0.500	<2.00	<1.00	<1.50	--	--	<1.00
MW-13	6/3/2002	2357.30	--	6.63	2,350.67	--	--	<50	<250	<750	<0.50	<0.50	<0.50	<1.5	--	--	--
MW-13	8/28/2002	2357.30	--	7.24	2,350.06	--	--	<50	<250	<250	<0.50	0.50	<0.50	<1.5	--	--	--
MW-13	11/19/2002	2357.30	--	5.69	2,351.61	--	--	<50	<250	<250	<0.50	<0.50	<0.50	<1.5	--	--	--
MW-13	2/20/2003	2357.30	--	6.14	2,351.16	--	--	<50	<250	<250	<0.50	<0.50	<0.50	<1.5	<2.5	--	--
MW-13	5/17/2003	2357.30	--	6.80	2,350.50	--	--	<50	**1,900**	**11,000**	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	8/22/2003	2357.30	--	7.15	2,350.15	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	11/28/2003	2357.30	--	8.10	2,349.20	--	--	<50	290	260	<0.5	<0.5	<0.5	<1.5	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-13	2/17/2004	2357.30	--	5.58	2,351.72	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	6/9/2004	2357.30	--	7.54	2,349.76	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	8/11/2004	2357.30	--	4.93	2,352.37	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	11/21/2004	2357.30	--	6.42	2,350.88	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	2/20/2005	2357.30	--	6.21	2,351.09	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	5/29/2005	2357.30	--	7.79	2,349.51	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	8/18/2005	2357.30	--	5.91	2,351.39	--	--	<50	<250	<250	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	11/26/2005	2357.30	--	6.51	2,350.79	--	--	<48	<86	<110	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	2/20/2006	2357.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	5/12/2006	2357.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	8/6/2006	2357.30	--	6.97	2,350.33	--	--	<48	<80	<100	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	8/6/2007	2357.30	--	7.00	2,350.30	--	--	<50	<80	<99	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	8/19/2008	2357.30	--	7.01	2,350.29	--	--	<50	<79	<99	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-13	9/11/2008	2357.30	--	8.54	2,348.76	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	4/1/2009	2357.30	--	3.31	2,353.99	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	6/4/2009	2357.30	--	7.52	2,349.78	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	7/31/2009	2357.30	--	6.71	2,350.59	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	8/27/2009	2357.30	--	7.65	2,349.65	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	4/29/2010	2357.30	--	5.73	2,351.57	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	5/24/2010	2357.30	--	8.30	2,349.00	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	7/30/2010	2357.30	--	6.32	2,350.98	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	9/16/2010	2357.30	--	8.01	2,349.29	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	11/16/2010	2357.30	--	7.26	2,350.04	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	5/18/2011	2357.30	--	5.69	2,351.61	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	8/4/2011	2357.30	--	7.39	2,349.91	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	10/9/2011	2357.30	--	--	2,357.30	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	5/24/2012	2357.30	--	8.82	2,348.48	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	8/8/2012	2357.30	--	7.55	2,349.75	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	5/3/2013	2357.30	--	8.41	2,348.89	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	3/13/2018	2357.30	--	6.55	2,350.75	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	5/17/2021	2357.30	--	9.34	2,347.96	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	11/11/2021	2357.30	--	9.40	2,347.90	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	6/15/2022	2357.30	--	4.40	2,352.90	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	12/7/2022	2357.30	--	7.84	2,349.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	5/17/2023	2357.30	--	8.75	2,348.55	0	--	--	--	--	--	--	--	--	--	--	--
MW-13	11/6/2023	2357.30	--	6.65	2,350.65	0	--	--	--	--	--	--	--	--	--	--	--
MW-13	4/8/2024	2357.30	--	5.42	2,351.88	0.00	--	--	--	--	--	--	--	--	--	--	--
MW-13	6/10/2024	2357.30	--	5.09	2,352.21	0.00	--	--	--	--	--	--	--	--	--	--	--
MW-14	2/22/2001	2353.34	--	4.40	2,348.94	--	--	**38,300**	**109,000**	**5,520**	**948**	151	548	**1,450**	--	--	--
MW-14	5/22/2001	2353.34	5.52	7.74	2,347.38	2.22					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-14	8/13/2001	2353.34	5.82	8.00	2,347.08	2.18					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-14	11/11/2001	2353.34	5.90	8.01	2,347.02	2.11					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-14	1/31/2002	2353.34	INACCESSIBLE - DUE TO SNOW AND ICE				--	--	--	--	--	--	--	--	--	--	--
MW-14	6/3/2002	2353.34	4.81	5.73	2,348.35	0.92					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-14	8/2/2002	2353.34	5.80	6.65	2,347.37	0.85	--	--	--	--	--	--	--	--	--	--	--
MW-14	8/28/2002	2353.34	5.80	6.41	2,347.42	0.61					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-14	9/20/2002	2353.34	6.04	7.06	2,347.10	1.02	--	--	--	--	--	--	--	--	--	--	--
MW-14	11/6/2002	2353.34	6.36	7.08	2,346.84	0.72	--	--	--	--	--	--	--	--	--	--	--
MW-14	11/19/2002	2353.34	7.82	8.23	2,345.44	0.41					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-14	1/3/2003	2353.34	7.73	8.17	2,345.52	0.44	--	--	--	--	--	--	--	--	--	--	--
MW-14	1/30/2003	2353.34	6.61	7.07	2,346.64	0.46	--	--	--	--	--	--	--	--	--	--	--
MW-14	2/20/2003	2353.34	3.07	3.69	2,350.15	0.62					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-14	3/21/2003	2353.34	7.79	8.21	2,345.47	0.42	--	--	--	--	--	--	--	--	--	--	--
MW-14	5/6/2003	2353.34	4.88	5.42	2,348.35	0.54	--	--	--	--	--	--	--	--	--	--	--
MW-14	5/17/2003	2353.34	3.82	4.40	2,349.40	0.58					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-14	6/29/2003	2353.34	5.09	5.60	2,348.15	0.51	--	--	--	--	--	--	--	--	--	--	--
MW-14	7/28/2003	2353.34	7.24	7.81	2,345.99	0.57	--	--	--	--	--	--	--	--	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-14	8/22/2003	2353.34	7.51	7.84	2,345.76	0.33					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-14	9/23/2003	2353.34	6.55	7.09	2,346.68	0.54	--	--	--	--	--	--	--	--	--	--	--
MW-14	11/1/2003	2353.34	7.45	7.98	2,345.78	0.53	--	--	--	--	--	--	--	--	--	--	--
MW-14	11/28/2003	2353.34	6.76	7.80	2,346.37	1.04					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-14	12/29/2003	2353.68	--	--	--	--					INACCESSIBLE DUE TO WEATHER						
MW-14	2/2/2004	2353.34	4.63	5.12	2,348.61	0.49	--	--	--	--	--	--	--	--	--	--	--
MW-14	2/17/2004	2353.34	UNABLE TO LOCATE - COVERED BY ROCK PILE					--	--	--	--	--	--	--	--	--	--
MW-14	6/9/2004	2353.34	UNABLE TO LOCATE - COVERED BY ROCK PILE					--	--	--	--	--	--	--	--	--	--
MW-14	8/11/2004	2353.34	UNABLE TO LOCATE - COVERED BY ROCK PILE					--	--	--	--	--	--	--	--	--	--
MW-14	11/21/2004	2353.34	UNABLE TO LOCATE - COVERED BY ROCK PILE					--	--	--	--	--	--	--	--	--	--
MW-14	2/20/2005	2353.34	UNABLE TO LOCATE - COVERED BY ROCK PILE					--	--	--	--	--	--	--	--	--	--
MW-14	5/29/2005	2353.34	UNABLE TO LOCATE - COVERED BY ROCK PILE					--	--	--	--	--	--	--	--	--	--
MW-14	8/18/2005	2353.34	UNABLE TO LOCATE - COVERED BY ROCK PILE					--	--	--	--	--	--	--	--	--	--
MW-14	11/26/2005	2353.34	UNABLE TO LOCATE - COVERED BY ROCK PILE					--	--	--	--	--	--	--	--	--	--
MW-14	2/20/2006	2353.34	UNABLE TO LOCATE - COVERED BY ROCK PILE					--	--	--	--	--	--	--	--	--	--
MW-14	5/12/2006	2353.34	UNABLE TO LOCATE - AREA COVERED BY GRAVEL					--		--	--	--	--	--	--	--	--
MW-14	8/6/2006	2353.34	UNABLE TO LOCATE - AREA COVERED BY GRAVEL					--		--	--	--	--	--	--	--	--
MW-14	8/6/2007	2353.34	UNABLE TO LOCATE - AREA COVERED BY GRAVEL					--		--	--	--	--	--	--	--	--
MW-14	8/19/2008	2353.34	UNABLE TO LOCATE - AREA COVERED BY GRAVEL					--		--	--	--	--	--	--	--	--
MW-14	4/1/2009	2353.34	UNABLE TO LOCATE - AREA COVERED BY GRAVEL					--		--	--	--	--	--	--	--	--
MW-14	4/29/2010	2353.34	--		--	<0.01	--	--	--	--	--	--	--	--	--	--	--
MW-14	5/24/2010	2353.34	--		--	0.02	--	--	--	--	--	--	--	--	--	--	--
MW-14	7/30/2010	2353.34	--		--	0.29	--	--	--	--	--	--	--	--	--	--	--
MW-14	9/16/2010	2353.34	--		--	0.21	--	--	--	--	--	--	--	--	--	--	--
MW-14	11/16/2010	2353.34	--		--	0.03	--	--	--	--	--	--	--	--	--	--	--
MW-14	5/18/2011	2353.34	--	3.61	2,353.34	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	8/4/2011	2353.34	--	--	2,353.34	0.35	--	--	--	--	--	--	--	--	--	--	--
MW-14	10/9/2011	2353.34	--	--	2,353.34	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	5/24/2012	2353.34	4.71	4.72	2,348.63	0.01	--	--	--	--	--	--	--	--	--	--	--
MW-14	8/8/2012	2353.34	5.70	5.80	2,347.62	0.10	--	--	--	--	--	--	--	--	--	--	--
MW-14	5/3/2013	2353.34	UNABLE TO ACCESS - AREA COVERED BY WATER					--	--	--	--	--	--	--	--	--	--
MW-14	8/25/2013	2353.34	6.72	6.76	2,346.61	0.04					WELL IS PART OF ACTIVE MONITORING AND LNAPL BAILING PROGRAM						
MW-14	3/12/2018	2353.34	UNABLE TO ACCESS - AREA COVERED BY WATER				--	--	--	--	--	--	--	--	--	--	--
MW-15	1/31/2002	2356.82	--	7.24	2,349.58	--	--	**11,900**	486	<750	**745**	168	**713**	**2,150**	--	--	1.47
MW-15	6/3/2002	2356.82	--	9.63	2,347.19	--	--	**26,000**	**1,000**	<750	**300**	200	**1,900**	**6,800**	--	--	--
MW-15	8/28/2002	2356.82	--	10.50	2,346.32	--	--	**22,000**	**920**	310	**600**	210	**1,200**	**4,700**	--	--	--
MW-15	11/19/2002	2356.82	--	11.73	2,345.09	--	--	**18,000**	**7,700**	**1,500**	**1,100**	130	**840**	**2,900**	--	--	--
MW-15	2/20/2003	2356.82	--	7.09	2,349.73	--	--	**1,200**	**680**	330	**59**	15	58	200	<5.0	--	--
MW-15	5/17/2003	2356.82	--	9.07	2,347.75	--	--	**12,000**	**1,300**	**780**	**310**	160	**760**	**3,300**	--	--	--
MW-15	8/22/2003	2356.82	--	10.22	2,346.60	--	--	**22,000**	**990**	470	**410**	100	**1,100**	**4,700**	--	--	--
MW-15	11/28/2003	2356.82	--	10.76	2,346.06	--	--	**7,500**	**6,300**	**1,400**	**200**	38	340	**1,300**	--	--	--
MW-15	2/17/2004	2356.82	--	6.95	2,349.87	--	--	**1,800**	**2,900**	**1,300**	**110**	38	110	390	--	--	--
MW-15	6/9/2004	2356.82	--	8.35	2,348.47	--	--	**5,700**	**2,900**	**1,800**	**85**	46	170	**1,100**	--	--	--
MW-15	8/11/2004	2356.82	--	9.16	2,347.66	--	--	**7,500**	**940**	460	**100**	31	230	**1,700**	--	--	--
MW-15	11/21/2004	2356.82	--	9.24	2,347.58	--	--	**15,000**	**800**	<250	**580**	170	**890**	**3,200**	--	--	--
MW-15	2/20/2005	2356.82	--	9.04	2,347.78	--	--	**12,000**	**520**	<250	**400**	160	**780**	**2,700**	--	--	--
MW-15	5/29/2005	2356.82	--	8.51	2,348.31	--	--	**5,300**	**610**	<500	**99**	53	230	740	--	--	--
MW-15	8/18/2005	2356.82	--	10.07	2,346.75	--	--	**2,300**	**1,200**	**560**	**75**	0.7	**1,600**	360	--	--	--
MW-15	11/26/2005	2356.82	--	9.33	2,347.49	--	--	**6,800**	**2,000**	280	**360**	92	470	**1,500**	--	--	--
MW-15	2/20/2006	2356.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	5/12/2006	2356.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	8/6/2006	2356.82	--	9.91	2,346.91	--	--	**3,400**	**1,700**	**1,400**	**290**	60	150	760	--	--	--
MW-15	8/6/2007	2356.82	--	9.24	2,347.58	--	--	**3,400**	**600**	370	**250**	50	220	700	--	--	--
MW-15	8/19/2008	2356.82	--	9.19	2,347.63	--	--	**3,000**	240	200	**210**	45	220	680	--	--	--
MW-15	4/1/2009	2356.82	--	9.84	2,346.98	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/1/2009	2356.82	--	5.38	2,351.44	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	6/4/2009	2356.82	--	8.61	2,348.21	--	--	--	--	--	--	--	--	--	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-15	7/31/2009	2356.82	--	9.24	2,347.58	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	8/27/2009	2356.82	--	9.50	2,347.32	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/29/2010	2356.82	--	8.02	2,348.80	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	5/24/2010	2356.82	--	8.67	2,348.15	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	7/30/2010	2356.82	--	8.89	2,347.93	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	9/16/2010	2356.82	--	10.40	2,346.42	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	11/16/2010	2356.82	--	8.98	2,347.84	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	5/18/2011	2356.82	--	6.41	2,350.41	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	8/4/2011	2356.82	--	8.56	2,348.26	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	10/9/2011	2356.82	--	--	2,356.82	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	5/24/2012	2356.82	--	8.59	2,348.23	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	8/8/2012	2356.82	--	10.20	2,346.62	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	5/3/2013	2356.82	--	8.35	2,348.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	3/13/2018	2356.82	--	6.64	2,350.18	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	5/18/2021	2356.82	--	9.38	2,347.44	--	--	**4,120**	**88.3 J**	<250	**205**	**20.5**	**152**	**109**	<5.00		
MW-15	11/11/2021	2356.82	--	9.60	2,347.22	--	--	--	**88.3 J**	--	--	--	--	--	--	--	--
MW-15	6/15/2022	2356.82	--	5.52	2,351.30	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	12/7/2022	2356.82	--	7.99	2,348.83	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	5/17/2023	2356.82	--	8.71	2,348.11	0	--	--	--	--	--	--	--	--	--	--	--
MW-15	11/6/2023	2356.82	--	9.23	2,347.59	0	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/8/2024	2356.82	--	6.06	2,350.76	0.00	--	--	--	--	--	--	--	--	--	--	--
MW-15	6/10/2024	2356.82	--	5.93	2,350.89	0.00	--	--	--	--	--	--	--	--	--	--	--
MW-16	1/31/2002	2355.96	--	5.62	2,350.34	--	--	**5,470**	390	<750	**640**	46.0	267	27.7	--	--	<1.00
MW-16	6/3/2002	2355.96	--	8.19	2,347.77	--	--	**2,500**	**900**	<750	**470**	41	310	65	--	--	--
MW-16	8/28/2002	2355.96	--	9.16	2,346.80	--	--	**3,700**	**1,600**	270	**660**	44	410	53	--	--	--
MW-16	11/19/2002	2355.96	--	10.75	2,345.21	--	--	**3,200**	**1,500**	<250	**570**	36	380	56	--	--	--
MW-16	2/20/2003	2355.96	--	5.76	2,350.20	--	--	**1,600**	**870**	<250	**240**	15	130	24	<10	--	--
MW-16	5/17/2003	2355.96	7.55	7.58	2,348.40	0.03		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	8/22/2003	2355.96	--	9.13	2,346.83	--	--	**1,800**	**10,000**	<1,000	**760**	40	240	39	--	--	--
MW-16	11/28/2003	2355.96	--	9.78	2,346.18	--	--	**2,200**	**2,600**	390	**530**	27	250	32	--	--	--
MW-16	2/17/2004	2355.96	--	5.58	2,350.38	--	--	**1,300**	**2,900**	**950**	**180**	11	89	14	--	--	--
MW-16	6/9/2004	2355.96	6.72	6.86	2,349.21	0.14		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	8/11/2004	2355.96	8.11	8.16	2,347.84	0.05		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	11/21/2004	2355.96	7.81	8.00	2,348.11	0.19		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	2/20/2005	2355.96	7.86	8.04	2,348.06	0.18		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	5/29/2005	2355.96	6.81	7.40	2,349.03	0.59		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	8/18/2005	2355.96	8.74	9.15	2,347.14	0.41		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	11/26/2005	2355.96	7.63	7.90	2,348.28	0.27		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	2/20/2006	2355.96	7.57	7.88	2,348.33	0.31		SAMPLED ANNUALLY									
MW-16	5/12/2006	2355.96	7.09	7.84	2,348.72	0.75		SAMPLED ANNUALLY									
MW-16	8/6/2006	2355.96	8.55	9.01	2,347.32	0.46		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	8/6/2007	2355.96	8.05	8.62	2,347.80	0.57		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	8/19/2008	2355.96	8.61	9.57	2,347.16	0.96		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	9/11/2008	2355.96	9.47	8.92	2,346.38	0.55		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	4/1/2009	2355.96	--	--	--	0.09		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	6/4/2009	2355.96	--	--	--	<0.01		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	7/31/2009	2355.96	--	--	--	0.05		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	8/27/2009	2355.96	--	--	--	0.22		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	4/29/2010	2355.96	--	--	--	0.08		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	5/24/2010	2355.96	--	--	--	<0.04		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	7/30/2010	2355.96	--	--	--	0.20		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	9/16/2010	2355.96	--	--	--	0.20		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	11/16/2010	2355.96	--	--	--	0.01		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	5/18/2011	2355.96	5.10	5.22	2,350.84	0.12		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	8/4/2011	2355.96	--	--	--	0.43		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	10/9/2011	2355.96	--	--	--	--		NOT SAMPLED DUE TO THE PRESENCE OF SPH									
MW-16	5/24/2012	2355.96	6.92	7.41	2,348.94	0.49		NOT SAMPLED DUE TO THE PRESENCE OF SPH									

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-16	8/8/2012	2355.96	8.88	9.24	2,347.01	0.36					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-16	5/3/2013	2355.96	6.52	7.44	2,349.26	0.92					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-16	3/13/2018	2355.96	4.62	8.00	2,350.66	3.38					NOT SAMPLED DUE TO THE PRESENCE OF SPH						
MW-16	5/17/2021	2355.96	--	--	--	--					BAILER/SKIMMER PRESENT IN THE WELL						
MW-16	11/6/2023	2355.96	8.64	10.25	2,347.00	1.61	--	--	--	--	--	--	--	--	--	--	--
MW-16	4/8/2024	2355.96	5.41	9.89	2,349.65	4.48	--	--	--	--	--	--	--	--	--	--	--
MW-16	6/10/2024	2355.96	5.23	9.76	2,349.82	4.53	--	--	--	--	--	--	--	--	--	--	--
MW-17	1/31/2002	2354.19	INACCESSIBLE - DUE TO SNOW AND ICE				--	--	--	--		--	--	--	--	--	--
MW-17	6/3/2002	2354.19	--	5.60	2,348.59	--	--	**7,900**	**2,200**	<750	**840**	180	**1,600**	730	--	--	3.3
MW-17	8/28/2002	2354.19	--	6.92	2,347.27	--	--	**9,600**	**1,600**	<250	**620**	190	**1,500**	850	--	--	<1.2
MW-17	11/19/2002	2354.19	--	8.39	2,345.80	--	--	**7,600**	**3,400**	**820**	**690**	140	**1,400**	380	--	--	--
MW-17	2/20/2003	2354.19	--	3.26	2,350.93	--	--	**9,800**	**1,200**	**730**	**820**	240	**2,000**	880	<20	--	--
MW-17	5/17/2003	2354.19	--	5.04	2,349.15	--	--	**7,600**	**2,100**	390	**940**	190	**1,500**	660	--	--	--
MW-17	8/22/2003	2354.19	--	6.70	2,347.49	--	--	**9,000**	**1,200**	<250	**480**	160	**1,400**	640	--	--	--
MW-17	11/28/2003	2354.19	--	7.38	2,346.81	--	--	**7,200**	**1,200**	<250	**460**	150	**1,200**	410	--	--	--
MW-17	2/17/2004	2354.19	INACCESSIBLE - VEHICLE PARKED OVER WELL					**--**	--	--	--	--	--	--	--	--	--
MW-17	6/9/2004	2354.19	--	4.16	2,350.03	--	--	**7,700**	**730**	<500	**530**	170	**1,600**	550	--	--	--
MW-17	8/11/2004	2354.19	--	5.12	2,349.07	--	--	**7,800**	**1,100**	290	**400**	160	**1,500**	610	--	--	--
MW-17	11/21/2004	2354.19	--	4.15	2,350.04	--	--	**7,400**	**750**	<250	**380**	150	**1,400**	560	--	--	--
MW-17	2/20/2005	2354.19	--	4.93	2,349.26	--	--	500	300	450	**43**	12	83	32	--	--	--
MW-17	5/29/2005	2354.19	--	4.33	2,349.86	--	--	**5,000**	**680**	<250	**200**	83	**860**	210	--	--	--
MW-17	8/18/2005	2354.19	--	6.44	2,347.75	--	--	**1,900**	**1,400**	400	**68**	2.8	0.9	170	--	--	--
MW-17	11/26/2005	2354.19	--	4.23	2,349.96	--	--	**6,100**	**1,000**	160	**260**	110	**950**	370	--	--	--
MW-17	2/20/2006	2354.19	MONITORED/SAMPLED ANNUALLY				--	--	--	--	--	--	--	--	--	--	--
MW-17	5/12/2006	2354.19	MONITORED/SAMPLED ANNUALLY				--	--	--	--	--	--	--	--	--	--	--
MW-17	8/6/2006	2354.19	--	6.27	2,347.92	--	--	**5,700**	**1,200**	420	**200**	89	**1,000**	310	--	--	--
MW-17	8/6/2007	2354.19	--	5.11	2,349.08	--	--	**7,700**	**980**	320	**100**	90	**1,600**	450	--	--	--
MW-17	8/19/2008	2354.19	--	5.57	2,348.62	--	--	**6,000**	370	<100	**110**	58	**1,300**	430	--	--	--
MW-17	4/1/2009	2354.19	--	1.69	2,352.50	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	6/4/2009	2354.19	--	4.66	2,349.53	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	7/31/2009	2354.19	--	5.63	2,348.56	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	8/27/2009	2354.19	--	5.96	2,348.23	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	4/29/2010	2354.19	--	4.34	2,349.85	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	5/24/2010	2354.19	--	5.66	2,348.53	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	7/30/2010	2354.19	--	5.22	2,348.97	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	9/16/2010	2354.19	--	6.19	2,348.00	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	11/16/2010	2354.19	--	5.15	2,349.04	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	5/18/2011	2354.19	--	3.25	2,350.94	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	8/4/2011	2354.19	--	4.05	2,350.14	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	10/9/2011	2354.19	--	--	2,354.19	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	5/24/2012	2354.19	--	4.32	2,349.87	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	8/8/2012	2354.19	--	6.77	2,347.42	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	5/3/2013	2354.19	--	4.46	2,349.73	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	3/12/2018	2354.19	--	2.40	2,351.79	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	5/17/2021	2354.19	--	5.18	2,349.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	11/11/2021	2354.19	--	6.90	2,347.29	--	--	**5,170**	399 J3	<250	**118**	9.99	34.6	29.9	<1.00	--	--
MW-17 DUP	11/11/2021	2354.19	--	6.90	2,347.29	--	--	**5,110**	290	<250	**120**	10.6	36.0	31.3	<1.00	--	--
MW-17	6/15/2022	2354.19	--	1.90	2,352.29	--	--	**2,670**	178 J	<250	**16.2**	4.03	24.2	15.7	<1.00	--	--
MW-17	5/17/2023	2354.19	--	4.15	2,350.04	0	--	**2,960**	--	112 J	**15.5**	2.33	11.9	8.15	<1.00	--	--
MW-17	11/6/2023	2354.19	--	5.70	2,348.49	0	--	**2,620**	--	277	3.85	0.572 J	1.03	2.01 J	<1.00	--	--
MW-17	4/9/2024	2354.19	--	1.96	2,352.23	0.00	--	**1,390**	--	264	**8.00**	1.44	3.20	3.75	<1.00	--	--
MW-17	6/11/2024	2354.19	--	3.24	2,350.95	0.00	--	**1,180**	460	228 J	**14.3**	2.48	9.49	6.65	<1.00	--	--
MW-18	9/11/2008	2346.62	--	3.71	2,342.91	--	--	<50	<99	<120	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-18	4/1/2009	2346.62	--	2.21	2,344.41	--	--	<50	<30	<70	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-18	6/4/2009	2346.62	--	3.46	2,343.16	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	7/31/2009	2346.62	--	3.82	2,342.80	--	--	<50	<30	<70	<0.5	<0.5	<0.5	<1.5	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-18	8/27/2009	2346.62	--	3.17	2,343.45	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	4/29/2010	2346.62	--	2.69	2,343.93	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	5/24/2010	2346.62	--	3.62	2,343.00	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	7/30/2010	2346.62	--	3.72	2,342.90	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	9/16/2010	2346.62	--	4.12	2,342.50	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	11/16/2010	2346.62	--	3.30	2,343.32	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	5/18/2011	2346.62	--	2.33	2,344.29	--	--	<50	<34	<79	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-18	8/4/2011	2346.62	--	2.23	2,344.39	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	10/9/2011	2346.62	--	4.21	2,342.41	--	--	<50	<29	<69	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-18	5/24/2012	2346.62	--	3.15	2,343.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-18	8/8/2012	2346.62	--	3.87	2,342.75	--	--	<50	33	<67	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-18	5/3/2013	2346.62	--	3.06	2,343.56	--	--	<50	<30	<70	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-18	3/13/2018	2346.62	--	2.43	2,344.16	--	--	<50	<46	<100	<0.5	<0.5	<0.5	<1.5	<2.5	--	--
MW-18	3/12/2020	2346.62	--	2.50	2,344.12	--	--	77.3	<67	--	<0.5	<0.5	<0.5	<1.5	<0.5	--	--
MW-18	5/17/2021	2346.62	--	3.35	2,343.27	--	--	<100	<200	<250	**0.627 J**	<1.00	<1.00	<3.00	<1.00	--	--
MW-18 DUP	5/17/2021	--	--	--	--	--	--	<100	<200	<250	**0.710 J**	<1.00	<1.00	<3.00	<1.00	--	--
MW-18	11/11/2021	2346.62	--	3.24	2,343.38	--	--	74.2 B J	<200 J3	<250	0.448 J	<1.00	<1.00	<3.00	<1.00	--	--
MW-18	6/15/2022	2346.62	--	1.85	2,344.77	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-18	12/7/2022	2346.62	--	2.96	2,343.66	--	--	<100	<200	<250	0.512 J	<1.00	<1.00	0.222 J	<1.00	--	--
MW-18	5/17/2023	2346.62	--	3.52	2,343.10	--	--	<100	--	112 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-18 DUP	5/17/2023	--	--	--	--	--	--	60.4 B J	--	142 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-18	11/6/2023	2346.62	--	3.42	2,343.20	--	--	42.3 B J	--	<250	<1.00	<1.00	<1.00	0.447 J	<1.00	--	--
MW-18	4/9/2024	2346.62	--	2.26	2,344.36	0.00	--	<100	--	232 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-18	6/10/2024	2346.62	--	2.33	2,344.29	0.00	--	<100	109 J	126 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-18 DUP	6/10/2024	--	--	--	--	--	--	<100	120 J	207 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19	9/11/2008	2349.45	--	7.07	2,342.38	--	--	<50	<800	<1,000	<0.5	<0.5	<0.7	<1.5	--	--	--
MW-19	4/1/2009	2349.45	--	4.89	2,344.56	--	--	<50	<29	<68	<0.5	<0.5	<0.7	<1.5	--	--	--
MW-19	6/4/2009	2349.45	--	6.68	2,342.77	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	7/31/2009	2349.45	--	7.13	2,342.32	--	--	<50	<29	<68	<0.5	<0.5	<0.7	<1.5	--	--	--
MW-19	8/27/2009	2349.45	--	6.78	2,342.67	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	4/29/2010	2349.45	--	5.86	2,343.59	--	--	<50	<29	<69	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-19	5/24/2010	2349.45	--	5.83	2,343.62	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	7/30/2010	2349.45	--	7.42	2,342.03	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	9/16/2010	2349.45	--	7.24	2,342.21	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	11/16/2010	2349.45	--	6.50	2,342.95	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	5/18/2011	2349.45	--	5.61	2,343.84	--	--	<50	<33	<77	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-19	8/4/2011	2349.45	--	6.51	2,342.94	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	10/9/2011	2349.45	--	7.69	2,341.76	--	--	<50	<29	<69	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-19	5/24/2012	2349.45	--	6.55	2,342.90	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	8/8/2012	2349.45	--	7.58	2,341.87	--	--	<50	45	<69	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-19	5/3/2013	2349.45	--	6.34	2,343.11	--	--	<50	<31	<73	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-19	3/13/2018	2349.45	--	5.67	2,343.78	--	--	<50	<46	<100	<0.5	<0.5	<0.5	<1.5	<2.5	--	--
MW-19	3/11/2020	2349.45	--	6.32	2,342.13	--	--	60.4	<67	--	<0.5	<0.5	<0.5	<1.5	<0.5	--	--
MW-19	5/18/2021	2349.45	--	6.84	2,342.61	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19	5/18/2021	2349.45	--	6.84	2,342.61	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19	11/12/2021	2349.45	--	6.22	2,343.23	--	--	51.5 B J	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19	6/15/2022	2349.45	--	4.74	2,344.71	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19	6/15/2022	--	--	--	--	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19	12/7/2022	2349.45	--	6.13	2,343.32	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19	5/17/2023	2349.45	--	6.63	2,342.82	0	--	<100	--	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19	11/6/2023	2349.45	--	5.92	2,343.53	0	--	<100	--	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19	4/9/2024	2349.45	--	5.42	2,344.03	0.00	--	<100	73.5 J	135 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19 DUP	4/9/2024	2349.45	--	--	--	--	--	<100	--	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-19	6/11/2024	2349.45	--	6.16	2,343.29	0.00	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-20	9/11/2008	2345.88	--	5.44	2,340.44	--	--	<50	<79	<99	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-20	4/1/2009	2345.88	--	3.67	2,342.21	--	--	<50	<31	<73	<0.5	<0.5	<0.5	<1.5	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-20	6/4/2009	2345.88	--	5.00	2,340.88	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	7/31/2009	2345.88	--	5.33	2,340.55	--	--	<50	<31	<73	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-20	8/27/2009	2345.88	--	4.62	2,341.26	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	12/8/2009	2345.88	--	5.00	2,340.88	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	4/29/2010	2345.88	--	4.23	2,341.65	--	--	<50	65	95	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-20	5/24/2010	2345.88	--	4.99	2,340.89	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	7/30/2010	2345.88	--	5.54	2,340.34	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	9/16/2010	2345.88	--	5.21	2,340.67	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	11/16/2010	2345.88	--	4.33	2,341.55	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	5/18/2011	2345.88	--	4.13	2,341.75	--	--	<50	<30	<71	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-20	8/4/2011	2345.88	--	4.01	2,341.87	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	10/9/2011	2345.88	--	5.73	2,340.15	--	--	<50	<29	<68	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-20	5/24/2012	2345.88	--	4.95	2,340.93	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	8/8/2012	2345.88	--	6.12	2,339.76	--	--	<50	<28	<66	<0.5	<0.5	<0.5	<1.5	--	--	--
MW-20	5/3/2013	2345.88	--	4.99	2,340.89	--	--	<50	<29	<67	<0.5	<0.5	<0.5	<1.5	<0.5	--	--
MW-20	3/13/2018	2345.88	--	4.38	2,341.50	--	--	<50	<48	<110	<0.5	<0.5	<0.5	<1.5	<2.5		
MW-20	3/12/2020	2345.88	--	5.59	2,340.29	--	--	35.5	<67	--	<0.5	<0.5	<0.5	<1.5	<0.5	--	--
MW-20	5/17/2021	2345.88	--	5.80	2,340.08	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	11/12/2021	2345.88	--	4.90	2,340.98	--	--	51.2 B J	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-20	6/15/2022	2345.88	--	4.23	2,341.65	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-20	5/17/2023	2345.88	--	5.25	2,340.63	0	--	<100	--	85.6 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-20	11/6/2023	2345.88	--	4.85	2,341.03	0	--	<100	--	<250	<1.00	0.346 J	<1.00	0.320 J	<1.00	--	--
MW-20	4/9/2024	2345.88	--	4.48	2,341.40	0.00	--	<100	--	166 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-20	6/11/2024	2345.88	--	5.31	2,340.57	0.00	--	<100	69.9 J	100 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-21	12/8/2009	--	--	5.07	--	--	--	**3,100**	**1,400**	380	**240**	18	150	110	--	--	--
MW-21	4/29/2010	--	--	--	--	0.10	--	--	--	--	--	--	--	--	--	--	--
MW-21	5/24/2010	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	--
MW-21	7/30/2010	--	--	--	--	2.50	--	--	--	--	--	--	--	--	--	--	--
MW-21	9/16/2010	--	--	--	--	1.25	--	--	--	--	--	--	--	--	--	--	--
MW-21	11/16/2010	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--
MW-21	5/18/2011	--	1.92	1.97	--	0.05	--	--	--	--	--	--	--	--	--	--	--
MW-21	8/4/2011	--	--	--	--	1.07	--	--	--	--	--	--	--	--	--	--	--
MW-21	10/9/2011	--	--	--	--	1.07	--	--	--	--	--	--	--	--	--	--	--
MW-21	5/24/2012	--	3.43	3.47	--	0.04	--	--	--	--	--	--	--	--	--	--	--
MW-21	8/8/2012	--	5.33	6.09	--	0.76	--	--	--	--	--	--	--	--	--	--	--
MW-21	5/3/2013	--	3.48	3.52	--	0.04	--	--	--	--	--	--	--	--	--	--	--
MW-21	8/25/2013	--	6.44	6.93	--	0.49				WELL IS PART OF ACTIVE MONITORING AND LNAPL BAILING PROGRAM							
MW-21	3/12/2018	--	1.75	2.24	--	0.49				WELL IS PART OF ACTIVE MONITORING AND LNAPL BAILING PROGRAM							
MW-21	5/17/2021	--	--	--	--	--				BAILER/SKIMMER PRESENT IN THE WELL							
MW-21	11/6/2023	--	4.92	5.00	--	0.08	--	--	--	--	--	--	--	--	--	--	--
MW-21	4/8/2024	--	2.70	2.81	--	0.11	--	--	--	--	--	--	--	--	--	--	--
MW-21	6/10/2024	--	4.01	4.11	--	0.10	--	--	--	--	--	--	--	--	--	--	--
MW-22	12/8/2009	2351.81	--	4.92	2,346.89	--	--	**3,200**	**1,300**	410	**470**	23	200	23	--	--	--
MW-22	4/29/2010	2351.81	--	--	--	--	--	**1,100**	170	90	**46**	3.1	9.8	3.0	--	--	--
MW-22	5/24/2010	2351.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	7/30/2010	2351.81	--	5.23	2,346.58	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	9/16/2010	2351.81	--	6.11	2,345.70	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	11/16/2010	2351.81	--	5.04	2,346.77	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	5/18/2011	2351.81	--	0.95	2,350.86	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	8/4/2011	2351.81	--	5.91	2,345.90	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	10/9/2011	2351.81	--	5.91	2,345.90	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	5/24/2012	2351.81	--	3.40	2,348.41	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	8/8/2012	2351.81	--	5.24	2,346.57	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	5/3/2013	2351.81	--	4.62	2,347.19	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	3/12/2018	2351.81	--	1.65	2,350.16	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	3/11/2020	2351.81	--	2.96	2,347.85	--	--	52.5	103	--	<0.5	<0.5	<0.5	<1.5	<0.5	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-22	5/17/2021	2351.81	--	3.81	2,348.00	--	--	**72.1 J**	<200	<250	**0.722 J**	<1.00	<1.00	<3.00	<1.00	--	--
MW-22	11/11/2021	2351.81	--	4.40	2,347.41	--	--	56.2 B J	<200 J3	<250	0.319 J	<1.00	<1.00	<3.00	<1.00	--	--
MW-22	6/15/2022	2351.81	--	0.80	2,351.01	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-22	5/17/2023	2351.81	--	3.12	2,348.69	0	--	36.8 B J	--	212 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-22	11/6/2023	2351.81	--	3.74	2,348.07	0	--	<100	--	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-22	4/9/2024	2351.81	--	1.14	2,350.67	0.00	--	<100	--	332	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-22	6/11/2024	2351.81	--	2.00	2,349.81	0.00	--	<100	162 J	225 J	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-23	12/8/2009	2351.52	--	--	--	--	--	**7,900**	**1,300**	430	**660**	78	**1,500**	200	--	--	--
MW-23	4/29/2010	2351.52	--	--	--	--	--	**8,200**	**650**	120	**900**	86	**1,600**	220	--	--	--
MW-23	5/24/2010	2351.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	7/30/2010	2351.52	--	6.06	2,345.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	9/16/2010	2351.52	--	6.78	2,344.74	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	11/16/2010	2351.52	--	5.69	2,345.83	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	5/18/2011	2351.52	--	3.47	2,348.05	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	8/4/2011	2351.52	--	5.97	2,345.55	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	10/9/2011	2351.52	--	5.97	2,345.55	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	5/24/2012	2351.52	--	5.08	2,346.44	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	8/8/2012	2351.52	--	6.36	2,345.16	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	5/3/2013	2351.52	--	4.62	2,346.90	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	3/12/2018	2351.52	--	2.34	2,349.18	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	3/11/2020	2351.52	--	4.58	2,346.94	--	--	75.2	144	--	<0.5	<0.5	<0.5	<1.5	<0.5	--	--
MW-23	5/17/2021	2351.52	--	5.34	2,346.18	--	--	**293**	<200	<250	**1.06**	<1.00	**0.484 J**	<3.00	<1.00	--	--
MW-23	11/11/2021	2351.52	--	6.32	2,345.20	--	--	410 B	<200	<250	**75.7**	<1.00	0.270 J	0.252 J	<1.00	--	--
MW-23	6/15/2022	2351.52	--	0.50	2,351.02	--	--	<100	<200	<250	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-23	5/17/2023	2351.52	--	4.86	2,346.66	0	--	**1,680**	--	217 J	3.98	2.16	14.4	2.47 J	<1.00	--	--
MW-23	11/6/2023	2351.52	--	6.21	2,345.31	0	--	**900**	--	**734**	**128**	3.24	23.5	2.10 J	<1.00	--	--
MW-23	4/9/2024	2351.52	--	2.36	2,349.16	0.00	--	<100	--	327	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
MW-23	6/11/2024	2351.52	--	3.49	2,348.03	0.00		258	**754**	464	**5.22**	0.434 J	2.02	0.237 J	<1.00	--	--
DPE-1	10/7/2011	--	--	--	--	--	--	**16,000**	**64,000**	**<6,700**	**22**	22	440	28	--	--	--
DPE-1	5/24/2012	--	--	3.92	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-1	8/8/2012	--	--	5.63	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-1	5/3/2013	--	--	3.28	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-1	3/12/2018	--	--	1.71	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-1	5/17/2021	--	--	4.02	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-1	11/11/2021	--	--	5.54	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-1	6/15/2022	--	--	1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-1	5/17/2023	--	--	3.34	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-1	11/6/2023	--	--	5.98	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-1	4/8/2024	--	--	1.05	--	0.00	--	--	--	--	--	--	--	--	--	--	--
DPE-1	6/10/2024	--	--	2.03	--	0.00	--	--	--	--	--	--	--	--	--	--	--
DPE-2	5/24/2012	--	--	5.18	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-2	8/8/2012	--	--	6.98	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-2	5/3/2013	--	--	4.79	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-2	3/12/2018	--	3.33	3.43	--	0.1	--	--	--	--	--	--	--	--	--	--	--
DPE-2	5/17/2021	--	--	6.09	--	--	--	--	--	--	--	--	--	--	--	--	--
DPE-2	11/11/2021	--	7.08	7.21	--	0.13	--	--	--	--	--	--	--	--	--	--	--
DPE-2	6/15/2022	--	2.71	2.75	--	0.04	--	--	--	--	--	--	--	--	--	--	--
DPE-2	5/17/2023	--	5.13	5.23	--	0.10	--	--	--	--	--	--	--	--	--	--	--
DPE-2	11/6/2023	--	6.32	6.36	--	0.04	--	--	--	--	--	--	--	--	--	--	--
DPE-2	4/8/2024	--	2.40	2.53	--	0.13	--	--	--	--	--	--	--	--	--	--	--
DPE-2	6/10/2024	--	3.92	4.05	--	0.13	--	--	--	--	--	--	--	--	--	--	--
PZ-1A	5/24/2012	--	--	3.86	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-1A	8/8/2012	--	--	5.64	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-1A	5/3/2013	--	--	3.25	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
PZ-1A	3/12/2018	--	--	2.20	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-1A	5/17/2021	--	--	3.99	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-1A	11/11/2021	--	--	5.58	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-1A	6/15/2022	--	--	1.03	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-1A	5/17/2023	--	--	3.48	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-1A	11/6/2023	--	--	5.02	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-1A	4/8/2024	--	--	4.00	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-1A	6/10/2024	--	--	2.80	--	0.00	--	--	--	--	--	--	--	--	--	--	--
PZ-1B	5/24/2012	--	4.21	5.63	--	1.42	--	--	--	--	--	--	--	--	--	--	--
PZ-1B	8/8/2012	--	5.94	7.15	--	1.21	--	--	--	--	--	--	--	--	--	--	--
PZ-1B	5/3/2013	--	3.62	5.00	--	1.38	--	--	--	--	--	--	--	--	--	--	--
PZ-1B	3/12/2018	--	2.19	4.30	--	2.11	--	--	--	--	--	--	--	--	--	--	--
PZ-1B	5/17/2021	--	--	--	--	--					BAILER/SKIMMER PRESENT IN THE WELL						
PZ-1B	11/11/2021	--	--	--	--	--					BAILER/SKIMMER PRESENT IN THE WELL						
PZ-1B	11/6/2023	--	5.01	6.62	--	1.61	--	--	--	--	--	--	--	--	--	--	--
PZ-1B	4/8/2024	--	1.67	4.65	--	2.98	--	--	--	--	--	--	--	--	--	--	--
PZ-1B	6/10/2024	--	3.03	4.49	--	1.46	--	--	--	--	--	--	--	--	--	--	--
AS-1	5/24/2012	--	--	4.40	--	--	--	--	--	--	--	--	--	--	--	--	--
AS-1	8/8/2012	--	--	6.07	--	--	--	--	--	--	--	--	--	--	--	--	--
AS-1	3/12/2018	--	--	2.34	--	--	--	--	--	--	--	--	--	--	--	--	--
AS-1	5/17/2021	--	--	4.52	--	--	--	--	--	--	--	--	--	--	--	--	--
AS-1	11/11/2021	--	--	5.98	--	--	--	--	--	--	--	--	--	--	--	--	--
AS-1	6/15/2022	--	--	1.45	--	--	--	--	--	--	--	--	--	--	--	--	--
AS-1	5/17/2023	--	--	3.76	--	--	--	--	--	--	--	--	--	--	--	--	--
AS-1	11/6/2023	--	--	4.96	--	--	--	--	--	--	--	--	--	--	--	--	--
AS-1	4/8/2024	--	--	1.80	--	0.00	--	--	--	--	--	--	--	--	--	--	--
AS-1	6/10/2024	--	--	2.68	--	0.00	--	--	--	--	--	--	--	--	--	--	--
PZ-2A	5/24/2012	--	--	5.22	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2A	8/8/2012	--	--	7.09	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2A	3/12/2018	--	--	3.47	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2A	5/17/2021	--	--	6.07	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2A	11/11/2021	--	--	7.25	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2A	6/15/2022	--	--	2.11	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2A	5/17/2023	--	--	5.14	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2A	11/6/2023	--	--	6.57	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2A	4/8/2024	--	--	2.91	--	0.00	--	--	--	--	--	--	--	--	--	--	--
PZ-2A	6/10/2024	--	--	4.22	--	0.00	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	5/24/2012	--	--	5.07	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	8/8/2012	--	--	7.09	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	3/12/2018	--	--	3.50	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	5/17/2021	--	--	6.00	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	11/11/2021	--	--	7.50	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	6/15/2022	--	--	2.46	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	12/7/2022	--	--	4.52	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	5/17/2023	--	--	5.29	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	11/6/2023	--	--	6.77	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	4/8/2024	--	--	3.01	--	0.00	--	--	--	--	--	--	--	--	--	--	--
PZ-2B	6/10/2024	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	3/29/1992	2354.24	--	--	--	--	--	--	**49,800**	--	**169**	27	462	48	--	**323**	--
MW-1	4/23/1992	2354.24	--	7.74	2,346.50	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	12/17/1992	2354.24	--	8.02	2,346.22	--	**19,000**	**3,900**	**15,000**	--	**200**	15	260	32	--	**22**	4.2
MW-1	12/18/1992	2354.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	2/23/1992	2354.24	--	7.46	2,346.78	--	--	--	--	--	--	--	--	--	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-1	3/9/1993	2354.24	--	7.27	2,346.97	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	4/10/1993	2354.24	--	6.52	2,347.72	--	**28,000**	**3,000**	**10,000**	--	**98**	14	130	--	--	--	--
MW-1	5/11/1993	2354.24	--	6.00	2,348.24	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	6/17/1993	2354.24	--	8.50	2,345.74	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	7/16/1993	2354.24	--	8.61	2,345.63	--	**9,400**	**2,800**	**5,400**	--	**120**	31	200	46	--	--	ND
MW-1	8/13/1993	2354.24	--	9.54	2,344.70	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	9/15/1993	2354.24	--	10.14	2,344.10	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	10/29/1993	2354.24	--	10.66	2,343.58	--	**5,900**	**4,400**	**4,300**	--	**180**	24	290	43	--	--	ND
MW-1	3/4/1994	2354.24	--	8.29	2,345.95	--	**44,000**	**1,900**	**55,000**	--	**610**	110	110	15	--	--	--
MW-1	6/8/1994	2354.24	--	8.53	2,345.71	--	**10,000**	**2,100**	**1,400**	--	**620**	120	120	27	--	--	ND
MW-1	9/14/1994	2354.24	--	10.68	2,343.56	--	11.1	**4,400**	**689**	--	**62.6**	13	139	25	--	**71**	2.0
MW-1	DESTROYED																
MW-3	03/29/92[1]	2354.43	--	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	**196**	--
MW-3	4/23/1992	2354.43	--	7.20	2,347.23	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	12/17/1992	2354.43	--	7.74	2,346.69	--	ND	ND	ND	--	ND	ND	ND	ND	--	**45**	2.2
MW-3	2/23/1993	2354.43	--	6.98	2,347.45	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	3/9/1993	2354.43	--	6.72	2,347.71	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	4/10/1993	2354.43	--	6.27	2,348.16	--	ND	ND	ND	--	ND	ND	ND	--	--	--	--
MW-3	5/11/1993	2354.43	--	6.24	2,348.19	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	6/17/1993	2354.43	--	8.53	2,345.90	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	7/16/1993	2354.43	--	9.11	2,345.32	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-3	8/13/1993	2354.43	--	9.82	2,344.61	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	9/15/1993	2354.43	--	10.34	2,344.09	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	10/29/1993	2354.43	--	10.86	2,343.57	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-3	3/4/1994	2354.43	--	7.13	2,347.30	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	--
MW-3	6/8/1994	2354.43	--	8.36	2,346.07	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-3	9/14/1994	2354.43	--	10.95	2,343.48	--	ND	ND	ND	--	ND	ND	ND	ND	--	**81**	ND
MW-3	1/25/1995	2354.43	--	8.09	2,346.34	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-3	DESTROYED																
MW-4	3/29/1992	2352.35	--	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	**142**	--
MW-4	4/23/1992	2352.35	--	6.92	2,345.43	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	12/17/1992	2352.35	--	7.75	2,344.60	--	**1,200**	ND	ND	--	ND	ND	ND	ND	--	**48**	ND
MW-4	2/23/1993	2352.35	--	6.82	2,345.53	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	3/9/1993	2352.35	--	6.72	2,345.63	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	4/10/1993	2352.35	--	5.78	2,346.57	--	ND	ND	ND	--	ND	ND	ND	--	--	--	--
MW-4	5/11/1993	2352.35	--	5.56	2,346.79	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	6/17/1993	2352.35	--	7.58	2,344.77	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	7/16/1993	2352.35	--	8.19	2,344.16	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-4	8/13/1993	2352.35	--	8.63	2,343.72	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	9/15/1993	2352.35	--	9.10	2,343.25	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	10/29/1993	2352.35	--	9.51	2,342.84	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-4	3/4/1994	2352.35	--	7.76	2,344.59	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	--
MW-4	6/8/1994	2352.35	--	8.04	2,344.31	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-4	9/14/1994	2352.35	--	9.68	2,342.67	--	114	ND	ND	--	ND	ND	ND	ND	--	**300**	ND
MW-4	1/25/1995	2352.35	--	6.42	2,345.93	--	--	ND	51	--	ND	ND	ND	ND	--	--	ND
MW-4	DESTROYED																
MW-5	3/29/1992	2353.38	--	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
MW-5	4/23/1992	2353.38	--	6.30	2,347.08	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	12/17/1992	2353.38	--	6.86	2,346.52	--	ND	ND	ND	--	ND	ND	ND	ND	--	ND	3.0
MW-5	2/23/1993	2353.38	--	6.12	2,347.26	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	3/9/1993	2353.38	--	5.99	2,347.39	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	4/10/1993	2353.38	--	5.00	2,348.38	--	ND	ND	ND	--	ND	ND	ND	--	--	--	--
MW-5	5/11/1993	2353.38	--	4.81	2,348.57	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	6/17/1993	2353.38	--	7.23	2,346.15	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	7/16/1993	2353.38	--	8.19	2,345.19	--	ND	160	ND	--	ND	0.5	ND	ND	--	--	8.6

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Chevron Site No. 206196
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Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-5	8/13/1993	2353.38	--	8.59	2,344.79	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	9/15/1993	2353.38	--	9.22	2,344.16	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	10/29/1993	2353.38	--	9.79	2,343.59	--	**1,900**	**2,600**	**1,900**	--	0.7	2.7	4.8	14	--	--	ND
MW-5	3/4/1994	2353.38	--	--	--	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	--
MW-5	6/8/1994	2353.38	--	7.46	2,345.92	--	ND	ND	ND	--	ND	ND	ND	ND	--	--	ND
MW-5	9/14/1994	2353.38	--	9.74	2,343.64	--	0.6	591	199	--	ND	3.0	2.0	6.0	--	--	ND
MW-5	DESTROYED																
MW-6	12/17/92[6]	2348.38	--	5.39	2,342.99	--	**4,600**	**2,200**	**780**	--	**950**	34	360	ND	--	**460**	ND
MW-6	3/9/1993	2348.38	--	3.93	2,344.45	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	4/10/1993	2348.38	--	3.76	2,344.62	--	**1,000**	400	ND	--	**53**	4.1	4.1	--	--	--	--
MW-6	5/11/1993	2348.38	--	3.26	2,345.12	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	6/17/1993	2348.38	--	5.03	2,343.35	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	7/16/1993	2348.38	--	5.63	2,342.75	--	**2,700**	**2,500**	310	--	**1,000**	50	350	82	--	--	ND
MW-6	8/13/1993	2348.38	--	5.79	2,342.59	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	9/15/1993	2348.38	--	6.02	2,342.36	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	10/29/1993	2348.38	--	6.21	2,342.17	--	**3,700**	**1,600**	270	--	**760**	15	16	13	--	--	ND
MW-6	3/4/1994	2348.38	--	--	--	--	**1,700**	**5,000**	ND	--	**360**	15	30	21	--	--	--
MW-6	6/8/1994	2348.38	--	6.58	2,341.80	--	ND	470	ND	--	**370**	18	5.2	7.3	--	--	ND
MW-6	9/14/1994	2348.38	--	6.24	2,342.14	--	1.9	**1,310**	134	--	**512**	9.0	4.0	6.0	--	**24**	ND
MW-6	1/25/1995	2348.38	--	3.90	2,344.48	--	--	206	ND	--	**26.2**	ND	2.0	3.0	--	--	ND
MW-6	DESTROYED																
MW-9	12/17/1992	2353.61	--	6.46	2,347.15	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	12/18/1992	2353.61	--	--	--	--	**15,000**	**15,000**	**2,000**	--	**7,200**	**1,500**	**1,200**	**2,500**	--	**140**	4.0
MW-9	2/23/1993	2353.61	--	5.88	2,347.73	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	3/9/1993	2353.61	--	5.77	2,347.84	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	4/10/1993	2353.61	--	5.08	2,348.53	--	**12,000**	**20,000**	**600**	--	**8,400**	**2,800**	**1,300**	--	--	--	--
MW-9	5/11/1993	2353.61	--	4.41	2,349.20	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	6/17/1993	2353.61	--	7.06	2,346.55	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	7/16/1993	2353.61	--	7.88	2,345.73	--	**16,000**	**34,000**	440	--	**7,400**	**4,800**	**1,900**	**5,300**	--	--	3.4
MW-9	8/13/1993	2353.61	--	8.16	2,345.45	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	9/15/1993	2353.61	--	8.62	2,344.99	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	10/29/1993	2353.61	--	9.16	2,344.45	--	**12,000**	**17,000**	**800**	--	**7,300**	**1,100**	**980**	**2,600**	--	--	ND
MW-9	3/4/1994	2353.61	--	7.41	2,346.20	--	**6,800**	**21,000**	**1,100**	--	**7,200**	**1,000**	**1,100**	**2,600**	--	--	--
MW-9	6/8/1994	2353.61	--	7.91	2,345.70	--	**8,000**	**13,000**	**1,100**	--	**8,500**	**900**	**1,300**	**3,400**	--	--	ND
MW-9	9/14/1994	2353.61	--	9.43	2,344.18	--	10.9	**9,270**	223	--	**6,600**	**395**	**1,100**	**1,800**	--	**113**	ND
MW-9	1/25/1995	2353.61	5.65	5.75	2,347.94	0.10	--	--	--	--	--	--	--	--	--	--	--
MW-9	5/16/1995	2353.61	7.77	9.27	2,345.54	1.50	--	--	--	--	--	--	--	--	--	--	--
MW-9	11/14/1995	2353.61	5.63	5.80	2,347.95	0.17	--	--	--	--	--	--	--	--	--	--	--
MW-9	2/13/1996	2353.61	2.40	4.53	2,350.78	2.13	--	--	--	--	--	--	--	--	--	--	--
MW-9	5/16/1997	2353.61	4.16	4.82	2,349.32	0.66	--	--	--	--	--	--	--	--	--	--	--
MW-9	11/4/1997	2353.61	6.15	6.20	2,347.45	0.05	--	--	--	--	--	--	--	--	--	--	--
MW-9	5/5/1998	2353.61	6.57	6.75	2,347.00	0.18	--	--	--	--	--	--	--	--	--	--	--
MW-9	3/18/1999	2353.61	5.25	7.07	2,348.00	1.82	--	--	--	--	--	--	--	--	--	--	--
MW-9	6/30/1999	2353.61	7.00	7.08	2,346.59	0.08	--	--	--	--	--	--	--	--	--	--	--
MW-9	9/3/1999	2353.61	6.50	6.85	2,347.04	0.35	--	--	--	--	--	--	--	--	--	--	--
MW-9	11/21/1999	2353.61	5.80	5.96	2,347.78	0.16	--	--	--	--	--	--	--	--	--	--	--
MW-9	02/19-20/00	2353.61	5.05	7.22	2,348.13	2.17	--	**43,100**	**23,100**	ND	**6,900**	**4,620**	**2,950**	**8,460**	--	--	--
MW-9	5/6/2000	2353.61	5.69	6.17	2,347.82	0.48	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--	--	--
MW-9	8/8/2000	2353.61	6.28	7.04	2,347.18	0.76	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--	--	--
MW-9	11/12/2000	2353.61	6.08	6.51	2,347.44	0.43	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--	--	--
MW-9	ABANDONED																
MW-10	12/17/1992	2354.35	--	9.12	2,345.23	--	**94,000**	**66,000**	**23,000**	--	**1,300**	220	**5,400**	**16,000**	--	**1,300**	**24**
MW-10	2/23/1993	2354.35	--	8.82	2,345.53	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	3/9/1993	2354.35	--	8.42	2,345.93	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	4/10/1993	2354.35	8.03	8.20	2,346.29	0.17	--	--	--	--	--	--	--	--	--	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
MW-10	5/11/1993	2354.35	7.50	7.93	2,346.76	0.43	--	--	--	--	--	--	--	--	--	--	--
MW-10	6/17/1993	2354.35	9.00	9.29	2,345.29	0.29	--	--	--	--	--	--	--	--	--	--	--
MW-10	7/16/1993	2354.35	9.34	9.38	2,345.00	0.04	--	--	--	--	--	--	--	--	--	--	--
MW-10	8/13/1993	2354.35	9.51	9.93	2,344.76	0.42	--	--	--	--	--	--	--	--	--	--	--
MW-10	9/15/1993	2354.35	9.72	10.14	2,344.55	0.42	--	--	--	--	--	--	--	--	--	--	--
MW-10	10/29/1993	2354.35	9.38	9.42	2,344.96	0.04	--	--	--	--	--	--	--	--	--	--	--
MW-10	6/8/1994	2354.35	--	9.80	2,344.55	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	9/14/1994	2354.35	--	10.41	2,343.94	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	1/25/1995	2354.35	7.91	8.16	2,346.39	0.25	--	--	--	--	--	--	--	--	--	--	--
MW-10	DESTROYED																
TRIP BLANK	5/5/1998	--	--	--	--	--	--	ND	--	--	ND	ND	ND	ND	--	--	--
TRIP BLANK	3/18/1999	--	--	--	--	--	--	ND	--	--	ND	ND	ND	1.41	ND	--	--
TRIP BLANK	6/30/1999	--	--	--	--	--	--	ND	--	--	ND	ND	ND	ND	ND	--	--
TRIP BLANK	9/3/1999	--	--	--	--	--	--	ND	--	--	ND	ND	ND	ND	--	--	--
TRIP BLANK	11/21/1999	--	--	--	--	--	--	ND	--	--	ND	ND	ND	ND	--	--	--
TRIP BLANK	02/19-20/00	--	--	--	--	--	--	ND	--	--	ND	ND	ND	ND	--	--	--
TRIP BLANK	5/6/2000	--	--	--	--	--	--	414	--	--	ND	ND	ND	ND	--	--	--
TRIP BLANK	8/8/2000	--	--	--	--	--	--	ND	--	--	ND	ND	ND	ND	--	--	--
TRIP BLANK	11/12/2000	--	--	--	--	--	--	ND	--	--	ND	ND	ND	ND	--	--	--
TRIP BLANK	2/22/2001	--	--	--	--	--	--	ND	--	--	ND	ND	ND	ND	--	--	--
TRIP BLANK	5/22/2001	--	--	--	--	--	--	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	--	--	--
TRIP BLANK	8/13/2001	--	--	--	--	--	--	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	--	--	--
TRIP BLANK	11/11/2001	--	--	--	--	--	--	<100	--	--	<0.500	<1.00	<1.00	<1.50	--	--	--
TRIP BLANK	1/31/2002	--	--	--	--	--	--	<100	--	--	<0.500	<2.00	<1.00	<1.50	--	--	--
TRIP BLANK	6/3/2002	--	--	--	--	--	--	<50	--	--	<0.50	<0.50	<0.50	<1.5	--	--	--
TRIP BLANK	11/11/2021	--	--	--	--	--	--	**67.8 B J**	--	--	<0.50	<0.50	<0.50	<1.5	--	--	--
TRIP BLANK	6/16/2022	--	--	--	--	--	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
TRIP BLANK	6/16/2022	--	--	--	--	--	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
TRIP BLANK	12/7/2022	--	--	--	--	--	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
QA	8/28/2002	--	--	--	--	--	--	<50	--	--	<0.50	<0.50	<0.50	<1.5	--	--	--
QA	11/19/2002	--	--	--	--	--	--		--	--	<0.50	<0.50	<0.50	<1.5	--	--	--
QA	2/20/2003	--	--	--	--	--	--	<50	--	--	<0.50	<0.50	<0.50	<1.5	2.5	--	--
QA	5/17/2003	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	8/22/2003	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	11/28/2003	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	2/17/2004	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	6/9/2004	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	8/11/2004	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	11/21/2004	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	2/20/2005	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	5/29/2005	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	8/18/2005	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	11/26/2005	--	--	--	--	--	--	<48	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	8/6/2006	--	--	--	--	--	--	<48	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	8/6/2007	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	8/19/2008	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	4/1/2009	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	7/31/2009	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	12/8/2009	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	4/29/2010	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	5/18/2011	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	10/9/2011	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	8/8/2012	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	5/3/2013	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	3/13/2018	--	--	--	--	--	--	<50	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--
QA	5/17/2023	--	--	--	--	--	--	37.1 B J	--	--	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
QA	11/7/2023	--	--	--	--	--	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	<1.00	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Well ID	Sample Date	TOC[1] (ft)	DTP (ft)	DTW (ft)	GWE[2] (ft)	SPHT (ft)	TPH (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	TPH-HO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MTCA Method A Cleanup Levels								**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**15**	**15**
QA	4/9/2024	--	--	--	--	--	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	<1.00	--	--
QA	6/11/2024	--	--	--	--	--	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	<1.00	--	--

Table 2. Historical Groundwater Monitoring and Analytical Results
First Quarter 1992 to Current
Chevron Site No. 206196
815 NE College Street
Pullman, Washington

Notes:

BOLD = Laboratory RDL is greater than the MTCA Method A CUL

BOLD and shaded = Concentration detected above MTCA Method A CUL

[1] TOC elevations have been surveyed in feet relative to the 1988 North American Vertical Datum.

[2] When SPH is present, GWE has been corrected using the following formula: GWE = [(TOC - DTW) + (SPHT x 0.80)].

Laboratory analytical methods for historical data may not be consistent with list of current analytical methods. When necessary, consult original laboratory reports to verify methods used.

GWE formula changed starting with May 2021 event.

Abbreviations:

BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes
CUL = Cleanup Level
DTW = Depth to Water
DTP = Depth to Product
DUP = Duplicate
ft = feet
GWE = Groundwater Elevation
ID = Identification
MDL = Method Detection Limit
MTBE = Methyl Tertiary Butyl Ether
MTCA = Model Toxics Control Act
ND = Non-detect
QA = Quality Assurance/Trip Blank
RDL = Reported Detection Limit
SPH = Separate-phase Hydrocarbon
SPHT = Separate-phase Hydrocarbon Thickness
TOC = Top of Casing
TPH = Total Petroleum Hydrocarbons
TPH-DRO = TPH as Diesel-Range Organics
TPH-GRO = TPH as Gasoline-Range Organics
TPH-HO = TPH as Heavy Oil Organics
USEPA = United States Environmental Protection Agency
< = Analyte not detected at or above the laboratory reporting limit
-- = not measured/not analyzed
µg/L = micrograms per liter

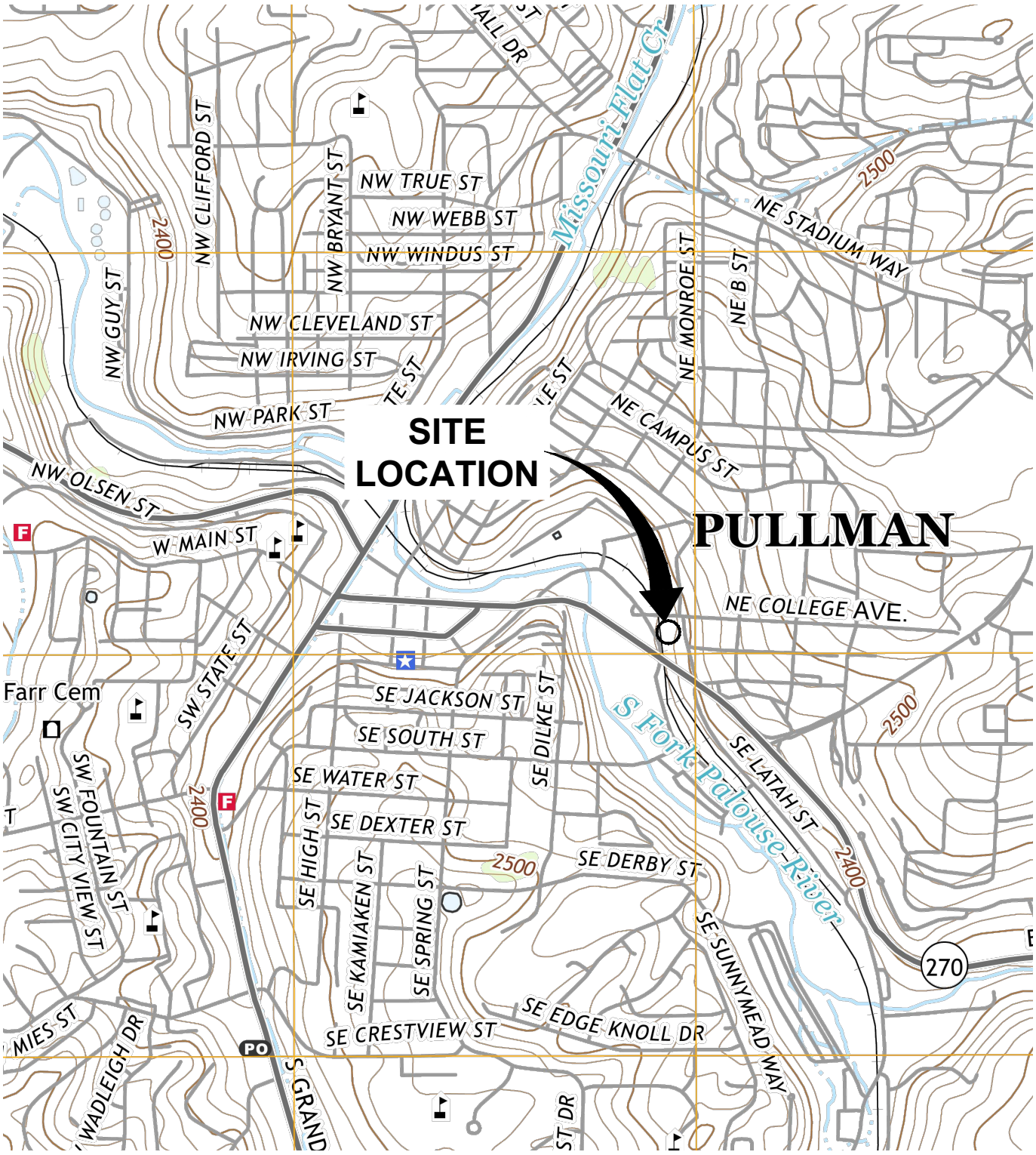
Laboratory Qualifier:

B = The same analyte is found in the associated blank.
C3 = The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
J = The identification of the analyte is acceptable; the reported value is an estimate.
J3 = The associated batch QC was outside the established quality control range for precision.

Current Analytical Methods:

TPH-GRO analyzed by the Method NWTPHGX
BTEX and MTBE analyzed by the Method 8260D
TPH-DRO and TPH-RRO analyzed by the Method NWTPHDX-NO SGT

Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., TORRANCE AND CARSON, CALIFORNIA, 1981

N

0 2,000' 4,000'

Approximate Scale: 1 in. = 2,000 ft.

CHEVRON SITE NO. 206196
815 NE COLLEGE AVE.
PULLMAN, WASHINGTON

SITE LOCATION MAP

ARCADIS

FIGURE 1

XREFS:
IMAGES:
Arcadis Logo.png

C:\Users\KSARTORI\DC\ACCDocs\Arcadis ACC US\AUS-99999999-CHEV_206196_PULLMAN_WA\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\815-GEN-F01-SITE LOCATION MAP.dwg LAYOUT: 1 SAVED: 2/20/2025 12:37 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE:
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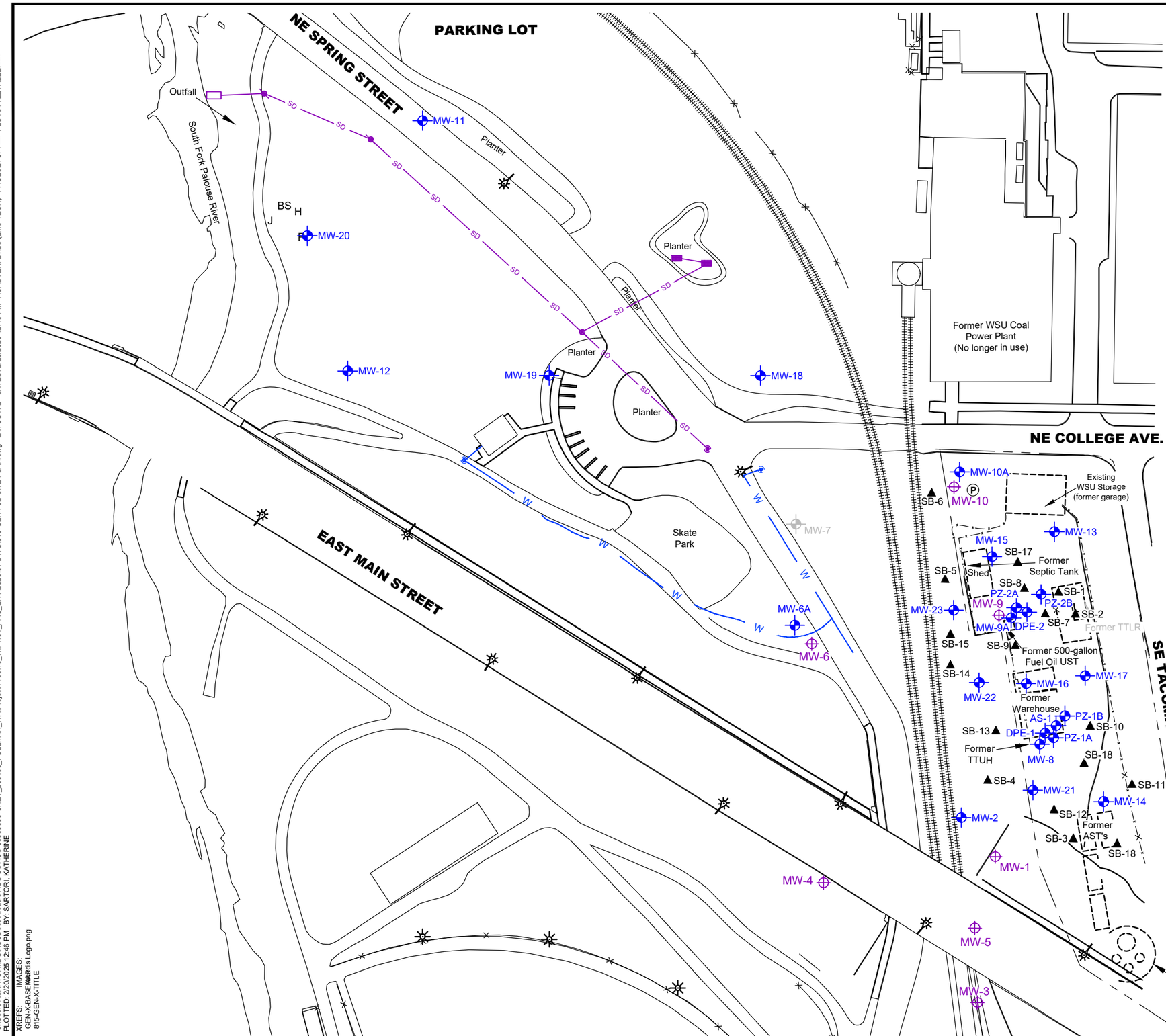

LEGEND:

- PROPERTY BOUNDARY
- FORMER FEATURES
- RETENTION WALL
- FENCE
- RAIL TRACK
- UTILITY LIGHT BULB
- UTILITY WATER LINE
- STORM DRAIN
- MW-1 GROUNDWATER MONITORING WELL
- SB-6 SOIL BORING
- MW-6 ABANDONED/ DESTROYED MONITORING WELL
- MW-7 UNABLE TO LOCATE GROUNDWATER MONITORING WELL
- TTLR TRUCK TRAILER LOADING RACK
- AST ABOVEGROUND STORAGE TANK
- TTUH TRUCK TRAILER UNLOADING HEADER
- UST UNDERGROUND STORAGE STORAGE TANK
- WSU WASHINGTON STATE UNIVERSITY
- PZ PIEZOMETRIC WELL
- DPE DUAL PHASE EXTRACTION WELL
- AS AIR SPARGE

N

0 80' 160'

Approximate Scale: 1 in. = 80 ft.

CHEVRON SITE NO. 206196
815 NE COLLEGE AVE.
PULLMAN, WASHINGTON

SITE PLAN

ARCADIS

FIGURE 2

C:\Users\KSARTORI\DOCS\Docs\Arcadis ACC USA\US-99999999-CHEV_206196_PULLMAN_WA\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\815-GEN-F02-SITE PLAN.dwg LAYOUT: 2 SAVED: 2/20/2025 12:45 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ---
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XREFS:
IMAGES:
GEN-X-BASEMAP
Arcadis Logo.png
815-GEN-X-TITLE

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PLOTSTYLETABLE: ---- PLOTTED: 2/20/2025 12:50 PM BY: SARTORI, KATHERINE

XREFS:
GEN-X-BASEMAP
815-X-PB-TITLE

IMAGES:
Arcadis Logo.png

N

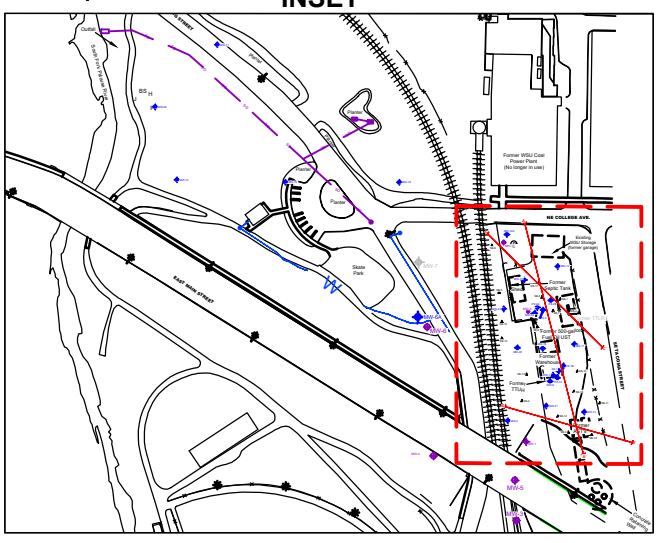
NE COLLEGE AVE.

SE TACOMA STREET

A
A'
B
B'
C
C'

MW-10A
MW-10
SB-6
Existing WSU Storage (former garage)
MW-13
MW-15
SB-17
Former Septic Tank
Shed
SB-5
SB-8
SB-1
PZ-2A
PZ-2B
MW-23
MW-9
MW-9A
DPE-2
SB-7
SB-2
Former TTLR
SB-15
SB-9
Former 500-gallon Fuel Oil UST
SB-14
MW-16
MW-17
MW-22
Former Warehouse
PZ-1B
AS-1
SB-13
SB-10
DPE-1
PZ-1A
MW-8
Former TTUH
SB-18
SB-4
SB-11
MW-21
MW-14
SB-12
MW-2
Former AST's
SB-3
SB-18
MW-1

INSET



LEGEND:

PROPERTY BOUNDARY		UST	UNDERGROUND STORAGE STORAGE TANK
FORMER FEATURES		WSU	WASHINGTON STATE UNIVERSITY
RETENTION WALL		PZ	PIEZOMETRIC WELL
FENCE		DPE	DUAL PHASE EXTRACTION WELL
RAIL TRACK		AS	AIR SPARGE
UTILITY LIGHT BULB			
UTILITY WATER LINE			
STORM DRAIN			
MW-1	GROUNDWATER MONITORING WELL		
SB-6	SOIL BORING		
MW-6	ABANDONED/ DESTROYED MONITORING WELL		
MW-7	UNABLE TO LOCATE GROUNDWATER MONITORING WELL		
A A'	CROSS SECTION TRANSECT LINE		
TTLR	TRUCK TRAILER LOADING RACK		
AST	ABOVEGROUND STORAGE TANK		
TTUH	TRUCK TRAILER UNLOADING HEADER		

0 35' 70'
Approximate Scale: 1 in. = 35 ft.

CHEVRON SITE NO. 206194
815 NE COLLEGE AVE.
PULLMAN,WASHINGTON

CROSS SECTION LOCATIONS AND OVERVIEW

ARCADIS

FIGURE
3A

NORTH
A

SOUTH
A'

ELEVATION (FEET ABOVE MEAN SEA LEVEL)

2360
2355
2350
2345
2340
2335
2330

MW-10A
SB-17
SB-8
SB-7
MW-9A
SB-9
MW-16
MW-17
SB-10
SB-18
MW-14
SB-3
SB-16

<5.00
<10
0.596

<100
<1.00

<24
<120
0.012

110
58
0.059

6,600
110
0.48

<35
<3.7
0.28

3,100
590
2.2

7.8
<3.8
0.012

<62.3
14.6
0.487

2,100
430
11

510
6.7
2.0

17
<3.4
0.018

58
140
0.21

4,700
3,500
19

2,960
15.5

450
740
0.10

1,500
3,700
2.2

890
130
1.4

2.2
13
0.035

165
45
0.905

19
<4.0
0.01

3,500
5,000
<0.34

3,300
380
1.9

150
37
0.003

1,600
700
<0.039

160
120
<0.008

LEGEND

MW-14 — BORING IDENTIFICATION

GROUND SURFACE

MOST RECENT GROUNDWATER ELEVATION - MAY 2023

WELL SCREEN INTERVAL

END OF BORING

FILL MATERIAL

ML-SILT

SM-SILTY SAND

SW-SAND

WEATHERED BEDROCK

0 30' 60'
HORIZONTAL SCALE

0 5' 10'
VERTICAL SCALE

NOTES:

1. 2:2 = GASOLINE-RANGE HYDROCARBON CONCENTRATION
2. 13 = DIESEL-RANGE HYDROCARBON CONCENTRATION
3. 0.035 = BENZENE CONCENTRATION
4. < = CONCENTRATION WAS BELOW METHOD DETECTION OR LABORATORY REPORTING LIMITS
5. **BOLDED:** CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVELS
6. ☐ MOST RECENT SOIL ANALYTICAL RESULTS (mg/kg)
7. ☐ MOST RECENT GROUNDWATER ANALYTICAL RESULTS (ug/L)
8. mg/kg = MILLIGRAMS PER KILOGRAM
9. ug/L = MICROGRAMS PER LITER

CHEVRON SITE NO. 206196
815 NE COLLEGE AVENUE
PULLMAN, WASHINGTON

GEOLOGIC CROSS SECTION A-A'

ARCADIS

FIGURE
3B

C:\Users\jlharris\DC\ACCDocs\Arcadis ACC USAUS-99999999-CHEV_206196_PULLMAN_WA\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\815-GEN-F3B-CROSS SECTIONS A-A'.dwg LAYOUT: 3B SAVED: 2/20/2025 9:55 AM ACADVER: 24.3S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ----
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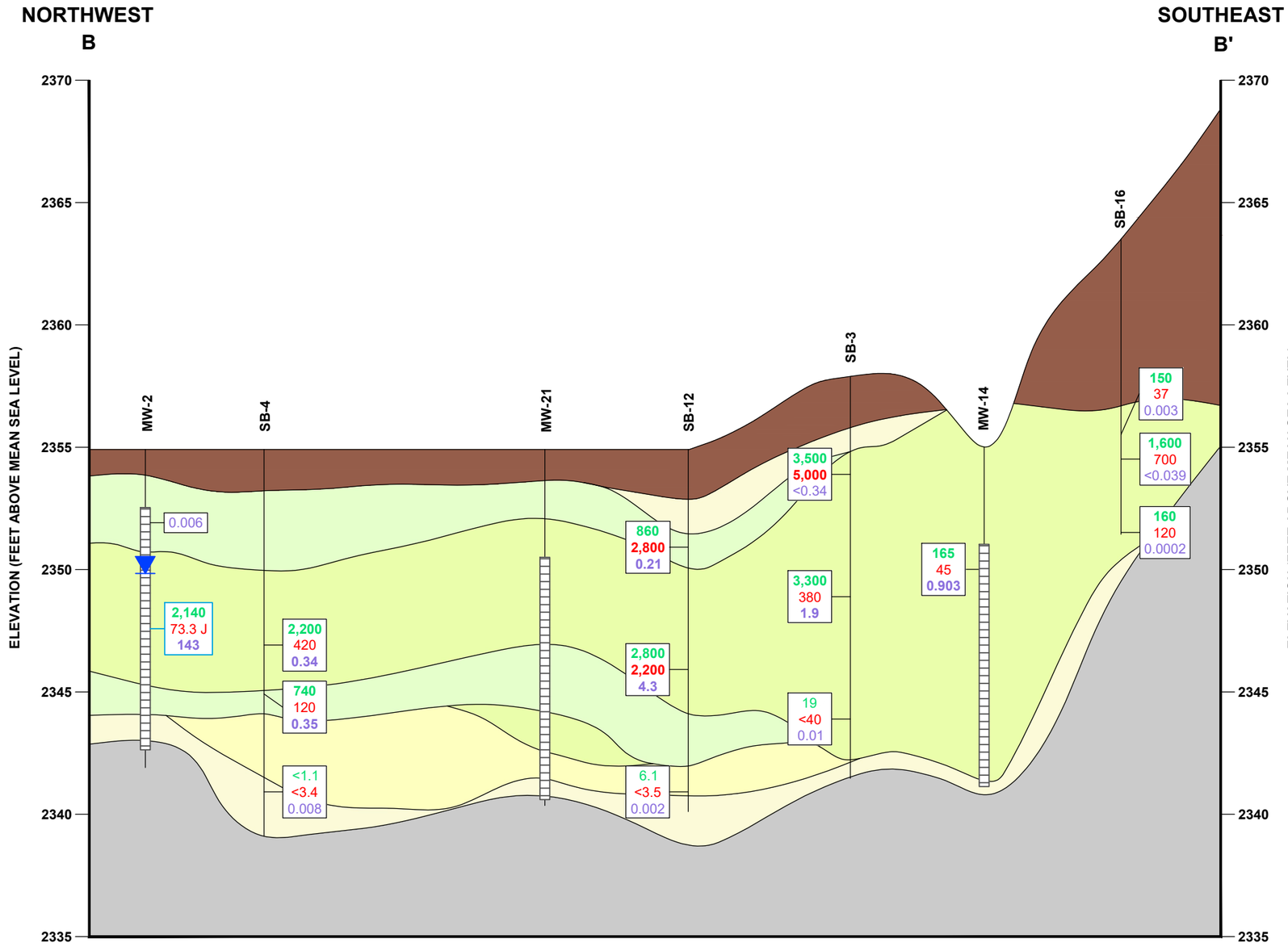
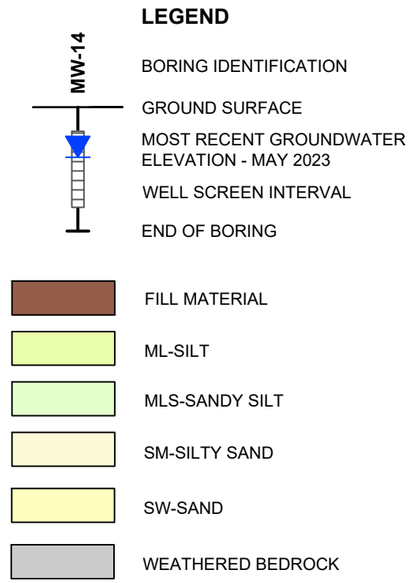
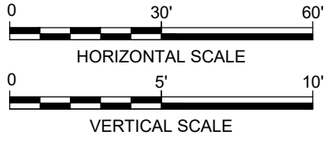


NOTES:

1. 2:2 = GASOLINE-RANGE HYDROCARBON CONCENTRATION
2. 13 = DIESEL-RANGE HYDROCARBON CONCENTRATION
3. 0.003 = BENZENE CONCENTRATION
4. < = CONCENTRATION WAS BELOW METHOD DETECTION OR LABORATORY REPORTING LIMITS
5. **BOLDED:** CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVELS
6. ☐ MOST RECENT SOIL ANALYTICAL RESULTS (mg/kg)
7. ☐ MOST RECENT GROUNDWATER ANALYTICAL RESULTS (ug/L)
8. mg/kg = MILLIGRAMS PER KILOGRAM
9. ug/L = MICROGRAMS PER LITER





CHEVRON SITE NO. 206196
815 NE COLLEGE AVENUE
PULLMAN, WASHINGTON

GEOLOGIC CROSS SECTION B-B'

ARCADIS

FIGURE
3C

C:\Users\jharris\DOCSDocs\Arcadis ACC US\AUS-99999999-CHEV_206196_PULLMAN_WA\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\815-GEN-F3C-CROSS SECTIONS B-B'.dwg LAYOUT: 3C SAVED: 2/20/2025 10:03 AM ACADVER: 24.3S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ----
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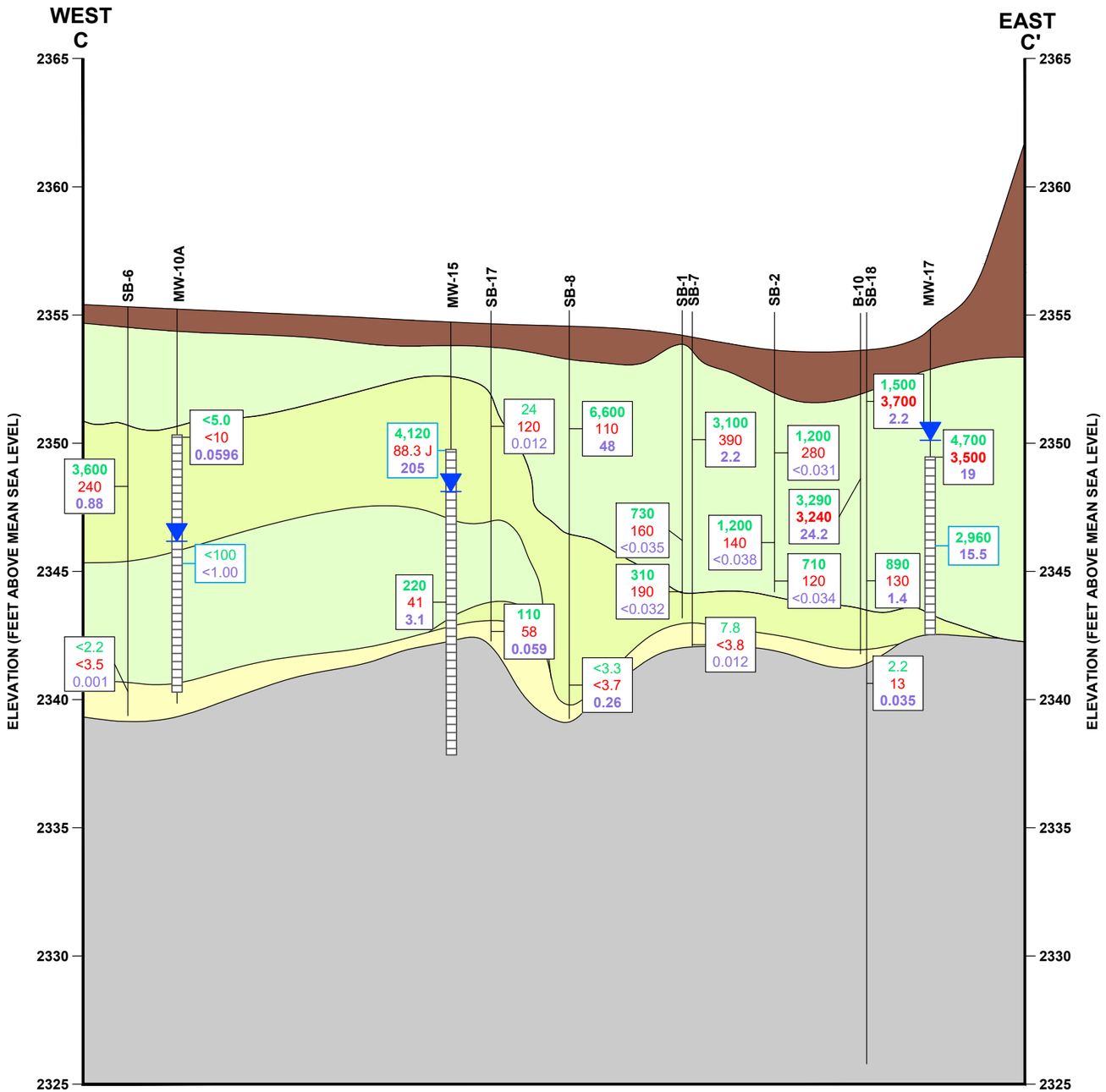
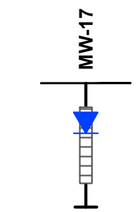


LEGEND



- BORING IDENTIFICATION
- GROUND SURFACE
- MOST RECENT GROUNDWATER ELEVATION - MAY 2023
- WELL SCREEN INTERVAL
- END OF BORING
- FILL MATERIAL
- ML-SILT
- MLS-SANDY SILT
- SW-SAND
- WEATHERED BEDROCK

NOTES:

1. 2:2 = GASOLINE-RANGE HYDROCARBON CONCENTRATION
2. 13 = DIESEL-RANGE HYDROCARBON CONCENTRATION
3. 0.003 = BENZENE CONCENTRATION
4. < = CONCENTRATION WAS BELOW METHOD DETECTION OR LABORATORY REPORTING LIMITS
5. **BOLDED:** CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVELS
6. ▭ MOST RECENT SOIL ANALYTICAL RESULTS (mg/kg)
7. ▭ MOST RECENT GROUNDWATER ANALYTICAL RESULTS (ug/L)
8. mg/kg = MILLIGRAMS PER KILOGRAM
9. ug/L = MICROGRAMS PER LITER

0 30' 60'
HORIZONTAL SCALE

0 5' 10'
VERTICAL SCALE

CHEVRON SITE NO. 206196
815 NE COLLEGE AVENUE
PULLMAN, WASHINGTON

GEOLOGIC CROSS SECTION C-C'

ARCADIS

FIGURE
3D

C:\Users\jharris\DOCS\ACCDocs\Arcadis ACC USA\US-9999999-CHEV_206196_PULLMAN_WA\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\815-GEN-F3D-CROSS SECTIONS C-C'.dwg LAYOUT: 3D SAVED: 2/20/2025 10:04 AM ACADVER: 24.3S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ----
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XREFS:
GEN-X-BASEMAP
815-X-PB-TITLE

IMAGES:
Arcadis Logo.png

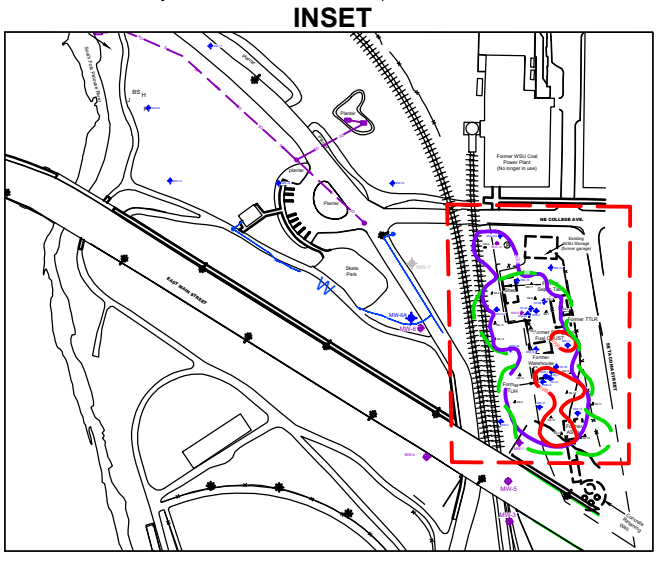
N

NE COLLEGE AVE.

SE TACOMA STREET

MW-10A
SB-6
MW-10
P
Existing WSU Storage (former garage)
0.03
MW-13
30
MW-15
SB-17
Former Septic Tank
Shed
SB-5
SB-8
SB-1
PZ-2B
PZ-2A
MW-23
MW-9
MW-9A
DPE-2
SB-7
SB-2
Former TTLR
SB-15
SB-9
Former 500-gallon Fuel Oil UST
SB-14
2,000
MW-17
MW-22
MW-16
Former Warehouse
PZ-1B
DPE-1
AS-1
SB-10
SB-13
PZ-1A
MW-8
Former TTUH
2,000
SB-18
SB-4
MW-21
SB-11
MW-14
SB-12
MW-2
Former AST's
SB-3
SB-16
MW-1

INSET



LEGEND:

PROPERTY BOUNDARY	
FORMER FEATURES	
RETENTION WALL	
FENCE	
RAIL TRACK	
UTILITY LIGHT BULB	
UTILITY WATER LINE	
STORM DRAIN	
MW-1	GROUNDWATER MONITORING WELL
SB-6	SOIL BORING
MW-6	ABANDONED/ DESTROYED MONITORING WELL
MW-7	UNABLE TO LOCATE GROUNDWATER MONITORING WELL
TTLR	TRUCK TRAILER LOADING RACK
AST	ABOVEGROUND STORAGE TANK
TTUH	TRUCK TRAILER UNLOADING HEADER
UST	UNDERGROUND STORAGE STORAGE TANK
WSU	WASHINGTON STATE UNIVERSITY
PZ	PIEZOMETRIC WELL
DPE	DUAL PHASE EXTRACTION WELL
AS	AIR SPARGE
30	GASOLINE-RANGE HYDROCARBON CONCENTRATION CONTOUR (DASHED WHERE INFERRED)
0.03	BENZENE CONCENTRATION CONTOUR (DASHED WHERE INFERRED)
2,000	DIESEL-RANGE HYDROCARBON CONCENTRATION CONTOUR (DASHED WHERE INFERRED)

0 35' 70'

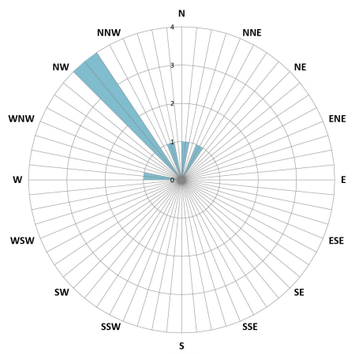
Approximate Scale: 1 in. = 35 ft.

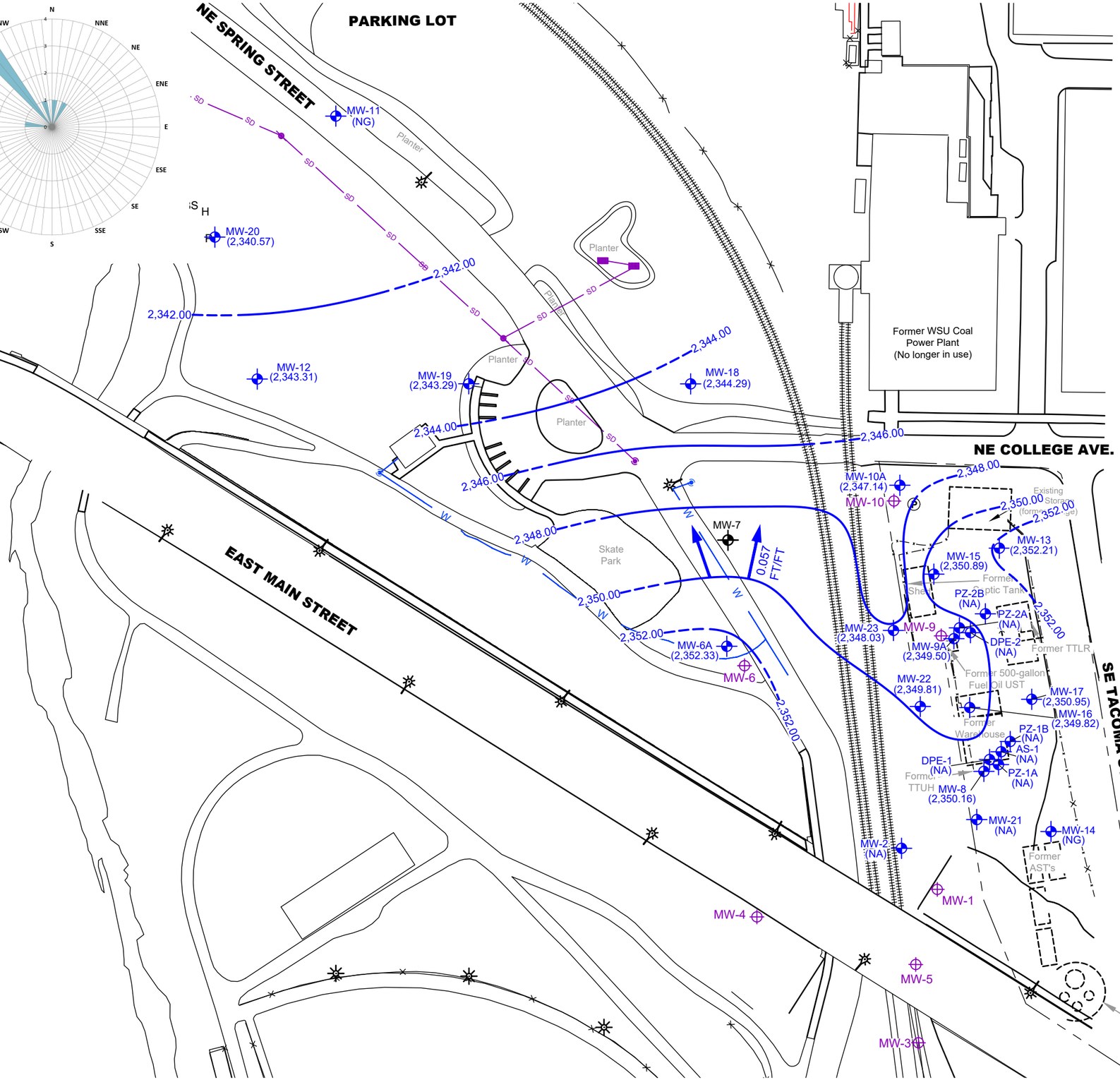
CHEVRON SITE NO. 206196
815 NE COLLEGE AVENUE
PULLMAN, WASHINGTON

HISTORICAL SOIL ANALYTICAL RESULTS

ARCADIS

FIGURE
4





LEGEND:

- PROPERTY BOUNDARY
- FORMER FEATURES
- RETENTION WALL
- FENCE
- RAIL TRACK
- UTILITY LIGHT BULB
- UTILITY WATER LINE
- STORM DRAIN
- MW-1 — GROUNDWATER MONITORING WELL
- MW-6 — ABANDONED/ DESTROYED MONITORING WELL
- MW-7 — UNABLE TO LOCATE GROUNDWATER MONITORING WELL
- (2,352.33) — GROUNDWATER ELEVATION (FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988)
- 2,352.00 — GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW
- 0.057 FT/FT — APPROXIMATE HYDRAULIC GRADIENT (FEET PER FOOT)
- (NG) — NOT GAUGED
- (NA) — UNABLE TO DETERMINE GROUNDWATER ELEVATION - WELL SURVEY DATA NOT AVAILABLE

N

ACRONYMS AND ABBREVIATIONS

AS	AIR SPARGE
AST	ABOVEGROUND STORAGE TANK
DPE	DUAL PHASE EXTRACTION WELL
MTCA	MODEL TOXIC CONTROL ACT
PZ	PIEZOMETRIC WELL
TTLR	TRUCK TRAILER LOADING RACK
TTUH	TRUCK TRAILER UNLOADING HEADER
UST	UNDERGROUND STORAGE TANK
WSU	WASHINGTON STATE UNIVERSITY

0 80' 160'

GRAPHIC SCALE

CHEVRON SITE NO. 206196
815 NE COLLEGE AVE.
PULLMAN, WASHINGTON

GROUNDWATER ELEVATION CONTOUR MAP JUNE 10, 2024

ARCADIS

FIGURE 5

C:\Users\KSARTORI\DCACCDocs\Arcadis ACC US\AUS-99999999-CHEV_206196_PULLMAN_WA\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\815-GWM-F05-GWEC.dwg LAYOUT: 5 SAVED: 2/20/2025 1:07 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 2/20/2025 1:16 PM BY: SARTORI, KATHERINE
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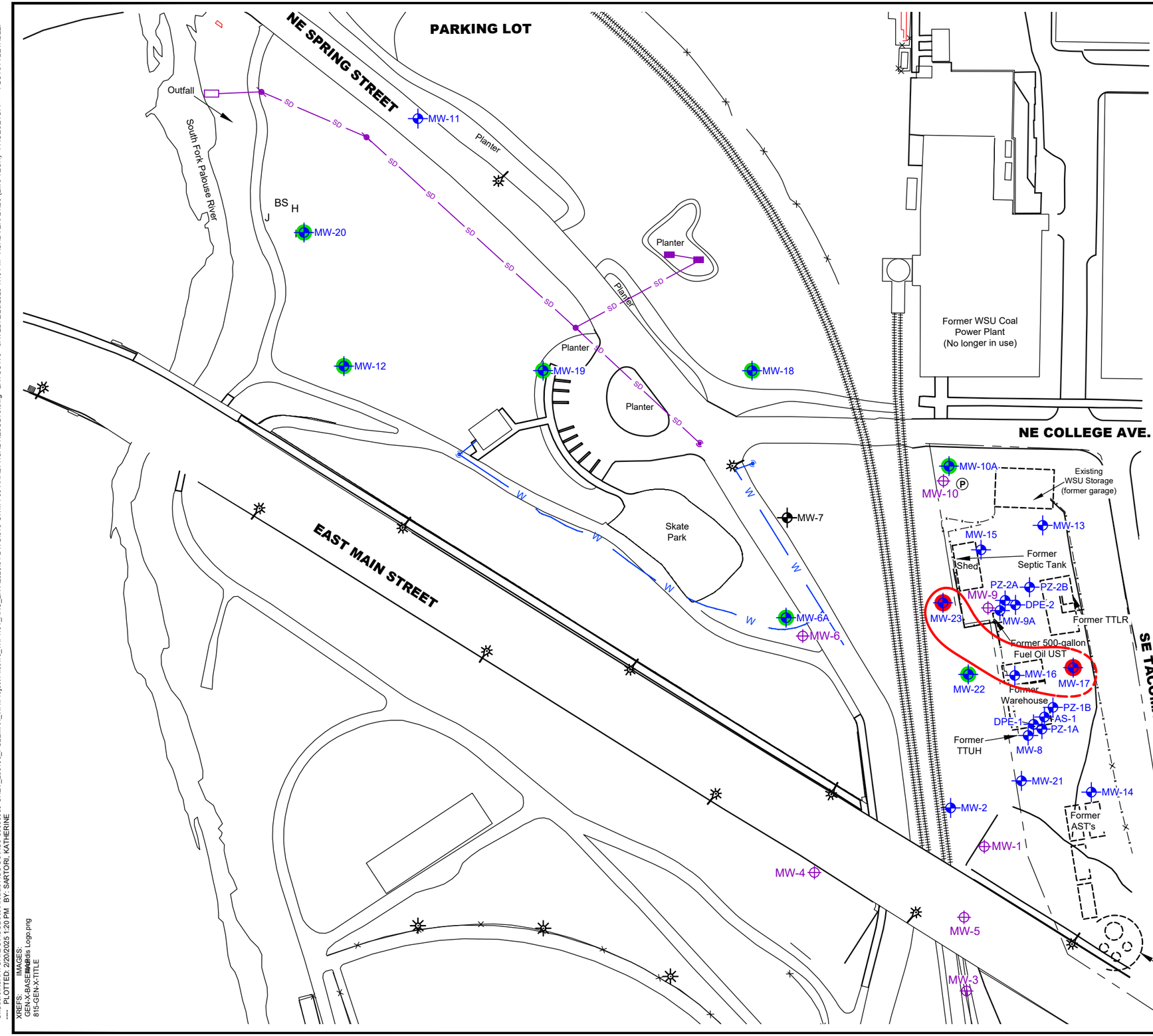

LEGEND:

- PROPERTY BOUNDARY
- FORMER FEATURES
- RETENTION WALL
- FENCE
- RAIL TRACK
- UTILITY LIGHT BULB
- UTILITY WATER LINE
- STORM DRAIN
- MW-1 GROUNDWATER MONITORING WELL
- MW-6 ABANDONED/ DESTROYED MONITORING WELL
- MW-7 UNABLE TO LOCATE GROUNDWATER MONITORING WELL
- CONCENTRATIONS DO NOT EXCEED MTCA METHOD A CLEANUP LEVELS IN GROUNDWATER
- CONCENTRATIONS EXCEED MTCA METHOD A CLEANUP LEVELS IN GROUNDWATER
- ISOCONTOUR OF CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVELS IN GROUNDWATER (DASHED WHERE INFERRED)

N

ACRONYMS AND ABBREVIATIONS

AS	AIR SPARGE
AST	ABOVEGROUND STORAGE TANK
DPE	DUAL PHASE EXTRACTION WELL
MTCA	MODEL TOXIC CONTROL ACT
PZ	PIEZOMETRIC WELL
TTLR	TRUCK TRAILER LOADING RACK
TTUH	TRUCK TRAILER UNLOADING HEADER
UST	UNDERGROUND STORAGE TANK
WSU	WASHINGTON STATE UNIVERSITY

0 80' 160'

GRAPHIC SCALE

CHEVRON SITE NO. 206196
815 NE COLLEGE AVE.
PULLMAN, WASHINGTON

GROUNDWATER ANALYTICAL RESULTS JUNE 10 AND 11, 2024

ARCADIS

FIGURE 6

C:\Users\KSARTORI\DC\ACCDocs\Arcadis ACC US\AUS-99999999-CHEV_206196_PULLMAN_WA\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\815-GWM-F06-ANALYTICAL RESULTS.dwg LAYOUT: 6 SAVED: 2/20/2025 1:18 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ---- PLOTTED: 2/20/2025 1:20 PM BY: SARTORI, KATHERINE
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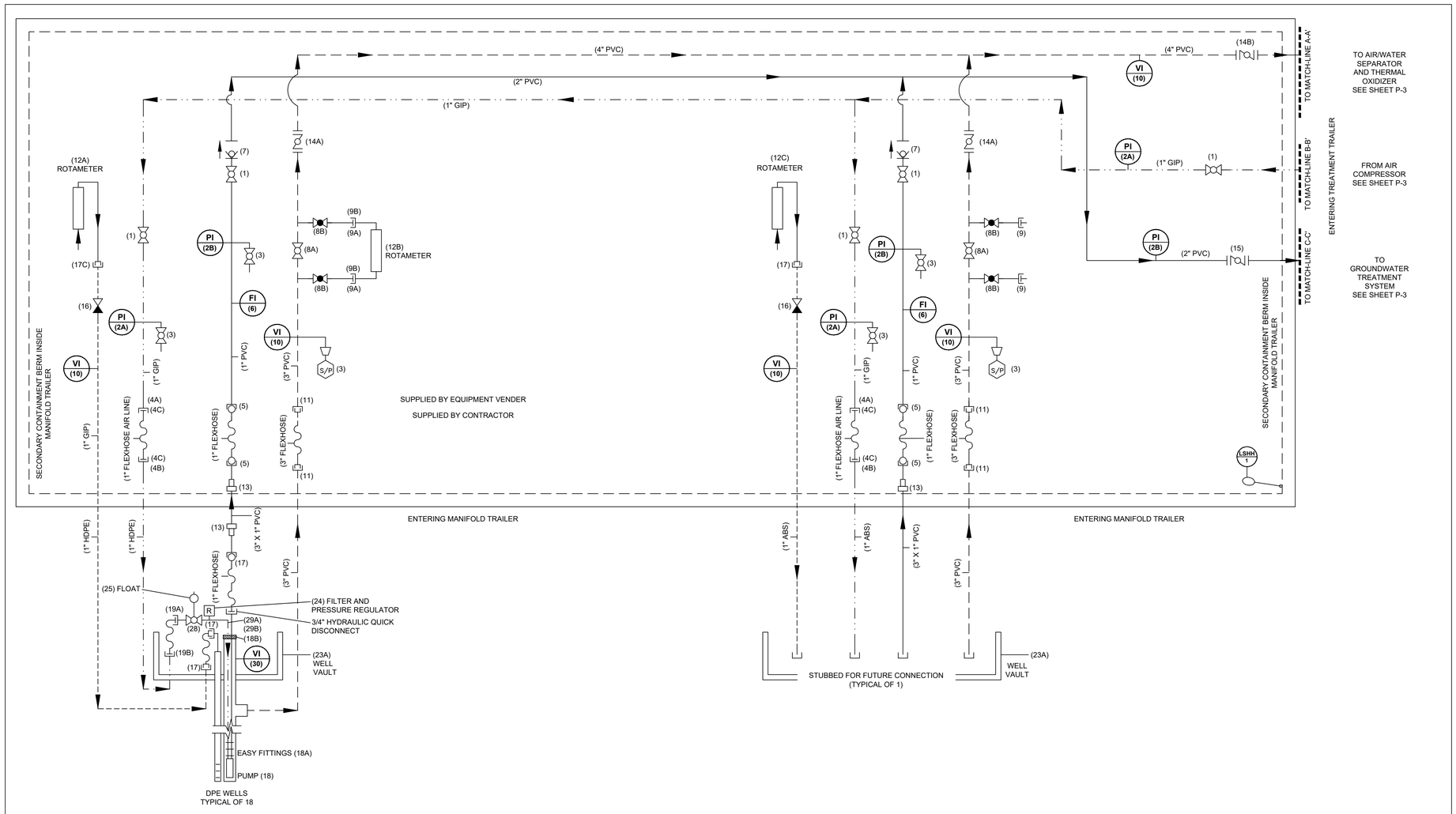

CONTROL UNIT

LSHH 1

FUNCTION:

LEVEL SWITCH/ALARM HIGH HIGH:
TURNS OFF TRANSFER PUMPS (T-1/T-2/T-3) AND THERMAL OXIDIZER SYSTEM / ALL SYSTE MS OFF (MANUAL RESET)

LINE TYPE LEGEND:

- GW EXTRACTION LINE (TYPICAL 3" X 1" DU AL UNDERGROUND)
- 3" SVE LINE (TYPICAL 3" PVC UNDERGROUND)
- PNEUMATIC LINE (TYPICAL 1" ABS UNDERGROUND)
- AIR VENT LINE (TYPICAL 1" ABS UNDERGROUND)

MISCELLANEOUS SYMBOLS

- XX / YY — LOCALLY MOUNTED INSTRUMENT/SENSOR
- XX / YY — CONTROL PANEL MOUNTED INSTRUMENT
- XX — OPERATING DEVICE (CP = CONTROL PANEL, M =MOTOR, S = SOLENOID)
- I — ELECTRICAL INTERLOCK ("AND OR "OR LOGIC)
- S/P — SAMPLE/PRESSURE PORT
- EQUIPMENT GROUND

ABBREVIATIONS

DPI	DIFFERENTIAL PRESSURE INDICATOR
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
FE	FLOW ELEMENT
FI	FLOW IND ICATOR
FIR	FLO W INDICATOR RECORDER
FIT	FLO W IND ICATOR AND TOTALIZER
HS	HANO SWITCH (HAND, OFF, AUTO or ON, OF F)
LAHH	LEVEL ALARM HIGH HIGH
LAH	LEVEL ALARM HIGH
LAL	LEVEL ALARM LOW
LI	LEVEL INDICATOR
LSHH	LEVEL SWITCH HIGH HIGH
LSH	LEVEL SWITCH HIGH
LSL	LEVEL SWITCH LOW
MS	MOTOR STARTER
PAH	PRESSURE ALARM HIGH
PI	PRESSURE INDICATOR
PS	PRESSURE SWITCH
TAD	TELEPHONE AUTOMATIC DIALER
TAH	TEMPE RATURE ALARM HIGH
TE	TEMPERATURE ELEMENT
TI	TEMPERATURE INDICATOR
TIC	TEMPERATURE INDICATOR CONTROLLER
TIR	TEMPERATURE INDICATOR RECORDER
TS	TEMPERATURE SWITCH
VSD	VARIABLE SPEED DRIVE

LEGEND:

PRIMARY EQUIPMENT SYMBOLS

- VACUUM BLOWER
- LIQUID-RING BLOWER
- OIL-LESS COMPRESSOR
- METERING PUMP
- FILTER — COALESCING FILTER
- SILENCER — DISCHARGE SILERCER

FITTINGS SYMBOLS

- CAP (THREADED)
- PLUG (THREADED)
- REDUCER
- RAIN CAP
- WYE STRAINER
- FOOT SCREEN
- SPRAY NOZZLE
- UNION
- FLANGED JOINT
- ORIFICE-PLATE FLOWMETER
- CAM LOCK
- FLEXIBLE HOSE OR CONNECTOR
- P-TRAP

VALVE SYMBOLS

- GATE (NORMALLY OPEN)
- GATE (THROTTLED)
- BALL (NORMALLY OPEN)
- BALL (NORMALLY CLOSED)
- BUTTERFLY (NORM. OPEN)
- BUTTERFLY (NORM. CLOSED)
- BALL CHECK
- SPRING CHECK
- SEATLESS CHECK
- AUTOMATIC DRAIN
- NEEDLE VALVE
- TERMINATING COUPLING
- S — SOLENOID (NORMALLY CLOSED: FAIL CLOSED)
- PRESSURE REGULATOR
- VR — VACUUM RELIEF
- PR — PRESSURE RELIEF
- P/VR — PRESSURE/ VACUUM RELIEF
- QUICK DISCONNECT
- QUICK DISCONNECT
- BOSS POSITIVE METAL-TO-POLYMER COUPLER
- R — PRESSURE REGULATOR

0 2' 4'
GRAPHIC SCALE

CHEVRON SITE NO. 206196
815 NE COLLEGE AVE.
PULLMAN, WASHINGTON

PROCESS & INSTRUMENTATION DIAGRAM (MANIFOLD)

ARCADIS

FIGURE
7A

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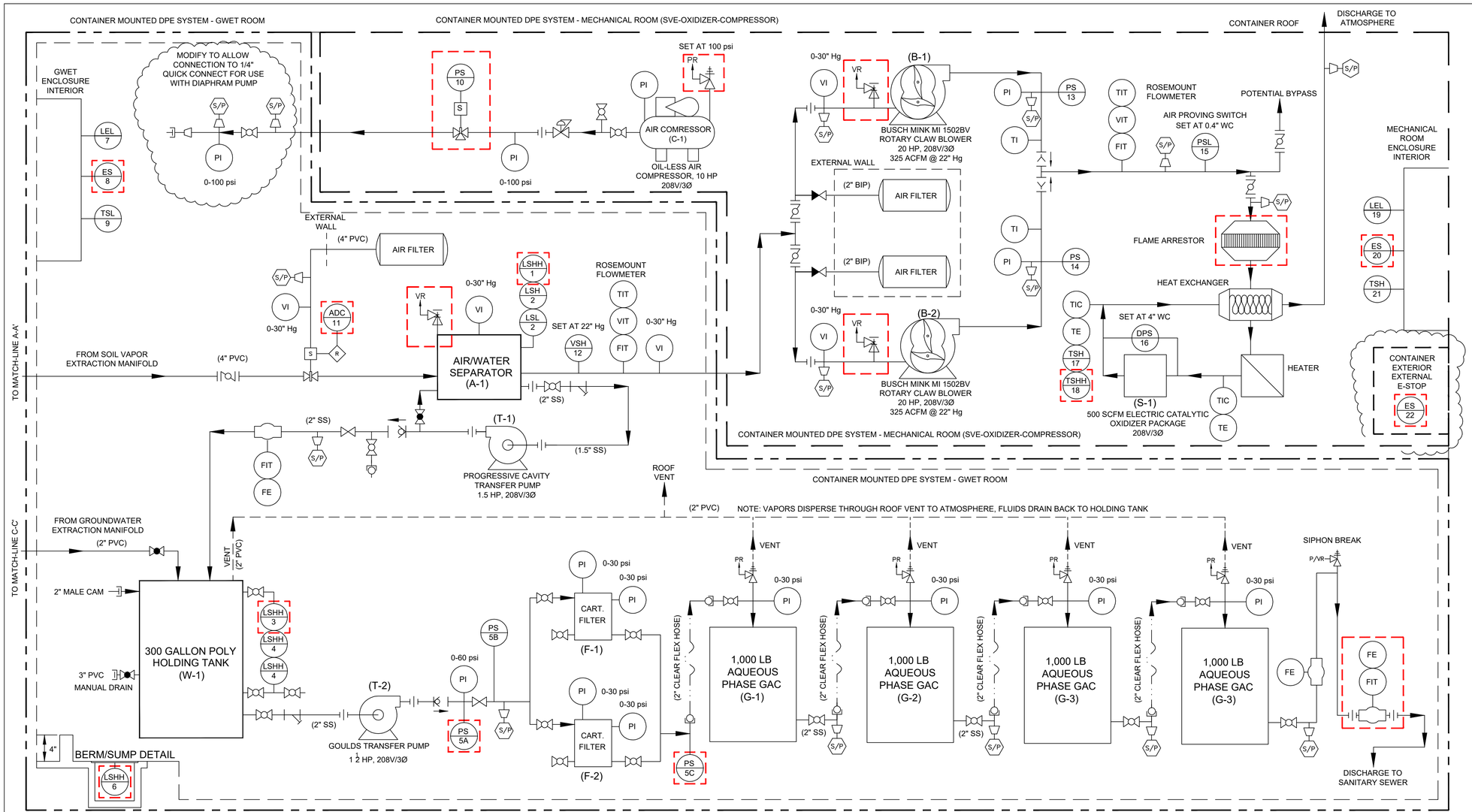


CONTROL UNIT	FUNCTION
LSHH 1	LEVEL SWITCH/ALARM HIGH HIGH: TURNS OFF TRANSFER PUMPS (T-1/T-2/T-3) AND THERMAL OXIDIZER SYSTEM / ALL SYSTEMS OFF (MANUAL RESET)
LSH 2	LEVEL SWITCH HIGH: TURNS ON SUMP PUMP
LSL 2	LEVEL SWITCH LOW: TURNS OFF SUMP PUMP
LSHH 3	LEVEL SWITCH/ALARM HIGH HIGH: TURNS OFF TRANSFER PUMPS (T-1/T-2/T-3) AND THERMAL OXIDIZER SYSTEM / ALL SYSTEMS OFF (MANUAL RESET)
LSH 4	LEVEL SWITCH HIGH: TURNS ON TRANSFER PUMP (T-1)
LSL 4	LEVEL SWITCH LOW: TURNS OFF TRANSFER PUMP (T-1)

CONTROL UNIT	FUNCTION
PS 5A	PRESSURE SWITCH/ALARM HIGH: TURNS OFF TRANSFER PUMP (T-1/T-2/T-3) (ALL SYSTEMS OFF) (MANUAL RESET)
PS 5B	PRESSURE SWITCH/ALARM HIGH: TURNS OFF TRANSFER PUMP (T-1/T-2/T-3) (ALL SYSTEMS OFF) (MANUAL RESET)
PS 5C	PRESSURE SWITCH/ALARM HIGH: TURNS OFF TRANSFER PUMP (T-1/T-2/T-3) (ALL SYSTEMS OFF) (MANUAL RESET)
LSHH 6	LEVEL SWITCH/ALARM HIGH HIGH: TURNS OFF T-1/ T-2 /T-3 TRANSFER PUMPS/ (ALL SYSTEMS OFF) (MANUAL RESET)
LEL 7	LEL SWITCH/ALARM: TURNS OFF T-1/ T-2/ T-3 (ALL SYSTEMS OFF) (MANUAL RESET)

CONTROL UNIT	FUNCTION
ES 8	EMERGENCY STOP SWITCH: TURNS OFF T-1/T-2/T-3, B-1/B-2, C-1 (ALL SYSTEMS OFF) (MANUAL RESET)
TSL 9	TEMPERATURE SWITCH HIGH: TURNS OFF T-1/T-2/T-3, B-1/B-2, C-1 (ALL SYSTEMS OFF) (MANUAL RESET)
PS 10	PRESSURE SWITCH/ALARM HIGH: TURNS OFF AIR COMPRESSOR ONLY (MANUAL RESET)
ADC 11	AIR DILUTION CONTROL VALVE: OPENS AT HIGH TEMP TO COOL OXIDIZER
VSH 12	VACUUM SWITCH/ALARM HIGH: TURNS OFF ROTARY BLOWERS (B-1/B-2) (ALL SYSTEMS OFF) (MANUAL RESET)

CONTROL UNIT	FUNCTION
PS 13	PRESSURE SWITCH/ALARM HIGH: TURNS OFF ROTARY BLOWER (B-1 ONLY)
PS 14	PRESSURE SWITCH/ALARM HIGH: TURNS OFF ROTARY BLOWER (B-2 ONLY)
APS 15	AIR PROVING SWITCH/ALARM LOW: TURNS OFF ROTARY BLOWERS (TIMER-ALL SVE SYSTEMS OFF)
DPS 16	DIFFERENTIAL PRESSURE SWITCH HIGH: TURNS OFF ROTARY BLOWERS (B-1/B-2) (ALL SVE SYSTEMS OFF)
TSH 17	TEMPERATURE SWITCH/ALARM HIGH: OPENS AUTOMATIC AIR DILUTION CONTROL VALVE TO COOL CATALYTIC OXIDIZER

CONTROL UNIT	FUNCTION
TSHH 18	TEMPERATURE SWITCH/ALARM HIGH-HIGH: TURNS OFF HEATERS, SHUTS OFF BLOWERS (ALL SVE SYSTEMS OFF)
LEL 19	LEL SWITCH/ALARM: TURNS OFF ROTARY BLOWERS (B-1/B-2) (ALL SVE SYSTEMS OFF)
ES 20	EMERGENCY STOP SWITCH: TURNS OFF T-1/T-2/T-3, B-1/B-2, C-1 (ALL SYSTEMS OFF) (MANUAL RESET)
TSH 21	TEMPERATURE SWITCH HIGH: TURNS OFF ROTARY BLOWERS (B-1/B-2) (ALL SVE SYSTEMS OFF)
ES 22	EXTERNAL EMERGENCY STOP SWITCH: TURNS OFF T-1/T-2/T-3, B-1/B-2, C-1 (ALL SYSTEMS OFF) (MANUAL RESET)

NOTE:
ALL HIGH HIGH OR LEL LEVEL SWITCHES ARE MANUAL RESET

PRIMARY EQUIPMENT SYMBOLS

- VACUUM BLOWER
- LIQUID-RING BLOWER
- OIL-LESS COMPRESSOR
- DISCHARGE PUMP
- FILTER — COALESCING FILTER
- SILENCER — DISCHARGE SILENCER

FITTINGS SYMBOLS

- CAP (THREADED)
- PLUG (THREADED)
- REDUCER
- RAIN CAP
- WYE STRAINER
- SPRAY NOZZLE
- UNION
- FLANGED JOINT
- ORIFICE-PLATE FLOWMETER
- CAM LOCK
- FLEXIBLE HOSE OR CONNECTOR
- P-TRAP

VALVE SYMBOLS

- GATE (NORMALLY OPEN)
- GATE (NORMALLY CLOSED)
- BALL (NORMALLY OPEN)
- BALL (NORMALLY CLOSED)
- BUTTERFLY (NORM. OPEN)
- BUTTERFLY (NORM. CLOSED)
- BALL CHECK
- SPRING CHECK
- SEATLESS CHECK
- AUTOMATIC DRAIN
- NEEDLE VALVE
- S — SOLENOID (NORMALLY CLOSED; FAIL CLOSED)
- PRESSURE REGULATOR
- VR — VACUUM RELIEF
- PR — PRESSURE RELIEF
- P/VR — PRESSURE/ VACUUM RELIEF
- QUICK DISCONNECT
- QUICK DISCONNECT
- BOSS POSITIVE METAL-TO-POLYME COUPLER

MISCELLANEOUS SYMBOLS

- XX — LOCALLY MOUNTED INSTRUMENT/SENSOR
- XX YY — CONTROL PANEL MOUNTED INSTRUMENT
- XX — OPERATING DEVICE (CP = CONTROL PANEL, M = MOTOR, S = SOLENOID)
- I — ELECTRICAL INTERLOCK ("AND" OR "OR" LOGIC)
- S/P — SAMPLE/PRESSURE PORT
- EQUIPMENT GROUND

CRITICAL DEVICES ARE OUTLINED IN RED

ABBREVIATIONS

DPI	DIFFERENTIAL PRESSURE INDICATOR
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
ES	EMERGENCY STOP
FE	FLOW ELEMENT
FI	FLOW INDICATOR
FIR	FLOW INDICATOR RECORDER
FIT	FLOW INDICATOR AND TOTALIZER
HS	HAND SWITCH (HAND, OFF, AUTO or ON, OFF)
LAHH	LEVEL ALARM HIGH HIGH
LAH	LEVEL ALARM HIGH
LAL	LEVEL ALARM LOW
LI	LEVEL INDICATOR
LSHH	LEVEL SWITCH HIGH HIGH
LSH	LEVEL SWITCH HIGH
LSL	LEVEL SWITCH LOW
PAH	PRESSURE ALARM HIGH
PI	PRESSURE INDICATOR
PS	PRESSURE SWITCH
TAD	TELEPHONE AUTOMATIC DIALER
TAH	TEMPERATURE ALARM HIGH
TE	TEMPERATURE ELEMENT
TI	TEMPERATURE INDICATOR
TIC	TEMPERATURE INDICATOR CONTROLLER
TIR	TEMPERATURE INDICATOR RECORDER
TS	TEMPERATURE SWITCH
VSD	VARIABLE SPEED DRIVE

0 2' 4'
GRAPHIC SCALE

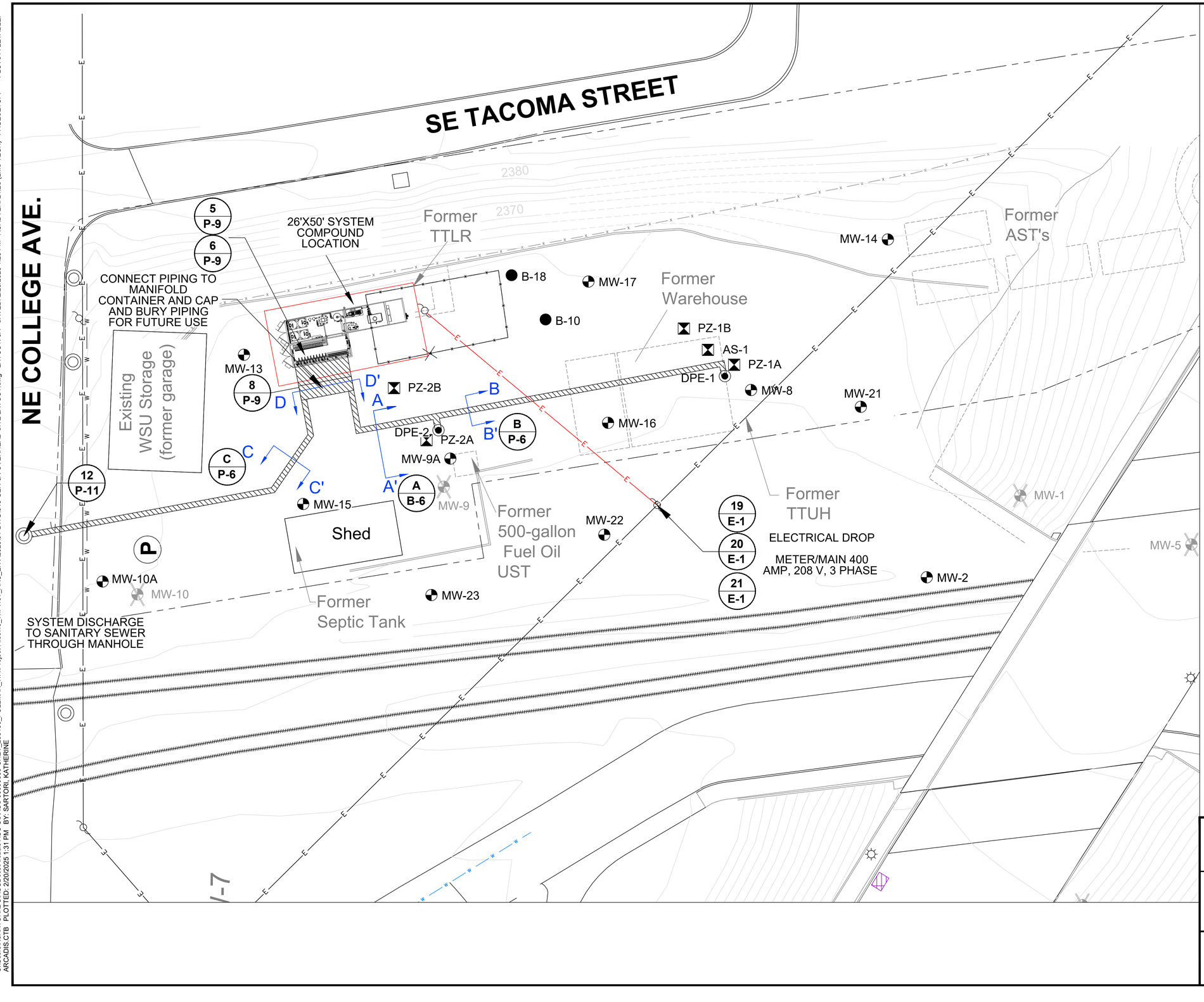
CHEVRON SITE NO. 206196
815 NE COLLEGE AVE.
PULLMAN, WASHINGTON

PROCESS & INSTRUMENTATION DIAGRAM (EQUIPMENT CONTAINER)

ARCADIS

FIGURE 7B

C:\Users\KSARTORI\DCACCDocs\Arcadis ACC US\AUS-99999999-CHEV_206196_PULLMAN_WA\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\815-GEN-F7B-PID EQUIPMENT.dwg LAYOUT: 7B SAVED: 2/20/2025 1:24 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/20/2025 1:25 PM BY: SARTORI, KATHERINE



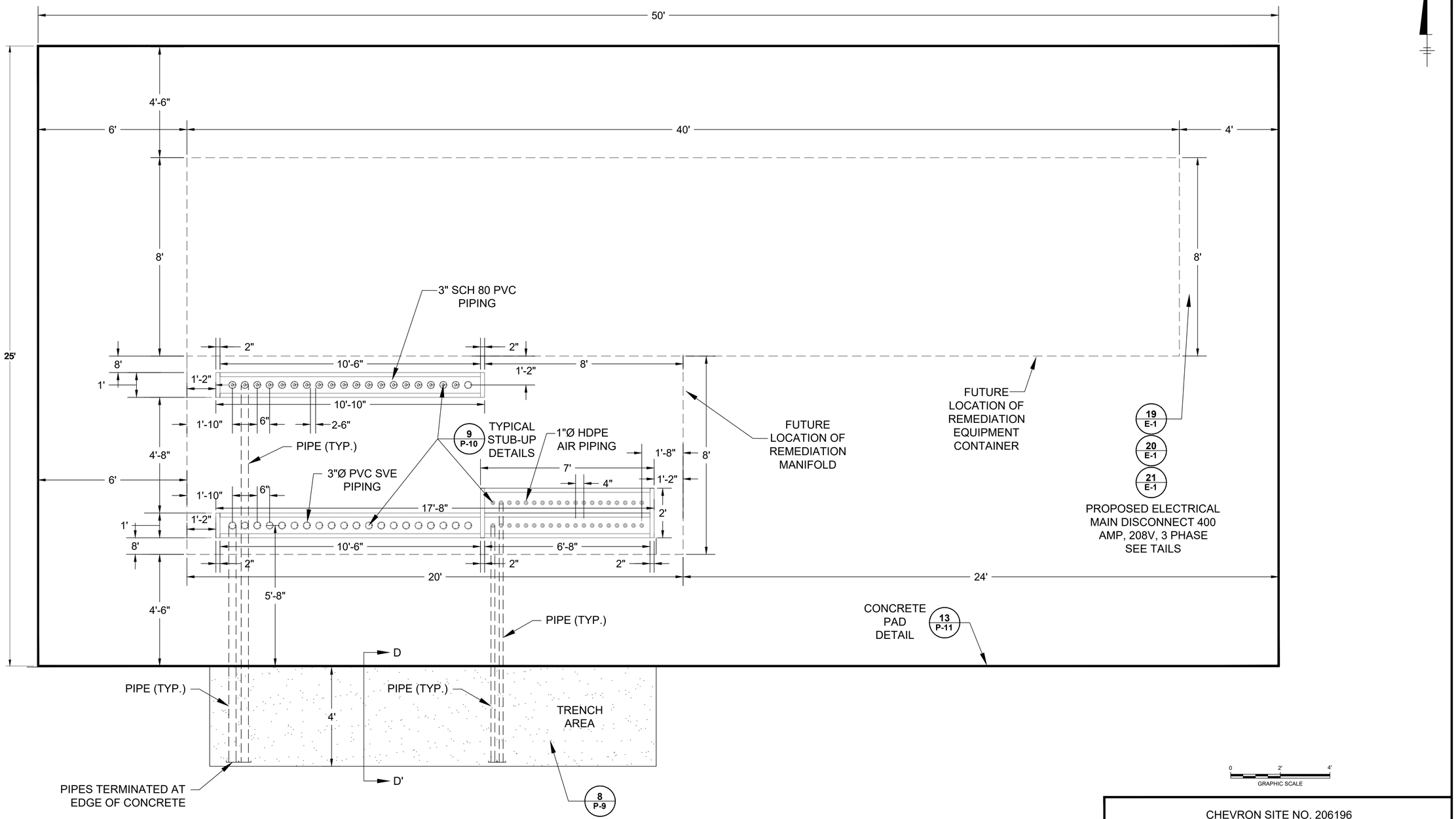
CHEVRON SITE NO. 206196
815 NE COLLEGE AVE.
PULLMAN, WASHINGTON

REMEDIATION COMPOUND OVERHEAD SITE LAYOUT

ARCADIS

FIGURE
8A

C:\Users\KSARTORI\DC\ACCDocs\Arcadis ACC US\AUS-99999999-CHEV_206196_PULLMAN_WA\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\815-GEN-8A-OVERHEAD SITE LAYOUT.dwg LAYOUT: 8A SAVED: 2/20/2025 1:28 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/20/2025 1:31 PM BY: SARTORI, KATHERINE



0 2' 4'
GRAPHIC SCALE

NOTES:

1. SECONDARY CONTAINMENT BERMED AREA WILL BE LOCATED INSIDE BOTH SYSTEM CONTAINERS ONLY
2. CONTRACTOR TO TRENCH PIPING INTO COMPOUND AND STUB UP AS SHOWN ON DRAWINGS

CHEVRON SITE NO. 206196
815 NE COLLEGE AVE.
PULLMAN, WASHINGTON

REMEDIATION COMPOUND GENERAL LAYOUT

ARCADIS

FIGURE
8B

C:\Users\KSARTORI\DC\ACCDocs\Arcadis ACC US\AUS-999999999-CHEV_206196_PULLMAN_WA\Project Files\10_WIP\10T_ARC_ENV\2025\01-DWG\815-GEN-F8B-REMEDIATION GENERAL.dwg LAYOUT: 8B SAVED: 2/20/2025 1:34 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ----
PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/20/2025 1:35 PM BY: SARTORI, KATHERINE

Appendix A

Laboratory Reports

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 27, 2020

Arcadis - Chevron - WA

Sample Delivery Group:	L1199291
Samples Received:	03/14/2020
Project Number:	30045311
Description:	206196
Site:	206196
Report To:	Tyler Green 1100 Olive Way Suite 800 Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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MW-6A_200311 L1199291-01 GW

Collected by: Tyler Green | Collected date/time: 03/11/20 12:52 | Received date/time: 03/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1445205	1	03/17/20 13:14	03/17/20 13:14	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1444905	1	03/16/20 19:40	03/16/20 19:40	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1445555	1	03/18/20 18:33	03/21/20 07:30	CLG	Mt. Juliet, TN

MW-12_200312 L1199291-02 GW

Collected by: Tyler Green | Collected date/time: 03/12/20 09:24 | Received date/time: 03/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1445205	1	03/17/20 13:35	03/17/20 13:35	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1444905	1	03/16/20 19:59	03/16/20 19:59	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1446310	1	03/18/20 18:32	03/20/20 23:32	CLG	Mt. Juliet, TN

MW-18_200312 L1199291-03 GW

Collected by: Tyler Green | Collected date/time: 03/12/20 14:25 | Received date/time: 03/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1445205	1	03/17/20 14:19	03/17/20 14:19	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1444905	1	03/16/20 20:48	03/16/20 20:48	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1446310	1	03/18/20 18:32	03/20/20 23:57	CLG	Mt. Juliet, TN

MW-19_200311 L1199291-04 GW

Collected by: Tyler Green | Collected date/time: 03/11/20 14:22 | Received date/time: 03/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1445205	1	03/17/20 14:40	03/17/20 14:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1444905	1	03/16/20 22:06	03/16/20 22:06	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1445555	1	03/18/20 18:33	03/21/20 07:51	CLG	Mt. Juliet, TN

MW-22_200311 L1199291-05 GW

Collected by: Tyler Green | Collected date/time: 03/11/20 10:08 | Received date/time: 03/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1445205	1	03/17/20 15:02	03/17/20 15:02	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1444905	1	03/16/20 22:25	03/16/20 22:25	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1445555	1	03/18/20 18:33	03/21/20 08:12	CLG	Mt. Juliet, TN

MW-23_200311 L1199291-06 GW

Collected by: Tyler Green | Collected date/time: 03/11/20 11:25 | Received date/time: 03/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1445205	1	03/17/20 15:23	03/17/20 15:23	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1444905	1	03/16/20 22:44	03/16/20 22:44	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1450422	1	03/22/20 08:26	03/26/20 09:14	JN	Mt. Juliet, TN

MW-20_200312 L1199291-07 GW

Collected by: Tyler Green
Collected date/time: 03/12/20 12:20
Received date/time: 03/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1445205	1	03/17/20 09:03	03/17/20 09:03	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1444905	1	03/16/20 23:28	03/16/20 23:28	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1446310	1	03/18/20 18:32	03/21/20 00:23	CLG	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	116	B	31.6	100	1	03/17/2020 13:14	WG1445205
(S) a,a,a-Trifluorotoluene(FID)	*92.0*			*78.0-120*		*03/17/2020 13:14*	WG1445205

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.331	1.00	1	03/16/2020 19:40	WG1444905
Toluene	U		0.412	1.00	1	03/16/2020 19:40	WG1444905
Ethylbenzene	U		0.384	1.00	1	03/16/2020 19:40	WG1444905
Total Xylenes	U		1.06	3.00	1	03/16/2020 19:40	WG1444905
Methyl tert-butyl ether	U		0.367	1.00	1	03/16/2020 19:40	WG1444905
(S) Toluene-d8	*103*			*80.0-120*		*03/16/2020 19:40*	WG1444905
(S) 4-Bromofluorobenzene	*93.0*			*77.0-126*		*03/16/2020 19:40*	WG1444905
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*03/16/2020 19:40*	WG1444905

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	68.9	J	66.7	200	1	03/21/2020 07:30	WG1445555
Residual Range Organics (RRO)	U		83.3	250	1	03/21/2020 07:30	WG1445555
(S) o-Terphenyl	*62.1*			*52.0-156*		*03/21/2020 07:30*	WG1445555

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	48.2	B J	31.6	100	1	03/17/2020 13:35	WG1445205
(S) a,a,a-Trifluorotoluene(FID)	*95.8*			*78.0-120*		*03/17/2020 13:35*	WG1445205

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.331	1.00	1	03/16/2020 19:59	WG1444905
Toluene	U		0.412	1.00	1	03/16/2020 19:59	WG1444905
Ethylbenzene	U		0.384	1.00	1	03/16/2020 19:59	WG1444905
Total Xylenes	U		1.06	3.00	1	03/16/2020 19:59	WG1444905
Methyl tert-butyl ether	U		0.367	1.00	1	03/16/2020 19:59	WG1444905
(S) Toluene-d8	*104*			*80.0-120*		*03/16/2020 19:59*	WG1444905
(S) 4-Bromofluorobenzene	*98.1*			*77.0-126*		*03/16/2020 19:59*	WG1444905
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*03/16/2020 19:59*	WG1444905

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	03/20/2020 23:32	WG1446310
Residual Range Organics (RRO)	U		83.3	250	1	03/20/2020 23:32	WG1446310
(S) o-Terphenyl	*87.4*			*52.0-156*		*03/20/2020 23:32*	WG1446310

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	77.3	B J	31.6	100	1	03/17/2020 14:19	WG1445205
(S) a,a,a-Trifluorotoluene(FID)	*95.5*			*78.0-120*		*03/17/2020 14:19*	WG1445205

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.331	1.00	1	03/16/2020 20:48	WG1444905
Toluene	U		0.412	1.00	1	03/16/2020 20:48	WG1444905
Ethylbenzene	U		0.384	1.00	1	03/16/2020 20:48	WG1444905
Total Xylenes	U		1.06	3.00	1	03/16/2020 20:48	WG1444905
Methyl tert-butyl ether	U		0.367	1.00	1	03/16/2020 20:48	WG1444905
(S) Toluene-d8	*103*			*80.0-120*		*03/16/2020 20:48*	WG1444905
(S) 4-Bromofluorobenzene	*97.5*			*77.0-126*		*03/16/2020 20:48*	WG1444905
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*03/16/2020 20:48*	WG1444905

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	03/20/2020 23:57	WG1446310
Residual Range Organics (RRO)	U		83.3	250	1	03/20/2020 23:57	WG1446310
(S) o-Terphenyl	*84.2*			*52.0-156*		*03/20/2020 23:57*	WG1446310

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	60.4	B J	31.6	100	1	03/17/2020 14:40	WG1445205
(S) a,a,a-Trifluorotoluene(FID)	*95.7*			*78.0-120*		*03/17/2020 14:40*	WG1445205

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.331	1.00	1	03/16/2020 22:06	WG1444905
Toluene	U		0.412	1.00	1	03/16/2020 22:06	WG1444905
Ethylbenzene	U		0.384	1.00	1	03/16/2020 22:06	WG1444905
Total Xylenes	U		1.06	3.00	1	03/16/2020 22:06	WG1444905
Methyl tert-butyl ether	U		0.367	1.00	1	03/16/2020 22:06	WG1444905
(S) Toluene-d8	*103*			*80.0-120*		*03/16/2020 22:06*	WG1444905
(S) 4-Bromofluorobenzene	*98.7*			*77.0-126*		*03/16/2020 22:06*	WG1444905
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*03/16/2020 22:06*	WG1444905

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	03/21/2020 07:51	WG1445555
Residual Range Organics (RRO)	U		83.3	250	1	03/21/2020 07:51	WG1445555
(S) o-Terphenyl	*54.7*			*52.0-156*		*03/21/2020 07:51*	WG1445555

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	52.5	B J	31.6	100	1	03/17/2020 15:02	WG1445205
(S) a,a,a-Trifluorotoluene(FID)	*95.0*			*78.0-120*		*03/17/2020 15:02*	WG1445205

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.331	1.00	1	03/16/2020 22:25	WG1444905
Toluene	U		0.412	1.00	1	03/16/2020 22:25	WG1444905
Ethylbenzene	U		0.384	1.00	1	03/16/2020 22:25	WG1444905
Total Xylenes	U		1.06	3.00	1	03/16/2020 22:25	WG1444905
Methyl tert-butyl ether	U		0.367	1.00	1	03/16/2020 22:25	WG1444905
(S) Toluene-d8	*101*			*80.0-120*		*03/16/2020 22:25*	WG1444905
(S) 4-Bromofluorobenzene	*93.5*			*77.0-126*		*03/16/2020 22:25*	WG1444905
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*03/16/2020 22:25*	WG1444905

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	103	J	66.7	200	1	03/21/2020 08:12	WG1445555
Residual Range Organics (RRO)	125	J	83.3	250	1	03/21/2020 08:12	WG1445555
(S) o-Terphenyl	*58.9*			*52.0-156*		*03/21/2020 08:12*	WG1445555

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	75.2	B J	31.6	100	1	03/17/2020 15:23	WG1445205
(S) a,a,a-Trifluorotoluene(FID)	*94.5*			*78.0-120*		*03/17/2020 15:23*	WG1445205

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	03/16/2020 22:44	WG1444905
Toluene	U		0.412	1.00	1	03/16/2020 22:44	WG1444905
Ethylbenzene	U		0.384	1.00	1	03/16/2020 22:44	WG1444905
Total Xylenes	U		1.06	3.00	1	03/16/2020 22:44	WG1444905
Methyl tert-butyl ether	U		0.367	1.00	1	03/16/2020 22:44	WG1444905
(S) Toluene-d8	*105*			*80.0-120*		*03/16/2020 22:44*	WG1444905
(S) 4-Bromofluorobenzene	*95.7*			*77.0-126*		*03/16/2020 22:44*	WG1444905
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*03/16/2020 22:44*	WG1444905

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	144	J	66.7	200	1	03/26/2020 09:14	WG1450422
Residual Range Organics (RRO)	145	J	83.3	250	1	03/26/2020 09:14	WG1450422
(S) o-Terphenyl	*90.0*			*52.0-156*		*03/26/2020 09:14*	WG1450422

Sample Narrative:

L1199291-06 WG1450422: pH meets requirements to extend holding time

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	35.5	B J	31.6	100	1	03/17/2020 09:03	WG1445205
(S) a,a,a-Trifluorotoluene(FID)	*95.9*			*78.0-120*		*03/17/2020 09:03*	WG1445205

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.331	1.00	1	03/16/2020 23:28	WG1444905
Toluene	U		0.412	1.00	1	03/16/2020 23:28	WG1444905
Ethylbenzene	U		0.384	1.00	1	03/16/2020 23:28	WG1444905
Total Xylenes	U		1.06	3.00	1	03/16/2020 23:28	WG1444905
Methyl tert-butyl ether	U		0.367	1.00	1	03/16/2020 23:28	WG1444905
(S) Toluene-d8	*103*			*80.0-120*		*03/16/2020 23:28*	WG1444905
(S) 4-Bromofluorobenzene	*99.3*			*77.0-126*		*03/16/2020 23:28*	WG1444905
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*03/16/2020 23:28*	WG1444905

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	03/21/2020 00:23	WG1446310
Residual Range Organics (RRO)	U		83.3	250	1	03/21/2020 00:23	WG1446310
(S) o-Terphenyl	*76.3*			*52.0-156*		*03/21/2020 00:23*	WG1446310

Method Blank (MB)

(MB) R3509533-3 03/17/20 08:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	38.4	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*95.9*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3509533-2 03/17/20 07:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5680	103	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*102*	*78.0-120*	

Method Blank (MB)

(MB) R3511148-3 03/16/20 14:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*103*			*80.0-120*
(S) 4-Bromofluorobenzene	*96.6*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3511148-1 03/16/20 13:06 • (LCSD) R3511148-2 03/16/20 13:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	4.72	4.68	94.4	93.6	70.0-123			0.851	20
Ethylbenzene	5.00	4.73	4.88	94.6	97.6	79.0-123			3.12	20
Methyl tert-butyl ether	5.00	4.38	4.79	87.6	95.8	68.0-125			8.94	20
Toluene	5.00	4.72	4.75	94.4	95.0	79.0-120			0.634	20
Xylenes, Total	15.0	13.8	14.3	92.0	95.3	79.0-123			3.56	20
(S) Toluene-d8				*102*	*102*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.8*	*98.2*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*114*	*117*	*70.0-130*				

Method Blank (MB)

(MB) R3510786-1 03/20/20 08:08

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*52.0*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3510786-2 03/20/20 08:29 • (LCSD) R3510786-3 03/20/20 08:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1420	1350	94.7	90.0	50.0-150			5.05	20
(S) o-Terphenyl				*104*	*106*	*52.0-156*				

Method Blank (MB)

(MB) R3510992-1 03/20/20 22:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*88.5*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3510992-2 03/20/20 22:40 • (LCSD) R3510992-3 03/20/20 23:06

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Diesel Range Organics (DRO)	1500	1500	1520	100	101	50.0-150			1.32	20
(S) o-Terphenyl				*88.0*	*86.0*	*52.0-156*				

Method Blank (MB)

(MB) R3512692-1 03/26/20 06:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*100*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3512692-2 03/26/20 07:05 • (LCSD) R3512692-3 03/26/20 07:31

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Diesel Range Organics (DRO)	1500	1780	1780	119	119	50.0-150			0.000	20
(S) o-Terphenyl				*95.5*	*99.0*	*52.0-156*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

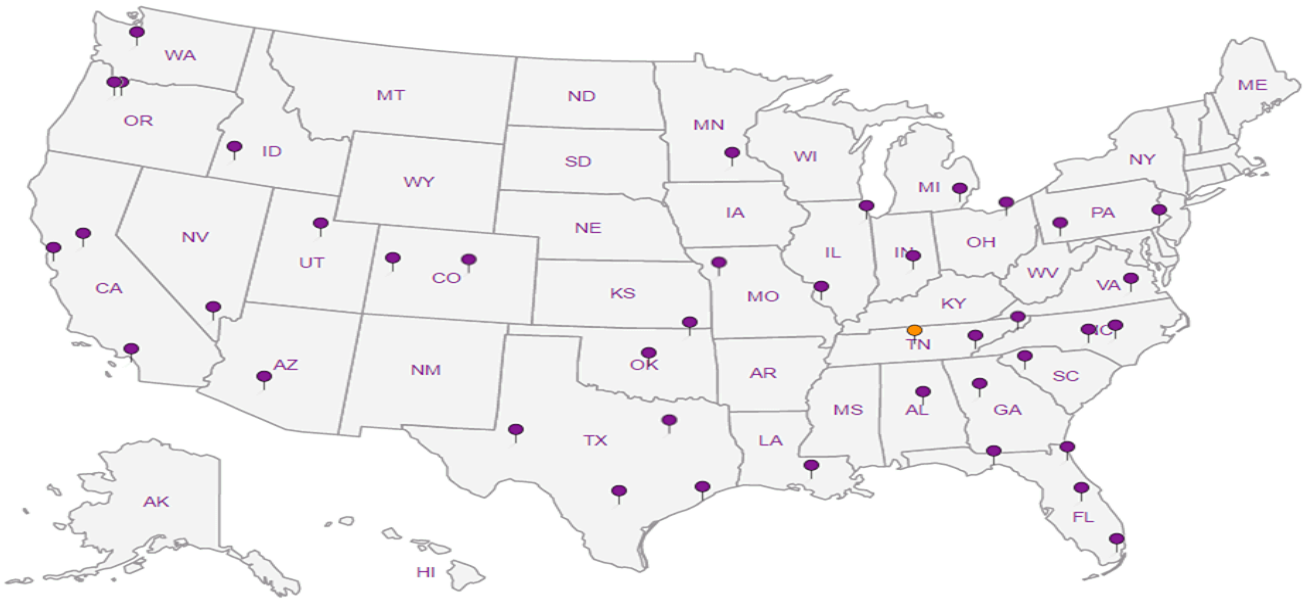
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle, WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Report to: Tyler Green

Email To: Tyler.Green@arcadis.com;environmentDM-

Project Description: 206196

City/State Collected:

Please Circle: PT MT CT ET

Phone: 206-325-5254
Fax:

Client Project # 30045311

Lab Project # CHEVARCWA-206196

Collected by (print): Tyler Green

Site/Facility ID # 206196

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEXM 8260D 40mlAmb-HCl	NWTPHDX LVINOSGT 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	TCLP VOC/SVOC/Metals 1L-Clr-NoPres	pH 125mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-6A	Grab	GW		03/11/2020	1252	8	X	X	X				-01
MW-12	Grab	GW		03/12/2020	09:24	8	X	X	X				-02
MW-18	Grab	GW		3/12/2020	14:25	8	X	X	X				-03
MW-19	Grab	GW		3/11/2020	14:22	8	X	X	X				-04
MW-22	Grab	GW		3/11/2020	10:08	8	X	X	X				-05
MW-23	Grab	GW		3/11/2020	11:25	8	X	X	X				-06
MW-20	Grab	GW		3/12/2020	12:20	8	X	X	X				-07
		GW				7	S.4						
		GW											
		GW											

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1199291

Tab A191

Acctnum: CHEVARCWA
Template: T164457
Prelogin: P761172
PM: 110 - Brian Ford
PB:
Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 167627499756

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Tyler Green	03/12/2020	16:50		2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: IR#6 °C 1.6-.4=1.2 Bottles Received: 55	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Sandy Yossef	Date: 3/14/20 Time: 9100	Hold: Condition: NCF / OK

ANALYTICAL REPORT

June 02, 2021

Arcadis - Chevron - WA

Sample Delivery Group:	L1357187
Samples Received:	05/22/2021
Project Number:	30064313 19.45
Description:	206196
Site:	815 NE COLLEGE ST PULLMAN WA
Report To:	Melissa Caldwell/Sydney Clark 1100 Olive Way Suite 800 Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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MW-15-W-202105 L1357187-01 GW

Collected by: Tyler Green | Collected date/time: 05/18/21 08:02 | Received date/time: 05/22/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1679767	1	05/31/21 16:45	05/31/21 16:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1679608	5	05/29/21 13:39	05/29/21 13:39	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1680112	1	05/28/21 17:12	05/30/21 18:38	AEG	Mt. Juliet, TN

MW-2-W-202105 L1357187-02 GW

Collected by: Tyler Green | Collected date/time: 05/18/21 09:42 | Received date/time: 05/22/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1679767	1	05/31/21 17:07	05/31/21 17:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1677780	1	05/26/21 13:33	05/26/21 13:33	TJJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1679608	1	05/29/21 13:59	05/29/21 13:59	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1680112	1	05/28/21 17:12	05/30/21 19:00	AEG	Mt. Juliet, TN

MW-12-W-202105 L1357187-03 GW

Collected by: Tyler Green | Collected date/time: 05/18/21 11:18 | Received date/time: 05/22/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1679767	1	05/31/21 17:28	05/31/21 17:28	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1677780	1	05/26/21 13:53	05/26/21 13:53	TJJ	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1680112	1	05/28/21 17:12	05/30/21 19:23	AEG	Mt. Juliet, TN

MW-19-W-202105 L1357187-04 GW

Collected by: Tyler Green | Collected date/time: 05/18/21 12:22 | Received date/time: 05/22/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1679767	1	05/31/21 17:50	05/31/21 17:50	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1677780	1	05/26/21 14:13	05/26/21 14:13	TJJ	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1680112	1	05/28/21 17:12	05/30/21 19:45	AEG	Mt. Juliet, TN

BD-W-202105 L1357187-05 GW

Collected by: Tyler Green | Collected date/time: 05/17/21 00:00 | Received date/time: 05/22/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1679767	1	05/31/21 13:04	05/31/21 13:04	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1677780	1	05/26/21 14:33	05/26/21 14:33	TJJ	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1678692	1	05/29/21 00:10	05/31/21 16:43	DMG	Mt. Juliet, TN

MW-22-W-202105 L1357187-06 GW

Collected by: Tyler Green | Collected date/time: 05/17/21 15:35 | Received date/time: 05/22/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1679767	1	05/31/21 14:13	05/31/21 14:13	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1677780	1	05/26/21 14:54	05/26/21 14:54	TJJ	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1678692	1	05/29/21 00:10	05/31/21 17:09	DMG	Mt. Juliet, TN

MW-23-W-202105 L1357187-07 GW

Collected by: Tyler Green
Collected date/time: 05/17/21 14:38
Received date/time: 05/22/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1679767	1	05/31/21 14:35	05/31/21 14:35	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1677780	1	05/26/21 15:14	05/26/21 15:14	TJJ	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1678692	1	05/29/21 00:10	05/31/21 17:34	DMG	Mt. Juliet, TN

MW-18-W-202105 L1357187-08 GW

Collected by: Tyler Green
Collected date/time: 05/17/21 13:19
Received date/time: 05/22/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1679767	1	05/31/21 14:57	05/31/21 14:57	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1677780	1	05/26/21 15:35	05/26/21 15:35	TJJ	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1678692	1	05/29/21 00:10	05/31/21 18:00	DMG	Mt. Juliet, TN

TRIP BLANK-202105 L1357187-09 NONE

Collected by: Tyler Green
Collected date/time: 05/17/21 00:00
Received date/time: 05/22/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	4120		31.6	100	1	05/31/2021 16:45	WG1679767
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*78.0-120*		*05/31/2021 16:45*	WG1679767

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	205		0.471	5.00	5	05/29/2021 13:39	WG1679608
Toluene	20.5		1.39	5.00	5	05/29/2021 13:39	WG1679608
Ethylbenzene	152		0.685	5.00	5	05/29/2021 13:39	WG1679608
Total Xylenes	109		0.870	15.0	5	05/29/2021 13:39	WG1679608
Methyl tert-butyl ether	U		0.505	5.00	5	05/29/2021 13:39	WG1679608
(S) Toluene-d8	*92.6*			*80.0-120*		*05/29/2021 13:39*	WG1679608
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/29/2021 13:39*	WG1679608
(S) 1,2-Dichloroethane-d4	*93.3*			*70.0-130*		*05/29/2021 13:39*	WG1679608

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	88.3	J	66.7	200	1	05/30/2021 18:38	WG1680112
Residual Range Organics (RRO)	U		83.3	250	1	05/30/2021 18:38	WG1680112
(S) o-Terphenyl	*92.6*			*52.0-156*		*05/30/2021 18:38*	WG1680112

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2140		31.6	100	1	05/31/2021 17:07	WG1679767
(S) a,a,a-Trifluorotoluene(FID)	*90.4*			*78.0-120*		*05/31/2021 17:07*	WG1679767

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	143		0.0941	1.00	1	05/29/2021 13:59	WG1679608
Toluene	3.76		0.278	1.00	1	05/26/2021 13:33	WG1677780
Ethylbenzene	17.7		0.137	1.00	1	05/26/2021 13:33	WG1677780
Total Xylenes	3.87		0.174	3.00	1	05/26/2021 13:33	WG1677780
Methyl tert-butyl ether	U		0.101	1.00	1	05/26/2021 13:33	WG1677780
(S) Toluene-d8	*102*			*80.0-120*		*05/26/2021 13:33*	WG1677780
(S) Toluene-d8	*99.3*			*80.0-120*		*05/29/2021 13:59*	WG1679608
(S) 4-Bromofluorobenzene	*98.6*			*77.0-126*		*05/26/2021 13:33*	WG1677780
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*05/29/2021 13:59*	WG1679608
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*05/26/2021 13:33*	WG1677780
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*05/29/2021 13:59*	WG1679608

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	73.3	J	66.7	200	1	05/30/2021 19:00	WG1680112
Residual Range Organics (RRO)	U		83.3	250	1	05/30/2021 19:00	WG1680112
(S) o-Terphenyl	*80.5*			*52.0-156*		*05/30/2021 19:00*	WG1680112

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	41.6	J	31.6	100	1	05/31/2021 17:28	WG1679767
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*78.0-120*		*05/31/2021 17:28*	WG1679767

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	0.559	J	0.0941	1.00	1	05/26/2021 13:53	WG1677780
Toluene	U		0.278	1.00	1	05/26/2021 13:53	WG1677780
Ethylbenzene	U		0.137	1.00	1	05/26/2021 13:53	WG1677780
Total Xylenes	0.261	J	0.174	3.00	1	05/26/2021 13:53	WG1677780
Methyl tert-butyl ether	U		0.101	1.00	1	05/26/2021 13:53	WG1677780
(S) Toluene-d8	*101*			*80.0-120*		*05/26/2021 13:53*	WG1677780
(S) 4-Bromofluorobenzene	*99.7*			*77.0-126*		*05/26/2021 13:53*	WG1677780
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*05/26/2021 13:53*	WG1677780

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	05/30/2021 19:23	WG1680112
Residual Range Organics (RRO)	U		83.3	250	1	05/30/2021 19:23	WG1680112
(S) o-Terphenyl	*104*			*52.0-156*		*05/30/2021 19:23*	WG1680112

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/31/2021 17:50	WG1679767
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*78.0-120*		*05/31/2021 17:50*	WG1679767

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	05/26/2021 14:13	WG1677780
Toluene	U		0.278	1.00	1	05/26/2021 14:13	WG1677780
Ethylbenzene	U		0.137	1.00	1	05/26/2021 14:13	WG1677780
Total Xylenes	U		0.174	3.00	1	05/26/2021 14:13	WG1677780
Methyl tert-butyl ether	U		0.101	1.00	1	05/26/2021 14:13	WG1677780
(S) Toluene-d8	*99.2*			*80.0-120*		*05/26/2021 14:13*	WG1677780
(S) 4-Bromofluorobenzene	*95.5*			*77.0-126*		*05/26/2021 14:13*	WG1677780
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*05/26/2021 14:13*	WG1677780

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	05/30/2021 19:45	WG1680112
Residual Range Organics (RRO)	U		83.3	250	1	05/30/2021 19:45	WG1680112
(S) o-Terphenyl	*88.9*			*52.0-156*		*05/30/2021 19:45*	WG1680112

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/31/2021 13:04	WG1679767
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*05/31/2021 13:04*	WG1679767

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	0.710	J	0.0941	1.00	1	05/26/2021 14:33	WG1677780
Toluene	U		0.278	1.00	1	05/26/2021 14:33	WG1677780
Ethylbenzene	U		0.137	1.00	1	05/26/2021 14:33	WG1677780
Total Xylenes	U		0.174	3.00	1	05/26/2021 14:33	WG1677780
Methyl tert-butyl ether	U		0.101	1.00	1	05/26/2021 14:33	WG1677780
(S) Toluene-d8	*100*			*80.0-120*		*05/26/2021 14:33*	WG1677780
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*05/26/2021 14:33*	WG1677780
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*05/26/2021 14:33*	WG1677780

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	05/31/2021 16:43	WG1678692
Residual Range Organics (RRO)	U		83.3	250	1	05/31/2021 16:43	WG1678692
(S) o-Terphenyl	*90.5*			*52.0-156*		*05/31/2021 16:43*	WG1678692

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	72.1	J	31.6	100	1	05/31/2021 14:13	WG1679767
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*78.0-120*		*05/31/2021 14:13*	WG1679767

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	0.722	J	0.0941	1.00	1	05/26/2021 14:54	WG1677780
Toluene	U		0.278	1.00	1	05/26/2021 14:54	WG1677780
Ethylbenzene	U		0.137	1.00	1	05/26/2021 14:54	WG1677780
Total Xylenes	U		0.174	3.00	1	05/26/2021 14:54	WG1677780
Methyl tert-butyl ether	U		0.101	1.00	1	05/26/2021 14:54	WG1677780
(S) Toluene-d8	*100*			*80.0-120*		*05/26/2021 14:54*	WG1677780
(S) 4-Bromofluorobenzene	*98.1*			*77.0-126*		*05/26/2021 14:54*	WG1677780
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*05/26/2021 14:54*	WG1677780

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	05/31/2021 17:09	WG1678692
Residual Range Organics (RRO)	U		83.3	250	1	05/31/2021 17:09	WG1678692
(S) o-Terphenyl	*92.6*			*52.0-156*		*05/31/2021 17:09*	WG1678692

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	293		31.6	100	1	05/31/2021 14:35	WG1679767
(S) a,a,a-Trifluorotoluene(FID)	*99.2*			*78.0-120*		*05/31/2021 14:35*	WG1679767

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	1.06		0.0941	1.00	1	05/26/2021 15:14	WG1677780
Toluene	U		0.278	1.00	1	05/26/2021 15:14	WG1677780
Ethylbenzene	0.484	J	0.137	1.00	1	05/26/2021 15:14	WG1677780
Total Xylenes	U		0.174	3.00	1	05/26/2021 15:14	WG1677780
Methyl tert-butyl ether	U		0.101	1.00	1	05/26/2021 15:14	WG1677780
(S) Toluene-d8	*99.2*			*80.0-120*		*05/26/2021 15:14*	WG1677780
(S) 4-Bromofluorobenzene	*97.2*			*77.0-126*		*05/26/2021 15:14*	WG1677780
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*05/26/2021 15:14*	WG1677780

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	05/31/2021 17:34	WG1678692
Residual Range Organics (RRO)	U		83.3	250	1	05/31/2021 17:34	WG1678692
(S) o-Terphenyl	*73.2*			*52.0-156*		*05/31/2021 17:34*	WG1678692

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/31/2021 14:57	WG1679767
(S) a,a,a-Trifluorotoluene(FID)	*99.4*			*78.0-120*		*05/31/2021 14:57*	WG1679767

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	0.627	J	0.0941	1.00	1	05/26/2021 15:35	WG1677780
Toluene	U		0.278	1.00	1	05/26/2021 15:35	WG1677780
Ethylbenzene	U		0.137	1.00	1	05/26/2021 15:35	WG1677780
Total Xylenes	U		0.174	3.00	1	05/26/2021 15:35	WG1677780
Methyl tert-butyl ether	U		0.101	1.00	1	05/26/2021 15:35	WG1677780
(S) Toluene-d8	*100*			*80.0-120*		*05/26/2021 15:35*	WG1677780
(S) 4-Bromofluorobenzene	*97.5*			*77.0-126*		*05/26/2021 15:35*	WG1677780
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*05/26/2021 15:35*	WG1677780

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	05/31/2021 18:00	WG1678692
Residual Range Organics (RRO)	U		83.3	250	1	05/31/2021 18:00	WG1678692
(S) o-Terphenyl	*95.8*			*52.0-156*		*05/31/2021 18:00*	WG1678692

Method Blank (MB)

(MB) R3661797-2 05/31/21 12:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*99.6*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3661797-1 05/31/21 11:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5020	91.3	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*106*	*78.0-120*	

Method Blank (MB)

(MB) R3660734-3 05/26/21 09:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Ethylbenzene	U		0.137	1.00
Methyl tert-butyl ether	U		0.101	1.00
Toluene	U		0.278	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*97.8*			*80.0-120*
(S) 4-Bromofluorobenzene	*94.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3660734-1 05/26/21 08:33 • (LCSD) R3660734-2 05/26/21 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	5.78	5.51	116	110	70.0-123			4.78	20
Ethylbenzene	5.00	5.00	4.92	100	98.4	79.0-123			1.61	20
Methyl tert-butyl ether	5.00	5.55	5.09	111	102	68.0-125			8.65	20
Toluene	5.00	5.41	5.02	108	100	79.0-120			7.48	20
Xylenes, Total	15.0	15.3	14.6	102	97.3	79.0-123			4.68	20
(S) Toluene-d8				*100*	*98.4*	*80.0-120*				
(S) 4-Bromofluorobenzene				*99.2*	*96.3*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*108*	*105*	*70.0-130*				

Method Blank (MB)

(MB) R3661131-2 05/29/21 09:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Ethylbenzene	U		0.137	1.00
Methyl tert-butyl ether	U		0.101	1.00
Toluene	U		0.278	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*92.3*			*80.0-120*
(S) 4-Bromofluorobenzene	*101*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*89.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3661131-1 05/29/21 08:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	5.03	101	70.0-123	
Ethylbenzene	5.00	5.01	100	79.0-123	
Methyl tert-butyl ether	5.00	5.15	103	68.0-125	
Toluene	5.00	4.92	98.4	79.0-120	
Xylenes, Total	15.0	14.3	95.3	79.0-123	
(S) Toluene-d8			*95.5*	*80.0-120*	
(S) 4-Bromofluorobenzene			*99.7*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*98.8*	*70.0-130*	

Method Blank (MB)

(MB) R3661506-1 05/31/21 08:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*73.0*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3661506-2 05/31/21 09:03 • (LCSD) R3661506-3 05/31/21 09:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1280	1420	85.3	94.7	50.0-150			10.4	20
(S) o-Terphenyl				*91.5*	*94.5*	*52.0-156*				

Method Blank (MB)

(MB) R3661258-1 05/30/21 16:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*95.5*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3661258-2 05/30/21 16:23 • (LCSD) R3661258-3 05/30/21 16:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1960	1890	131	126	50.0-150			3.64	20
(S) o-Terphenyl				*123*	*124*	*52.0-156*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell/Sydney Clark

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected: Pullman, WA

Please Circle: (PT) MT CT ET

Phone: 206-325-5254

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
Tyler Green

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):

Quote #

Immediate Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day X 10 Day (Rad Only)
___ Three Day

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEXM 8260D 40mlAmb-HCl	NWTPHDX w/ silica 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl								Remarks	Sample # (lab only)
MW-15-W-202105	G	GW		5/18/21	0802	8	X	X	X									-01
MW-2-W-202105	G	GW		5/18/21	0942	8	X	X	X									-02
MW-12-W-202105	G	GW		5/18/21	1118	7	X	X	X									-03
MW-19-W-202105	G	GW		5/18/21	1222	8	X	X	X									-04
BD-W-202105	G	GW		5/17/21	—	7	X	X	X									-05
MW-22W-202105	G	GW		5/17/21	1535	8	X	X	X									-06
MW-23-W-202105	G	GW		5/17/21	1438	8	X	X	X									-07
MW-18-W-202105	G	GW		5/17/21	1319	8	X	X	X									-08
Trip Blank	—			—	—	3												-09

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical®

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1357187

F009

Acctnum: CHEVARCWA
Template: T187479
Prelogin: P846866
PM: 110 - Brian Ford
PB:
Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: HCl bottle for MW-12 leaked preservative. Bottle was not collected.
Send report to sydney.clark@arcadis.com

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____
Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	5/18/2021		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: (Yes) No
x 3 (HCL) MeoH TBR

Temp: 11.3 °C 11.3 Bottles Received: 2 pm A2 6 2+3 3 HCl

If preservation required by Login: Date/Time

Hold:

Condition: (NCF) / OK

Date: 5/22/21 Time: 0930

L1357187 CHEVARCWA NCF

R5

Time estimate: oh **Time spent:** oh **Grouping date:** 25 May 2021

Members

Cole Medley (responsible) Brian Ford

- [ ] Parameter(s) past holding time
- [x] Temperature not in range
- [ ] Improper container type
- [ ] pH not in range
- [ ] Insufficient sample volume
- [ ] Sample is biphasic
- [ ] Vials received with headspace
- [ ] Broken container
- [ ] Sufficient sample remains
- [ ] If broken container: Insufficient packing material around container
- [ ] If broken container: Insufficient packing material inside cooler
- [ ] If broken container: Improper handling by carrier:_____
- [ ] If broken container: Sample was frozen
- [ ] If broken container: Container lid not intact
- [ ] Client informed by Call
- [x] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:_____
- [x] PM initials:_____bjf_____
- [ ] Client Contact:_____

Comments

Cole Medley *22 May 2021 2:22 PM*

OOT @ 11.3 deg C; Ice Melted.

Brian Ford *24 May 2021 12:21 PM*

proceed with analysis.

Cole Medley *25 May 2021 8:39 AM*

Done.

ANALYTICAL REPORT

November 29, 2021

Arcadis - Chevron - WA

Sample Delivery Group:	L1431144
Samples Received:	11/13/2021
Project Number:	30064313 19.45
Description:	206196
Site:	815 NE COLLEGE ST PULLMAN WA
Report To:	Melissa Caldwell/Sydney Clark 1100 Olive Way Suite 800 Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

MW-6A-W-20211112 L1431144-01 GW

Collected by: Foster Koetzel | Collected date/time: 11/12/21 07:25 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1774385	1	11/16/21 12:46	11/16/21 12:46	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1777783	1	11/20/21 22:30	11/20/21 22:30	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1779167	1	11/24/21 22:35	11/26/21 13:08	CAG	Mt. Juliet, TN

MW-8-W-20211111 L1431144-02 GW

Collected by: Foster Koetzel | Collected date/time: 11/11/21 13:22 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1774385	1	11/16/21 13:09	11/16/21 13:09	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1776863	1	11/18/21 23:43	11/18/21 23:43	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1778405	10	11/22/21 15:40	11/22/21 15:40	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1780162	1	11/25/21 08:10	11/26/21 06:16	CAG	Mt. Juliet, TN

MW-10A-W-20211111 L1431144-03 GW

Collected by: Foster Koetzel | Collected date/time: 11/11/21 14:02 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1776151	1	11/17/21 19:56	11/17/21 19:56	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1778405	1	11/22/21 15:21	11/22/21 15:21	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1780162	1	11/25/21 08:10	11/26/21 09:46	CAG	Mt. Juliet, TN

MW-12-W-20211112 L1431144-04 GW

Collected by: Foster Koetzel | Collected date/time: 11/12/21 08:43 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1776151	1	11/17/21 20:20	11/17/21 20:20	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1777783	1	11/20/21 22:52	11/20/21 22:52	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1779167	1	11/24/21 22:35	11/26/21 13:34	CAG	Mt. Juliet, TN

MW-17-W-20211111 L1431144-05 GW

Collected by: Foster Koetzel | Collected date/time: 11/11/21 12:32 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1776151	1	11/17/21 20:43	11/17/21 20:43	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1776863	1	11/19/21 00:26	11/19/21 00:26	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1780162	1	11/25/21 08:10	11/26/21 10:08	CAG	Mt. Juliet, TN

MW-18-W-20211111 L1431144-06 GW

Collected by: Foster Koetzel | Collected date/time: 11/11/21 15:52 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1776151	1	11/17/21 21:06	11/17/21 21:06	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1776863	1	11/19/21 00:48	11/19/21 00:48	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1780162	1	11/25/21 08:10	11/26/21 10:30	CAG	Mt. Juliet, TN

MW-19-W-20211112 L1431144-07 GW

Collected by: Foster Koetzel | Collected date/time: 11/12/21 08:02 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1776151	1	11/17/21 21:30	11/17/21 21:30	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1777783	1	11/20/21 23:13	11/20/21 23:13	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1779167	1	11/24/21 22:35	11/26/21 13:57	CAG	Mt. Juliet, TN

MW-20-W-20211112 L1431144-08 GW

Collected by: Foster Koetzel | Collected date/time: 11/12/21 09:17 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1776151	1	11/17/21 21:53	11/17/21 21:53	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1777783	1	11/20/21 23:35	11/20/21 23:35	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1779167	1	11/24/21 22:35	11/26/21 14:23	CAG	Mt. Juliet, TN

MW-22-W-20211111 L1431144-09 GW

Collected by: Foster Koetzel | Collected date/time: 11/11/21 14:39 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1776151	1	11/17/21 22:16	11/17/21 22:16	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1776863	1	11/19/21 01:10	11/19/21 01:10	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1780162	1	11/25/21 08:10	11/26/21 10:52	CAG	Mt. Juliet, TN

MW-23-W-20211111 L1431144-10 GW

Collected by: Foster Koetzel | Collected date/time: 11/11/21 15:15 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1776151	1	11/17/21 22:39	11/17/21 22:39	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1776863	1	11/19/21 01:31	11/19/21 01:31	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1779167	1	11/24/21 22:35	11/26/21 14:49	CAG	Mt. Juliet, TN

BD-W-20211111 L1431144-11 GW

Collected by: Foster Koetzel | Collected date/time: 11/11/21 12:00 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1776151	1	11/17/21 23:02	11/17/21 23:02	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1776863	1	11/19/21 01:53	11/19/21 01:53	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1779167	1	11/24/21 22:35	11/26/21 15:12	CAG	Mt. Juliet, TN

TB-1-20211111 L1431144-12 GW

Collected by: Foster Koetzel | Collected date/time: 11/11/21 08:00 | Received date/time: 11/13/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1776151	1	11/17/21 18:47	11/17/21 18:47	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1776863	1	11/18/21 21:34	11/18/21 21:34	JAH	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	11/16/2021 12:46	WG1774385
(S) a,a,a-Trifluorotoluene(FID)	*109*			*78.0-120*		*11/16/2021 12:46*	WG1774385

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	11/20/2021 22:30	WG1777783
Toluene	U		0.278	1.00	1	11/20/2021 22:30	WG1777783
Ethylbenzene	U		0.137	1.00	1	11/20/2021 22:30	WG1777783
Total Xylenes	U		0.174	3.00	1	11/20/2021 22:30	WG1777783
Methyl tert-butyl ether	U		0.101	1.00	1	11/20/2021 22:30	WG1777783
(S) Toluene-d8	*106*			*80.0-120*		*11/20/2021 22:30*	WG1777783
(S) 4-Bromofluorobenzene	*95.8*			*77.0-126*		*11/20/2021 22:30*	WG1777783
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*11/20/2021 22:30*	WG1777783

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	11/26/2021 13:08	WG1779167
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 13:08	WG1779167
(S) o-Terphenyl	*55.5*			*52.0-156*		*11/26/2021 13:08*	WG1779167

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	6650		31.6	100	1	11/16/2021 13:09	WG1774385
(S) a,a,a-Trifluorotoluene(FID)	*90.8*			*78.0-120*		*11/16/2021 13:09*	WG1774385

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	314		0.941	10.0	10	11/22/2021 15:40	WG1778405
Toluene	15.7		0.278	1.00	1	11/18/2021 23:43	WG1776863
Ethylbenzene	44.4		0.137	1.00	1	11/18/2021 23:43	WG1776863
Total Xylenes	30.8		0.174	3.00	1	11/18/2021 23:43	WG1776863
Methyl tert-butyl ether	U		0.101	1.00	1	11/18/2021 23:43	WG1776863
(S) Toluene-d8	*121*	J1		*80.0-120*		*11/18/2021 23:43*	WG1776863
(S) Toluene-d8	*111*			*80.0-120*		*11/22/2021 15:40*	WG1778405
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*11/18/2021 23:43*	WG1776863
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*11/22/2021 15:40*	WG1778405
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*		*11/18/2021 23:43*	WG1776863
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/22/2021 15:40*	WG1778405

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	447	J3	66.7	200	1	11/26/2021 06:16	WG1780162
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 06:16	WG1780162
(S) o-Terphenyl	*95.3*			*52.0-156*		*11/26/2021 06:16*	WG1780162

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	54.3	B J	31.6	100	1	11/17/2021 19:56	WG1776151
(S) a,a,a-Trifluorotoluene(FID)	*109*			*78.0-120*		*11/17/2021 19:56*	WG1776151

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	11/22/2021 15:21	WG1778405
Toluene	U		0.278	1.00	1	11/22/2021 15:21	WG1778405
Ethylbenzene	U		0.137	1.00	1	11/22/2021 15:21	WG1778405
Total Xylenes	U		0.174	3.00	1	11/22/2021 15:21	WG1778405
Methyl tert-butyl ether	U		0.101	1.00	1	11/22/2021 15:21	WG1778405
(S) Toluene-d8	*112*			*80.0-120*		*11/22/2021 15:21*	WG1778405
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*11/22/2021 15:21*	WG1778405
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/22/2021 15:21*	WG1778405

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U	J3	66.7	200	1	11/26/2021 09:46	WG1780162
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 09:46	WG1780162
(S) o-Terphenyl	*90.0*			*52.0-156*		*11/26/2021 09:46*	WG1780162

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	51.2	B J	31.6	100	1	11/17/2021 20:20	WG1776151
(S) a,a,a-Trifluorotoluene(FID)	*109*			*78.0-120*		*11/17/2021 20:20*	WG1776151

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	11/20/2021 22:52	WG1777783
Toluene	U		0.278	1.00	1	11/20/2021 22:52	WG1777783
Ethylbenzene	U		0.137	1.00	1	11/20/2021 22:52	WG1777783
Total Xylenes	U		0.174	3.00	1	11/20/2021 22:52	WG1777783
Methyl tert-butyl ether	U		0.101	1.00	1	11/20/2021 22:52	WG1777783
(S) Toluene-d8	*110*			*80.0-120*		*11/20/2021 22:52*	WG1777783
(S) 4-Bromofluorobenzene	*98.7*			*77.0-126*		*11/20/2021 22:52*	WG1777783
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/20/2021 22:52*	WG1777783

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	11/26/2021 13:34	WG1779167
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 13:34	WG1779167
(S) o-Terphenyl	*55.0*			*52.0-156*		*11/26/2021 13:34*	WG1779167

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	5170		31.6	100	1	11/17/2021 20:43	WG1776151
(S) a,a,a-Trifluorotoluene(FID)	*102*			*78.0-120*		*11/17/2021 20:43*	WG1776151

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	118		0.0941	1.00	1	11/19/2021 00:26	WG1776863
Toluene	9.99		0.278	1.00	1	11/19/2021 00:26	WG1776863
Ethylbenzene	34.6		0.137	1.00	1	11/19/2021 00:26	WG1776863
Total Xylenes	29.9		0.174	3.00	1	11/19/2021 00:26	WG1776863
Methyl tert-butyl ether	U		0.101	1.00	1	11/19/2021 00:26	WG1776863
(S) Toluene-d8	*110*			*80.0-120*		*11/19/2021 00:26*	WG1776863
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*11/19/2021 00:26*	WG1776863
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/19/2021 00:26*	WG1776863

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	399	J3	66.7	200	1	11/26/2021 10:08	WG1780162
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 10:08	WG1780162
(S) o-Terphenyl	*91.6*			*52.0-156*		*11/26/2021 10:08*	WG1780162

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	74.2	B J	31.6	100	1	11/17/2021 21:06	WG1776151
(S) a,a,a-Trifluorotoluene(FID)	*108*			*78.0-120*		*11/17/2021 21:06*	WG1776151

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	0.448	J	0.0941	1.00	1	11/19/2021 00:48	WG1776863
Toluene	U		0.278	1.00	1	11/19/2021 00:48	WG1776863
Ethylbenzene	U		0.137	1.00	1	11/19/2021 00:48	WG1776863
Total Xylenes	U		0.174	3.00	1	11/19/2021 00:48	WG1776863
Methyl tert-butyl ether	U		0.101	1.00	1	11/19/2021 00:48	WG1776863
(S) Toluene-d8	*107*			*80.0-120*		*11/19/2021 00:48*	WG1776863
(S) 4-Bromofluorobenzene	*96.5*			*77.0-126*		*11/19/2021 00:48*	WG1776863
(S) 1,2-Dichloroethane-d4	*99.6*			*70.0-130*		*11/19/2021 00:48*	WG1776863

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U	J3	66.7	200	1	11/26/2021 10:30	WG1780162
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 10:30	WG1780162
(S) o-Terphenyl	*86.8*			*52.0-156*		*11/26/2021 10:30*	WG1780162

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	51.5	B J	31.6	100	1	11/17/2021 21:30	WG1776151
(S) a,a,a-Trifluorotoluene(FID)	*109*			*78.0-120*		*11/17/2021 21:30*	WG1776151

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	11/20/2021 23:13	WG1777783
Toluene	U		0.278	1.00	1	11/20/2021 23:13	WG1777783
Ethylbenzene	U		0.137	1.00	1	11/20/2021 23:13	WG1777783
Total Xylenes	U		0.174	3.00	1	11/20/2021 23:13	WG1777783
Methyl tert-butyl ether	U		0.101	1.00	1	11/20/2021 23:13	WG1777783
(S) Toluene-d8	*109*			*80.0-120*		*11/20/2021 23:13*	WG1777783
(S) 4-Bromofluorobenzene	*97.8*			*77.0-126*		*11/20/2021 23:13*	WG1777783
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*11/20/2021 23:13*	WG1777783

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	11/26/2021 13:57	WG1779167
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 13:57	WG1779167
(S) o-Terphenyl	*55.0*			*52.0-156*		*11/26/2021 13:57*	WG1779167

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	51.2	B J	31.6	100	1	11/17/2021 21:53	WG1776151
(S) a,a,a-Trifluorotoluene(FID)	*109*			*78.0-120*		*11/17/2021 21:53*	WG1776151

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	11/20/2021 23:35	WG1777783
Toluene	U		0.278	1.00	1	11/20/2021 23:35	WG1777783
Ethylbenzene	U		0.137	1.00	1	11/20/2021 23:35	WG1777783
Total Xylenes	U		0.174	3.00	1	11/20/2021 23:35	WG1777783
Methyl tert-butyl ether	U		0.101	1.00	1	11/20/2021 23:35	WG1777783
(S) Toluene-d8	*105*			*80.0-120*		*11/20/2021 23:35*	WG1777783
(S) 4-Bromofluorobenzene	*93.2*			*77.0-126*		*11/20/2021 23:35*	WG1777783
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*		*11/20/2021 23:35*	WG1777783

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	11/26/2021 14:23	WG1779167
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 14:23	WG1779167
(S) o-Terphenyl	*53.5*			*52.0-156*		*11/26/2021 14:23*	WG1779167

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	56.2	B J	31.6	100	1	11/17/2021 22:16	WG1776151
(S) a,a,a-Trifluorotoluene(FID)	*108*			*78.0-120*		*11/17/2021 22:16*	WG1776151

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	0.319	J	0.0941	1.00	1	11/19/2021 01:10	WG1776863
Toluene	U		0.278	1.00	1	11/19/2021 01:10	WG1776863
Ethylbenzene	U		0.137	1.00	1	11/19/2021 01:10	WG1776863
Total Xylenes	U		0.174	3.00	1	11/19/2021 01:10	WG1776863
Methyl tert-butyl ether	U		0.101	1.00	1	11/19/2021 01:10	WG1776863
(S) Toluene-d8	*106*			*80.0-120*		*11/19/2021 01:10*	WG1776863
(S) 4-Bromofluorobenzene	*96.4*			*77.0-126*		*11/19/2021 01:10*	WG1776863
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/19/2021 01:10*	WG1776863

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U	J3	66.7	200	1	11/26/2021 10:52	WG1780162
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 10:52	WG1780162
(S) o-Terphenyl	*84.7*			*52.0-156*		*11/26/2021 10:52*	WG1780162

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	410	B	31.6	100	1	11/17/2021 22:39	WG1776151
(S) a,a,a-Trifluorotoluene(FID)	*103*			*78.0-120*		*11/17/2021 22:39*	WG1776151

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	75.7		0.0941	1.00	1	11/19/2021 01:31	WG1776863
Toluene	U		0.278	1.00	1	11/19/2021 01:31	WG1776863
Ethylbenzene	0.270	J	0.137	1.00	1	11/19/2021 01:31	WG1776863
Total Xylenes	0.252	J	0.174	3.00	1	11/19/2021 01:31	WG1776863
Methyl tert-butyl ether	U		0.101	1.00	1	11/19/2021 01:31	WG1776863
(S) Toluene-d8	*106*			*80.0-120*		*11/19/2021 01:31*	WG1776863
(S) 4-Bromofluorobenzene	*97.1*			*77.0-126*		*11/19/2021 01:31*	WG1776863
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/19/2021 01:31*	WG1776863

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	11/26/2021 14:49	WG1779167
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 14:49	WG1779167
(S) o-Terphenyl	*57.0*			*52.0-156*		*11/26/2021 14:49*	WG1779167

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	5110		31.6	100	1	11/17/2021 23:02	WG1776151
(S) a,a,a-Trifluorotoluene(FID)	*99.0*			*78.0-120*		*11/17/2021 23:02*	WG1776151

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	120		0.0941	1.00	1	11/19/2021 01:53	WG1776863
Toluene	10.6		0.278	1.00	1	11/19/2021 01:53	WG1776863
Ethylbenzene	36.0		0.137	1.00	1	11/19/2021 01:53	WG1776863
Total Xylenes	31.3		0.174	3.00	1	11/19/2021 01:53	WG1776863
Methyl tert-butyl ether	U		0.101	1.00	1	11/19/2021 01:53	WG1776863
(S) Toluene-d8	*115*			*80.0-120*		*11/19/2021 01:53*	WG1776863
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*11/19/2021 01:53*	WG1776863
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/19/2021 01:53*	WG1776863

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	290		66.7	200	1	11/26/2021 15:12	WG1779167
Residual Range Organics (RRO)	U		83.3	250	1	11/26/2021 15:12	WG1779167
(S) o-Terphenyl	*63.5*			*52.0-156*		*11/26/2021 15:12*	WG1779167

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	67.8	B J	31.6	100	1	11/17/2021 18:47	WG1776151
(S) a,a,a-Trifluorotoluene(FID)	*109*			*78.0-120*		*11/17/2021 18:47*	WG1776151

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	11/18/2021 21:34	WG1776863
Toluene	U		0.278	1.00	1	11/18/2021 21:34	WG1776863
Ethylbenzene	U		0.137	1.00	1	11/18/2021 21:34	WG1776863
Total Xylenes	U		0.174	3.00	1	11/18/2021 21:34	WG1776863
Methyl tert-butyl ether	U		0.101	1.00	1	11/18/2021 21:34	WG1776863
(S) Toluene-d8	*109*			*80.0-120*		*11/18/2021 21:34*	WG1776863
(S) 4-Bromofluorobenzene	*97.8*			*77.0-126*		*11/18/2021 21:34*	WG1776863
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/18/2021 21:34*	WG1776863

Method Blank (MB)

(MB) R3731084-2 11/16/21 04:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*109*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3731084-1 11/16/21 03:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5310	96.5	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*100*	*78.0-120*	

L1430709-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1430709-02 11/16/21 09:17 • (MS) R3731084-3 11/16/21 13:56 • (MSD) R3731084-4 11/16/21 14:19

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	763	3010	3500	40.9	49.8	1	10.0-155			15.1	21
(S) a,a,a-Trifluorotoluene(FID)					*85.4*	*84.1*		*78.0-120*				

Method Blank (MB)

(MB) R3730937-2 11/17/21 17:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	87.9	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*109*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3730937-1 11/17/21 16:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4740	86.2	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*98.8*	*78.0-120*	

Method Blank (MB)

(MB) R3732238-2 11/18/21 21:12

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Ethylbenzene	U		0.137	1.00
Methyl tert-butyl ether	U		0.101	1.00
Toluene	U		0.278	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*105*			*80.0-120*
(S) 4-Bromofluorobenzene	*95.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3732238-1 11/18/21 20:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	5.02	100	70.0-123	
Ethylbenzene	5.00	5.42	108	79.0-123	
Methyl tert-butyl ether	5.00	4.63	92.6	68.0-125	
Toluene	5.00	5.12	102	79.0-120	
Xylenes, Total	15.0	15.1	101	79.0-123	
(S) Toluene-d8			*102*	*80.0-120*	
(S) 4-Bromofluorobenzene			*94.4*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*102*	*70.0-130*	

Method Blank (MB)

(MB) R3733470-3 11/20/21 21:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Ethylbenzene	U		0.137	1.00
Methyl tert-butyl ether	U		0.101	1.00
Toluene	U		0.278	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*110*			*80.0-120*
(S) 4-Bromofluorobenzene	*93.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*96.0*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3733470-1 11/20/21 20:43 • (LCSD) R3733470-2 11/20/21 21:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	4.41	4.46	88.2	89.2	70.0-123			1.13	20
Ethylbenzene	5.00	4.92	4.63	98.4	92.6	79.0-123			6.07	20
Methyl tert-butyl ether	5.00	4.56	4.58	91.2	91.6	68.0-125			0.438	20
Toluene	5.00	4.55	4.54	91.0	90.8	79.0-120			0.220	20
Xylenes, Total	15.0	13.3	12.9	88.7	86.0	79.0-123			3.05	20
(S) Toluene-d8				*107*	*106*	*80.0-120*				
(S) 4-Bromofluorobenzene				*99.6*	*94.7*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*101*	*97.2*	*70.0-130*				

Method Blank (MB)

(MB) R3733102-2 11/22/21 12:57

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Ethylbenzene	U		0.137	1.00
Methyl tert-butyl ether	U		0.101	1.00
Toluene	U		0.278	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*111*			*80.0-120*
(S) 4-Bromofluorobenzene	*109*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3733102-1 11/22/21 11:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	4.37	87.4	70.0-123	
Ethylbenzene	5.00	4.41	88.2	79.0-123	
Methyl tert-butyl ether	5.00	4.42	88.4	68.0-125	
Toluene	5.00	4.18	83.6	79.0-120	
Xylenes, Total	15.0	13.4	89.3	79.0-123	
(S) Toluene-d8			*113*	*80.0-120*	
(S) 4-Bromofluorobenzene			*111*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*106*	*70.0-130*	

Method Blank (MB)

(MB) R3734185-1 11/26/21 05:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*60.0*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3734185-2 11/26/21 06:15 • (LCSD) R3734185-3 11/26/21 06:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1130	1170	75.3	78.0	50.0-150			3.48	20
(S) o-Terphenyl				*74.5*	*77.0*	*52.0-156*				

Method Blank (MB)

(MB) R3734105-1 11/25/21 23:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*78.0*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3734105-2 11/25/21 23:54 • (LCSD) R3734105-3 11/26/21 00:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1200	1490	80.0	99.3	50.0-150		J3	21.6	20
(S) o-Terphenyl				*93.0*	*97.0*	*52.0-156*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Page 1 of 2

Chain of Custody

Pace Analytical®

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Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1431144

Table # C066

Acctnum: CHEVARCWA
Template: T198704
Prelogin: P885305
PM: 110 - Brian Ford
PB:
Shipped Via:

Company Name/Address:
Arcadis - Chevron - WA
1100 Olive Way
Suite 800
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to: Melissa Caldwell/Sydney Clark

Email To: Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description: 206196

City/State Collected: Pullman WA

Please Circle: PT MT CT ET

Phone: 206-325-5254

Client Project # 30064313 19.45

Lab Project # CHEVARCWA-206196

Collected by (print): Foster Koetzel

Site/Facility ID # 815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEXM 8260D 40mlAmb-HCl	NWTPHDX w/ silica 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	MTBE	Remarks	Sample # (lab only)
MW-6A-W-20211112	6	GW		11/12/21	0725	8	X	X	X	X		-01
MW-8-W-20211111		GW		11/11/21	1322	8	X	X	X	X		-02
MW-10A-W-20211111		GW		11/11/21	1402	8	X	X	X	X		-03
MW-12-W-20211112		GW		11/12/21	0843	8	X	X	X	X		-04
MW-17-W-20211111		GW		11/11/21	1232	8	X	X	X	X		-05
MW-18-W-20211111		GW		11/11/21	1552	8	X	X	X	X		-06
MW-19-W-20211112		GW		11/12/21	0802	8	X	X	X	X		-07
MW-20-W-20211112		GW		11/12/21	0917	8	X	X	X	X		-08
MW-22-W-20211111		GW		11/11/21	1439	8	X	X	X	X		-09
MW-23-W-20211111		GW		11/11/21	1515	8	X	X	X	X		-10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __UPS X FedEx __Courier _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		X N
Bottles arrive intact:		X N
Correct bottles used:		X N
Sufficient volume sent:		X N
If Applicable		
VOA Zero Headspace:		X N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	11/12/21	1600	Shipped via Fed Ex
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Olivia Zacc

Trip Blank Received: Yes / No HCl / MeoH TBR

Temp: 4.0 °C 4.2 4.2 Bottles Received: 8

Date: 11/18/21 Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Company Name/Address:
Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell/Sydney Clark

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected: **pullman WA**

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
Foster Koetzel

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEXM 8260D 40mlAmb-HCl	NWTPHDX w/ silica 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	MTBE
BD-W-20211111	G	GW		11/11/21	1200	8	X	X	X	X
TB-1-20211111	↓	GW		11/11/21	0800	2	X		X	X
		GW								
		GW								
		GW								
		GW								
		GW								
		GW								
		GW								
		GW								

Chain of Custody Page 2 of 2

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Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1431144

Table #

Acctnum: **CHEVARCWA**

Template: **T198704**

Prelogin: **P885305**

PM: **110 - Brian Ford**

PB:

Shipped Via:

Remarks | Sample # (lab only)

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS X FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	__NP X N
COC Signed/Accurate:	X N
Bottles arrive intact:	X N
Correct bottles used:	X N
Sufficient volume sent:	X N
If Applicable	
VOA Zero Headspace:	X N
Preservation Correct/Checked:	X N
RAD Screen <0.5 mR/hr:	X N

Relinquished by : (Signature)	Date: 11/12/21	Time: 1600	Received by: (Signature) Shipped Via FedEx	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.2 °C 4.2 Bottles Received: 8
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/13/21 Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

July 01, 2022

Arcadis - Chevron - WA

Sample Delivery Group:	L1506532
Samples Received:	06/18/2022
Project Number:	30064313 19.45
Description:	206196
Site:	815 NE COLLEGE ST PULLMAN WA
Report To:	Melissa Caldwell/Sydney Clark 1100 Olive Way Suite 800 Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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MW-6A-W-20220616 L1506532-01 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 10:46 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/27/22 04:28	06/27/22 04:28	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/26/22 01:15	06/26/22 01:15	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1885766	1	06/27/22 05:12	06/28/22 16:09	DMG	Mt. Juliet, TN

MW-10A-W-20220616 L1506532-02 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 12:56 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/27/22 04:50	06/27/22 04:50	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/26/22 01:35	06/26/22 01:35	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1885766	1	06/27/22 05:12	06/28/22 16:29	DMG	Mt. Juliet, TN

MW-12-W-20220616 L1506532-03 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 14:05 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/27/22 05:12	06/27/22 05:12	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/26/22 01:53	06/26/22 01:53	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1885766	1	06/27/22 05:12	06/28/22 16:49	DMG	Mt. Juliet, TN

MW-17-W-20220616 L1506532-04 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 13:29 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/27/22 05:34	06/27/22 05:34	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/26/22 02:12	06/26/22 02:12	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1885766	1	06/27/22 05:12	06/28/22 17:09	DMG	Mt. Juliet, TN

MW-18-W-20220616 L1506532-05 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 09:24 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/27/22 05:56	06/27/22 05:56	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/26/22 02:31	06/26/22 02:31	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1885766	1	06/27/22 05:12	06/28/22 17:30	DMG	Mt. Juliet, TN

MW-19-W-20220616 L1506532-06 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 09:56 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/27/22 06:18	06/27/22 06:18	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/26/22 02:50	06/26/22 02:50	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1885766	1	06/27/22 05:12	06/28/22 17:50	DMG	Mt. Juliet, TN

MW-20-W-20220616 L1506532-07 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 14:30 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/27/22 06:40	06/27/22 06:40	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/26/22 03:09	06/26/22 03:09	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1885766	1	06/27/22 05:12	06/28/22 18:10	DMG	Mt. Juliet, TN

MW-22-W-20220616 L1506532-08 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 12:02 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/27/22 07:02	06/27/22 07:02	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/26/22 03:28	06/26/22 03:28	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1885766	1	06/27/22 05:12	06/28/22 18:30	DMG	Mt. Juliet, TN

MW-23-W-20220616 L1506532-09 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 11:26 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/27/22 07:24	06/27/22 07:24	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/26/22 03:47	06/26/22 03:47	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1885766	1	06/27/22 05:12	06/28/22 14:48	DMG	Mt. Juliet, TN

BD-W-20220616 L1506532-10 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 12:00 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/27/22 07:46	06/27/22 07:46	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/26/22 04:06	06/26/22 04:06	JCP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1885766	1	06/27/22 05:12	06/28/22 15:08	DMG	Mt. Juliet, TN

TB-W-20220616 L1506532-11 GW

Collected by: Andrew Waser | Collected date/time: 06/16/22 09:00 | Received date/time: 06/18/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1885482	1	06/26/22 23:51	06/26/22 23:51	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1885356	1	06/25/22 22:25	06/25/22 22:25	JCP	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	152		31.6	100	1	06/27/2022 04:28	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*85.4*			*78.0-120*		*06/27/2022 04:28*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/26/2022 01:15	WG1885356
Toluene	U		0.278	1.00	1	06/26/2022 01:15	WG1885356
Ethylbenzene	U		0.137	1.00	1	06/26/2022 01:15	WG1885356
Total Xylenes	U		0.174	3.00	1	06/26/2022 01:15	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/26/2022 01:15	WG1885356
(S) Toluene-d8	*102*			*80.0-120*		*06/26/2022 01:15*	WG1885356
(S) 4-Bromofluorobenzene	*94.8*			*77.0-126*		*06/26/2022 01:15*	WG1885356
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*06/26/2022 01:15*	WG1885356

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/28/2022 16:09	WG1885766
Residual Range Organics (RRO)	U		83.3	250	1	06/28/2022 16:09	WG1885766
(S) o-Terphenyl	*67.9*			*52.0-156*		*06/28/2022 16:09*	WG1885766

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/27/2022 04:50	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*95.1*			*78.0-120*		*06/27/2022 04:50*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/26/2022 01:35	WG1885356
Toluene	U		0.278	1.00	1	06/26/2022 01:35	WG1885356
Ethylbenzene	U		0.137	1.00	1	06/26/2022 01:35	WG1885356
Total Xylenes	U		0.174	3.00	1	06/26/2022 01:35	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/26/2022 01:35	WG1885356
(S) Toluene-d8	*109*			*80.0-120*		*06/26/2022 01:35*	WG1885356
(S) 4-Bromofluorobenzene	*96.1*			*77.0-126*		*06/26/2022 01:35*	WG1885356
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*06/26/2022 01:35*	WG1885356

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/28/2022 16:29	WG1885766
Residual Range Organics (RRO)	U		83.3	250	1	06/28/2022 16:29	WG1885766
(S) o-Terphenyl	*75.8*			*52.0-156*		*06/28/2022 16:29*	WG1885766

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/27/2022 05:12	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*97.9*			*78.0-120*		*06/27/2022 05:12*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/26/2022 01:53	WG1885356
Toluene	U		0.278	1.00	1	06/26/2022 01:53	WG1885356
Ethylbenzene	U		0.137	1.00	1	06/26/2022 01:53	WG1885356
Total Xylenes	U		0.174	3.00	1	06/26/2022 01:53	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/26/2022 01:53	WG1885356
(S) Toluene-d8	*111*			*80.0-120*		*06/26/2022 01:53*	WG1885356
(S) 4-Bromofluorobenzene	*99.1*			*77.0-126*		*06/26/2022 01:53*	WG1885356
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*06/26/2022 01:53*	WG1885356

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/28/2022 16:49	WG1885766
Residual Range Organics (RRO)	U		83.3	250	1	06/28/2022 16:49	WG1885766
(S) o-Terphenyl	*72.6*			*52.0-156*		*06/28/2022 16:49*	WG1885766

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2670		31.6	100	1	06/27/2022 05:34	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*06/27/2022 05:34*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	16.2		0.0941	1.00	1	06/26/2022 02:12	WG1885356
Toluene	4.03		0.278	1.00	1	06/26/2022 02:12	WG1885356
Ethylbenzene	24.2		0.137	1.00	1	06/26/2022 02:12	WG1885356
Total Xylenes	15.7		0.174	3.00	1	06/26/2022 02:12	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/26/2022 02:12	WG1885356
(S) Toluene-d8	*124*	J1		*80.0-120*		*06/26/2022 02:12*	WG1885356
(S) 4-Bromofluorobenzene	*113*			*77.0-126*		*06/26/2022 02:12*	WG1885356
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*06/26/2022 02:12*	WG1885356

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	178	J	66.7	200	1	06/28/2022 17:09	WG1885766
Residual Range Organics (RRO)	U		83.3	250	1	06/28/2022 17:09	WG1885766
(S) o-Terphenyl	*71.1*			*52.0-156*		*06/28/2022 17:09*	WG1885766

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/27/2022 05:56	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*95.5*			*78.0-120*		*06/27/2022 05:56*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/26/2022 02:31	WG1885356
Toluene	U		0.278	1.00	1	06/26/2022 02:31	WG1885356
Ethylbenzene	U		0.137	1.00	1	06/26/2022 02:31	WG1885356
Total Xylenes	U		0.174	3.00	1	06/26/2022 02:31	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/26/2022 02:31	WG1885356
(S) Toluene-d8	*109*			*80.0-120*		*06/26/2022 02:31*	WG1885356
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*06/26/2022 02:31*	WG1885356
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*06/26/2022 02:31*	WG1885356

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/28/2022 17:30	WG1885766
Residual Range Organics (RRO)	U		83.3	250	1	06/28/2022 17:30	WG1885766
(S) o-Terphenyl	*76.3*			*52.0-156*		*06/28/2022 17:30*	WG1885766

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/27/2022 06:18	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*		*06/27/2022 06:18*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/26/2022 02:50	WG1885356
Toluene	U		0.278	1.00	1	06/26/2022 02:50	WG1885356
Ethylbenzene	U		0.137	1.00	1	06/26/2022 02:50	WG1885356
Total Xylenes	U		0.174	3.00	1	06/26/2022 02:50	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/26/2022 02:50	WG1885356
(S) Toluene-d8	*111*			*80.0-120*		*06/26/2022 02:50*	WG1885356
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*06/26/2022 02:50*	WG1885356
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*06/26/2022 02:50*	WG1885356

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/28/2022 17:50	WG1885766
Residual Range Organics (RRO)	U		83.3	250	1	06/28/2022 17:50	WG1885766
(S) o-Terphenyl	*76.8*			*52.0-156*		*06/28/2022 17:50*	WG1885766

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/27/2022 06:40	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*78.0-120*		*06/27/2022 06:40*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/26/2022 03:09	WG1885356
Toluene	U		0.278	1.00	1	06/26/2022 03:09	WG1885356
Ethylbenzene	U		0.137	1.00	1	06/26/2022 03:09	WG1885356
Total Xylenes	U		0.174	3.00	1	06/26/2022 03:09	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/26/2022 03:09	WG1885356
(S) Toluene-d8	*110*			*80.0-120*		*06/26/2022 03:09*	WG1885356
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*06/26/2022 03:09*	WG1885356
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*06/26/2022 03:09*	WG1885356

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/28/2022 18:10	WG1885766
Residual Range Organics (RRO)	U		83.3	250	1	06/28/2022 18:10	WG1885766
(S) o-Terphenyl	*76.8*			*52.0-156*		*06/28/2022 18:10*	WG1885766

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/27/2022 07:02	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*95.4*			*78.0-120*		*06/27/2022 07:02*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/26/2022 03:28	WG1885356
Toluene	U		0.278	1.00	1	06/26/2022 03:28	WG1885356
Ethylbenzene	U		0.137	1.00	1	06/26/2022 03:28	WG1885356
Total Xylenes	U		0.174	3.00	1	06/26/2022 03:28	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/26/2022 03:28	WG1885356
(S) Toluene-d8	*111*			*80.0-120*		*06/26/2022 03:28*	WG1885356
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*06/26/2022 03:28*	WG1885356
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*06/26/2022 03:28*	WG1885356

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/28/2022 18:30	WG1885766
Residual Range Organics (RRO)	U		83.3	250	1	06/28/2022 18:30	WG1885766
(S) o-Terphenyl	*78.9*			*52.0-156*		*06/28/2022 18:30*	WG1885766

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/27/2022 07:24	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*78.0-120*		*06/27/2022 07:24*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	06/26/2022 03:47	WG1885356
Toluene	U		0.278	1.00	1	06/26/2022 03:47	WG1885356
Ethylbenzene	U		0.137	1.00	1	06/26/2022 03:47	WG1885356
Total Xylenes	U		0.174	3.00	1	06/26/2022 03:47	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/26/2022 03:47	WG1885356
(S) Toluene-d8	*109*			*80.0-120*		*06/26/2022 03:47*	WG1885356
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*06/26/2022 03:47*	WG1885356
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*06/26/2022 03:47*	WG1885356

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	06/28/2022 14:48	WG1885766
Residual Range Organics (RRO)	U		83.3	250	1	06/28/2022 14:48	WG1885766
(S) o-Terphenyl	*75.3*			*52.0-156*		*06/28/2022 14:48*	WG1885766

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/27/2022 07:46	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*78.0-120*		*06/27/2022 07:46*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/26/2022 04:06	WG1885356
Toluene	U		0.278	1.00	1	06/26/2022 04:06	WG1885356
Ethylbenzene	U		0.137	1.00	1	06/26/2022 04:06	WG1885356
Total Xylenes	U		0.174	3.00	1	06/26/2022 04:06	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/26/2022 04:06	WG1885356
(S) Toluene-d8	*109*			*80.0-120*		*06/26/2022 04:06*	WG1885356
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*06/26/2022 04:06*	WG1885356
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*06/26/2022 04:06*	WG1885356

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/28/2022 15:08	WG1885766
Residual Range Organics (RRO)	U		83.3	250	1	06/28/2022 15:08	WG1885766
(S) o-Terphenyl	*79.5*			*52.0-156*		*06/28/2022 15:08*	WG1885766

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/26/2022 23:51	WG1885482
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*78.0-120*		*06/26/2022 23:51*	WG1885482

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/25/2022 22:25	WG1885356
Toluene	U		0.278	1.00	1	06/25/2022 22:25	WG1885356
Ethylbenzene	U		0.137	1.00	1	06/25/2022 22:25	WG1885356
Total Xylenes	U		0.174	3.00	1	06/25/2022 22:25	WG1885356
Methyl tert-butyl ether	U		0.101	1.00	1	06/25/2022 22:25	WG1885356
(S) Toluene-d8	*108*			*80.0-120*		*06/25/2022 22:25*	WG1885356
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*06/25/2022 22:25*	WG1885356
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*06/25/2022 22:25*	WG1885356

Method Blank (MB)

(MB) R3809695-2 06/26/22 21:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*96.3*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3809695-1 06/26/22 21:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5050	91.8	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*98.8*	*78.0-120*	

Method Blank (MB)

(MB) R3807853-3 06/25/22 21:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Xylenes, Total	U		0.174	3.00
Methyl tert-butyl ether	U		0.101	1.00
(S) Toluene-d8	*112*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3807853-1 06/25/22 20:50 • (LCSD) R3807853-2 06/25/22 21:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	4.10	3.89	82.0	77.8	70.0-123			5.26	20
Toluene	5.00	4.99	4.82	99.8	96.4	79.0-120			3.47	20
Ethylbenzene	5.00	5.10	4.81	102	96.2	79.0-123			5.85	20
Xylenes, Total	15.0	15.2	14.3	101	95.3	79.0-123			6.10	20
Methyl tert-butyl ether	5.00	4.49	4.38	89.8	87.6	68.0-125			2.48	20
(S) Toluene-d8				*110*	*108*	*80.0-120*				
(S) 4-Bromofluorobenzene				*102*	*102*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*105*	*107*	*70.0-130*				

Method Blank (MB)

(MB) R3808375-1 06/28/22 09:57

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*78.0*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3808375-2 06/28/22 10:18 • (LCSD) R3808375-3 06/28/22 10:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1220	1270	81.3	84.7	50.0-150			4.02	20
(S) o-Terphenyl				*77.5*	*82.5*	*52.0-156*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to: **Melissa Caldwell/Sydney Clark**

Email To: **Melissa.Caldwell@arcadis.com;Tyler.Green@arc**

Project Description: **206196**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project # **30064313 19.45**

Lab Project # **CHEVARCWA-206196**

Collected by (print): Andrew Lusser

Site/Facility ID # **815 NE COLLEGE ST PULLMAN**

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace Analytical®

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SDG # L1506532
F192

Acctnum: **CHEVARCWA**
Template: **T198704**
Prelogin: **P885305**
PM: **110 - Brian Ford**
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEXM 8260D 40mlAmb-HCl	NWTPHDX w/ silica 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	Remarks	Sample # (lab only)
MW-6A-W-20220616	Grab	GW		6/16/22	1046	8	X	X	X		-01
MW-10A-W-20220616	Grab	GW		6/16/22	1256	8	X	X	X		-02
MW-12-W-20220616	Grab	GW		6/16/22	1405	8	X	X	X		-03
MW-19-W-20220616	Grab	GW		6/16/22	1328	8	✓	X	X		-04
MW-18-W-20220616	Grab	GW		6/16/22	0924	8	X	X	X		-05
MW-19-W-20220616	Grab	GW		6/16/22	0956	8	✓	✓	X		-06
MW-20-W-20220616	Grab	GW		6/16/22	1430	8	X	X	X		-07
MW-22-W-20220616	Grab	GW		6/16/22	1202	8	X	X	X		-08
MW-23-W-20220616	Grab	GW		6/16/22	1126	8	X	X	X		-09
TB-W-20220616	Grab	GW		6/16/22	1200	8	X	X	X		-10

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 5179 6190 0501

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: (Yes) / No HCl / MeoH TBR	
	6/16 6/17/22		Shipped via Fedex	3	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: RRAQC 3.40=3.4	Bottles Received: 80
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/18/22	Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Company Name/Address:
Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell/Sydney Clark

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected:

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
Andrew Luser

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEXM 8260D 40mlAmb-HCl	NWTPHDX w/ silica 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl								Remarks	Sample # (lab only)
TB-V-20220616	Grab	GW	—	6/16/22	0800	3	X		X									-11
		GW																
		GW																
		GW																
		GW																
		GW																

Chain of Custody Page 2 of 2

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SDG # L1506532

Table #

Acctnum: **CHEVARCWA**
Template:**T198704**
Prelogin: **P885305**
PM: **110 - Brian Ford**
PB:

Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	6/17/22		Shipper Via FedEx		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: RR 4.6°C Bottles Received: 3.4+0=3.4	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/18/22 Time: 900	Hold: / Condition: NCF / OK

ANALYTICAL REPORT

December 21, 2022

Arcadis - Chevron - WA

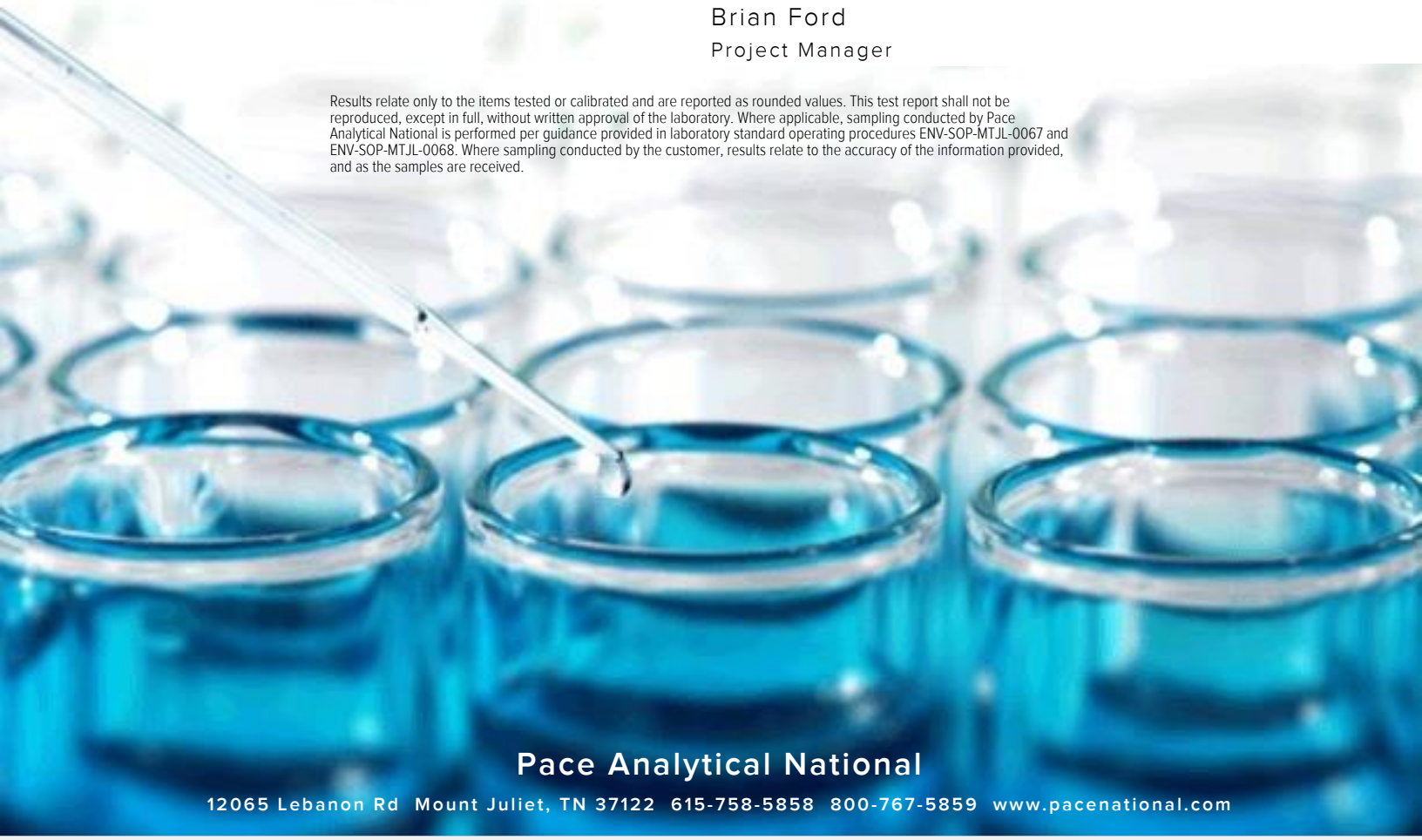
Sample Delivery Group:	L1566833
Samples Received:	12/13/2022
Project Number:	30064313 19.45
Description:	206196
Site:	815 NE COLLEGE ST PULLMAN WA
Report To:	Melissa Caldwell/Sydney Clark 1100 Olive Way Suite 800 Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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MW-8-W-20221207 L1566833-01 GW

Collected by: R. Palmer | Collected date/time: 12/07/22 13:26 | Received date/time: 12/13/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1975798	20	12/17/22 06:49	12/17/22 06:49	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1975876	5	12/16/22 22:50	12/16/22 22:50	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1977028	50	12/20/22 14:20	12/20/22 14:20	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1974647	1	12/15/22 11:18	12/15/22 16:23	DMG	Mt. Juliet, TN

MW-18-W-20221207 L1566833-02 GW

Collected by: R. Palmer | Collected date/time: 12/07/22 12:17 | Received date/time: 12/13/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1975798	1	12/17/22 00:30	12/17/22 00:30	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1975876	1	12/16/22 17:35	12/16/22 17:35	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1974647	1	12/15/22 11:18	12/15/22 16:43	DMG	Mt. Juliet, TN

MW-19-W-20221207 L1566833-03 GW

Collected by: R. Palmer | Collected date/time: 12/07/22 11:28 | Received date/time: 12/13/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1975798	1	12/17/22 01:19	12/17/22 01:19	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1975876	1	12/16/22 17:54	12/16/22 17:54	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1974647	1	12/15/22 11:18	12/15/22 17:03	DMG	Mt. Juliet, TN

BD-W-20221207 L1566833-04 GW

Collected by: R. Palmer | Collected date/time: 12/07/22 12:00 | Received date/time: 12/13/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1975798	1	12/17/22 01:41	12/17/22 01:41	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1977028	20	12/20/22 14:41	12/20/22 14:41	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1974647	1	12/15/22 11:18	12/15/22 17:22	DMG	Mt. Juliet, TN

TB-W-20221207 L1566833-05 GW

Collected by: R. Palmer | Collected date/time: 12/07/22 09:00 | Received date/time: 12/13/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1975798	1	12/16/22 22:40	12/16/22 22:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1975876	1	12/16/22 17:15	12/16/22 17:15	JAH	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Sample Delivery Group (SDG) Narrative

pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1566833-01	MW-8-W-20221207	NWTPHGX

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	10400		632	2000	20	12/17/2022 06:49	WG1975798
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*		*12/17/2022 06:49*	WG1975798

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	2530		4.71	50.0	50	12/20/2022 14:20	WG1977028
Toluene	7.75		1.39	5.00	5	12/16/2022 22:50	WG1975876
Ethylbenzene	399		6.85	50.0	50	12/20/2022 14:20	WG1977028
Total Xylenes	569		0.870	15.0	5	12/16/2022 22:50	WG1975876
Methyl tert-butyl ether	U		0.505	5.00	5	12/16/2022 22:50	WG1975876
(S) Toluene-d8	*106*			*80.0-120*		*12/16/2022 22:50*	WG1975876
(S) Toluene-d8	*106*			*80.0-120*		*12/20/2022 14:20*	WG1977028
(S) 4-Bromofluorobenzene	*92.9*			*77.0-126*		*12/16/2022 22:50*	WG1975876
(S) 4-Bromofluorobenzene	*93.8*			*77.0-126*		*12/20/2022 14:20*	WG1977028
(S) 1,2-Dichloroethane-d4	*88.1*			*70.0-130*		*12/16/2022 22:50*	WG1975876
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*		*12/20/2022 14:20*	WG1977028

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	684		66.7	200	1	12/15/2022 16:23	WG1974647
Residual Range Organics (RRO)	U		83.3	250	1	12/15/2022 16:23	WG1974647
(S) o-Terphenyl	*77.4*			*52.0-156*		*12/15/2022 16:23*	WG1974647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/17/2022 00:30	WG1975798
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*12/17/2022 00:30*	WG1975798

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	0.512	J	0.0941	1.00	1	12/16/2022 17:35	WG1975876
Toluene	U		0.278	1.00	1	12/16/2022 17:35	WG1975876
Ethylbenzene	U		0.137	1.00	1	12/16/2022 17:35	WG1975876
Total Xylenes	0.222	J	0.174	3.00	1	12/16/2022 17:35	WG1975876
Methyl tert-butyl ether	U		0.101	1.00	1	12/16/2022 17:35	WG1975876
(S) Toluene-d8	*110*			*80.0-120*		*12/16/2022 17:35*	WG1975876
(S) 4-Bromofluorobenzene	*93.5*			*77.0-126*		*12/16/2022 17:35*	WG1975876
(S) 1,2-Dichloroethane-d4	*91.5*			*70.0-130*		*12/16/2022 17:35*	WG1975876

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	12/15/2022 16:43	WG1974647
Residual Range Organics (RRO)	U		83.3	250	1	12/15/2022 16:43	WG1974647
(S) o-Terphenyl	*77.4*			*52.0-156*		*12/15/2022 16:43*	WG1974647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/17/2022 01:19	WG1975798
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*12/17/2022 01:19*	WG1975798

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/16/2022 17:54	WG1975876
Toluene	U		0.278	1.00	1	12/16/2022 17:54	WG1975876
Ethylbenzene	U		0.137	1.00	1	12/16/2022 17:54	WG1975876
Total Xylenes	U		0.174	3.00	1	12/16/2022 17:54	WG1975876
Methyl tert-butyl ether	U		0.101	1.00	1	12/16/2022 17:54	WG1975876
(S) Toluene-d8	*108*			*80.0-120*		*12/16/2022 17:54*	WG1975876
(S) 4-Bromofluorobenzene	*94.4*			*77.0-126*		*12/16/2022 17:54*	WG1975876
(S) 1,2-Dichloroethane-d4	*90.1*			*70.0-130*		*12/16/2022 17:54*	WG1975876

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	12/15/2022 17:03	WG1974647
Residual Range Organics (RRO)	U		83.3	250	1	12/15/2022 17:03	WG1974647
(S) o-Terphenyl	*76.8*			*52.0-156*		*12/15/2022 17:03*	WG1974647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	9850		31.6	100	1	12/17/2022 01:41	WG1975798
(S) a,a,a-Trifluorotoluene(FID)	*87.9*			*78.0-120*		*12/17/2022 01:41*	WG1975798

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	2340		1.88	20.0	20	12/20/2022 14:41	WG1977028
Toluene	7.02	J	5.56	20.0	20	12/20/2022 14:41	WG1977028
Ethylbenzene	429		2.74	20.0	20	12/20/2022 14:41	WG1977028
Total Xylenes	444		3.48	60.0	20	12/20/2022 14:41	WG1977028
Methyl tert-butyl ether	U		2.02	20.0	20	12/20/2022 14:41	WG1977028
(S) Toluene-d8	*107*			*80.0-120*		*12/20/2022 14:41*	WG1977028
(S) 4-Bromofluorobenzene	*97.2*			*77.0-126*		*12/20/2022 14:41*	WG1977028
(S) 1,2-Dichloroethane-d4	*91.4*			*70.0-130*		*12/20/2022 14:41*	WG1977028

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	519		66.7	200	1	12/15/2022 17:22	WG1974647
Residual Range Organics (RRO)	U		83.3	250	1	12/15/2022 17:22	WG1974647
(S) o-Terphenyl	*72.1*			*52.0-156*		*12/15/2022 17:22*	WG1974647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/16/2022 22:40	WG1975798
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*12/16/2022 22:40*	WG1975798

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/16/2022 17:15	WG1975876
Toluene	U		0.278	1.00	1	12/16/2022 17:15	WG1975876
Ethylbenzene	U		0.137	1.00	1	12/16/2022 17:15	WG1975876
Total Xylenes	U		0.174	3.00	1	12/16/2022 17:15	WG1975876
Methyl tert-butyl ether	U		0.101	1.00	1	12/16/2022 17:15	WG1975876
(S) Toluene-d8	*111*			*80.0-120*		*12/16/2022 17:15*	WG1975876
(S) 4-Bromofluorobenzene	*93.4*			*77.0-126*		*12/16/2022 17:15*	WG1975876
(S) 1,2-Dichloroethane-d4	*90.3*			*70.0-130*		*12/16/2022 17:15*	WG1975876

Method Blank (MB)

(MB) R3873041-2 12/16/22 21:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*104*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3873041-1 12/16/22 19:49

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4890	88.9	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*84.0*	*78.0-120*	

Method Blank (MB)

(MB) R3873661-2 12/16/22 15:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Xylenes, Total	U		0.174	3.00
Methyl tert-butyl ether	U		0.101	1.00
(S) Toluene-d8	*107*			*80.0-120*
(S) 4-Bromofluorobenzene	*91.6*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*89.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3873661-1 12/16/22 15:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	4.19	83.8	70.0-123	
Toluene	5.00	4.95	99.0	79.0-120	
Ethylbenzene	5.00	4.63	92.6	79.0-123	
Xylenes, Total	15.0	13.8	92.0	79.0-123	
Methyl tert-butyl ether	5.00	4.12	82.4	68.0-125	
(S) Toluene-d8			*109*	*80.0-120*	
(S) 4-Bromofluorobenzene			*98.8*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*86.1*	*70.0-130*	

Method Blank (MB)

(MB) R3874230-2 12/20/22 09:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Xylenes, Total	U		0.174	3.00
Methyl tert-butyl ether	U		0.101	1.00
(S) Toluene-d8	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*94.1*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*95.3*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3874230-1 12/20/22 08:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	5.81	116	70.0-123	
Toluene	5.00	5.83	117	79.0-120	
Ethylbenzene	5.00	5.62	112	79.0-123	
Xylenes, Total	15.0	15.8	105	79.0-123	
Methyl tert-butyl ether	5.00	5.82	116	68.0-125	
(S) Toluene-d8			*108*	*80.0-120*	
(S) 4-Bromofluorobenzene			*100*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*98.7*	*70.0-130*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3872460-1 12/15/22 15:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*81.0*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3872460-2 12/15/22 15:23 • (LCSD) R3872460-3 12/15/22 15:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1340	1210	89.3	80.7	50.0-150			10.2	20
(S) o-Terphenyl				*88.5*	*80.5*	*52.0-156*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell/Sydney Clark

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected:

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
R. PALMER

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):
R Palmer

Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1566833

Table # 1219

Acctnum: **CHEVARCWA**
Template: **T221249**
Prelogin: **P968826**
PM: **110 - Brian Ford**
PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEXM 8260D 40mlAmb-HCl	NWTPHDX w/ silica 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	Remarks	Sample # (lab only)
MW-8-W-20221207	G	GW	—	12/7/22	1326	8	X	X	X		-01
MW-18-W-20221207	G	GW	—		1257	8	X	X	X		-02
MW-19-W-20221207	G	GW	—		1128	8	X	X	X		-03
BD-W-20221207	G	GW	—		1200	8	X	X	X		-04
TB-W-20221207	G	GW	—	↓	0900	2	X		X		-05
		GW									
		GW									
		GW									
		GW									
		GW									

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier _____

Tracking # 5528 5946 5286

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: ✓Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	12/12/22	1500	SHIPPED VIA FEDEX	2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 4.7 T0=4.7 Bottles Received: 32	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) HAWA MWECHIWA	Date: 12/13/22 Time: 09:50	Hold: Condition: NCF / OK

ANALYTICAL REPORT

June 01, 2023

Arcadis - Chevron - WA

Sample Delivery Group:	L1618601
Samples Received:	05/20/2023
Project Number:	30064313 19.45
Description:	206196
Site:	815 NE COLLEGE ST PULLMAN WA
Report To:	Melissa Caldwell/Sydney Clark 1100 Olive Way Suite 800 Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford

Project Manager

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MW-6A-W-20230517 L1618601-01 GW

Collected by: MR | Collected date/time: 05/17/23 10:55 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068101	1	05/29/23 12:12	05/29/23 12:12	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 02:19	05/28/23 02:19	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2067260	1	05/28/23 17:29	05/30/23 05:30	HLJ	Mt. Juliet, TN

MW-10A-W-20230517 L1618601-02 GW

Collected by: MR | Collected date/time: 05/17/23 12:11 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068101	1	05/29/23 12:37	05/29/23 12:37	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 02:38	05/28/23 02:38	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2067260	1	05/28/23 17:29	05/30/23 05:53	HLJ	Mt. Juliet, TN

MW-12-W-20230517 L1618601-03 GW

Collected by: MR | Collected date/time: 05/17/23 09:21 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068101	1	05/29/23 13:01	05/29/23 13:01	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 02:57	05/28/23 02:57	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2067260	1	05/28/23 17:29	05/30/23 06:16	HLJ	Mt. Juliet, TN

MW-17-W-20230517 L1618601-04 GW

Collected by: MR | Collected date/time: 05/17/23 14:40 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068101	1	05/29/23 13:26	05/29/23 13:26	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 03:16	05/28/23 03:16	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2067260	1	05/28/23 17:29	05/30/23 06:39	HLJ	Mt. Juliet, TN

MW-18-W-20230517 L1618601-05 GW

Collected by: MR | Collected date/time: 05/17/23 07:27 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068101	1	05/29/23 13:51	05/29/23 13:51	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 03:35	05/28/23 03:35	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2067260	1	05/28/23 17:29	05/30/23 07:26	HLJ	Mt. Juliet, TN

MW-19-W-20230517 L1618601-06 GW

Collected by: MR | Collected date/time: 05/17/23 09:50 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068101	1	05/29/23 14:15	05/29/23 14:15	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 03:54	05/28/23 03:54	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2067260	1	05/28/23 17:29	05/30/23 07:49	HLJ	Mt. Juliet, TN

MW-20-W-20230517 L1618601-07 GW

Collected by: MR | Collected date/time: 05/17/23 08:50 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068101	1	05/29/23 14:40	05/29/23 14:40	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 04:13	05/28/23 04:13	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2067260	1	05/28/23 17:29	05/30/23 08:12	HLJ	Mt. Juliet, TN

MW-22-W-20230517 L1618601-08 GW

Collected by: MR | Collected date/time: 05/17/23 13:32 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068390	1	05/30/23 18:54	05/30/23 18:54	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 04:31	05/28/23 04:31	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2067260	1	05/28/23 17:29	05/30/23 21:08	HLJ	Mt. Juliet, TN

MW-23-W-20230517 L1618601-09 GW

Collected by: MR | Collected date/time: 05/17/23 12:55 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068390	1	05/30/23 19:16	05/30/23 19:16	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 04:50	05/28/23 04:50	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2067260	1	05/28/23 17:29	05/31/23 08:49	MWS	Mt. Juliet, TN

BD-W-20230517 L1618601-10 GW

Collected by: MR | Collected date/time: 05/17/23 08:00 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068390	1	05/30/23 19:38	05/30/23 19:38	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 05:09	05/28/23 05:09	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2067260	1	05/28/23 17:29	05/30/23 09:44	HLJ	Mt. Juliet, TN

TB-W-20230517 L1618601-11 GW

Collected by: MR | Collected date/time: 05/17/23 06:30 | Received date/time: 05/20/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2068390	1	05/30/23 18:32	05/30/23 18:32	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2067772	1	05/28/23 01:22	05/28/23 01:22	JHH	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Sample Delivery Group (SDG) Narrative

Analyzed from headspace vial.

Lab Sample ID	Project Sample ID	Method
L1618601-11	TB-W-20230517	NWTPHGX

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/29/2023 12:12	WG2068101
(S) a,a,a-Trifluorotoluene(FID)	*92.7*			*78.0-120*		*05/29/2023 12:12*	WG2068101

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	05/28/2023 02:19	WG2067772
Toluene	U		0.278	1.00	1	05/28/2023 02:19	WG2067772
Ethylbenzene	U		0.137	1.00	1	05/28/2023 02:19	WG2067772
Total Xylenes	U		0.174	3.00	1	05/28/2023 02:19	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 02:19	WG2067772
(S) Toluene-d8	*100*			*80.0-120*		*05/28/2023 02:19*	WG2067772
(S) 4-Bromofluorobenzene	*94.4*			*77.0-126*		*05/28/2023 02:19*	WG2067772
(S) 1,2-Dichloroethane-d4	*94.1*			*70.0-130*		*05/28/2023 02:19*	WG2067772

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	119	J	83.3	250	1	05/30/2023 05:30	WG2067260
(S) o-Terphenyl	*89.5*			*52.0-156*		*05/30/2023 05:30*	WG2067260

Sample Narrative:

L1618601-01 WG2067260: Sample does not resemble laboratory standards.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/29/2023 12:37	WG2068101
(S) a,a,a-Trifluorotoluene(FID)	*93.5*			*78.0-120*		*05/29/2023 12:37*	WG2068101

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	05/28/2023 02:38	WG2067772
Toluene	U		0.278	1.00	1	05/28/2023 02:38	WG2067772
Ethylbenzene	U		0.137	1.00	1	05/28/2023 02:38	WG2067772
Total Xylenes	U		0.174	3.00	1	05/28/2023 02:38	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 02:38	WG2067772
(S) Toluene-d8	*101*			*80.0-120*		*05/28/2023 02:38*	WG2067772
(S) 4-Bromofluorobenzene	*95.0*			*77.0-126*		*05/28/2023 02:38*	WG2067772
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*05/28/2023 02:38*	WG2067772

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	U		83.3	250	1	05/30/2023 05:53	WG2067260
(S) o-Terphenyl	*80.5*			*52.0-156*		*05/30/2023 05:53*	WG2067260

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/29/2023 13:01	WG2068101
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*78.0-120*		*05/29/2023 13:01*	WG2068101

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	05/28/2023 02:57	WG2067772
Toluene	U		0.278	1.00	1	05/28/2023 02:57	WG2067772
Ethylbenzene	U		0.137	1.00	1	05/28/2023 02:57	WG2067772
Total Xylenes	U		0.174	3.00	1	05/28/2023 02:57	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 02:57	WG2067772
(S) Toluene-d8	*101*			*80.0-120*		*05/28/2023 02:57*	WG2067772
(S) 4-Bromofluorobenzene	*98.1*			*77.0-126*		*05/28/2023 02:57*	WG2067772
(S) 1,2-Dichloroethane-d4	*95.3*			*70.0-130*		*05/28/2023 02:57*	WG2067772

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	U		83.3	250	1	05/30/2023 06:16	WG2067260
(S) o-Terphenyl	*84.0*			*52.0-156*		*05/30/2023 06:16*	WG2067260

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	2960		31.6	100	1	05/29/2023 13:26	WG2068101
(S) a,a,a-Trifluorotoluene(FID)	*92.8*			*78.0-120*		*05/29/2023 13:26*	WG2068101

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	15.5		0.0941	1.00	1	05/28/2023 03:16	WG2067772
Toluene	2.33		0.278	1.00	1	05/28/2023 03:16	WG2067772
Ethylbenzene	11.9		0.137	1.00	1	05/28/2023 03:16	WG2067772
Total Xylenes	8.15		0.174	3.00	1	05/28/2023 03:16	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 03:16	WG2067772
(S) Toluene-d8	*98.7*			*80.0-120*		*05/28/2023 03:16*	WG2067772
(S) 4-Bromofluorobenzene	*90.0*			*77.0-126*		*05/28/2023 03:16*	WG2067772
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*		*05/28/2023 03:16*	WG2067772

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	112	J	83.3	250	1	05/30/2023 06:39	WG2067260
(S) o-Terphenyl	*69.5*			*52.0-156*		*05/30/2023 06:39*	WG2067260

Sample Narrative:

L1618601-04 WG2067260: Sample resembles laboratory standard for Gasoline.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/29/2023 13:51	WG2068101
(S) a,a,a-Trifluorotoluene(FID)	*93.2*			*78.0-120*		*05/29/2023 13:51*	WG2068101

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	05/28/2023 03:35	WG2067772
Toluene	U		0.278	1.00	1	05/28/2023 03:35	WG2067772
Ethylbenzene	U		0.137	1.00	1	05/28/2023 03:35	WG2067772
Total Xylenes	U		0.174	3.00	1	05/28/2023 03:35	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 03:35	WG2067772
(S) Toluene-d8	*102*			*80.0-120*		*05/28/2023 03:35*	WG2067772
(S) 4-Bromofluorobenzene	*95.2*			*77.0-126*		*05/28/2023 03:35*	WG2067772
(S) 1,2-Dichloroethane-d4	*92.0*			*70.0-130*		*05/28/2023 03:35*	WG2067772

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	112	J	83.3	250	1	05/30/2023 07:26	WG2067260
(S) o-Terphenyl	*82.5*			*52.0-156*		*05/30/2023 07:26*	WG2067260

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/29/2023 14:15	WG2068101
(S) a,a,a-Trifluorotoluene(FID)	*93.8*			*78.0-120*		*05/29/2023 14:15*	WG2068101

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	05/28/2023 03:54	WG2067772
Toluene	U		0.278	1.00	1	05/28/2023 03:54	WG2067772
Ethylbenzene	U		0.137	1.00	1	05/28/2023 03:54	WG2067772
Total Xylenes	U		0.174	3.00	1	05/28/2023 03:54	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 03:54	WG2067772
(S) Toluene-d8	*101*			*80.0-120*		*05/28/2023 03:54*	WG2067772
(S) 4-Bromofluorobenzene	*96.2*			*77.0-126*		*05/28/2023 03:54*	WG2067772
(S) 1,2-Dichloroethane-d4	*93.6*			*70.0-130*		*05/28/2023 03:54*	WG2067772

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	U		83.3	250	1	05/30/2023 07:49	WG2067260
(S) o-Terphenyl	*83.5*			*52.0-156*		*05/30/2023 07:49*	WG2067260

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/29/2023 14:40	WG2068101
(S) a,a,a-Trifluorotoluene(FID)	*93.9*			*78.0-120*		*05/29/2023 14:40*	WG2068101

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	05/28/2023 04:13	WG2067772
Toluene	U		0.278	1.00	1	05/28/2023 04:13	WG2067772
Ethylbenzene	U		0.137	1.00	1	05/28/2023 04:13	WG2067772
Total Xylenes	U		0.174	3.00	1	05/28/2023 04:13	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 04:13	WG2067772
(S) Toluene-d8	*102*			*80.0-120*		*05/28/2023 04:13*	WG2067772
(S) 4-Bromofluorobenzene	*97.1*			*77.0-126*		*05/28/2023 04:13*	WG2067772
(S) 1,2-Dichloroethane-d4	*92.2*			*70.0-130*		*05/28/2023 04:13*	WG2067772

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	85.6	J	83.3	250	1	05/30/2023 08:12	WG2067260
(S) o-Terphenyl	*82.5*			*52.0-156*		*05/30/2023 08:12*	WG2067260

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	36.8	B J	31.6	100	1	05/30/2023 18:54	WG2068390
(S) a,a,a-Trifluorotoluene(FID)	*99.0*			*78.0-120*		*05/30/2023 18:54*	WG2068390

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	05/28/2023 04:31	WG2067772
Toluene	U		0.278	1.00	1	05/28/2023 04:31	WG2067772
Ethylbenzene	U		0.137	1.00	1	05/28/2023 04:31	WG2067772
Total Xylenes	U		0.174	3.00	1	05/28/2023 04:31	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 04:31	WG2067772
(S) Toluene-d8	*103*			*80.0-120*		*05/28/2023 04:31*	WG2067772
(S) 4-Bromofluorobenzene	*95.5*			*77.0-126*		*05/28/2023 04:31*	WG2067772
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*05/28/2023 04:31*	WG2067772

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Residual Range Organics (RRO)	212	J	83.3	250	1	05/30/2023 21:08	WG2067260
(S) o-Terphenyl	*67.0*			*52.0-156*		*05/30/2023 21:08*	WG2067260

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	1680		31.6	100	1	05/30/2023 19:16	WG2068390
(S) a,a,a-Trifluorotoluene(FID)	*94.4*			*78.0-120*		*05/30/2023 19:16*	WG2068390

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	3.98		0.0941	1.00	1	05/28/2023 04:50	WG2067772
Toluene	2.16		0.278	1.00	1	05/28/2023 04:50	WG2067772
Ethylbenzene	14.4		0.137	1.00	1	05/28/2023 04:50	WG2067772
Total Xylenes	2.47	J	0.174	3.00	1	05/28/2023 04:50	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 04:50	WG2067772
(S) Toluene-d8	*102*			*80.0-120*		*05/28/2023 04:50*	WG2067772
(S) 4-Bromofluorobenzene	*95.8*			*77.0-126*		*05/28/2023 04:50*	WG2067772
(S) 1,2-Dichloroethane-d4	*95.3*			*70.0-130*		*05/28/2023 04:50*	WG2067772

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	217	J	83.3	250	1	05/31/2023 08:49	WG2067260
(S) o-Terphenyl	*114*			*52.0-156*		*05/31/2023 08:49*	WG2067260

Sample Narrative:

L1618601-09 WG2067260: Sample resembles laboratory standard for Mineral Spirits

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	60.4	B J	31.6	100	1	05/30/2023 19:38	WG2068390
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*78.0-120*		*05/30/2023 19:38*	WG2068390

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	05/28/2023 05:09	WG2067772
Toluene	U		0.278	1.00	1	05/28/2023 05:09	WG2067772
Ethylbenzene	U		0.137	1.00	1	05/28/2023 05:09	WG2067772
Total Xylenes	U		0.174	3.00	1	05/28/2023 05:09	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 05:09	WG2067772
(S) Toluene-d8	*101*			*80.0-120*		*05/28/2023 05:09*	WG2067772
(S) 4-Bromofluorobenzene	*94.4*			*77.0-126*		*05/28/2023 05:09*	WG2067772
(S) 1,2-Dichloroethane-d4	*92.1*			*70.0-130*		*05/28/2023 05:09*	WG2067772

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Residual Range Organics (RRO)	142	J	83.3	250	1	05/30/2023 09:44	WG2067260
(S) o-Terphenyl	*83.0*			*52.0-156*		*05/30/2023 09:44*	WG2067260

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	37.1	B J	31.6	100	1	05/30/2023 18:32	WG2068390
(S) a,a,a-Trifluorotoluene(FID)	*99.2*			*78.0-120*		*05/30/2023 18:32*	WG2068390

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	05/28/2023 01:22	WG2067772
Toluene	U		0.278	1.00	1	05/28/2023 01:22	WG2067772
Ethylbenzene	U		0.137	1.00	1	05/28/2023 01:22	WG2067772
Total Xylenes	U		0.174	3.00	1	05/28/2023 01:22	WG2067772
Methyl tert-butyl ether	U		0.101	1.00	1	05/28/2023 01:22	WG2067772
(S) Toluene-d8	*102*			*80.0-120*		*05/28/2023 01:22*	WG2067772
(S) 4-Bromofluorobenzene	*95.2*			*77.0-126*		*05/28/2023 01:22*	WG2067772
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*05/28/2023 01:22*	WG2067772

Method Blank (MB)

(MB) R3931205-2 05/29/23 11:12

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3931205-1 05/29/23 10:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	6480	118	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*104*	*78.0-120*	

Method Blank (MB)

(MB) R3931283-3 05/30/23 13:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	44.1	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3931283-2 05/30/23 12:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4900	89.1	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*78.0-120*	

Method Blank (MB)

(MB) R3931202-3 05/28/23 01:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Total Xylenes	U		0.174	3.00
Methyl tert-butyl ether	U		0.101	1.00
(S) Toluene-d8	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*96.6*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3931202-1 05/28/23 00:07 • (LCSD) R3931202-2 05/28/23 00:25

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Benzene	5.00	5.12	5.15	102	103	70.0-123			0.584	20
Toluene	5.00	4.82	4.83	96.4	96.6	79.0-120			0.207	20
Ethylbenzene	5.00	4.87	4.65	97.4	93.0	79.0-123			4.62	20
Total Xylenes	15.0	14.2	13.8	94.7	92.0	79.0-123			2.86	20
Methyl tert-butyl ether	5.00	4.69	4.55	93.8	91.0	68.0-125			3.03	20
(S) Toluene-d8				*103*	*103*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.6*	*95.9*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*96.1*	*96.0*	*70.0-130*				

L1618953-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1618953-01 05/28/23 06:25 • (MS) R3931202-4 05/28/23 07:41 • (MSD) R3931202-5 05/28/23 08:01

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Benzene	5.00	U	5.16	3.17	103	63.4	1	17.0-158		J3	47.8	27
Toluene	5.00	1.62	6.26	4.48	92.8	57.2	1	26.0-154		J3	33.1	28
Ethylbenzene	5.00	U	4.74	2.80	94.8	56.0	1	30.0-155		J3	51.5	27
Total Xylenes	15.0	U	13.5	8.45	90.0	56.3	1	29.0-154		J3	46.0	28
Methyl tert-butyl ether	5.00	0.256	4.75	4.05	95.0	81.0	1	28.0-150			15.9	29
(S) Toluene-d8					*98.3*	*101*		*80.0-120*				
(S) 4-Bromofluorobenzene					*95.4*	*96.8*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*96.3*	*93.8*		*70.0-130*				

Method Blank (MB)

(MB) R3930787-1 05/30/23 04:20

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*73.5*			*52.0-156*

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell/Sydney Clark

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected: Pullman, WA

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
MR

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # 161860

J095

Acctnum: CHEVARCWA
Template: T230371
Prelogin: P999497
PM: 110 - Brian Ford
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	NWTPHGX 40mlAmb HCl	RRO (HO) DX no sil 40mlAmb-HCl-BT	Remarks	Sample # (lab only)
MW-6A-W-20230517	G	GW	—	5/17/23	1055	8	X	X	X		-01
MW-10A-W-20230517	G	GW	—	5/17/23	1211	8	X	X	X		-02
MW-12-W-20230517	G	GW	—	5/17/23	0921	8	X	X	X		-03
MW-17-W-20230517	G	GW	—	5/17/23	1440	8	X	X	X		-04
MW-18-W-20230517	G	GW	—	5/17/23	0727	8	X	X	X		-05
MW-19-W-20230517	G	GW	—	5/17/23	0950	8	X	X	X		-06
MW-20-W-20230517	G	GW	—	5/17/23	0850	8	X	X	X		-07
MW-22-W-20230517	G	GW	—	5/17/23	1332	8	X	X	X		-08
MW-23-W-20230517	G	GW	—	5/17/23	1255	8	X	X	X		-09
BD-W-20230517	G	GW	—	5/17/23	0800	8	X	X	X		-10

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 5300 4300 6410

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: X Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	5/19/23	1600	SHIPPED VIA FEDEX	2
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.9 °C Bottles Received: 80
				WSA7 1.9+0=1.9
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/20/23 Time: 9:20
			PW	

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Company Name/Address:
Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell/Sydney Clark

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected:

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
MR

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):
Immediately
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	NWTPHGX 40mlAmb HCl	RRO (HO) DX no sil 40mlAmb-HCl-BT								Remarks	Sample # (lab only)
TB-W-20230517	G	GW	—	5/17/23	0630	2	X	X										→17

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # 161860

Table #

Acctnum: **CHEVARCWA**
Template: **T230371**
Prelogin: **P999497**
PM: **110 - Brian Ford**
PB:

Shipped Via:

Remarks | Sample # (lab only)

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 5300 4300 6410

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	5/19/23	1600	SHIPPED VIA FEDEX	NA
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: .9 °C Bottles Received: 60
				NSA7 .940=.9
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/20/23 Time: 9:20
			FW	

If preservation required by Login: Date/Time

Hold: | Condition: NCF / OK

ANALYTICAL REPORT

April 19, 2024

Arcadis - Chevron - WA

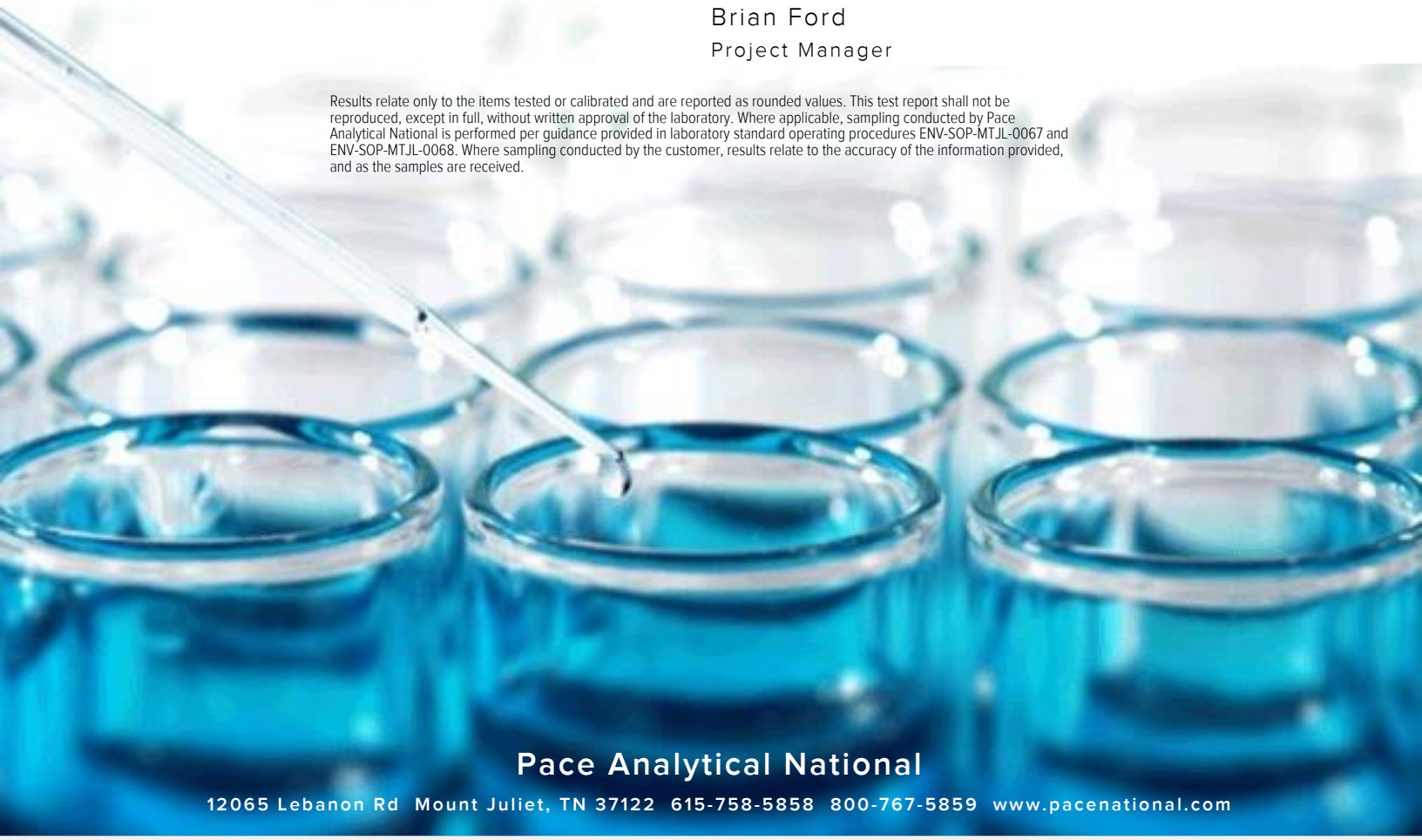
Sample Delivery Group:	L1724753
Samples Received:	04/11/2024
Project Number:	30064313 19.45
Description:	206196
Site:	815 NE COLLEGE ST PULLMAN WA
Report To:	Melissa Caldwell 1420 5th Ave Unit 2400 Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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MW-6A-W-20240409 L1724753-01 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 10:25 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 01:13	04/17/24 01:13	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265864	1	04/12/24 14:07	04/12/24 14:07	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2268414	1	04/17/24 17:58	04/18/24 22:04	DMG	Mt. Juliet, TN

MW-8-W-20240409 L1724753-02 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 11:55 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	20	04/17/24 07:43	04/17/24 07:43	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2268404	100	04/16/24 21:13	04/16/24 21:13	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2268414	1	04/17/24 17:58	04/18/24 22:25	DMG	Mt. Juliet, TN

MW-10A-W-20240409 L1724753-03 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 10:55 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 01:34	04/17/24 01:34	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265864	1	04/12/24 14:28	04/12/24 14:28	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2268414	1	04/17/24 17:58	04/18/24 22:46	DMG	Mt. Juliet, TN

MW-12-W-20240409 L1724753-04 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 09:20 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 01:56	04/17/24 01:56	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265864	1	04/12/24 14:50	04/12/24 14:50	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2268414	1	04/17/24 17:58	04/18/24 23:07	DMG	Mt. Juliet, TN

MW-17-W-20240409 L1724753-05 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 11:25 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 02:18	04/17/24 02:18	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265864	1	04/12/24 15:11	04/12/24 15:11	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2268414	1	04/17/24 17:58	04/18/24 23:29	DMG	Mt. Juliet, TN

MW-18-W-20240409 L1724753-06 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 09:55 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 02:40	04/17/24 02:40	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265864	1	04/12/24 15:33	04/12/24 15:33	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2268414	1	04/17/24 17:58	04/18/24 23:50	DMG	Mt. Juliet, TN

MW-19-W-20240409 L1724753-07 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 08:10 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 03:01	04/17/24 03:01	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265864	1	04/12/24 15:55	04/12/24 15:55	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2268414	1	04/17/24 17:58	04/19/24 00:11	DMG	Mt. Juliet, TN

MW-20-W-20240409 L1724753-08 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 08:50 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 03:23	04/17/24 03:23	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265864	1	04/12/24 16:16	04/12/24 16:16	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2268414	1	04/17/24 17:58	04/19/24 00:32	DMG	Mt. Juliet, TN

MW-22-W-20240409 L1724753-09 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 12:35 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 03:44	04/17/24 03:44	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265864	1	04/12/24 16:38	04/12/24 16:38	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2268414	1	04/17/24 17:58	04/19/24 00:53	DMG	Mt. Juliet, TN

MW-23-W-20240409 L1724753-10 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 13:10 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 04:06	04/17/24 04:06	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265864	1	04/12/24 16:59	04/12/24 16:59	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2269439	1	04/18/24 08:05	04/19/24 03:42	DMG	Mt. Juliet, TN

BD-W-20240409 L1724753-11 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 12:00 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 04:28	04/17/24 04:28	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265864	1	04/12/24 17:21	04/12/24 17:21	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2269439	1	04/18/24 08:05	04/19/24 04:03	DMG	Mt. Juliet, TN

TB-W-20240409 L1724753-12 GW

Collected by: Aimee Rike | Collected date/time: 04/09/24 09:00 | Received date/time: 04/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2268433	1	04/17/24 00:51	04/17/24 00:51	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2266243	1	04/12/24 22:38	04/12/24 22:38	DYW	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	41.8	J	31.6	100	1	04/17/2024 01:13	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*		*04/17/2024 01:13*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	04/12/2024 14:07	WG2265864
Toluene	U		0.278	1.00	1	04/12/2024 14:07	WG2265864
Ethylbenzene	U		0.137	1.00	1	04/12/2024 14:07	WG2265864
Total Xylenes	U		0.174	3.00	1	04/12/2024 14:07	WG2265864
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 14:07	WG2265864
(S) Toluene-d8	*100*			*80.0-120*		*04/12/2024 14:07*	WG2265864
(S) 4-Bromofluorobenzene	*90.9*			*77.0-126*		*04/12/2024 14:07*	WG2265864
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/12/2024 14:07*	WG2265864

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	285		83.3	250	1	04/18/2024 22:04	WG2268414
(S) o-Terphenyl	*93.2*			*52.0-156*		*04/18/2024 22:04*	WG2268414

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	12800		632	2000	20	04/17/2024 07:43	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*98.0*			*78.0-120*		*04/17/2024 07:43*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	2870		9.41	100	100	04/16/2024 21:13	WG2268404
Toluene	U		27.8	100	100	04/16/2024 21:13	WG2268404
Ethylbenzene	708		13.7	100	100	04/16/2024 21:13	WG2268404
Total Xylenes	1330		17.4	300	100	04/16/2024 21:13	WG2268404
Methyl tert-butyl ether	U	C3	10.1	100	100	04/16/2024 21:13	WG2268404
(S) Toluene-d8	*103*			*80.0-120*		*04/16/2024 21:13*	WG2268404
(S) 4-Bromofluorobenzene	*85.9*			*77.0-126*		*04/16/2024 21:13*	WG2268404
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*04/16/2024 21:13*	WG2268404

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Residual Range Organics (RRO)	3090		83.3	250	1	04/18/2024 22:25	WG2268414
(S) o-Terphenyl	*98.9*			*52.0-156*		*04/18/2024 22:25*	WG2268414

Sample Narrative:

L1724753-02 WG2268414: Sample resembles laboratory standard for Diesel.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2024 01:34	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*99.9*			*78.0-120*		*04/17/2024 01:34*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	04/12/2024 14:28	WG2265864
Toluene	U		0.278	1.00	1	04/12/2024 14:28	WG2265864
Ethylbenzene	U		0.137	1.00	1	04/12/2024 14:28	WG2265864
Total Xylenes	U		0.174	3.00	1	04/12/2024 14:28	WG2265864
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 14:28	WG2265864
(S) Toluene-d8	*103*			*80.0-120*		*04/12/2024 14:28*	WG2265864
(S) 4-Bromofluorobenzene	*94.6*			*77.0-126*		*04/12/2024 14:28*	WG2265864
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*04/12/2024 14:28*	WG2265864

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	226	J	83.3	250	1	04/18/2024 22:46	WG2268414
(S) o-Terphenyl	*80.5*			*52.0-156*		*04/18/2024 22:46*	WG2268414

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2024 01:56	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*04/17/2024 01:56*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	04/12/2024 14:50	WG2265864
Toluene	U		0.278	1.00	1	04/12/2024 14:50	WG2265864
Ethylbenzene	U		0.137	1.00	1	04/12/2024 14:50	WG2265864
Total Xylenes	U		0.174	3.00	1	04/12/2024 14:50	WG2265864
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 14:50	WG2265864
(S) Toluene-d8	*102*			*80.0-120*		*04/12/2024 14:50*	WG2265864
(S) 4-Bromofluorobenzene	*91.5*			*77.0-126*		*04/12/2024 14:50*	WG2265864
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*04/12/2024 14:50*	WG2265864

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	140	J	83.3	250	1	04/18/2024 23:07	WG2268414
(S) o-Terphenyl	*83.7*			*52.0-156*		*04/18/2024 23:07*	WG2268414

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1390		31.6	100	1	04/17/2024 02:18	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*89.8*			*78.0-120*		*04/17/2024 02:18*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	8.00		0.0941	1.00	1	04/12/2024 15:11	WG2265864
Toluene	1.44		0.278	1.00	1	04/12/2024 15:11	WG2265864
Ethylbenzene	3.20		0.137	1.00	1	04/12/2024 15:11	WG2265864
Total Xylenes	3.75		0.174	3.00	1	04/12/2024 15:11	WG2265864
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 15:11	WG2265864
(S) Toluene-d8	*100*			*80.0-120*		*04/12/2024 15:11*	WG2265864
(S) 4-Bromofluorobenzene	*92.8*			*77.0-126*		*04/12/2024 15:11*	WG2265864
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*04/12/2024 15:11*	WG2265864

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Residual Range Organics (RRO)	264		83.3	250	1	04/18/2024 23:29	WG2268414
(S) o-Terphenyl	*91.1*			*52.0-156*		*04/18/2024 23:29*	WG2268414

Sample Narrative:

L1724753-05 WG2268414: Sample resembles laboratory standards for Diesel and Gasoline.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2024 02:40	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*04/17/2024 02:40*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	04/12/2024 15:33	WG2265864
Toluene	U		0.278	1.00	1	04/12/2024 15:33	WG2265864
Ethylbenzene	U		0.137	1.00	1	04/12/2024 15:33	WG2265864
Total Xylenes	U		0.174	3.00	1	04/12/2024 15:33	WG2265864
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 15:33	WG2265864
(S) Toluene-d8	*101*			*80.0-120*		*04/12/2024 15:33*	WG2265864
(S) 4-Bromofluorobenzene	*93.8*			*77.0-126*		*04/12/2024 15:33*	WG2265864
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*04/12/2024 15:33*	WG2265864

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	232	J	83.3	250	1	04/18/2024 23:50	WG2268414
(S) o-Terphenyl	*88.4*			*52.0-156*		*04/18/2024 23:50*	WG2268414

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2024 03:01	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*04/17/2024 03:01*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	04/12/2024 15:55	WG2265864
Toluene	U		0.278	1.00	1	04/12/2024 15:55	WG2265864
Ethylbenzene	U		0.137	1.00	1	04/12/2024 15:55	WG2265864
Total Xylenes	U		0.174	3.00	1	04/12/2024 15:55	WG2265864
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 15:55	WG2265864
(S) Toluene-d8	*99.7*			*80.0-120*		*04/12/2024 15:55*	WG2265864
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*		*04/12/2024 15:55*	WG2265864
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*04/12/2024 15:55*	WG2265864

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	73.5	J	66.7	200	1	04/19/2024 00:11	WG2268414
Residual Range Organics (RRO)	135	J	83.3	250	1	04/19/2024 00:11	WG2268414
(S) o-Terphenyl	*89.5*			*52.0-156*		*04/19/2024 00:11*	WG2268414

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2024 03:23	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*04/17/2024 03:23*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	04/12/2024 16:16	WG2265864
Toluene	U		0.278	1.00	1	04/12/2024 16:16	WG2265864
Ethylbenzene	U		0.137	1.00	1	04/12/2024 16:16	WG2265864
Total Xylenes	U		0.174	3.00	1	04/12/2024 16:16	WG2265864
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 16:16	WG2265864
(S) Toluene-d8	*102*			*80.0-120*		*04/12/2024 16:16*	WG2265864
(S) 4-Bromofluorobenzene	*96.1*			*77.0-126*		*04/12/2024 16:16*	WG2265864
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*04/12/2024 16:16*	WG2265864

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	166	J	83.3	250	1	04/19/2024 00:32	WG2268414
(S) o-Terphenyl	*85.8*			*52.0-156*		*04/19/2024 00:32*	WG2268414

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2024 03:44	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*04/17/2024 03:44*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	04/12/2024 16:38	WG2265864
Toluene	U		0.278	1.00	1	04/12/2024 16:38	WG2265864
Ethylbenzene	U		0.137	1.00	1	04/12/2024 16:38	WG2265864
Total Xylenes	U		0.174	3.00	1	04/12/2024 16:38	WG2265864
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 16:38	WG2265864
(S) Toluene-d8	*104*			*80.0-120*		*04/12/2024 16:38*	WG2265864
(S) 4-Bromofluorobenzene	*94.9*			*77.0-126*		*04/12/2024 16:38*	WG2265864
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/12/2024 16:38*	WG2265864

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	332		83.3	250	1	04/19/2024 00:53	WG2268414
(S) o-Terphenyl	*87.9*			*52.0-156*		*04/19/2024 00:53*	WG2268414

Sample Narrative:

L1724753-09 WG2268414: Sample does not resemble laboratory standards.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2024 04:06	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*99.7*			*78.0-120*		*04/17/2024 04:06*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	04/12/2024 16:59	WG2265864
Toluene	U		0.278	1.00	1	04/12/2024 16:59	WG2265864
Ethylbenzene	U		0.137	1.00	1	04/12/2024 16:59	WG2265864
Total Xylenes	U		0.174	3.00	1	04/12/2024 16:59	WG2265864
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 16:59	WG2265864
(S) Toluene-d8	*104*			*80.0-120*		*04/12/2024 16:59*	WG2265864
(S) 4-Bromofluorobenzene	*95.8*			*77.0-126*		*04/12/2024 16:59*	WG2265864
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*04/12/2024 16:59*	WG2265864

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Residual Range Organics (RRO)	327		83.3	250	1	04/19/2024 03:42	WG2269439
(S) o-Terphenyl	*81.1*			*52.0-156*		*04/19/2024 03:42*	WG2269439

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2024 04:28	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*04/17/2024 04:28*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	04/12/2024 17:21	WG2265864
Toluene	U		0.278	1.00	1	04/12/2024 17:21	WG2265864
Ethylbenzene	U		0.137	1.00	1	04/12/2024 17:21	WG2265864
Total Xylenes	U		0.174	3.00	1	04/12/2024 17:21	WG2265864
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 17:21	WG2265864
(S) Toluene-d8	*100*			*80.0-120*		*04/12/2024 17:21*	WG2265864
(S) 4-Bromofluorobenzene	*92.7*			*77.0-126*		*04/12/2024 17:21*	WG2265864
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/12/2024 17:21*	WG2265864

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Residual Range Organics (RRO)	U		83.3	250	1	04/19/2024 04:03	WG2269439
(S) o-Terphenyl	*81.1*			*52.0-156*		*04/19/2024 04:03*	WG2269439

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2024 00:51	WG2268433
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*04/17/2024 00:51*	WG2268433

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	04/12/2024 22:38	WG2266243
Toluene	U		0.278	1.00	1	04/12/2024 22:38	WG2266243
Ethylbenzene	U		0.137	1.00	1	04/12/2024 22:38	WG2266243
Total Xylenes	U		0.174	3.00	1	04/12/2024 22:38	WG2266243
Methyl tert-butyl ether	U		0.101	1.00	1	04/12/2024 22:38	WG2266243
(S) Toluene-d8	*103*			*80.0-120*		*04/12/2024 22:38*	WG2266243
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*04/12/2024 22:38*	WG2266243
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*04/12/2024 22:38*	WG2266243

Method Blank (MB)

(MB) R4058954-2 04/17/24 00:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*99.5*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R4058954-1 04/16/24 23:14

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5000	5190	104	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*78.0-120*	

Method Blank (MB)

(MB) R4058458-3 04/12/24 09:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Total Xylenes	U		0.174	3.00
Methyl tert-butyl ether	U		0.101	1.00
(S) Toluene-d8	*102*			*80.0-120*
(S) 4-Bromofluorobenzene	*95.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4058458-1 04/12/24 08:02 • (LCSD) R4058458-2 04/12/24 08:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	5.73	5.62	115	112	70.0-123			1.94	20
Toluene	5.00	5.37	5.36	107	107	79.0-120			0.186	20
Ethylbenzene	5.00	5.35	5.21	107	104	79.0-123			2.65	20
Total Xylenes	15.0	15.1	15.3	101	102	79.0-123			1.32	20
Methyl tert-butyl ether	5.00	5.64	5.73	113	115	68.0-125			1.58	20
(S) Toluene-d8				*97.0*	*96.3*	*80.0-120*				
(S) 4-Bromofluorobenzene				*90.1*	*91.3*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*107*	*108*	*70.0-130*				

Method Blank (MB)

(MB) R4058133-3 04/12/24 20:50

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Total Xylenes	U		0.174	3.00
Methyl tert-butyl ether	U		0.101	1.00
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*108*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4058133-1 04/12/24 18:58 • (LCSD) R4058133-2 04/12/24 19:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	4.83	4.85	96.6	97.0	70.0-123			0.413	20
Toluene	5.00	4.86	5.03	97.2	101	79.0-120			3.44	20
Ethylbenzene	5.00	4.41	4.62	88.2	92.4	79.0-123			4.65	20
Total Xylenes	15.0	13.6	14.1	90.7	94.0	79.0-123			3.61	20
Methyl tert-butyl ether	5.00	4.97	4.78	99.4	95.6	68.0-125			3.90	20
(S) Toluene-d8				*102*	*104*	*80.0-120*				
(S) 4-Bromofluorobenzene				*105*	*107*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*109*	*106*	*70.0-130*				

Method Blank (MB)

(MB) R4058689-3 04/16/24 20:32

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	0.132	J	0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Total Xylenes	U		0.174	3.00
Methyl tert-butyl ether	U		0.101	1.00
(S) Toluene-d8	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*83.1*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4058689-1 04/16/24 19:35 • (LCSD) R4058689-2 04/16/24 19:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	5.56	5.40	111	108	70.0-123			2.92	20
Toluene	5.00	5.01	4.78	100	95.6	79.0-120			4.70	20
Ethylbenzene	5.00	4.78	4.72	95.6	94.4	79.0-123			1.26	20
Total Xylenes	15.0	14.0	13.5	93.3	90.0	79.0-123			3.64	20
Methyl tert-butyl ether	5.00	3.97	3.99	79.4	79.8	68.0-125			0.503	20
(S) Toluene-d8				*102*	*102*	*80.0-120*				
(S) 4-Bromofluorobenzene				*87.0*	*88.8*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*113*	*116*	*70.0-130*				

Method Blank (MB)

(MB) R4059532-1 04/18/24 11:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*86.0*			*52.0-156*

Laboratory Control Sample (LCS)

(LCS) R4059532-2 04/18/24 11:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	1500	1620	108	50.0-150	
(S) o-Terphenyl			*89.5*	*52.0-156*	

L1724797-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1724797-01 04/18/24 11:56 • (MS) R4059532-3 04/18/24 12:18 • (MSD) R4059532-4 04/18/24 12:39

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1430	U	1580	1560	110	109	1	50.0-150			1.27	20
(S) o-Terphenyl					*91.6*	*91.6*		*52.0-156*				

Method Blank (MB)

(MB) R4059710-1 04/19/24 02:02

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*84.5*			*52.0-156*

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Arcadis - Chevron - WA

1420 5th Ave
Unit 2400
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected:

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
Aimee Rice

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):

Immediately
Packed on Ice N____ Y____

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	HO (aka RRO) NWTPHDX 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	Remarks	Sample # (lab only)
MW-6A-W-20240409	G	GW	—	04/09/24	1025	8	X	X	X		-01
MW-8-W-20240409		GW	—		1155	8	X	X	X		-02
MW-10A-W-20240409		GW	—		1055	8	X	X	X		-03
MW-12-W-20240409		GW	—		0920	8	X	X	X		-04
MW-17-W-20240409		GW	—		1125	8	X	X	X		-05
MW-18-W-20240409		GW	—		0955	8	X	X	X		-06
MW-19-W-20240409		GW	—		0810	8	X	X	X		-07
MW-20-W-20240409		GW	—		0850	8	X	X	X		-08
MW-22-W-20240409		GW	—		1235	8	X	X	X		-09
MW-23-W-20240409		GW	—		1310	8	X	X	X		-10

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1724753
A227

Acctnum: **CHEVARCWA**
Template:**T241266**
Prelogin: **P1067778**
PM: **110 - Brian Ford**
PB:
Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6727 1916 2271

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	4/10/24	1500	Shipped via fedex
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No (2) HCl / MeoH TBR

Temp: °C Bottles Received: DP07 1.2+.1=1.3

If preservation required by Login: Date/Time

Date: 4-11-24 Time: 9:00

Hold:

Condition: NCF / OK

Company Name/Address:
Arcadis - Chevron - WA

1420 5th Ave
Unit 2400
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected:

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
Aimee Rice

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):

Immediately
Packed on Ice N____ Y____

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	HO (aka RRO) NWTPHDX 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl								Remarks	Sample # (lab only)
BD-W-20240409	G	GW	—	04/09/24	1200	8	X	X	X									-11
TB-W-20240409	↓	GW	—	↓	0900	2	X		X									-12
		GW																
		GW																
		GW																
		GW																

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1724753

Table #

Acctnum: **CHEVARCWA**
Template:**T241266**
Prelogin: **P1067778**
PM: **110 - Brian Ford**
PB:

Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6727 1916 2276

Sample Receipt Checklist

COC Seal Present/Intact: __NP	Y N
COC Signed/Accurate:	Y N
Bottles arrive intact:	Y N
Correct bottles used:	Y N
Sufficient volume sent:	Y N
If Applicable	
VOA Zero Headspace:	Y N
Preservation Correct/Checked:	Y N
RAD Screen <0.5 mR/hr:	Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR
	4/10/24	1500	Shipped Via Fedex	2
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				OPA7 1.2, 1.3
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
				4-11-24 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

June 25, 2024

Arcadis - Chevron - WA

Sample Delivery Group:	L1746001
Samples Received:	06/12/2024
Project Number:	30064313 19.45
Description:	206196
Site:	815 NE COLLEGE ST PULLMAN WA
Report To:	Melissa Caldwell 1420 5th Ave Unit 2400 Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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MW-6A-W-20240611 L1746001-01 GW

Collected by: Diana Ojeda | Collected date/time: 06/11/24 09:16 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 14:29	06/18/24 14:29	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 06:08	06/20/24 06:08	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2307738	1	06/19/24 06:35	06/22/24 02:48	MAA	Mt. Juliet, TN

MW-10A-W-20240611 L1746001-02 GW

Collected by: Diana Ojeda | Collected date/time: 06/11/24 10:20 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 14:52	06/18/24 14:52	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 06:30	06/20/24 06:30	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2307738	1	06/19/24 06:35	06/22/24 03:08	MAA	Mt. Juliet, TN

MW-12-W-20240611 L1746001-03 GW

Collected by: Diana Ojeda | Collected date/time: 06/11/24 08:24 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 15:15	06/18/24 15:15	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 06:51	06/20/24 06:51	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2307738	1	06/19/24 06:35	06/22/24 03:29	MAA	Mt. Juliet, TN

MW-17-W-20240611 L1746001-04 GW

Collected by: Diana Ojeda | Collected date/time: 06/11/24 09:52 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 15:39	06/18/24 15:39	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 07:13	06/20/24 07:13	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2307738	1	06/19/24 06:35	06/22/24 03:50	MAA	Mt. Juliet, TN

MW-18-W-20240610 L1746001-05 GW

Collected by: Diana Ojeda | Collected date/time: 06/10/24 15:58 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 16:02	06/18/24 16:02	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 07:34	06/20/24 07:34	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2307738	1	06/19/24 06:35	06/22/24 04:11	MAA	Mt. Juliet, TN

MW-19-W-20240611 L1746001-06 GW

Collected by: Diana Ojeda | Collected date/time: 06/11/24 07:52 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 16:32	06/18/24 16:32	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 07:56	06/20/24 07:56	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2307738	1	06/19/24 06:35	06/24/24 18:45	DMG	Mt. Juliet, TN

MW-20-W-20240611 L1746001-07 GW

Collected by: Diana Ojeda | Collected date/time: 06/11/24 08:46 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 16:55	06/18/24 16:55	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 08:18	06/20/24 08:18	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2307738	1	06/19/24 06:35	06/24/24 19:05	DMG	Mt. Juliet, TN

MW-22-W-20240611 L1746001-08 GW

Collected by: Diana Ojeda | Collected date/time: 06/11/24 11:28 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 17:22	06/18/24 17:22	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 08:39	06/20/24 08:39	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2307738	1	06/19/24 06:35	06/24/24 19:25	DMG	Mt. Juliet, TN

MW-23-W-20240611 L1746001-09 GW

Collected by: Diana Ojeda | Collected date/time: 06/11/24 10:51 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 17:45	06/18/24 17:45	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 09:00	06/20/24 09:00	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2307738	1	06/19/24 06:35	06/24/24 19:45	DMG	Mt. Juliet, TN

BD-W-20240610 L1746001-10 GW

Collected by: Diana Ojeda | Collected date/time: 06/10/24 12:00 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 18:09	06/18/24 18:09	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 09:22	06/20/24 09:22	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2307738	1	06/19/24 06:35	06/24/24 20:04	DMG	Mt. Juliet, TN

TB-W-20240611 L1746001-11 GW

Collected by: Diana Ojeda | Collected date/time: 06/11/24 09:00 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2307126	1	06/18/24 14:05	06/18/24 14:05	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2307649	1	06/20/24 05:26	06/20/24 05:26	ACG	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Sample Delivery Group (SDG) Narrative

pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1746001-01	MW-6A-W-20240611	NWTPHDX-NO SGT

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	40.8	J	31.6	100	1	06/18/2024 14:29	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*90.1*			*78.0-120*		*06/18/2024 14:29*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	06/20/2024 06:08	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 06:08	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 06:08	WG2307649
Total Xylenes	U		0.174	3.00	1	06/20/2024 06:08	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 06:08	WG2307649
(S) Toluene-d8	*112*			*80.0-120*		*06/20/2024 06:08*	WG2307649
(S) 4-Bromofluorobenzene	*110*			*77.0-126*		*06/20/2024 06:08*	WG2307649
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*06/20/2024 06:08*	WG2307649

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	338		66.7	200	1	06/22/2024 02:48	WG2307738
Residual Range Organics (RRO)	234	J	83.3	250	1	06/22/2024 02:48	WG2307738
(S) o-Terphenyl	*115*			*52.0-156*		*06/22/2024 02:48*	WG2307738

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/18/2024 14:52	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*91.7*			*78.0-120*		*06/18/2024 14:52*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/20/2024 06:30	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 06:30	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 06:30	WG2307649
Total Xylenes	U		0.174	3.00	1	06/20/2024 06:30	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 06:30	WG2307649
(S) Toluene-d8	*106*			*80.0-120*		*06/20/2024 06:30*	WG2307649
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*06/20/2024 06:30*	WG2307649
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*06/20/2024 06:30*	WG2307649

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/22/2024 03:08	WG2307738
Residual Range Organics (RRO)	U		83.3	250	1	06/22/2024 03:08	WG2307738
(S) o-Terphenyl	*92.6*			*52.0-156*		*06/22/2024 03:08*	WG2307738

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/18/2024 15:15	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*91.4*			*78.0-120*		*06/18/2024 15:15*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/20/2024 06:51	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 06:51	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 06:51	WG2307649
Total Xylenes	U		0.174	3.00	1	06/20/2024 06:51	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 06:51	WG2307649
(S) Toluene-d8	*106*			*80.0-120*		*06/20/2024 06:51*	WG2307649
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*06/20/2024 06:51*	WG2307649
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*06/20/2024 06:51*	WG2307649

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/22/2024 03:29	WG2307738
Residual Range Organics (RRO)	U		83.3	250	1	06/22/2024 03:29	WG2307738
(S) o-Terphenyl	*95.8*			*52.0-156*		*06/22/2024 03:29*	WG2307738

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	1180		31.6	100	1	06/18/2024 15:39	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*85.8*			*78.0-120*		*06/18/2024 15:39*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	14.3		0.0941	1.00	1	06/20/2024 07:13	WG2307649
Toluene	2.48		0.278	1.00	1	06/20/2024 07:13	WG2307649
Ethylbenzene	9.49		0.137	1.00	1	06/20/2024 07:13	WG2307649
Total Xylenes	6.65		0.174	3.00	1	06/20/2024 07:13	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 07:13	WG2307649
(S) Toluene-d8	*109*			*80.0-120*		*06/20/2024 07:13*	WG2307649
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*06/20/2024 07:13*	WG2307649
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*06/20/2024 07:13*	WG2307649

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	460		66.7	200	1	06/22/2024 03:50	WG2307738
Residual Range Organics (RRO)	228	J	83.3	250	1	06/22/2024 03:50	WG2307738
(S) o-Terphenyl	*115*			*52.0-156*		*06/22/2024 03:50*	WG2307738

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/18/2024 16:02	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*90.9*			*78.0-120*		*06/18/2024 16:02*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/20/2024 07:34	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 07:34	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 07:34	WG2307649
Total Xylenes	U		0.174	3.00	1	06/20/2024 07:34	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 07:34	WG2307649
(S) Toluene-d8	*108*			*80.0-120*		*06/20/2024 07:34*	WG2307649
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*06/20/2024 07:34*	WG2307649
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*06/20/2024 07:34*	WG2307649

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	109	J	66.7	200	1	06/22/2024 04:11	WG2307738
Residual Range Organics (RRO)	126	J	83.3	250	1	06/22/2024 04:11	WG2307738
(S) o-Terphenyl	*101*			*52.0-156*		*06/22/2024 04:11*	WG2307738

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/18/2024 16:32	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*90.4*			*78.0-120*		*06/18/2024 16:32*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/20/2024 07:56	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 07:56	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 07:56	WG2307649
Total Xylenes	U		0.174	3.00	1	06/20/2024 07:56	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 07:56	WG2307649
(S) Toluene-d8	*105*			*80.0-120*		*06/20/2024 07:56*	WG2307649
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*06/20/2024 07:56*	WG2307649
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*06/20/2024 07:56*	WG2307649

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	06/24/2024 18:45	WG2307738
Residual Range Organics (RRO)	U		83.3	250	1	06/24/2024 18:45	WG2307738
(S) o-Terphenyl	*113*			*52.0-156*		*06/24/2024 18:45*	WG2307738

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/18/2024 16:55	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*91.6*			*78.0-120*		*06/18/2024 16:55*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	06/20/2024 08:18	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 08:18	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 08:18	WG2307649
Total Xylenes	U		0.174	3.00	1	06/20/2024 08:18	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 08:18	WG2307649
(S) Toluene-d8	*108*			*80.0-120*		*06/20/2024 08:18*	WG2307649
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*06/20/2024 08:18*	WG2307649
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*06/20/2024 08:18*	WG2307649

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	69.9	J	66.7	200	1	06/24/2024 19:05	WG2307738
Residual Range Organics (RRO)	100	J	83.3	250	1	06/24/2024 19:05	WG2307738
(S) o-Terphenyl	*57.9*			*52.0-156*		*06/24/2024 19:05*	WG2307738

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/18/2024 17:22	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*91.0*			*78.0-120*		*06/18/2024 17:22*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/20/2024 08:39	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 08:39	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 08:39	WG2307649
Total Xylenes	U		0.174	3.00	1	06/20/2024 08:39	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 08:39	WG2307649
(S) Toluene-d8	*106*			*80.0-120*		*06/20/2024 08:39*	WG2307649
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*06/20/2024 08:39*	WG2307649
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*06/20/2024 08:39*	WG2307649

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	162	J	66.7	200	1	06/24/2024 19:25	WG2307738
Residual Range Organics (RRO)	225	J	83.3	250	1	06/24/2024 19:25	WG2307738
(S) o-Terphenyl	*103*			*52.0-156*		*06/24/2024 19:25*	WG2307738

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	258		31.6	100	1	06/18/2024 17:45	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*91.0*			*78.0-120*		*06/18/2024 17:45*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	5.22		0.0941	1.00	1	06/20/2024 09:00	WG2307649
Toluene	0.434	J	0.278	1.00	1	06/20/2024 09:00	WG2307649
Ethylbenzene	2.02		0.137	1.00	1	06/20/2024 09:00	WG2307649
Total Xylenes	0.237	J	0.174	3.00	1	06/20/2024 09:00	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 09:00	WG2307649
(S) Toluene-d8	*102*			*80.0-120*		*06/20/2024 09:00*	WG2307649
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*06/20/2024 09:00*	WG2307649
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*06/20/2024 09:00*	WG2307649

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	754		66.7	200	1	06/24/2024 19:45	WG2307738
Residual Range Organics (RRO)	464		83.3	250	1	06/24/2024 19:45	WG2307738
(S) o-Terphenyl	*113*			*52.0-156*		*06/24/2024 19:45*	WG2307738

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/18/2024 18:09	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*90.5*			*78.0-120*		*06/18/2024 18:09*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	06/20/2024 09:22	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 09:22	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 09:22	WG2307649
Total Xylenes	U		0.174	3.00	1	06/20/2024 09:22	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 09:22	WG2307649
(S) Toluene-d8	*107*			*80.0-120*		*06/20/2024 09:22*	WG2307649
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*06/20/2024 09:22*	WG2307649
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*06/20/2024 09:22*	WG2307649

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	120	J	66.7	200	1	06/24/2024 20:04	WG2307738
Residual Range Organics (RRO)	207	J	83.3	250	1	06/24/2024 20:04	WG2307738
(S) o-Terphenyl	*109*			*52.0-156*		*06/24/2024 20:04*	WG2307738

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	06/18/2024 14:05	WG2307126
(S) a,a,a-Trifluorotoluene(FID)	*91.4*			*78.0-120*		*06/18/2024 14:05*	WG2307126

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	06/20/2024 05:26	WG2307649
Toluene	U		0.278	1.00	1	06/20/2024 05:26	WG2307649
Ethylbenzene	U		0.137	1.00	1	06/20/2024 05:26	WG2307649
Total Xylenes	U		0.174	3.00	1	06/20/2024 05:26	WG2307649
Methyl tert-butyl ether	U		0.101	1.00	1	06/20/2024 05:26	WG2307649
(S) Toluene-d8	*108*			*80.0-120*		*06/20/2024 05:26*	WG2307649
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*06/20/2024 05:26*	WG2307649
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*06/20/2024 05:26*	WG2307649

Method Blank (MB)

(MB) R4083500-2 06/18/24 12:46

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*91.5*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R4083500-1 06/18/24 11:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5000	4150	83.0	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*99.5*	*78.0-120*	

Method Blank (MB)

(MB) R4084276-3 06/20/24 04:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Total Xylenes	U		0.174	3.00
Methyl tert-butyl ether	U		0.101	1.00
(S) Toluene-d8	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*104*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4084276-1 06/20/24 02:13 • (LCSD) R4084276-2 06/20/24 02:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	5.65	5.38	113	108	70.0-123			4.90	20
Toluene	5.00	5.37	4.90	107	98.0	79.0-120			9.15	20
Ethylbenzene	5.00	5.46	5.02	109	100	79.0-123			8.40	20
Total Xylenes	15.0	15.9	14.9	106	99.3	79.0-123			6.49	20
Methyl tert-butyl ether	5.00	5.61	5.53	112	111	68.0-125			1.44	20
(S) Toluene-d8				*104*	*105*	*80.0-120*				
(S) 4-Bromofluorobenzene				*104*	*103*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*110*	*110*	*70.0-130*				

Method Blank (MB)

(MB) R4085025-1 06/21/24 19:46

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*93.5*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4085025-2 06/21/24 20:07 • (LCSD) R4085025-3 06/21/24 20:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1380	1400	92.0	93.3	50.0-150			1.44	20
(S) o-Terphenyl				*100*	*103*	*52.0-156*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Arcadis - Chevron - WA

1420 5th Ave
Unit 2400
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected: **Pullman, WA**

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
Diana Ojeda

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):
Immediately
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	HO (aka RRO) NWTPHDX 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl								Remarks	Sample # (lab only)
MW-6A-W-20240611	G	GW	-	6/11/24	0916	8	X	X	X									-01
MW-10A-W-20240611		GW	-	6/11/24	1020	8	X	X	X									-02
MW-12-W-20240611		GW	-	6/11/24	0824	8	X	X	X									-03
MW-17-W-20240611		GW	-	6/11/24	0952	8	X	X	X									-04
MW-18-W-20240610		GW	-	6/10/24	1558	8	X	X	X									-05
MW-19-W-20240611		GW	-	6/11/24	0752	8	X	X	X									-06
MW-20-W-20240611		GW	-	6/11/24	0846	8	X	X	X									-07
MW-22-W-20240611		GW	-	6/11/24	1128	8	X	X	X									-08
MW-23-W-20240611		GW	-	6/11/24	1051	8	X	X	X									-09
BD-W-20240610		GW	-	6/10/24	1200	8	X	X	X									-10

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # 174600 | B002

Acctnum: **CHEVARCWA**
Template: **T241266**
Prelogin: **P1081356**
PM: **110 - Brian Ford**
PB:
Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7155 0313 6112

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Diana Ojeda	6/11/24	1300	Shipped via Fedex	2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: ED1°C 1.0-1.3=1.3 Bottles Received: 80	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Alexa Mitchell	Date: 6/12/24 Time: 0900	Hold: Condition: NCF / OK

Company Name/Address:
Arcadis - Chevron - WA

1420 5th Ave
Unit 2400
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected: Pullman, WA

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
Diana Ojeda

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):
Diana Ojeda

Immediately
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	HO (aka RRO) NWTPHDX 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	Remarks	Sample # (lab only)
TB-W-20240611	G	GW	-	6/11/24	0900	2	X		X		-01
		GW									
		GW									
		GW									
		GW									
		GW									

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # 174600l

Table #

Acctnum: **CHEVARCWA**
Template:**T241266**
Prelogin: **P1081356**
PM: **110 - Brian Ford**
PB:

Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7155 0313 6112

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Diana Ojeda	6/11/24	1300	Shipped via Fedex	2
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: FDAY °C Bottles Received: 1.0+.3=1.3 80
				If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time: Hold: Condition: NCF / OK
			alexa mitchell	6/12/24 0900

Appendix B

Groundwater Field Forms

ARCADIS Design & Consultancy for natural and built assets

DAILY LOG

Project No.: 30045311 Page 1 of 2

Site Location: Pullman, WA - 206196

Prepared By: Tyler Green

Date	Time	Description of Activities
3/10/20	0920	ANA onsite - conduct H&S meeting
	0940	Talk with Melissa Caldwell. Run through scope. Several wells are stick-up and have padlocks. No keys inside of shed. Go to hardware store and buy bolt cutters & padlocks.
	1030	ANA back onsite. Mob to MW-6A
		DTW: 2.18 ft BTOC 0.0 VOC / product
	1120	Mob to MW-19. Monument is full of water.
		DTW: 6.28 ft BTOC 0.0 VOC / product
	1135	Mob to MW-12.
		DTW: 6.06 ft BTOC
	1143	Mob to MW-20. Monument full of water.
		DTW: 5.09 ft BTOC
	1155	Mob to MW-18. DTW: 2.25 ft BTOC
	1220	Mob to MW-23. 4" well casing. 0.2 ppm VOC.
		Well monument is full of water. DTW: 4.33 ft BTOC
	1250	Mob to MW-22. 4" well casing. 0.0 VOCs/product
		DTW: 2.89 ft BTOC.
	1315	Mob to MW-21. 4" well casing with ~220 ppm VOCs. Large plastic tube inside of well casing full of H_2O that is tied to the J-plug. Presence of NAPL possible - wait until tomorrow when oil-water interface probe

ARCADIS Design & Consultancy for natural and built assets

DAILY LOG

Project No.: 30045311 Page 2 of 2

Site Location: 815 NE College St. Pullman, WA - 206196

Prepared By: Tyler Green

Date	Time	Description of Activities
3/10/2020		arrives. - DTW provided by FEI does not detect oil, only water. They will overnight the correct equipment.
	1348	Mob to MW-17. 4" casing. DTW=3.64 ft BTOC
		Loose j-plug. Dry monument.
	1358	Mob to MW-15. 4" well casing. 302 PPM VOC.
		8.25 ft BTOC (DTW). Stick-up well.
	1405	Mob to MW-13. 2" well casing. Ø VOCs.
		DTW = 8.09 ft BTOC
	1415	Mob to PZ-2B. 2" well casing. 0.2 VOCs
		DTW = 4.91 ft BTOC.
	1430	Mob to PZ-2A. 2" well casing. 18.4 VOCs
		DTW = 4.83 ft BTOC
	1450	Mob to DPE-1. 4" well casing. J-plug was
		left out of the casing by the previous technician.
		DTW = 2.47 ft BTOC. J-plug replaced.
	1457	Mob to PZ-1A. 2" well casing. 5.0 VOCs
		DTW = 2.79 ft BTOC.
	1510	Mob to AS-1. 2" well casing. Ø VOCs.
		DTW = 3.42 ft BTOC

ARCADIS Design & Consultancy for natural and built assets

DAILY LOG

Project No.: 30045311 Page 1 of 1

Site Location: 206196 - Pullman, WA

Prepared By: Tyler Green

Date	Time	Description of Activities
03/12/2020	0800	ANA onsite. Call Melissa Caldwell & open PTW. Conduct H&S meeting
	0830	Calibrate PID and Horiba.
	0840	Mob to MW-12. DTW: 6.15 TD: 12.51 ft BTOC
	0924	Sample MW-12. Battery on peri-pump died after charging all night. Go to O'Reilly's and get replacement battery.
	1030	ANA back onsite. Mob to MW-17.
	1045	MW-17 gauged. DTP: 3.72 ft BTOC DTW: 3.73 ft BTOC Do not sample due to product.
	1050	Mob to MW-21. 4" casing. Plastic tube inside. >300 PPM VOCs. Do not gauge/sample.
	11:10	Mob to MW-20. DTW: 5.14. ~~DTW~~ ft BTOC TD: 12.09 ft BTOC
	1220	Sample MW-20. Turbidity parameter did stabilize before the sample was collected because the water column was nearly gone.
	1255	Stop work for bathroom/water break
	1320	Mob to MW-18. DTW: 2.31 ft BTOC. TD: 11.84 ft BTOC
	1425	Samples collected @ MW-18.
	1500	Mob to main lot.

DPE 1 TD: 18.21 ft
DPE 2 TD: 18.47 ft
AS-1 TD: 13.09 ft

ARCADIS Design & Consultancy for natural and built assets

DAILY LOG

Project No.: 30045311 Page 1 of 1

Site Location: 815 NE College St, Pullman, WA

Prepared By: Tyler Green

Date	Time	Description of Activities
03/11/2020	0800	ANA onsite. Call Melissa Caldwell / open permit
	0850	Mob to MW-22. DTW = 2.92 ft BTOC. TD = 14.62
	10:08	Collect sample from MW-22 (low flow)
	10:25	Mob to MW-23. DTW = 4.32 ft BTOC. TD = 13.93 ft BTOC
	11:25	Collect sample from MW-23.
	11:40	Mob to MW-6A. DTW = 2.18 ft BTOC. TD = 13.78 ft BTOC
	12:52	Collect sample from MW-6A
	13:10	Mob to MW-19. DTW = 6.27 ft BTOC. TD = 14.00 ft BTOC
	14:22	Collect sample from MW-19.
	14:45	Mob to hotel to pick up oil-water interface probe.
	15:10	ANA back onsite. Mob to MW-9A. 2" well casing. Rope tied to j-plug which is holding a 2" plastic tube with water and product. VOCs spiked to 1000 ppm VOC.
	15:30	Call Melissa & report findings. Leaving well for now. (MW-9A)
	15:50	Mob to DPE-2. 86 ppm VOC upon opening. 4" casing DTP = 4.69 DTW = 4.71. Product seems to be light in color.
	1620	Mob to PZ-1B. 2" well casing with 2" plastic tube.
	1635	Mob to MW-8. Stick-up. 2" casing. DTP = 5.51 ft BTOC DTW = 5.53 ft BTOC. 28.1 PPM VOCs upon opening.
	1645	Call Melissa Caldwell and report near miss.
	1655	Mob to MW-16. Stick up. 4" casing. 4" plastic tube in well. 38 PPM VOCs

	DTW	TD	Sample time
MW-6A	2.18	13.78	3/11 @ 12:52
MW-8			~~3/12~~ N/A - product
MW-9A	—	—	Product/tube in well
MW-12	6.15	12.51	3/12 @ 9:24
MW-13	8.09	NM	NA
MW-15	8.25	NM	NA
MW-16	—	—	Product/tube in well
MW-17	3.~~73~~	~~NM~~ 3.72	~~NA~~ Not sampled - Product
MW-18	2.31	11.84	3/12 @ 14:25
MW-19	6.27	14.00	3/11 @ 14:22
MW-21	—	—	Bailer tube w/ product in well
MW-22	2.92	14.62	3/11 @ 10:08
MW-23	4.32	13.93	3/11 @ 11:25
DPE-1	2.47	NM	NA
DPE-2	4.71	4.69	NA
PZ-1A	2.79	NM	NA
PZ-1B	—	~~5.51~~	Product/tube in well
AS-1	3.42	NM	NA
PZ-2A	4.83	NM	NA
PZ-2B	4.91	NM	NA
MW-20	5.14	12.09	3/12 @ 12:20
MW-10A	well	not	found

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Project Number	30064313
Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Measuring Point:	Top of Casing
Date(s):	05/17/2021
Sampler(s):	Tyler Green
Gauging Equipment:	Interface Probe

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	Comments
AS-1	05/17/2021	11:16	4.52	ND	13.10	0	--
DPE-1	05/17/2021	09:25	4.02	ND	18.17	0.5	--
DPE-2	05/17/2021	08:20	6.09	5.91	--	438	Total depth not collected due to product
MW-2	05/17/2021	10:00	6.98	ND	14.21	--	Well monument was full of wasp hives. I used spray to kill them before gauging.
MW-6A	05/17/2021	11:25	2.87	ND	13.81	0	--
MW-8	05/17/2021	09:30	6.56	ND	16.89	53	--
MW-9A	05/17/2021	--	--	ND	--	--	Bailer/skimmer in well. 193 PPM VOCs upon j-plug removal.
MW-12	05/17/2021	11:36	6.59	ND	12.55	--	--
MW-13	05/17/2021	11:06	9.34	ND	16.87	--	--
MW-15	05/17/2021	10:40	9.38	ND	19.36	318	Possible sheen present.
MW-16	05/17/2021	--	--	ND	--	--	Why the well could no tbe Gauged: Bailer/skimmer in well. ; General Comments: Bailer/skimmer in well. Approximately 1” of product is in the top of the tube. Gauging can not be completed.
MW-17	05/17/2021	10:45	5.18	ND	12.01	93	--
MW-18	05/17/2021	12:48	3.35	ND	11.87	0	--
MW-18	05/17/2021	12:46	3.37	ND	11.86	0	--
MW-19	05/17/2021	11:50	6.84	ND	14.08	0	--
MW-20	05/17/2021	11:43	5.8	ND	12.08	--	--

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Project Number	30064313
Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Measuring Point:	Top of Casing
Date(s):	05/17/2021
Sampler(s):	Tyler Green
Gauging Equipment:	Interface Probe

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	Comments
MW-21	05/17/2021	--	--	ND	--	--	Why the well could no tbe Gauged: Bailer and product in well.; General Comments: Well monument is full of water and iron fouling sludge. Gauging can not be completed due to a bailer and product in the well. Approximately 3" of product in bailer. 289 PPM VOCs.
MW-22	05/17/2021	15:15	3.8	ND	14.68	--	--
MW-22	05/17/2021	10:13	3.81	ND	14.68	0	--
MW-23	05/17/2021	10:25	5.34	ND	13.90	--	--
MW-23	05/17/2021	14:06	5.36	ND	13.90	0	--
PZ-1A	05/17/2021	11:00	3.99	ND	15.05	--	--
PZ-1B	05/17/2021	--	--	ND	--	--	Why the well could no tbe Gauged: Bailer/skimmer inside of well.; General Comments: Bailer/skimmer is in well. Gauging can not be performed. 60 PPM VOCs.
PZ-2B	05/17/2021	08:40	6	ND	16.07	44	--
PZ-2A	05/17/2021	08:30	6.07	6.06	--	32	Total depth not collected due to product.

ft-bmp = feet below measuring point ND = Not Detected PID = Photoionization Detector Reading

ppm = parts per million -- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30064313	**Well ID**	MW-12	**Date**	5/18/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Tyler Green
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	-- to --	**Casing Diameter (in.)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.66	**Total Depth (ft-bmp)**	12.55	**Water Column (ft)**	5.89	**Gallons in Well**	0.96
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	11:18	**Well Volumes Purged**	4.40	**Sample ID**	MW-12-W-202105	**Evacuation Equipment**	Peristaltic
Purge Start	10:28	**Gallons Purged**	4.23	**Duplicate ID**	--		
Purge End	11:18	**Total Purge Time (h:m)**	0:50				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:31	300	7.48	6.52	0.976	25.3	0.39	9.33	98	Clear	--
10:34	300	7.68	6.55	1.02	15.1	0.28	9.27	69	Clear	--
10:37	300	7.88	6.60	1.07	10.2	0.26	9.26	34	Clear	--
10:40	300	8.04	6.63	1.08	7.8	0.25	9.37	11	Clear	--
10:43	300	8.19	6.65	1.09	6.0	0.28	9.35	-4	Clear	--
10:46	300	8.32	6.67	1.08	5.9	0.30	9.37	-13	Clear	--
10:49	300	8.49	6.68	1.07	5.7	0.34	9.39	-19	Clear	--
10:52	300	8.67	6.71	1.06	4.9	0.39	9.46	-26	Clear	--
10:55	300	8.83	6.76	1.06	4.8	0.44	9.47	-35	Clear	--
10:58	300	9.02	6.81	1.06	5.1	0.53	9.44	-41	Clear	--
11:01	300	9.18	6.87	1.06	5.1	0.70	9.46	-47	Clear	--
11:04	300	9.37	6.92	1.06	5.3	0.82	9.45	-51	Clear	--
11:07	300	9.58	6.94	1.08	5.4	0.99	9.42	-53	Clear	--
11:11	300	9.88	6.94	1.10	9.3	1.29	9.46	-52	Clear	--
11:14	300	10.20	6.94	1.11	8.4	1.57	9.50	-50	Clear	--

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

11:17	300	10.18	6.94	1.12	7.4	1.84	9.54	-48	Clear	--

Comments: I contacted Sydney for approval to sample the well before all of the parameters stabilized after 40 minutes of purging due to low water levels. One VOA had leaked its preservative. I did not fill this bottle and the sample set is 1 HCL VOA short.

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-12-W-202105 Sample Time: 11:18 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30064313	**Well ID**	MW-15	**Date**	5/18/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Tyler Green
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 17	**Casing Diameter (in.)**	4	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	9.51	**Total Depth (ft-bmp)**	19.36	**Water Column (ft)**	9.85	**Gallons in Well**	6.4
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	08:02	**Well Volumes Purged**	0.27	**Sample ID**	MW-15–W-202105	**Evacuation Equipment**	Peristaltic
Purge Start	07:27	**Gallons Purged**	1.72	**Duplicate ID**	--		
Purge End	08:01	**Total Purge Time (h:m)**	0:34				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
07:42	300	9.70	6.02	0.464	3.9	0.76	12.73	-41	Clear	Moderate
07:46	300	9.83	6.05	0.470	3.7	0.85	12.23	-49	Clear	Moderate
07:49	300	9.94	6.07	0.473	4.2	0.96	11.95	-53	Clear	Moderate
07:52	300	10.06	6.08	0.475	4.2	1.09	11.81	-56	Clear	Moderate
07:55	300	10.18	6.09	0.476	4.7	1.16	11.68	-58	Clear	Moderate
07:58	300	10.30	6.08	0.479	4.0	1.20	11.58	-59	Clear	Moderate
08:01	300	10.42	6.08	0.478	4.5	1.22	11.52	-60	Clear	Moderate

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-15–W-202105 Sample Time: 08:02 Sample Depth (ft-bmp): 15

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30064313	**Well ID**	MW-18	**Date**	5/17/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Tyler Green
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	3.35	**Total Depth (ft-bmp)**	11.87	**Water Column (ft)**	8.52	**Gallons in Well**	1.38
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	13:19	**Well Volumes Purged**	1.34	**Sample ID**	MW-18	**Evacuation Equipment**	Peristaltic
Purge Start	12:56	**Gallons Purged**	1.85	**Duplicate ID**	BD-1		
Purge End	13:19	**Total Purge Time (h:m)**	0:23				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:59	300	3.54	6.83	0.644	1.1	1.12	19.71	-76	Clear	--
13:02	300	3.54	6.91	0.651	0.0	1.13	18.96	-85	Clear	--
13:05	300	3.55	6.94	0.660	0.0	1.32	18.48	-92	Clear	--
13:08	300	3.56	6.96	0.661	0.0	1.44	18.39	-95	Clear	--
13:11	300	3.56	6.98	0.662	0.0	1.59	18.27	-98	Clear	--
13:14	300	3.57	7.05	0.662	0.0	1.72	18.18	-101	Clear	--
13:17	300	3.58	7.00	0.662	0.0	1.74	18.16	-101	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-18 Sample Time: 13:19 Sample Depth (ft-bmp): 8

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30064313	**Well ID**	MW-2	**Date**	5/18/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Tyler Green
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	-- to --	**Casing Diameter (in.)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	7.04	**Total Depth (ft-bmp)**	14.21	**Water Column (ft)**	7.17	**Gallons in Well**	1.17
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab

Sample Time	09:42	**Well Volumes Purged**	2.48	**Sample ID**	MW-2-W-202105	**Evacuation Equipment**	Peristaltic
Purge Start	09:10	**Gallons Purged**	2.91	**Duplicate ID**	--		
Purge End	09:42	**Total Purge Time (h:m)**	0:32				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:16	300	7.40	6.46	0.850	22.9	0.85	9.79	4	Brown	--
09:19	300	7.53	6.56	0.850	38.9	0.61	9.86	3	Brown	--
09:22	300	7.67	6.54	0.865	57.6	0.45	10.05	-4	Brown	--
09:25	300	7.78	6.63	0.876	51.4	0.42	10.01	-8	Brown	--
09:28	300	7.85	6.63	0.883	32.0	0.38	9.97	-13	Brown	--
09:31	300	7.89	6.62	0.885	20.7	0.35	10.01	-13	Brown	--
09:34	300	7.94	6.61	0.882	13.4	0.38	9.91	-15	Brown	--
09:37	300	7.98	6.62	0.881	12.8	0.45	9.88	-19	Brown	--
09:40	300	8.01	6.64	0.883	12.9	0.44	9.82	-20	Brown	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-2-W-202105 Sample Time: 09:42 Sample Depth (ft-bmp): 11

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30064313	**Well ID**	MW-22	**Date**	5/17/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Tyler Green
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4.6 to 14.6	**Casing Diameter (in.)**	4	**Well Casing Material**	--
Static Water Level (ft-bmp)	3.8	**Total Depth (ft-bmp)**	14.68	**Water Column (ft)**	10.88	**Gallons in Well**	7.07
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	15:35	**Well Volumes Purged**	0.30	**Sample ID**	MW-22	**Evacuation Equipment**	Peristaltic
Purge Start	15:17	**Gallons Purged**	2.11	**Duplicate ID**	--		
Purge End	15:35	**Total Purge Time (h:m)**	0:18				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
15:19	300	3.86	6.77	0.569	4.8	0.66	18.66	48	Clear	--
15:22	300	3.87	6.70	0.578	3.0	0.43	17.63	33	Clear	--
15:25	300	3.86	6.60	0.590	4.4	0.34	16.92	25	Clear	--
15:28	300	3.87	6.53	0.606	4.7	0.36	15.74	23	Clear	--
15:31	300	3.87	6.50	0.605	2.4	0.32	15.74	22	Clear	--
15:34	300	3.88	6.49	0.609	1.1	0.29	15.41	20	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-22 Sample Time: 15:35 Sample Depth (ft-bmp): 9

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30064313	**Well ID**	MW-23	**Date**	5/17/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Tyler Green
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3.95 to 13.95	**Casing Diameter (in.)**	4	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	5.36	**Total Depth (ft-bmp)**	13.9	**Water Column (ft)**	8.54	**Gallons in Well**	5.55
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	14:38	**Well Volumes Purged**	0.40	**Sample ID**	MW-23	**Evacuation Equipment**	Peristaltic
Purge Start	14:15	**Gallons Purged**	2.22	**Duplicate ID**	--		
Purge End	14:38	**Total Purge Time (h:m)**	0:23				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
14:16	300	5.50	6.93	0.490	9.3	1.36	18.51	77	Clear	--
14:19	300	5.63	6.76	0.501	16.3	0.46	15.39	65	Clear	--
14:22	300	5.80	6.65	0.516	14.2	0.32	14.41	63	Clear	--
14:25	300	5.98	6.55	0.520	11.0	0.27	14.05	64	Clear	--
14:28	300	6.14	6.46	0.522	12.2	0.25	13.97	66	Clear	--
14:31	300	6.31	6.42	0.524	8.5	0.25	13.89	66	Clear	--
14:34	300	6.43	6.41	0.526	8.1	0.25	13.85	66	Clear	--
14:37	300	6.54	6.41	0.527	8.4	0.27	13.96	66	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-23 Sample Time: 14:38 Sample Depth (ft-bmp): 12.5

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Groundwater Gauging Log

Project Number	30064313
Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Measuring Point:	Top of Casing
Date(s):	11/11/2021
Sampler(s):	Lee Bures
Gauging Equipment:	Interface Probe

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
AS-1	11/11/2021	11:19	5.98	ND	13.10	0	--	--
DPE-1	11/11/2021	11:28	5.54	ND	18.00	0	--	--
DPE-2	11/11/2021	11:57	7.21	7.08	--	0	--	--
MW-2	11/11/2021	11:38	7.38	ND	14.30	0	--	--
MW-6A	11/11/2021	10:22	3.51	ND	13.75	0	--	--
MW-8	11/11/2021	11:32	8	ND	16.88	0	--	--
MW-10A	11/11/2021	10:28	8.5	ND	15.05	0	--	--
MW-12	11/11/2021	10:01	5.65	ND	12.49	0	--	--
MW-13	11/11/2021	11:04	9.4	ND	16.72	0	--	--
MW-15	11/11/2021	10:40	9.6	ND	19.34	0	--	--
MW-17	11/11/2021	11:12	6.9	ND	12.02	0	--	--
MW-18	11/11/2021	10:15	3.24	ND	11.87	0	--	--
MW-19	11/11/2021	09:54	6.22	ND	14.08	0	--	--
MW-20	11/11/2021	10:06	4.9	ND	12.10	0	--	--
MW-22	11/11/2021	11:43	4.4	ND	14.70	0	--	--
MW-23	11/11/2021	11:49	6.32	ND	13.90	0	--	--
PZ-1A	11/11/2021	11:23	5.58	ND	14.98	0	--	--
PZ-2A	11/11/2021	10:51	7.25	ND	18.03	0	--	Odor
PZ-2B	11/11/2021	10:59	7.5	ND	15.98	0	--	--

ft-bmp = feet below measuring point ND = Not Detected PID = Photoionization Detector Reading

ppm = parts per million -- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-6A	**Date**	11/12/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	3.51	**Total Depth (ft-bmp)**	13.75	**Water Column (ft)**	10.24	**Gallons in Well**	1.66
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	07:25	**Well Volumes Purged**	0.57	**Sample ID**	Mw-6A-w-20211112	**Evacuation Equipment**	Peristaltic
Purge Start	07:04	**Gallons Purged**	0.95	**Duplicate ID**	--		
Purge End	07:23	**Total Purge Time (h:m)**	0:19				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
07:07	200	3.51	7.45	0.694	47.0	1.69	12.40	-23.5	Clear	None
07:10	200	3.51	7.21	0.702	48.0	1.45	12.25	-29.9	Clear	None
07:13	200	3.51	7.05	0.710	53.0	1.24	12.30	-34.6	Clear	None
07:16	200	3.51	7.01	0.713	49.0	1.06	12.30	-37.3	Clear	None
07:19	200	3.51	7.00	0.713	47.0	1.03	12.29	-38.9	Clear	None
07:22	200	3.51	6.97	0.713	46.0	1.01	12.29	-39.4	Clear	None

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: Mw-6A-w-20211112 Sample Time: 07:25 Sample Depth (ft-bmp): 8

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-8	**Date**	11/11/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	2.5 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	8	**Total Depth (ft-bmp)**	16.88	**Water Column (ft)**	8.88	**Gallons in Well**	1.44
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	13:22	**Well Volumes Purged**	0.55	**Sample ID**	Mw-8-w-20211111	**Evacuation Equipment**	Peristaltic
Purge Start	13:04	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	13:20	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
13:07	200	8.10	7.27	0.549	10.0	0.68	10.39	-63.4	Clear	Mild
13:10	200	8.10	7.20	0.555	6.0	0.50	10.72	-73.6	Clear	Mild
13:13	200	8.10	7.12	0.554	5.0	0.44	10.74	-78	Clear	Mild
13:16	200	8.10	7.10	0.556	5.0	0.42	10.79	-81.6	Clear	Mild
13:19	200	8.10	7.07	0.556	5.0	0.41	10.84	-83.7	Clear	Mild

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: Mw-8-w-20211111 Sample Time: 13:22 Sample Depth (ft-bmp): 12

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-10A	**Date**	11/11/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 15	**Casing Diameter (in.)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	8.5	**Total Depth (ft-bmp)**	15.05	**Water Column (ft)**	6.55	**Gallons in Well**	1.06
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	14:02	**Well Volumes Purged**	0.90	**Sample ID**	Mw-10A-w-20211111	**Evacuation Equipment**	Peristaltic
Purge Start	13:41	**Gallons Purged**	0.95	**Duplicate ID**	--		
Purge End	14:00	**Total Purge Time (h:m)**	0:19				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
13:44	200	8.68	6.84	0.544	49.0	0.58	13.64	-89.3	Clear	None
13:47	200	8.72	6.88	0.573	46.0	0.72	13.82	-80.1	Clear	None
13:50	200	8.75	6.74	0.566	38.0	0.68	13.43	-73.8	Clear	None
13:53	200	8.77	6.70	0.569	26.0	0.91	13.49	-68.2	Clear	None
13:56	200	8.79	6.66	0.570	28.0	0.93	13.53	-66.9	Clear	None
13:59	200	8.79	6.62	0.570	27.0	0.94	13.56	-62.5	Clear	None

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: Mw-10A-w-20211111 Sample Time: 14:02 Sample Depth (ft-bmp): 12

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-12	**Date**	11/12/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	-- to --	**Casing Diameter (in.)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	5.65	**Total Depth (ft-bmp)**	12.49	**Water Column (ft)**	6.84	**Gallons in Well**	1.11
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	08:43	**Well Volumes Purged**	0.71	**Sample ID**	Mw-22-w-20211112	**Evacuation Equipment**	Peristaltic
Purge Start	08:25	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	08:41	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
08:28	200	5.65	8.05	0.472	63.0	2.64	11.60	-4.5	Clear	None
08:31	200	5.65	7.76	0.466	42.0	3.00	11.61	-2	Clear	None
08:34	200	5.65	7.62	0.465	31.0	3.08	11.60	-0.2	Clear	None
08:37	200	5.65	7.58	0.465	33.0	3.11	11.58	1.3	Clear	None
08:40	200	5.65	7.56	0.464	31.0	3.11	11.57	2.8	Clear	None

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: Mw-22-w-20211112 Sample Time: 08:43 Sample Depth (ft-bmp): 9

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-17	**Date**	11/11/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 12	**Casing Diameter (in.)**	4	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.9	**Total Depth (ft-bmp)**	12.02	**Water Column (ft)**	5.12	**Gallons in Well**	3.33
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	12:32	**Well Volumes Purged**	0.24	**Sample ID**	Mw-17-w-20211111	**Evacuation Equipment**	Peristaltic
Purge Start	12:14	**Gallons Purged**	0.79	**Duplicate ID**	Bd-w-20211121		
Purge End	12:31	**Total Purge Time (h:m)**	0:17				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:17	200	6.98	6.84	0.668	12.0	1.78	12.02	-12.8	Clear	None
12:20	200	7.01	7.23	0.666	8.0	1.64	12.22	-17.5	Clear	None
12:23	200	7.04	7.30	0.662	7.0	1.60	12.20	-20.3	Clear	None
12:26	200	7.06	7.33	0.660	7.0	1.58	12.25	-23.6	Clear	None
12:29	200	7.08	7.37	0.659	7.0	1.56	12.22	-27.3	Clear	None

Comments: Noner

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: Mw-17-w-20211111 Sample Time: 12:32 Sample Depth (ft-bmp): 9

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-18	**Date**	11/11/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	3.24	**Total Depth (ft-bmp)**	11.87	**Water Column (ft)**	8.63	**Gallons in Well**	1.4
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	15:52	**Well Volumes Purged**	0.68	**Sample ID**	Mw-18-w-20211111	**Evacuation Equipment**	Peristaltic
Purge Start	15:31	**Gallons Purged**	0.95	**Duplicate ID**	--		
Purge End	15:50	**Total Purge Time (h:m)**	0:19				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
15:34	200	3.35	6.43	0.486	20.0	0.23	14.87	-23.9	Clear	None
15:37	200	3.39	6.33	0.494	10.0	0.20	15.05	-28.7	Clear	None
15:40	200	3.39	6.29	0.497	8.0	0.20	15.15	-34.3	Clear	None
15:43	200	3.39	6.27	0.502	8.0	0.20	15.39	-39	Clear	None
15:46	200	3.39	6.25	0.500	7.0	0.21	15.34	-41.3	Clear	None
15:49	200	3.39	6.24	0.499	7.0	0.21	15.28	-43.4	Clear	None

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: Mw-18-w-20211111 Sample Time: 15:52 Sample Depth (ft-bmp): 8

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-19	**Date**	11/12/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.22	**Total Depth (ft-bmp)**	14.08	**Water Column (ft)**	7.86	**Gallons in Well**	1.28
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	07:59	**Well Volumes Purged**	0.62	**Sample ID**	Mw-19-w-20211112	**Evacuation Equipment**	Peristaltic
Purge Start	07:44	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	08:00	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
07:47	200	6.22	6.78	0.517	52.0	0.80	10.09	-10.1	Clear	None
07:50	200	6.22	6.51	0.517	40.0	0.80	10.13	-12.2	Clear	None
07:53	200	6.22	6.60	0.516	28.0	0.75	10.12	-15	Clear	None
07:56	200	6.22	6.62	0.515	27.0	0.78	10.08	-17.4	Clear	None
07:59	200	6.22	6.60	0.516	28.0	0.80	10.13	-20.1	Clear	None

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: Mw-19-w-20211112 Sample Time: 07:59 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-20	**Date**	11/12/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	4.9	**Total Depth (ft-bmp)**	12.1	**Water Column (ft)**	7.20	**Gallons in Well**	1.17
Water Quality Meter Make/Model	Hanna HI 98129,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**	Grab		
Sample Time	09:17	**Well Volumes Purged**	0.34	**Sample ID**	Mw-20-w-20211112	**Evacuation Equipment**	Peristaltic
Purge Start	08:59	**Gallons Purged**	0.40	**Duplicate ID**	--		
Purge End	09:15	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:02	100	5.10	6.74	0.703	106	0.43	11.46	-8.9	Clear	None
09:05	100	5.18	6.65	0.703	46.0	0.38	11.49	-12.3	Clear	None
09:08	100	5.24	6.62	0.705	21.0	0.36	11.51	-15.6	Clear	None
09:11	100	5.30	6.59	0.708	19.0	0.35	11.54	-18	Clear	None
09:14	100	5.39	6.59	0.707	19.0	0.35	11.55	-19.3	Clear	None

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: Mw-20-w-20211112 Sample Time: 09:17 Sample Depth (ft-bmp): 9

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-22	**Date**	11/11/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4.6 to 14.6	**Casing Diameter (in.)**	4	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	4.4	**Total Depth (ft-bmp)**	14.7	**Water Column (ft)**	10.30	**Gallons in Well**	6.69
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	14:39	**Well Volumes Purged**	0.12	**Sample ID**	Mw-22-w-20211111	**Evacuation Equipment**	Peristaltic
Purge Start	14:21	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	14:37	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
14:24	200	4.44	6.73	0.479	14.0	2.02	9.45	-8.5	Clear	None
14:27	200	4.44	6.90	0.488	10.0	1.56	9.78	-2	Clear	None
14:30	200	4.44	6.93	0.492	9.0	1.46	10.01	0.8	Clear	None
14:33	200	4.44	6.93	0.493	9.0	1.45	10.06	2.1	Clear	None
14:36	200	4.44	6.91	0.493	9.0	1.50	10.03	3.7	Clear	None

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: Mw-22-w-20211111 Sample Time: 14:39 Sample Depth (ft-bmp): 9

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-23	**Date**	11/11/2021		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3.95 to 13.95	**Casing Diameter (in.)**	4	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.32	**Total Depth (ft-bmp)**	13.9	**Water Column (ft)**	7.58	**Gallons in Well**	4.93
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	15:15	**Well Volumes Purged**	0.16	**Sample ID**	Mw-23-w-20211111	**Evacuation Equipment**	Peristaltic
Purge Start	14:57	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	15:13	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
15:00	200	6.49	6.64	0.398	33.0	0.52	10.17	-3	Clear	None
15:03	200	6.55	6.56	0.399	30.0	0.37	10.34	-10.7	Clear	None
15:06	200	6.59	6.53	0.400	32.0	0.39	10.42	-15.8	Clear	None
15:09	200	6.62	6.50	0.399	31.0	0.42	10.40	-19.2	Clear	None
15:12	200	6.65	6.48	0.400	29.0	0.40	10.45	-20.9	Clear	None

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: Mw-23-w-20211111 Sample Time: 15:15 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Groundwater Gauging Log

Project Number	30064313
Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Measuring Point:	Top of Casing
Date(s):	06/15/2022
Sampler(s):	Lee Bures
Gauging Equipment:	Interface Probe

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
AS-1	06/15/2022	14:40	1.45	ND	13.15	--	--	--
DPE-1	06/15/2022	14:44	1	ND	18.40	--	--	--
DPE-2	06/15/2022	02:27	2.75	2.71	--	--	--	--
MW-2	06/15/2022	14:54	3.42	ND	14.25	--	--	--
MW-6A	06/15/2022	15:51	0.3	ND	13.75	--	--	--
MW-8	06/15/2022	14:51	3.51	3.48	--	--	--	--
MW-10A	06/15/2022	15:12	7.03	ND	15.05	--	--	--
MW-12	06/15/2022	15:32	4.65	ND	12.35	--	--	--
MW-13	06/15/2022	15:14	4.4	ND	13.64	--	--	--
MW-15	06/15/2022	15:40	5.52	ND	19.40	--	--	--
MW-17	06/15/2022	14:34	1.9	ND	12.02	--	--	--
MW-18	06/15/2022	15:19	1.85	ND	11.89	--	--	--
MW-19	06/15/2022	15:29	4.74	ND	14.10	--	--	--
MW-20	06/15/2022	15:35	4.23	ND	12.05	--	--	--
MW-22	06/15/2022	15:07	0.8	ND	14.70	--	--	--
MW-23	06/15/2022	14:59	0.5	ND	13.90	--	--	--
PZ-1A	06/15/2022	14:48	1.03	ND	14.85	--	--	--
PZ-2B	06/15/2022	14:20	2.46	ND	16.03	--	--	--
PZ-2A	06/15/2022	14:24	2.11	ND	15.91	--	--	--

ft-bmp = feet below measuring point ND = Not Detected PID = Photoionization Detector Reading

ppm = parts per million -- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-6A	**Date**	6/16/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	0.3	**Total Depth (ft-bmp)**	13.75	**Water Column (ft)**	13.45	**Gallons in Well**	2.19
Water Quality Meter Make/Model	Hach 2100Q,YSI Pro Plus	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	10:46	**Well Volumes Purged**	0.36	**Sample ID**	MW-6A-W-20220616	**Evacuation Equipment**	Peristaltic
Purge Start	10:28	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	10:43	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:31	200	0.30	7.14	0.656	102	0.28	14.10	-34.2	--	--
10:34	200	0.30	7.17	0.655	56.0	0.20	13.90	-57.1	--	--
10:37	200	0.30	7.19	0.661	37.0	0.16	14.30	-74.6	--	--
10:40	200	0.30	7.20	0.662	35.0	0.17	14.00	-76.2	--	--
10:43	200	0.30	7.19	0.661	35.0	0.17	14.10	-76.9	--	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-6A-W-20220616 Sample Time: 10:46 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-10A	**Date**	6/16/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Overcast temp is 62	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 15	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	7.03	**Total Depth (ft-bmp)**	15.05	**Water Column (ft)**	8.02	**Gallons in Well**	1.3
Water Quality Meter Make/Model	Hach 2100Q,YSI Pro Plus	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	12:56	**Well Volumes Purged**	0.61	**Sample ID**	MW-10A-W-20220616	**Evacuation Equipment**	Peristaltic
Purge Start	12:38	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	12:53	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:41	200	7.03	6.47	0.313	37.0	0.16	14.30	112.8	--	--
12:44	200	7.03	6.41	0.319	27.0	0.18	14.30	111	--	--
12:47	200	7.03	6.39	0.336	22.0	0.19	14.30	108	--	--
12:50	200	7.03	6.37	0.339	20.0	0.17	14.10	107.1	--	--
12:53	200	7.03	6.37	0.340	20.0	0.17	14.30	105.1	--	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-10A-W-20220616 Sample Time: 12:56 Sample Depth (ft-bmp): 11

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-12	**Date**	6/16/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Overcast temp is 62	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	-- to --	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	4.65	**Total Depth (ft-bmp)**	12.35	**Water Column (ft)**	7.70	**Gallons in Well**	1.25
Water Quality Meter Make/Model	Hach 2100Q,YSI Pro Plus	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	14:05	**Well Volumes Purged**	0.63	**Sample ID**	MW-12-W-20220616	**Evacuation Equipment**	Peristaltic
Purge Start	13:47	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	14:02	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
13:50	200	4.65	6.59	0.675	32.0	0.31	10.90	8.4	--	--
13:53	200	4.65	6.65	0.488	27.0	0.34	11.00	8.9	--	--
13:56	200	4.65	6.62	0.408	22.0	0.36	11.30	14	--	--
13:59	200	4.65	6.56	0.405	20.0	0.39	11.40	15.9	--	--
14:02	200	4.65	6.59	0.405	20.0	0.37	11.30	15.2	--	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-12-W-20220616 Sample Time: 14:05 Sample Depth (ft-bmp): 8

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-17	**Date**	6/16/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Overcast temp is 62	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	1.9	**Total Depth (ft-bmp)**	12.02	**Water Column (ft)**	10.12	**Gallons in Well**	1.64
Water Quality Meter Make/Model	Hach 2100Q,YSI Pro Plus	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	13:29	**Well Volumes Purged**	0.48	**Sample ID**	MW-17-W-20220616	**Evacuation Equipment**	Peristaltic
Purge Start	13:11	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	13:26	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
13:14	200	1.90	6.72	0.591	17.0	0.17	13.70	6.5	--	--
13:17	200	1.90	6.74	0.592	13.0	0.15	13.60	-15.3	--	--
13:20	200	1.90	6.76	0.599	12.0	0.14	13.80	-39.2	--	--
13:23	200	1.90	6.77	0.600	12.0	0.12	13.90	-41.2	--	--
13:26	200	1.90	6.78	0.601	12.0	0.11	13.90	-42.8	--	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-17-W-20220616 Sample Time: 13:29 Sample Depth (ft-bmp): 8

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-18	**Date**	6/16/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	1.85	**Total Depth (ft-bmp)**	11.89	**Water Column (ft)**	10.04	**Gallons in Well**	1.63
Water Quality Meter Make/Model	Hach 2100Q,YSI Pro Plus	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	09:24	**Well Volumes Purged**	0.49	**Sample ID**	MW-18-W-20220616	**Evacuation Equipment**	Peristaltic
Purge Start	09:06	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	09:21	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:09	200	1.85	6.70	0.628	43.0	1.07	15.80	119.8	--	--
09:12	200	1.85	6.68	0.631	32.0	0.83	15.90	78.1	--	--
09:15	200	1.85	6.69	0.633	27.0	0.48	15.90	25.6	--	--
09:18	200	1.85	6.69	0.632	27.0	0.45	15.80	24.2	--	--
09:21	200	1.85	6.70	0.633	27.0	0.44	15.80	24	--	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-18-W-20220616 Sample Time: 09:24 Sample Depth (ft-bmp): 7

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-19	**Date**	6/16/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	4.74	**Total Depth (ft-bmp)**	14.1	**Water Column (ft)**	9.36	**Gallons in Well**	1.52
Water Quality Meter Make/Model	Hach 2100Q,YSI Pro Plus	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	09:56	**Well Volumes Purged**	0.52	**Sample ID**	MW-19-W-20220616	**Evacuation Equipment**	Peristaltic
Purge Start	09:38	**Gallons Purged**	0.79	**Duplicate ID**	BD-W-20220616		
Purge End	09:56	**Total Purge Time (h:m)**	0:18				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:41	200	4.74	6.43	0.444	166	0.28	13.10	21	--	--
09:44	200	4.74	6.36	0.438	146	0.21	12.90	29.6	--	--
09:47	200	4.74	6.34	0.454	130	0.19	13.50	33.4	--	--
09:50	200	4.74	6.34	0.455	129	0.18	13.50	34	--	--
09:53	200	4.74	6.35	0.456	129	0.18	13.50	31.9	--	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-19-W-20220616 Sample Time: 09:56 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-20	**Date**	6/16/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	4.23	**Total Depth (ft-bmp)**	12.05	**Water Column (ft)**	7.82	**Gallons in Well**	1.27
Water Quality Meter Make/Model	Hach 2100Q,YSI Pro Plus	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	14:30	**Well Volumes Purged**	0.62	**Sample ID**	MW-20-W-20220616	**Evacuation Equipment**	Peristaltic
Purge Start	14:12	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	14:27	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
14:15	200	4.23	6.55	0.735	47.0	0.15	11.90	15.4	--	--
14:18	200	4.23	6.57	0.735	32.0	0.12	12.00	4.5	--	--
14:21	200	4.23	6.59	0.735	17.0	0.12	12.00	-9.3	--	--
14:24	200	4.23	6.60	0.735	17.0	0.10	12.10	-10.8	--	--
14:27	200	4.23	6.61	0.732	17.0	0.10	12.10	-10.2	--	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-20-W-20220616 Sample Time: 14:30 Sample Depth (ft-bmp): 8

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-22	**Date**	6/16/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4.6 to 14.6	**Casing Diameter (in.)**	4	**Well Casing Material**	--
Static Water Level (ft-bmp)	0.8	**Total Depth (ft-bmp)**	14.7	**Water Column (ft)**	13.90	**Gallons in Well**	9.03
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	12:02	**Well Volumes Purged**	0.09	**Sample ID**	MW-22-W-20220616	**Evacuation Equipment**	Peristaltic
Purge Start	11:44	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	11:59	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
11:47	200	0.80	6.48	0.478	28.0	0.86	14.60	84.1	Clear	--
11:50	200	0.80	6.49	0.480	22.0	0.35	14.80	78	Clear	--
11:53	200	0.80	6.50	0.485	17.0	0.22	15.50	72.5	Clear	--
11:56	200	0.80	6.50	0.485	17.0	0.17	15.70	70.1	Clear	--
11:59	200	0.80	6.51	0.484	17.0	0.15	15.50	70	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-22-W-20220616 Sample Time: 12:02 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-23	**Date**	6/16/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3.95 to 13.95	**Casing Diameter (in.)**	4	**Well Casing Material**	--
Static Water Level (ft-bmp)	0.5	**Total Depth (ft-bmp)**	13.9	**Water Column (ft)**	13.40	**Gallons in Well**	8.71
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	11:26	**Well Volumes Purged**	0.09	**Sample ID**	MW-23-W-20220616	**Evacuation Equipment**	Peristaltic
Purge Start	11:08	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	11:23	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
11:11	200	0.05	6.83	0.205	36.0	0.35	13.70	-0.1	Clear	--
11:14	200	0.05	6.56	0.202	24.0	0.30	14.10	18.3	Clear	--
11:17	200	0.05	6.41	0.204	20.0	0.31	14.80	31.8	Clear	--
11:20	200	0.05	6.36	0.208	20.0	0.34	15.00	32.7	Clear	--
11:23	200	0.05	6.37	0.203	20.0	0.31	14.70	33	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-23-W-20220616 Sample Time: 11:26 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Groundwater Gauging Log

Project Number	30064313
Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Measuring Point:	Top of Casing
Date(s):	12/07/2022
Sampler(s):	Lee Bures
Gauging Equipment:	Water Level Meter

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
MW-2	12/07/2022	09:54	5.62	ND	14.39	--	--	--
PZ-2B	12/07/2022	10:30	4.52	ND	16.2	--	--	--
MW-8	12/07/2022	10:01	5	ND	16.83	--	--	--
MW-13	12/07/2022	10:21	7.84	ND	16.76	--	--	--
MW-15	12/07/2022	10:11	7.99	ND	19.79	--	--	--
MW-18	12/07/2022	10:40	2.96	ND	11.84	--	--	--
MW-19	12/07/2022	10:48	6.13	ND	14.04	--	--	--

ft-bmp = feet below measuring point ND = Not Detected PID = Photoionization Detector Reading

ppm = parts per million -- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-18	**Date**	12/7/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	2.96	**Total Depth (ft-bmp)**	11.84	**Water Column (ft)**	8.88	**Gallons in Well**	1.44
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**			Grab

Sample Time	12:17	**Well Volumes Purged**	0.55	**Sample ID**	MW-18-W-20221207	**Purge Equipment**	Peristaltic
Purge Start	12:01	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	12:16	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:04	200	3.12	6.86	0.170	8.0	1.33	7.26	23.7	Clear	--
12:07	200	3.12	6.99	0.171	4.0	1.70	7.36	37.7	Clear	--
12:10	200	3.12	7.05	0.171	2.0	1.43	7.37	40.1	Clear	--
12:13	200	3.12	7.10	0.171	2.0	1.37	7.36	41.7	Clear	--
12:16	200	3.12	7.12	0.171	2.0	1.41	7.46	42.8	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-18-W-20221207 Sample Time: 12:17 Sample Depth (ft-bmp): 8

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-19	**Date**	12/7/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	6.13	**Total Depth (ft-bmp)**	14.04	**Water Column (ft)**	7.91	**Gallons in Well**	1.29
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**	Grab		
Sample Time	11:28	**Well Volumes Purged**	0.61	**Sample ID**	MW-19-W-20221207	**Purge Equipment**	Peristaltic
Purge Start	11:11	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	11:26	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
11:14	200	6.13	7.38	0.157	34.0	2.28	7.56	42.6	Clear	--
11:17	200	6.13	7.63	0.158	31.0	2.11	7.71	42.3	Clear	--
11:20	200	6.13	7.35	0.158	20.0	2.07	7.00	41.1	Clear	--
11:23	200	6.13	7.36	0.160	18.0	1.98	7.10	43.6	Clear	--
11:26	200	6.13	7.36	0.160	18.0	1.97	7.10	45.6	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-19-W-20221207 Sample Time: 11:28 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-8	**Date**	12/7/2022		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	2.5 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	5	**Total Depth (ft-bmp)**	16.83	**Water Column (ft)**	11.83	**Gallons in Well**	1.92
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Sample Method**	Grab		
Sample Time	13:26	**Well Volumes Purged**	0.41	**Sample ID**	MW-8-W-20221207	**Purge Equipment**	Peristaltic
Purge Start	13:10	**Gallons Purged**	0.79	**Duplicate ID**	BD-W-20221207	**Sample Equipment**	Peristaltic
Purge End	13:25	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
13:13	200	5.15	6.25	0.257	1.0	2.46	5.47	29.8	Clear	--
13:16	200	5.15	6.80	0.258	1.0	1.65	4.40	30.8	Clear	--
13:19	200	5.15	6.87	0.257	1.0	1.25	4.18	31.9	Clear	--
13:22	200	5.15	6.92	0.256	1.0	1.20	4.18	32.6	Clear	--
13:25	200	5.15	6.93	0.256	1.0	1.20	4.20	33.7	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-8-W-20221207 Sample Time: 13:26 Sample Depth (ft-bmp): 11

Analytes and Methods: See Chain-of-Custody.

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Company Name/Address:
Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Report to:
Melissa Caldwell/Sydney Clark

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected:

Please Circle:
PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

SDG #

Table #

Collected by (print):
R. PALMER

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Acctnum: **CHEVARCWA**
Template:**T221249**
Prelogin: **P968826**
PM: **110 - Brian Ford**
PB:

Collected by (signature):
R Palmer

Immediately
Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Date Results Needed

Quote #

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEXM 8260D 40mlAmb-HCl	NWTPHDX w/ silica 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	Remarks	Sample # (lab only)
MW-8-W-20221207	G	GW	—	12/7/22	1326	8	X	X	X		
MW-18-W-20221207	G	GW	—		1257	8	X	X	X		
MW-19-W-20221207	G	GW	—		1128	8	X	X	X		
BD-W-20221207	G	GW	—		1200	8	X	X	X		
TB-W-20221207	G	GW	—	↓	0900	2	X		X		
		GW									
		GW									
		GW									
		GW									
		GW									

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
	12/12/22	1500	SHIPPED VIA FEDEX		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: / Condition: NCF / OK

WELLHEAD INSPECTION FORM

Client: Arcadis Site: Pullman - 815 NE College St Date: 12/7/22

Job #: 221207-RP1 Technician: Rich Palmer Page 1 of 2

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency: Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty)	Tabs stripped (list qty)	Tabs broken (list qty)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade	Other (explain in notes)	Well Not Inspected (explain in notes)	Notes (list if cap or lick replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)
MW-2	X														
MW-6A														X	UNABLE TO LOCATE
MW-8	X														
MW-10A														X	UNABLE TO LOCATE
MW-12														X	UNABLE TO LOCATE
MW-13	X														
MW-15	X														
MW-17														X	UNABLE TO LOCATE
MW-18	X														
MW-19	X														
MW-20														X	UNABLE TO LOCATE
MW-22														X	UNABLE TO LOCATE
MW-23														X	UNABLE TO LOCATE
PZ-1A														X	UNABLE TO LOCATE
PZ-2A														X	UNABLE TO LOCATE
PZ-2B	X														
DPE-1														X	UNABLE TO LOCATE

NOTES:

WELLHEAD INSPECTION FORM

Client: Arcadis Site: Pullman - 815 NE College St Date: 12/7/22

Job #: 222207-RP1 Technician: Rich Palmer Page 2 of 2

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency: Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty)	Tabs stripped (list qty)	Tabs broken (list qty)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade	Other (explain in notes)	Well Not Inspected (explain in notes)	Notes (list if cap or lick replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)
DPE-2														X	UNABLE TO LOCATE
AS-1														X	UNABLE TO LOCATE

NOTES:

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME	Pullman - 815 NE College St			PROJECT NUMBER	221207-RP1		
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI 556	13C100603	0630 12/7/22	PH 4.0 7.0 10.0	3.94 ✓ 6.96 ✓ 10.02 ✓	—	14.1	RP
			COND 3900	3896 ✓	—	14.1	RP
			ORP 244	245.1 ✓	—	14.3	RP
			DO 100%	100.6% ✓	—	—	RP

CHEVRON-WASHINGTON/OREGON TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING** FOR PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF WASHINGTON AND OREGON. THE PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR AND HAULED TO THEIR FACILITY IN KENT, WASHINGTON FOR TEMPORARILY HOLDING PENDING TRANSPORT BY OTHERS TO FINAL DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 22727 72ND Ave South, Suite D – 102, Kent, WA 98032. BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

206196
CHEVRON # Chevron Project Manager

815 NE College St, Pullman, WA
Street number street name city state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-8	1.0		
MW-18	1.0		
MW-19	1.0		

added equip. rinse water 1.0

any other adjustments

TOTAL GALS. RECOVERED 4.0

loaded onto BTS vehicle # 148

BTS event # 272207RP1 time 1430 date 12/7/22

signature

Blaine Tech Services, Inc.

Permit To Work

for Chevron EMC Sites

Client: Arcadis Date 12/7/22

Site Address: 815 NE college. St

Job Number: 281207-RP1 Technician(s): Rick Palmer

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed. Reviewed: ☒

2. Special Permit Required Task Review

Are there any conditions or tasks that would require:	Yes	No
Confined space entry	☐	☒
Working at height	☐	☒
Lock-out/Tag-out	☐	☒
Excavations greater than 4 feet deep	☐	☒
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	☐	☒
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	☐	☒
Hot work	☐	☒

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

	Yes	No
3. Is a Traffic Control Permit required for today's work?	☐	☒
If so is it in the folder?	☐	☐
Is it current?	☐	☐
Do you understand the Traffic Control Plan and what equipment you will need?	☐	☐

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP.	☒
2. Route to hospital understood.	☒
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.	☒
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.	☒
5. Understands procedure to follow, if site circumstances change, to address new site hazards.	☒
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.	☒
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.	☒
8. After lunch tailgate safety meeting refresher conducted.	☐

If Checklist Task cannot be completed, explain:

Permit To Work Authority:

Name Title Date Time

Groundwater Gauging Log

Project Number	30064313
Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Measuring Point:	Top of Casing
Date(s):	05/16/2023
Sampler(s):	Lee Bures
Gauging Equipment:	Water Level Meter

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
AS-1	05/16/2023	15:15	3.76	ND	12.98	--	--	--
DPE-1	05/16/2023	15:18	3.34	ND	18.00	--	--	--
PZ-1A	05/16/2023	15:26	3.48	ND	14.95	--	--	--
DPE-2	05/16/2023	15:23	5.23	5.13	--	--	--	--
MW-2	05/16/2023	06:55	4.46	ND	14.01	--	--	--
PZ-2A	05/16/2023	14:04	5.14	ND	15.90	--	--	--
PZ-2B	05/16/2023	14:08	5.29	ND	15.99	--	--	--
MW-6A	05/16/2023	13:26	2.60	ND	13.72	--	--	--
MW-8	05/16/2023	15:00	5.81	5.77	--	--	--	--
MW-10A	05/16/2023	11:30	8.86	ND	14.91	--	--	--
MW-12	05/16/2023	13:07	6.32	ND	12.42	--	--	--
MW-13	05/16/2023	14:15	8.75	ND	16.77	--	--	--
MW-15	05/16/2023	14:22	8.71	ND	19.32	--	--	--
MW-17	05/16/2023	14:42	4.15	ND	11.98	--	--	--
MW-18	05/16/2023	12:50	3.52	ND	11.81	--	--	--
MW-19	05/16/2023	13:11	6.63	ND	13.92	--	--	--
MW-20	05/16/2023	13:03	5.25	ND	12.01	--	--	--
MW-22	05/16/2023	14:40	3.12	ND	15.58	--	--	--
MW-23	05/16/2023	14:50	4.86	ND	13.72	--	--	--

ft-bmp = feet below measuring point ND = Not Detected PID = Photoionization Detector Reading

ppm = parts per million -- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-6A	**Date**	5/17/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	2.6	**Total Depth (ft-bmp)**	13.72	**Water Column (ft)**	11.12	**Gallons in Well**	1.81
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	10:55	**Well Volumes Purged**	0.53	**Sample ID**	MW-6A-W-20230517	**Purge Equipment**	Peristaltic
Purge Start	10:32	**Gallons Purged**	0.95	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	10:50	**Total Purge Time (h:m)**	0:18				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:35	200	2.72	7.37	0.958	41.0	2.25	12.50	-126.7	Clear	--
10:38	200	2.73	7.36	0.963	39.0	1.54	12.60	-127.4	Clear	--
10:41	200	2.73	7.36	0.969	35.0	1.33	13.00	-122.5	Clear	--
10:44	200	2.74	7.35	0.984	31.0	1.20	13.20	-113.2	Clear	--
10:47	200	2.74	7.35	0.985	29.0	1.19	13.30	-110.7	Clear	--
10:50	200	2.75	7.35	0.987	30.0	1.19	13.30	-108.4	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-6A-W-20230517 Sample Time: 10:55 Sample Depth (ft-bmp) (e.g. pump intake): 8

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-10A	**Date**	5/17/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 15	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	8.86	**Total Depth (ft-bmp)**	14.91	**Water Column (ft)**	6.05	**Gallons in Well**	0.98
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	12:11	**Well Volumes Purged**	0.97	**Sample ID**	MW-10A-W-20230517	**Purge Equipment**	Peristaltic
Purge Start	11:48	**Gallons Purged**	0.95	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	12:06	**Total Purge Time (h:m)**	0:18				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
11:51	200	8.92	6.63	0.603	82.0	1.23	14.20	35.2	Clear	--
11:54	200	8.95	6.60	0.601	81.0	1.15	14.60	34.5	Clear	--
11:57	200	8.97	6.58	0.601	81.0	1.29	14.40	33.5	Clear	--
12:00	200	8.97	6.58	0.595	65.0	1.01	14.50	28.6	Clear	--
12:03	200	8.98	6.59	0.593	64.0	0.99	14.40	19.5	Clear	--
12:06	200	8.99	6.59	0.592	69.0	0.98	14.40	18.9	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-10A-W-20230517 Sample Time: 12:11 Sample Depth (ft-bmp) (e.g. pump intake): 12

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-12	**Date**	5/17/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	-- to --	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	6.32	**Total Depth (ft-bmp)**	12.42	**Water Column (ft)**	6.1	**Gallons in Well**	0.99
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	09:21	**Well Volumes Purged**	0.80	**Sample ID**	MW-12-W-20230517	**Purge Equipment**	Peristaltic
Purge Start	09:00	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	09:15	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:03	200	6.33	6.78	0.805	29.0	1.52	9.40	20.3	Clear	--
09:06	200	6.35	6.75	0.810	25.0	1.44	9.30	11.9	Clear	--
09:09	200	6.36	6.75	0.828	21.0	0.90	9.40	11	Clear	--
09:12	200	6.37	6.76	0.832	22.0	0.91	9.40	8.7	Clear	--
09:15	200	6.37	6.76	0.836	21.0	0.90	9.40	5.7	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-12-W-20230517 Sample Time: 09:21 Sample Depth (ft-bmp) (e.g. pump intake): 9

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-17	**Date**	5/17/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 12	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	4.15	**Total Depth (ft-bmp)**	11.98	**Water Column (ft)**	7.83	**Gallons in Well**	5.09
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	14:40	**Well Volumes Purged**	0.19	**Sample ID**	MW-17-W-20230517	**Purge Equipment**	Peristaltic
Purge Start	14:17	**Gallons Purged**	0.95	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	14:35	**Total Purge Time (h:m)**	0:18				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
14:20	200	4.22	6.95	0.736	21.0	0.89	13.00	-120.4	Clear	--
14:23	200	4.23	6.94	0.740	20.0	0.84	13.10	-110.3	Clear	--
14:26	200	4.24	6.94	0.745	18.0	0.85	13.10	-108.2	Clear	--
14:29	200	4.25	6.93	0.750	14.0	0.51	13.20	-107	Clear	--
14:32	200	4.25	6.93	0.751	13.0	0.52	13.20	-109.2	Clear	--
14:35	200	4.26	6.93	0.751	13.0	0.52	13.20	-111.8	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-17-W-20230517 Sample Time: 14:40 Sample Depth (ft-bmp) (e.g. pump intake): 8

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-18	**Date**	5/17/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	3.52	**Total Depth (ft-bmp)**	11.81	**Water Column (ft)**	8.29	**Gallons in Well**	1.35
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	07:27	**Well Volumes Purged**	0.70	**Sample ID**	MW-18-W-20230517	**Purge Equipment**	Peristaltic
Purge Start	07:04	**Gallons Purged**	0.95	**Duplicate ID**	BD-W-20230517	**Sample Equipment**	Peristaltic
Purge End	07:22	**Total Purge Time (h:m)**	0:18				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
07:07	200	3.55	6.85	0.916	11.0	1.32	12.00	-62.3	Clear	--
07:10	200	3.57	6.85	0.923	13.0	1.22	12.40	-69	Clear	--
07:13	200	3.59	6.83	0.925	12.0	1.11	12.40	-72.1	Clear	--
07:16	200	3.6	6.83	0.927	11.0	1.02	12.40	-73.1	Clear	--
07:19	200	3.61	6.83	0.929	9.0	1.01	12.40	-75.6	Clear	--
07:22	200	3.62	6.84	0.936	8.0	0.99	12.50	-81.3	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-18-W-20230517 Sample Time: 07:27 Sample Depth (ft-bmp) (e.g. pump intake): 8

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-19	**Date**	5/17/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	6.63	**Total Depth (ft-bmp)**	13.92	**Water Column (ft)**	7.29	**Gallons in Well**	1.18
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	09:50	**Well Volumes Purged**	0.67	**Sample ID**	MW-19-W-20230517	**Purge Equipment**	Peristaltic
Purge Start	09:30	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	09:45	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:33	200	6.69	6.74	0.702	35.0	1.13	11.90	18.9	Clear	--
09:36	200	6.7	6.72	0.699	29.0	0.81	11.90	15.6	Clear	--
09:39	200	6.72	6.72	0.698	26.0	0.72	11.80	14.1	Clear	--
09:42	200	6.74	6.73	0.697	25.0	0.71	11.80	14.6	Clear	--
09:45	200	6.74	6.73	0.695	24.0	0.70	11.70	15.3	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-19-W-20230517 Sample Time: 09:50 Sample Depth (ft-bmp) (e.g. pump intake): 10.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-20	**Date**	5/17/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	5.25	**Total Depth (ft-bmp)**	12.01	**Water Column (ft)**	6.76	**Gallons in Well**	1.1
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	08:50	**Well Volumes Purged**	0.72	**Sample ID**	MW-20-W-20230517	**Purge Equipment**	Peristaltic
Purge Start	08:30	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	08:45	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
08:33	200	5.32	6.81	0.885	35.0	3.62	9.40	-84.8	Clear	--
08:36	200	5.32	6.83	0.884	34.0	1.72	9.50	-92.4	Clear	--
08:39	200	5.33	6.83	0.883	33.0	1.68	9.50	-92.9	Clear	--
08:42	200	5.33	6.83	0.880	30.0	1.65	9.50	-92.8	Clear	--
08:45	200	5.33	6.83	0.878	31.0	1.66	9.60	-92.9	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-20-W-20230517 Sample Time: 08:50 Sample Depth (ft-bmp) (e.g. pump intake): 9

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-22	**Date**	5/17/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4.6 to 14.6	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	3.12	**Total Depth (ft-bmp)**	15.58	**Water Column (ft)**	12.46	**Gallons in Well**	8.1
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	13:32	**Well Volumes Purged**	0.10	**Sample ID**	MW-22-W-20230517	**Purge Equipment**	Peristaltic
Purge Start	13:14	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	13:29	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
13:17	200	3.15	6.65	0.777	19.0	0.86	13.50	34.7	Clear	--
13:20	200	3.16	6.63	0.780	16.0	0.32	13.90	30.9	Clear	--
13:23	200	3.18	6.62	0.753	16.0	0.31	12.80	28.3	Clear	--
13:26	200	3.18	6.62	0.763	16.0	0.31	12.80	25.5	Clear	--
13:29	200	3.18	6.62	0.762	15.0	0.30	12.70	23.2	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-22-W-20230517 Sample Time: 13:32 Sample Depth (ft-bmp) (e.g. pump intake): 9.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-23	**Date**	5/17/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3.95 to 13.95	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	4.86	**Total Depth (ft-bmp)**	13.72	**Water Column (ft)**	8.86	**Gallons in Well**	5.76
Water Quality Meter Make/Model	Hach 2100Q,YSI 556 MP5	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	12:55	**Well Volumes Purged**	0.14	**Sample ID**	MW-23-W-20230517	**Purge Equipment**	Peristaltic
Purge Start	12:35	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	12:50	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:38	200	4.92	6.56	0.547	21.0	1.38	12.40	43.9	Clear	--
12:41	200	4.93	6.54	0.550	20.0	0.91	12.60	42.1	Clear	--
12:44	200	4.93	6.55	0.569	19.0	0.59	14.30	40.4	Clear	--
12:47	200	4.93	6.54	0.569	20.0	0.57	14.30	39.8	Clear	--
12:50	200	4.93	6.54	0.570	21.0	0.56	14.40	38.6	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-23-W-20230517 Sample Time: 12:55 Sample Depth (ft-bmp) (e.g. pump intake): 9.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Company Name/Address:
Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle, WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Report to:
Melissa Caldwell/Sydney Clark

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected: **Pullman, WA**

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

SDG #

Table #

Collected by (print):
MR

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Acctnum: **CHEVARCWA**
Template: **T230371**
Prelogin: **P999497**
PM: **110 - Brian Ford**
PB:

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	NWTPHGX 40mlAmb HCl	RRO (HO) DX no sil 40mlAmb-HCl-BT	Remarks	Sample # (lab only)
MW-6A-W-20230517	G	GW	—	5/17/23	1055	8	X	X	X		
MW-10A-W-20230517	G	GW	—	5/17/23	1211	8	X	X	X		
MW-12-W-20230517	G	GW	—	5/17/23	0921	8	X	X	X		
MW-17-W-20230517	G	GW	—	5/17/23	1440	8	X	X	X		
MW-18-W-20230517	G	GW	—	5/17/23	0727	8	X	X	X		
MW-19-W-20230517	G	GW	—	5/17/23	0950	8	X	X	X		
MW-20-W-20230517	G	GW	—	5/17/23	0850	8	X	X	X		
MW-22-W-20230517	G	GW	—	5/17/23	1332	8	X	X	X		
MW-23-W-20230517	G	GW	—	5/17/23	1255	8	X	X	X		
BD-W-20230517	G	GW	—	5/17/23	0800	8	X	X	X		

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	5/19/23	1600	SHIPPED VIA FEDEX		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: / Condition: NCF / OK

Company Name/Address:
Arcadis - Chevron - WA

1100 Olive Way
Suite 800
Seattle. WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell/Sydney Clark

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected:

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
MR

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):

Immediately
Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	NWTPHGX 40mlAmb HCl	RRO (HD) DX no sil 40mlAmb-HCl-BT
TB-W-20230517	G	GW	—	5/17/23	0630	2	X	X	

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG #

Table #

Acctnum: **CHEVARCWA**
Template:**T230371**
Prelogin: **P999497**
PM: **110 - Brian Ford**
PB:

Shipped Via:

Remarks	Sample # (lab only)

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	5/19/23	1600	SHIPPED VIA FEDEX		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: / Condition: NCF / OK

WELLHEAD INSPECTION FORM

Client: Arcadis Site: 815 NE College St, Pullman, WA Date: 05/16/23

Job #: 230516 MR1 Technician: MR Page 1 of 2

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency: Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty)	Tabs stripped (list qty)	Tabs broken (list qty)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade	Other (explain in notes)	Well Not Inspected (explain in notes)	Notes (list if cap or lick replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)
MW-2	X														
MW-6A	X														
MW-8	X														
MW-10A	X				2										
MW-12	X														
MW-13	X														
MW-15	X														
MW-17	X						1								
MW-18	X				2										
MW-19	X				2										water bailed from box
MW-20	X														water bailed from box
MW-22	X														
MW-23	X														
~~PZ-1A~~	MB X														~~Unable to locate~~
PZ-2A	X														
PZ-2B	X														
DPE-1	MB X														~~Unable to locate well~~

NOTES:

WELLHEAD INSPECTION FORM

Client: Arcadis Site: 815 NE College St, Pullman, WA Date: 05/16/23

Job #: 230516MR1 Technician: MR Page 2 of 2

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency: Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty)	Tabs stripped (list qty)	Tabs broken (list qty)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade	Other (explain in notes)	Well Not Inspected (explain in notes)	Notes (list if cap or lick replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)
DPE-2	X														~~unable to locate~~
AS-1	X														

NOTES:

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME ~~230516 - MR1~~ 815 NE College St Pullman WA				PROJECT NUMBER 230516 - MR1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI 556	09F101784	5/17/23 0650	DO 100%	99.7%	✓	10.5	MR
↓	↓	↓	pH 4.00 pH 7.00	4.02 6.99	✓ ✓	10.5 10.5	MR
			pH 10.00	10.01	✓	10.6	MR
			Con. 3900	3904	✓	10.8	MR
			ORP ~~to~~ 236	236.2	✓	10.8	MR

CHEVRON-WASHINGTON/OREGON TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING**

FOR PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF WASHINGTON AND OREGON. THE PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR AND HAULED TO THEIR FACILITY IN KENT, WASHINGTON FOR TEMPORARILY HOLDING PENDING TRANSPORT BY OTHERS TO FINAL DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 22727 72ND Ave South, Suite D – 102, Kent, WA 98032. BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

206196
CHEVRON # Chevron Project Manager

815 NE College St, Pullman, WA
Street number street name city state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-6A	1.0		
MW-10A	1.0		
MW-12	1.0		
MW-17	1.0		
MW-18	1.0		
MW-19	1.0		
MW-20	1.0		
MW-22	1.0		
MW-23	1.0		

added equip. rinse water 5.0

any other adjustments

TOTAL GALS. RECOVERED 14.0

loaded onto BTS vehicle # 149

BTS event # 230576MR1 time 1500 date 5/17/23

signature

Blaine Tech Services, Inc.

Permit To Work

for Chevron EMC Sites

Client: ARCADIS Date 5/10/23

Site Address: 815 NE COLLEGE ST, PULLMAN, WA

Job Number: 730516MR1 Technician(s): MR

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed. Reviewed: ☒

2. Special Permit Required Task Review

Are there any conditions or tasks that would require:	Yes	No
Confined space entry	☐	☒
Working at height	☐	☒
Lock-out/Tag-out	☐	☒
Excavations greater than 4 feet deep	☐	☒
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	☐	☒
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	☐	☒
Hot work	☐	☒

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

	Yes	No
3. Is a Traffic Control Permit required for today's work?	☐	☒
If so is it in the folder?	☐	☒
Is it current?	☐	☒
Do you understand the Traffic Control Plan and what equipment you will need?	☐	☒

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP.	☒
2. Route to hospital understood.	☒
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.	☒
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.	☒
5. Understands procedure to follow, if site circumstances change, to address new site hazards.	☒
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.	☒
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.	☒
8. After lunch tailgate safety meeting refresher conducted.	☒

If Checklist Task cannot be completed, explain:

Permit To Work Authority:

Name Title Date Time

Groundwater Gauging Log

Project Number	30064313
Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Measuring Point:	Top of Casing
Date(s):	11/06/2023
Sampler(s):	Diana Ojeda
Gauging Equipment:	Interface Probe

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
AS-1	11/06/2023	14:09	4.96	ND	13.12	--	--	--
DPE-1	11/06/2023	14:06	5.98	ND	16.49	--	--	--
PZ-1A	11/06/2023	14:02	5.02	ND	15.17	--	--	--
PZ-1B	11/06/2023	14:12	6.62	5.01	--	--	--	--
DPE-2	11/06/2023	14:35	6.36	6.32	--	--	--	--
PZ-2A	11/06/2023	14:38	6.57	ND	15.93	--	--	--
PZ-2B	11/06/2023	14:41	6.77	ND	16.03	--	--	--
MW-6A	11/06/2023	15:06	3.33	ND	13.75	--	--	--
MW-8	11/06/2023	13:58	7.09	7.05	--	--	--	--
MW-9A	11/06/2023	14:31	6.59	6.46	--	--	--	--
MW-10A	11/06/2023	14:57	8.15	ND	14.90	--	--	--
MW-12	11/06/2023	15:14	5.43	ND	12.32	--	--	--
MW-13	11/06/2023	14:45	6.65	ND	13.70	--	--	--
MW-15	11/06/2023	14:49	9.23	ND	18.03	--	--	--
MW-16	11/06/2023	14:28	10.25	8.64	--	--	--	--
MW-17	11/06/2023	14:15	5.70	ND	11.58	--	--	--
MW-18	11/06/2023	15:25	3.42	ND	11.89	--	--	--
MW-19	11/06/2023	15:11	5.92	ND	14.09	--	--	--
MW-20	11/06/2023	15:18	4.85	ND	12.05	--	--	--
MW-21	11/06/2023	13:52	5.00	4.92	--	--	--	--
MW-22	11/06/2023	13:47	3.74	ND	14.60	--	--	--
MW-23	11/06/2023	14:52	6.21	ND	13.90	--	--	--

ft-bmp = feet below measuring point ND = Not Detected PID = Photoionization Detector Reading

ppm = parts per million -- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-6A	**Date**	11/7/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	3.33	**Total Depth (ft-bmp)**	13.75	**Water Column (ft)**	10.42	**Gallons in Well**	1.69
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	09:08	**Well Volumes Purged**	0.47	**Sample ID**	MW-6A-W-20231107	**Purge Equipment**	Peristaltic
Purge Start	08:50	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	09:05	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
08:53	200	3.37	6.72	1.15	38.0	2.33	11.84	-2.9	--	--
08:56	200	3.41	6.72	1.14	39.0	2.30	11.98	-5.4	--	--
08:59	200	3.45	6.72	1.12	37.0	2.31	12.20	-9.8	--	--
09:02	200	3.49	6.72	1.12	36.0	2.32	12.09	-12.6	--	--
09:05	200	3.52	6.73	1.11	35.0	2.34	12.03	-14.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-6A-W-20231107 Sample Time: 09:08 Sample Depth (ft-bmp) (e.g. pump intake): 9

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-10A	**Date**	11/7/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 15	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	8.15	**Total Depth (ft-bmp)**	14.9	**Water Column (ft)**	6.75	**Gallons in Well**	1.1
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	11:08	**Well Volumes Purged**	0.72	**Sample ID**	MW-10A-W-20231107	**Purge Equipment**	Peristaltic
Purge Start	10:50	**Gallons Purged**	0.79	**Duplicate ID**	BD-W-20231107	**Sample Equipment**	Peristaltic
Purge End	11:05	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:53	200	8.23	6.55	0.750	19.0	2.68	13.78	26.1	--	--
10:56	200	8.3	6.54	0.748	17.0	2.68	13.85	27.6	--	--
10:59	200	8.35	6.52	0.750	15.0	2.67	13.74	28.9	--	--
11:02	200	8.38	6.51	0.750	15.0	2.70	13.72	29.4	--	--
11:05	200	8.4	6.50	0.752	14.0	2.72	13.56	31	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-10A-W-20231107 Sample Time: 11:08 Sample Depth (ft-bmp) (e.g. pump intake): 11.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-12	**Date**	11/7/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	-- to --	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	5.43	**Total Depth (ft-bmp)**	12.32	**Water Column (ft)**	6.89	**Gallons in Well**	1.12
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	10:25	**Well Volumes Purged**	0.71	**Sample ID**	MW-12-W-20231107	**Purge Equipment**	Peristaltic
Purge Start	10:07	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	10:22	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:10	200	5.51	6.26	0.681	22.0	3.35	12.81	14.2	--	--
10:13	200	5.56	6.24	0.693	20.0	3.38	12.92	17	--	--
10:16	200	5.6	6.24	0.697	19.0	3.39	12.94	18.8	--	--
10:19	200	5.64	6.23	0.691	19.0	3.38	12.97	19.6	--	--
10:22	200	5.68	6.22	0.695	18.0	3.36	13.00	20.9	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-12-W-20231107 Sample Time: 10:25 Sample Depth (ft-bmp) (e.g. pump intake): 8.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-17	**Date**	11/7/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 12	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	5.7	**Total Depth (ft-bmp)**	11.58	**Water Column (ft)**	5.88	**Gallons in Well**	3.82
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	13:59	**Well Volumes Purged**	0.21	**Sample ID**	MW-17-W-20231107	**Purge Equipment**	Peristaltic
Purge Start	12:55	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	13:10	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:58	200	5.79	6.69	0.679	24.0	2.40	10.95	8.2	--	--
13:01	200	5.82	6.68	0.679	21.0	2.37	11.15	7.4	--	--
13:04	200	5.87	6.67	0.680	19.0	2.35	11.42	5.8	--	--
13:07	200	5.89	6.66	0.681	19.0	2.34	11.43	3.4	--	--
13:10	200	5.92	6.65	0.681	18.0	2.33	11.38	2.1	--	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-17-W-20231107 Sample Time: 13:59 Sample Depth (ft-bmp) (e.g. pump intake): 9

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-18	**Date**	11/7/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	3.42	**Total Depth (ft-bmp)**	11.89	**Water Column (ft)**	8.47	**Gallons in Well**	1.38
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	08:33	**Well Volumes Purged**	0.57	**Sample ID**	MW-18-W-20231107	**Purge Equipment**	Peristaltic
Purge Start	08:15	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	08:30	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
08:18	200	3.74	6.59	0.997	16.0	5.62	8.96	78.7	Clear	--
08:21	200	3.8	6.61	0.994	15.0	5.27	8.96	72.8	Clear	--
08:24	200	3.88	6.62	0.996	15.0	3.52	8.90	59.2	Clear	--
08:27	200	3.93	6.64	0.995	14.0	3.47	9.02	54.4	Clear	--
08:30	200	3.98	6.60	0.989	14.0	3.42	9.10	49.9	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-18-W-20231107 Sample Time: 08:33 Sample Depth (ft-bmp) (e.g. pump intake): 7.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-19	**Date**	11/7/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	5.92	**Total Depth (ft-bmp)**	14.09	**Water Column (ft)**	8.17	**Gallons in Well**	1.33
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	07:58	**Well Volumes Purged**	0.60	**Sample ID**	MW-19-W-20231107	**Purge Equipment**	Peristaltic
Purge Start	07:40	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	07:55	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
07:43	200	6.04	6.88	0.787	24.0	2.99	9.88	176.8	--	--
07:46	200	6.07	6.72	0.789	24.0	2.88	9.05	194.7	--	--
07:49	200	6.1	6.50	0.791	25.0	2.83	8.09	210.2	--	--
07:52	200	6.15	6.48	0.791	24.0	2.83	8.01	211.9	--	--
07:55	200	6.17	6.44	0.790	23.0	2.82	7.96	213.4	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-19-W-20231107 Sample Time: 07:58 Sample Depth (ft-bmp) (e.g. pump intake): 10

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-20	**Date**	11/7/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	4.85	**Total Depth (ft-bmp)**	12.05	**Water Column (ft)**	7.2	**Gallons in Well**	1.17
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	09:47	**Well Volumes Purged**	0.68	**Sample ID**	MW-20-W-20231107	**Purge Equipment**	Peristaltic
Purge Start	09:29	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	09:44	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:32	200	4.94	6.62	1.14	36.0	2.67	8.20	6.2	--	--
09:35	200	4.99	6.59	1.14	39.0	2.65	8.09	4.1	--	--
09:38	200	5.03	6.57	1.14	38.0	2.68	7.82	0.1	--	--
09:41	200	5.09	6.55	1.14	37.0	2.69	7.74	-1.4	--	--
09:44	200	5.13	6.54	1.14	35.0	2.69	7.70	-3.4	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-20-W-20231107 Sample Time: 09:47 Sample Depth (ft-bmp) (e.g. pump intake): 8.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-22	**Date**	11/7/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4.6 to 14.6	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	3.74	**Total Depth (ft-bmp)**	14.6	**Water Column (ft)**	10.86	**Gallons in Well**	7.06
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	12:40	**Well Volumes Purged**	0.11	**Sample ID**	MW-22-W-20231107	**Purge Equipment**	Peristaltic
Purge Start	12:22	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	12:37	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:25	200	3.74	6.40	0.826	21.0	3.21	7.56	17.1	--	--
12:28	200	3.8	6.39	0.828	20.0	3.21	7.51	18.3	--	--
12:31	200	3.84	6.42	0.826	19.0	3.19	7.46	19.5	--	--
12:34	200	3.88	6.38	0.826	19.0	3.18	7.36	21.2	--	--
12:37	200	3.93	6.37	0.827	18.0	3.18	7.30	22	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-22-W-20231107 Sample Time: 12:40 Sample Depth (ft-bmp) (e.g. pump intake): 10

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-23	**Date**	11/7/2023		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3.95 to 13.95	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	6.21	**Total Depth (ft-bmp)**	13.92	**Water Column (ft)**	7.71	**Gallons in Well**	5.01
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	11:59	**Well Volumes Purged**	0.16	**Sample ID**	MW-23-W-20231107	**Purge Equipment**	Peristaltic
Purge Start	11:41	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	11:56	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
11:44	200	6.33	6.42	0.579	24.0	2.70	7.79	21.4	--	--
11:47	200	6.37	6.41	0.578	22.0	2.68	7.79	20.8	--	--
11:50	200	6.4	6.39	0.577	21.0	2.67	7.75	19.4	--	--
11:53	200	6.43	6.36	0.578	21.0	2.66	7.70	19.2	--	--
11:56	200	6.45	6.35	0.579	20.0	2.64	7.66	19.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-23-W-20231107 Sample Time: 11:59 Sample Depth (ft-bmp) (e.g. pump intake): 10

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Pace Analytical®

PULLMAN

206196

Field

Company Name/Address:
Arcadis - Chevron - WA
1420 5th Ave
Unit 2400
Seattle, WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Report to: Melissa Caldwell

Email To: Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description: 206196

City/State Collected: Pullman, WA

Please Circle: PT MT CT ET

Phone: 206-325-5254

Client Project # 30064313 19.45

Lab Project # CHEVARCWA-206196

Collected by (print): Diana Ojeda

Site/Facility ID # 815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature): Diana Ojeda

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace
MT JULIET, TN

SDG #

Table #

Acctnum: CHEVARCWA

Template: T241266

Prelogin: P1035430

PM: 110 - Brian Ford

PB:

Shipped Via:

Remarks | Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	HO (aka RRO) NWTPHDX 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl
MW-6A-W-20231107	G	GW	—	11/7/23	0908	8	X	X	X
MW-10A-W-20231107		GW	—		1108	8	X	X	X
MW-12-W-20231107		GW	—		1025	8	X	X	X
MW-17-W-20231107		GW	—		1313	8	X	X	X
MW-18-W-20231107		GW			0833	8	X	X	X
MW-19-W-20231107		GW			0756	8	X	X	X
MW-20-W-20231107		GW			0947	8	X	X	X
MW-22-W-20231107		GW			1240	8	X	X	X
MW-23-W-20231107		GW			1159	8	X	X	X
BD-W-20231107	↓	GW		↓	1200	8	X	X	X

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

pH ___ Temp ___

Flow ___ Other ___

Samples returned via: __ UPS __ Fedex __ Courier ___

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N

If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR
Diana Ojeda	11/8/23	1500	Shipped via Fedex	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

PULLMAN 206196

Company Name/Address: Arcadis - Chevron - WA
1420 5th Ave
Unit 2400
Seattle, WA 98101

Billing Information: Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to: Melissa Caldwell

Email To: Melissa.Caldwell@arcadis.com,Tyler.Green@arc

Project Description: 206196

City/State Collected: Pullman, WA

Please Circle: PT MT CT ET

Phone: 206-325-5254

Client Project # 30064313 19.45

Lab Project # CHEVARCWA-206196

Collected By (print): Diana Ojeda

Site/Facility ID # 815 NE COLLEGE ST PULLMAN

P.O. #

Collected By (signature): Diana Ojeda

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	HO (aka RRO) NWTPHDX 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl
TB-W-20231107	G	GW	-	11/7/23	0900	2	X		X
		GW							
		GW							
		GW							
		GW							
		GW							

Chain of Custody Page 2 of 2

Pace
MT JULIET, TN

SDG #

Table #

Acctnum: CHEVARCWA
Template: T241266
Prelogin: P1035430
PM: 110 - Brian Ford
PB:
Shipped Via:

Remarks | Sample # (lab only)

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

pH ___ Temp ___
Flow ___ Other ___

Samples returned via: ___ UPS ___ FedEx ___ Courier

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: ___NP ___Y ___N
COC Signed/Accurate: ___Y ___N
Bottles arrive intact: ___Y ___N
Correct Bottles used: ___Y ___N
Sufficient Volume sent: ___Y ___N
If Applicable
VOA Zero Headspace: ___Y ___N
Preservation Correct/Checked: ___Y ___N
RAD Screen <0.5 mR/hr: ___Y ___N

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	Temp: °C Bottles Received:	If preservation required by Login: Date/Time
Diana Ojeda	11/9/23	1500	Shipped via Fedex			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)			
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold:	Condition: NCF / OK

Well Inspection Log

Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Date(s):	11/6/2023
Inspector(s):	Diana Ojeda

Well ID	Date	Easy to Locate?	Area Prone to Flooding ?	Well Type	Well Housing/ Pad in Good Condition ?	Well Labels Present Outside Well?	Well Labels Present Inside Well?	Lock Present ?	Lock Functioning ?	Well Locked at Arrival?	Photos Taken?	Comments
AS-1	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
DPE-1	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
DPE-2	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-10A	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-12	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-13	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-15	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-16	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-17	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-18	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-19	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-20	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-21	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-22	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-23	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-6A	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-8	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-9A	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
PZ-1A	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
PZ-1B	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
PZ-2A	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
PZ-2B	11/06/2023	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 815 NE College St, Pullman				PROJECT NUMBER 231106-D01			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
HANNA	07460037101	11/6/23 @ 0657	pH 4 7 10	4.09 7.05 9.92	✓	19.9	DO
			Cond 3900 ORP 237.5 DO 100	3902 239.6 92.9	✓	19.9	DO
HANNA	07460037101	11/7/23 @ 0649	pH 4 7 10	4.09 7.02 9.95	✓	19.7	DO
			Cond 3900 ORP 237.5 DO 100	3908 240.2 95.1	✓	19.8	DO

CHEVRON-WASHINGTON/OREGON TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING** FOR PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF WASHINGTON AND OREGON. THE PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR AND HAULED TO THEIR FACILITY IN KENT, WASHINGTON FOR TEMPORARILY HOLDING PENDING TRANSPORT BY OTHERS TO FINAL DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 22727 72ND Ave South, Suite D – 102, Kent, WA 98032. BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

206196 — CHEVRON #

Melissa Caldwell — Chevron Project Manager

815 NE College St, Pullman, WA

Street number / street name / city / state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-6A	1		
MW-10A	1		
MW-12	1		
MW-17	1		
MW-18	1		
MW-19	1		
MW-20	1		
MW-22	1		
MW-23	1		

added equip. rinse water 0.2

any other adjustments

TOTAL GALS. RECOVERED 9.2

loaded onto BTS vehicle # 90

BTS event # 231106-001 — time 1300 — date 11/9/23

signature Diana Geek

Blaine Tech Services, Inc.

Permit To Work

for Chevron EMC Sites

Client: Arcadis Date 11/6/23

Site Address: 815 NE College St, Pullman, WA

Job Number: 231106-001 Technician(s): DO

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed. Reviewed: ☒

2. Special Permit Required Task Review

Are there any conditions or tasks that would require:	**Yes**	**No**
Confined space entry	☐	☒
Working at height	☐	☒
Lock-out/Tag-out	☐	☒
Excavations greater than 4 feet deep	☐	☒
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	☐	☒
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	☐	☒
Hot work	☐	☒

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

	Yes	**No**
3. Is a Traffic Control Permit required for today's work?	☐	☒
If so is it in the folder?	☐	☒
Is it current?	☐	☒
Do you understand the Traffic Control Plan and what equipment you will need?	☐	☒

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP.	☒
2. Route to hospital understood.	☒
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.	☒
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.	☒
5. Understands procedure to follow, if site circumstances change, to address new site hazards.	☒
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.	☒
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.	☒
8. After lunch tailgate safety meeting refresher conducted.	☒

If Checklist Task cannot be completed, explain:

Permit To Work Authority: Diana Ojeda (Name) Technician (Title) 11/06/23 (Date) 0645 (Time)

Blaine Tech Services, Inc.

Permit To Work

for Chevron EMC Sites

Client: Arcadis Date 11/07/23

Site Address: 315 NE College St, Pullman

Job Number: 231106-001 Technician(s): DO

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed. Reviewed: ☒

2. Special Permit Required Task Review

Are there any conditions or tasks that would require:	Yes	No
Confined space entry	☐	☑
Working at height	☐	☑
Lock-out/Tag-out	☐	☑
Excavations greater than 4 feet deep	☐	☑
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	☐	☑
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	☐	☑
Hot work	☐	☑

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

	Yes	No
3. Is a Traffic Control Permit required for today's work?	☐	☑
If so is it in the folder?	☐	☑
Is it current?	☐	☑
Do you understand the Traffic Control Plan and what equipment you will need?	☐	☑

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP.	☑
2. Route to hospital understood.	☑
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.	☑
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.	☑
5. Understands procedure to follow, if site circumstances change, to address new site hazards.	☑
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.	☑
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.	☑
8. After lunch tailgate safety meeting refresher conducted.	☑

If Checklist Task cannot be completed, explain:

Permit To Work Authority: Diana Ojeda Technician 11/7/23 0655

Name Title Date Time

BLAINE
TECH SERVICES INC.

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

April 17, 2024

ARCADIS
Melissa Caldwell
320 Commerce, Suite 200
Irvine, CA 92602, CA

Second Quarter 2024 Monitoring at
Site Number 206196
815 NE College Avenue
Pullman, WA

Monitoring performed on April 8 & 9, 2024

Blaine Tech Services, Inc. Groundwater Monitoring Event 240408-AR1

This submission covers the routine monitoring of groundwater wells conducted on April 8 & 9, 2024 at this location. Twenty-Two monitoring wells were measured for depth to groundwater (DTW) and presence of separate-phase hydrocarbons (SPH). Ten monitoring wells were sampled. All sampling activities were performed in accordance with local, state and federal guidelines.

Water levels and separate-phase measurements were collected using an electronic water or oil-water interface detector. All sampled wells were purged of three case volumes or until water temperature, pH and conductivity stabilized. Purging was accomplished using electric submersible pumps, positive air-displacement pumps or stainless steel, Teflon or disposable bailers. Subsequent sample collection and sample handling was performed in accordance with EPA protocols using disposable bailers. Alternately, where applicable, wells were sampled utilizing no-purge methodology. All reused equipment was decontaminated in an integrated stainless steel sink with de-ionized water supplied Hotsy pressure washer and Liquinox or equivalent.

Samples were delivered under chain-of-custody to Pace Analytical for analysis. Monitoring well purgewater and equipment rinsate water was collected and transported under bill of lading to Blaine Tech Services, Inc.'s yard in Auburn, Washington, and bulked for future transportation (within 90 days) under non-hazardous manifest for disposal at a licensed facility.

SAN JOSE 1680 ROGERS AVENUE SAN JOSE, CA | SACRAMENTO (408) 573-0555 | LOS ANGELES FAX (408) 573-7771 | SAN DIEGO LIC. 746684 | SEATTLE WWW.BLAINETECH.COM

Enclosed documentation from this event includes copies of the Well Gauging Sheet, Well Monitoring Data Sheets, Bill of lading, and Chain-of-Custody.

Blaine Tech Services, Inc.'s activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrogeologic conditions or formulation of recommendations was performed.

Please call if you have any questions.

Thank you,

Lee Bures
Blaine Tech Services, Inc
Operations Manager

attachments: Well Gauging Sheet
Individual Well Monitoring Data Sheets
Chain of Custody Forms
Wellhead Inspection Form
Bill of lading

SAN JOSE SACRAMENTO LOS ANGELES SAN DIEGO SEATTLE
1680 ROGERS AVENUE SAN JOSE, CA (408) 573-0555 FAX (408) 573-7771 LIC. 746684 WWW.BLAINETECH.COM

ARCADIS

Groundwater Gauging Log

Project Number	30064313
Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Measuring Point:	Top of Casing
Date(s):	04/08/2024
Sampler(s):	Aimee Rike
Gauging Equipment:	Water Level Meter

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
AS-1	04/08/2024	14:58	1.80	ND	13.08	--	--	--
DPE-1	04/08/2024	16:02	1.05	ND	18.42	--	--	--
DPE-2	04/08/2024	14:15	2.53	2.4	--	--	--	--
MW-6A	04/08/2024	13:40	0.93	ND	13.71	--	--	--
MW-8	04/08/2024	14:27	3.88	ND	16.89	--	--	--
MW-9A	04/08/2024	14:10	3.09	2.78	--	--	--	--
MW-10A	04/08/2024	13:55	7.52	ND	15.01	--	--	--
MW-12	04/08/2024	13:33	5.05	ND	12.52	--	--	--
MW-13	04/08/2024	13:59	5.42	ND	13.65	--	--	--
MW-15	04/08/2024	13:57	6.06	ND	18.06	--	--	--
MW-16	04/08/2024	14:35	9.89	5.41	--	--	--	--
MW-17	04/08/2024	14:52	1.96	ND	12.01	--	--	--
MW-18	04/08/2024	13:24	2.26	ND	11.83	--	--	--
MW-19	04/08/2024	13:30	5.42	ND	14.04	--	--	--
MW-20	04/08/2024	13:36	4.48	ND	12.09	--	--	--
MW-21	04/08/2024	15:24	2.81	2.7	--	--	--	--
MW-22	04/08/2024	15:14	1.14	ND	14.63	--	--	--
MW-23	04/08/2024	15:08	2.36	ND	13.92	--	--	--
PZ-1A	04/08/2024	16:07	4.00	ND	15.04	--	--	--
PZ-1B	04/08/2024	15:32	4.65	1.67	--	--	--	--
PZ-2A	04/08/2024	14:02	2.91	ND	15.94	--	--	--
PZ-2B	04/08/2024	14:21	3.01	ND	16.04	--	--	--

ft-bmp = feet below measuring point ND = Not Detected PID = Photoionization Detector Reading

ppm = parts per million -- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-6A	**Date**	4/9/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Aimee Rike
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	0.93	**Total Depth (ft-bmp)**	13.71	**Water Column (ft)**	12.78	**Gallons in Well**	2.08
Water Quality Meter Make/Model	Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	10:25	**Well Volumes Purged**	0.38	**Sample ID**	MW-6A-W-20240409	**Purge Equipment**	Peristaltic
Purge Start	10:07	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	10:24	**Total Purge Time (h:m)**	0:17				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:10	200	1.21	6.88	1.03	35.0	1.31	9.49	-28.7	--	--
10:13	200	1.29	6.90	1.02	31.0	1.14	9.85	-33.4	--	--
10:16	200	1.34	6.92	1.01	29.0	1.10	10.05	-38.3	--	--
10:19	200	1.34	6.97	1.02	30.0	1.11	10.04	-41.2	--	--
10:22	200	1.34	6.96	1.02	29.0	1.12	10.06	-43.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-6A-W-20240409 Sample Time: 10:25 Sample Depth (ft-bmp) (e.g. pump intake): 9

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling 1.34

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-8	**Date**	4/9/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Aimee Rike
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	2.5 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	3.88	**Total Depth (ft-bmp)**	16.89	**Water Column (ft)**	13.01	**Gallons in Well**	2.11
Water Quality Meter Make/Model	Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	11:55	**Well Volumes Purged**	0.38	**Sample ID**	MW-8-W-20240409	**Purge Equipment**	Peristaltic
Purge Start	11:37	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	11:52	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
11:40	200	3.97	6.58	1.40	29.0	1.23	10.27	-26.4	--	--
11:43	200	4.04	6.57	1.41	25.0	1.12	10.31	-34.1	--	--
11:46	200	4.09	6.55	1.41	24.0	1.04	10.25	-36.9	--	--
11:49	200	4.09	6.57	1.41	25.0	1.07	10.34	-42.1	--	--
11:52	200	4.09	6.56	1.41	24.0	1.05	10.40	-45.8	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-8-W-20240409 Sample Time: 11:55 Sample Depth (ft-bmp) (e.g. pump intake): 8

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling 4.09

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-10A	**Date**	4/9/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Aimee Rike
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 15	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	7.52	**Total Depth (ft-bmp)**	15.01	**Water Column (ft)**	7.49	**Gallons in Well**	1.22
Water Quality Meter Make/Model	Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	10:55	**Well Volumes Purged**	0.65	**Sample ID**	MW-10A-W-20240409	**Purge Equipment**	Peristaltic
Purge Start	10:38	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	10:54	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:41	200	7.69	7.06	0.694	27.0	1.30	11.05	-42.5	--	--
10:44	200	7.74	6.91	0.693	27.0	1.17	11.09	-36.5	--	--
10:47	200	7.74	6.66	0.693	26.0	1.11	11.17	-25.3	--	--
10:50	200	7.74	6.61	0.694	25.0	1.10	11.04	-21.7	--	--
10:53	200	7.74	6.57	0.694	26.0	1.09	11.08	-28.9	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-10A-W-20240409 Sample Time: 10:55 Sample Depth (ft-bmp) (e.g. pump intake): 11

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling 7.74

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-12	**Date**	4/9/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Aimee Rike
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	-- to --	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	5.05	**Total Depth (ft-bmp)**	12.52	**Water Column (ft)**	7.47	**Gallons in Well**	1.21
Water Quality Meter Make/Model	Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	09:20	**Well Volumes Purged**	0.65	**Sample ID**	MW-12-W-20240409	**Purge Equipment**	Peristaltic
Purge Start	09:01	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	09:19	**Total Purge Time (h:m)**	0:18				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:04	200	5.22	6.58	0.641	24.0	2.72	8.65	50.7	--	--
09:07	200	5.28	6.50	0.634	18.0	2.65	8.69	53.9	--	--
09:10	200	5.35	6.41	0.632	15.0	2.66	8.62	58.5	--	--
09:13	200	5.35	6.39	0.631	14.0	2.65	8.58	61.2	--	--
09:16	200	5.35	6.37	0.630	14.0	2.63	8.64	64.7	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-12-W-20240409 Sample Time: 09:20 Sample Depth (ft-bmp) (e.g. pump intake): 8.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling 5.35

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-17	**Date**	4/9/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Aimee Rike
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 12	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	1.96	**Total Depth (ft-bmp)**	12.01	**Water Column (ft)**	10.05	**Gallons in Well**	6.53
Water Quality Meter Make/Model	Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**			Grab
Sample Time	11:25	**Well Volumes Purged**	0.12	**Sample ID**	MW-17-W-20240409	**Purge Equipment**	Peristaltic
Purge Start	11:06	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	11:22	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
11:09	200	2.31	6.74	0.789	35.0	1.70	9.00	-5.4	--	--
11:12	200	2.36	6.71	0.790	31.0	1.39	8.92	-15.8	--	--
11:15	200	2.42	6.70	0.791	27.0	1.35	8.97	-17.9	--	--
11:18	200	2.42	6.67	0.794	25.0	1.24	9.09	-23.9	--	--
11:21	200	2.42	6.66	0.795	25.0	1.23	9.12	-26.8	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-17-W-20240409 Sample Time: 11:25 Sample Depth (ft-bmp) (e.g. pump intake): 8.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling 2.42

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-18	**Date**	4/9/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Aimee Rike
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	2.26	**Total Depth (ft-bmp)**	11.83	**Water Column (ft)**	9.57	**Gallons in Well**	1.56
Water Quality Meter Make/Model	Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	09:55	**Well Volumes Purged**	0.51	**Sample ID**	MW-18-W-20240409	**Purge Equipment**	Peristaltic
Purge Start	09:36	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	09:52	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:39	200	3.12	6.55	1.14	37.0	1.60	9.98	38.9	--	--
09:42	200	3.18	6.49	1.15	33.0	1.34	10.33	20.7	--	--
09:45	200	3.27	6.47	1.18	29.0	1.23	10.44	-4.9	--	--
09:48	200	3.27	6.47	1.19	27.0	1.24	10.35	-3.6	--	--
09:51	200	3.27	6.47	1.19	28.0	1.20	10.43	-9.7	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-18-W-20240409 Sample Time: 09:55 Sample Depth (ft-bmp) (e.g. pump intake): 8

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling 3.27

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-19	**Date**	4/9/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Aimee Rike
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	5.42	**Total Depth (ft-bmp)**	14.04	**Water Column (ft)**	8.62	**Gallons in Well**	1.4
Water Quality Meter Make/Model	Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**			Grab

Sample Time	08:10	**Well Volumes Purged**	0.57	**Sample ID**	MW-19-W-20240409	**Purge Equipment**	Peristaltic
Purge Start	07:52	**Gallons Purged**	0.79	**Duplicate ID**	BD-W-20240409	**Sample Equipment**	Peristaltic
Purge End	08:08	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
07:55	200	5.81	6.33	0.618	29.0	2.95	8.26	151.2	--	--
07:58	200	5.86	6.31	0.617	26.0	2.71	8.38	155.8	--	--
08:01	200	5.91	6.28	0.618	24.0	2.67	8.43	159.9	--	--
08:04	200	5.91	6.26	0.616	23.0	2.69	8.46	157.8	--	--
08:07	200	5.91	6.25	0.615	22.0	2.67	8.52	158.4	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID:	MW-19-W-20240409	Sample Time:	08:10	Sample Depth (ft-bmp) (e.g. pump intake):	9.5
Analytes and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	5.91

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-20	**Date**	4/9/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Aimee Rike
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	4.48	**Total Depth (ft-bmp)**	12.09	**Water Column (ft)**	7.61	**Gallons in Well**	1.24
Water Quality Meter Make/Model	Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	08:50	**Well Volumes Purged**	0.64	**Sample ID**	MW-20-W-20240409	**Purge Equipment**	Peristaltic
Purge Start	08:33	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	08:49	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
08:36	200	4.72	6.41	1.14	32.0	1.62	8.37	169	--	--
08:39	200	4.79	6.33	1.14	27.0	1.50	8.39	164.1	--	--
08:42	200	4.82	6.40	1.15	26.0	1.45	8.52	160.9	--	--
08:45	200	4.82	6.35	1.15	25.0	1.43	8.46	157.7	--	--
08:48	200	4.82	6.34	1.15	24.0	1.31	8.51	153.9	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-20-W-20240409 Sample Time: 08:50 Sample Depth (ft-bmp) (e.g. pump intake): 7.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling 4.82

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-22	**Date**	4/9/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Aimee Rike
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4.6 to 14.6	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	1.14	**Total Depth (ft-bmp)**	14.63	**Water Column (ft)**	13.49	**Gallons in Well**	8.77
Water Quality Meter Make/Model	Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	12:35	**Well Volumes Purged**	0.09	**Sample ID**	MW-22-W-20240409	**Purge Equipment**	Peristaltic
Purge Start	12:15	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	12:34	**Total Purge Time (h:m)**	0:19				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:18	200	1.36	7.14	0.824	38.0	1.76	11.56	-42.2	--	--
12:21	200	1.42	7.02	0.823	33.0	1.56	12.58	-37.8	--	--
12:24	200	1.45	6.93	0.824	32.0	1.47	12.65	-34.7	--	--
12:27	200	1.46	6.88	0.823	30.0	1.44	12.78	-32.6	--	--
12:30	200	1.48	6.80	0.824	29.0	1.42	12.97	-30.8	--	--
12:33	200	1.48	6.79	0.825	30.0	1.44	12.97	-28.6	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-22-W-20240409 Sample Time: 12:35 Sample Depth (ft-bmp) (e.g. pump intake): 9

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling 1.48

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-23	**Date**	4/9/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Clear	**Sampled by**	Aimee Rike
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3.95 to 13.95	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	2.36	**Total Depth (ft-bmp)**	13.92	**Water Column (ft)**	11.56	**Gallons in Well**	7.51
Water Quality Meter Make/Model	Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	13:10	**Well Volumes Purged**	0.11	**Sample ID**	MW-23-W-20240409	**Purge Equipment**	Peristaltic
Purge Start	12:50	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	13:06	**Total Purge Time (h:m)**	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:53	200	2.57	6.53	0.425	28.0	3.21	14.55	15.8	--	--
12:56	200	2.66	6.48	0.424	25.0	2.96	14.32	18.8	--	--
12:59	200	2.66	6.23	0.421	22.0	2.72	15.11	28.8	--	--
13:02	200	2.66	6.21	0.423	21.0	2.73	15.16	33.9	--	--
13:05	200	2.66	6.20	0.425	20.0	2.70	15.22	35.2	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-23-W-20240409 Sample Time: 13:10 Sample Depth (ft-bmp) (e.g. pump intake): 8

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: 2.65

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Company Name/Address:
Arcadis - Chevron - WA
1420 5th Ave
Unit 2400
Seattle, WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to: Melissa Caldwell

Email To: Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description: 206196

City/State Collected:

Please Circle: PT MT CT ET

Phone: 206-325-5254

Client Project # 30064313 19.45

Lab Project # CHEVARCWA-206196

Collected by (print): Aimee Rike

Site/Facility ID # 815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y ___

No. of Cntrs

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace
ANALYTICAL ADVANCED SCIENCE

MT JULIET, TN

LGBG (please fill volume used, the FedEx Tracking # and the Client service info). By submitting a sample via this chain of custody, Client acknowledges receipt and acceptance of Pace Terms and Conditions found at: https://www.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG #

Table #

Acctnum: CHEVARCWA

Template: T241266

Prelogin: P1067778

PM: 110 - Brian Ford

PB:

Shipped Via:

Remarks | Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	HO (aka RRO) NWTPHDX 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl
MW-10A-W-20240409	G	GW	—	04/09/24	1025	8	X	X	X
MW-8-W-20240409		GW	—		1155	8	X	X	X
MW-10A-W-20240409		GW	—		1055	8	X	X	X
MW-12-W-20240409		GW	—		0920	8	X	X	X
MW-17-W-20240409		GW	—		1125	8	X	X	X
MW-18-W-20240409		GW	—		0955	8	X	X	X
MW-19-W-20240409		GW	—		0810	8	X	X	X
MW-20-W-20240409		GW	—		0850	8	X	X	X
MW-22-W-20240409		GW	—		1235	8	X	X	X
MW-23-W-20240409		GW	—		1310	8	X	X	X

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeOH TBR	
	4/9/24	1460			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: Condition: NCF / OK

Company: Arcadis - Chevron - WA

1420 5th Ave
Unit 2400
Seattle, WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Fred Chk

Report to: Melissa Caldwell

Email To: Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description: 206196

City/State Collected:

Please Circle: PT MT CT ET

Phone: 206-325-5254

Client Project # 30064313 19.45

Lab Project # CHEVARCWA-206196

Collected by (print): Aimee Kile

Site/Facility ID # 815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y ___

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	HO (aka RRO) NWTPHDX 40mlAmb-HCl-ST	NWTPHGX 40mlAmb HCl
BD-W-20240409	G	GW	—	04/09/24	1200	8	X	X	X
TB-W-20240409	↓	GW	—	↓	0900	2	X		X
		GW							
		GW							
		GW							
		GW							

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace
MT JULIET, TN

SDG #

Table #

Acctnum: CHEVARCWA

Template: T241266

Prelogin: P1067778

PM: 110 - Brian Ford

PB:

Shipped Via:

Remarks | Sample # (lab only)

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

pH ____ Temp ____

Flow ____ Other ____

Samples returned via:
__ UPS __ FedEx __ Courier

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:

If preservation required by Login: Date/Ti

Hold: Cond NCF

Well Inspection Log

ARCADIS

Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Date(s):	4/9/2024,4/8/2024
Inspector(s):	Aimee Rike

Well ID	Date	Easy to Locate?	Area Prone to Flooding?	Well Type	Well Housing/Pad in Good Condition?	Well Labels Present Outside Well?	Well Labels Present Inside Well?	Lock Present?	Lock Functioning?	Well Locked at Arrival?	Photos Taken?	Comments
AS-1	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
DPE-1	04/08/2024	yes	no	vault	yes	no	no	no	--	--	No	--
DPE-2	04/08/2024	yes	no	vault	yes	no	no	no	--	--	No	--
MW-6A	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
MW-8	04/08/2024	yes	no	stick_up	yes	yes	yes	no	--	--	No	--
MW-9A	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
MW-10A	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
MW-12	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
MW-13	04/08/2024	yes	yes	stick_up	yes	no	yes	no	--	--	No	--
MW-15	04/08/2024	yes	yes	stick_up	yes	yes	yes	no	--	--	No	--
MW-16	04/08/2024	yes	no	stick_up	yes	yes	yes	no	--	--	No	--
MW-17	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
MW-18	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
MW-19	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
MW-20	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
MW-21	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
MW-22	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
MW-23	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
PZ-1A	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
PZ-1B	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
PZ-2A	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--
PZ-2B	04/08/2024	yes	no	flushmount	yes	yes	yes	no	--	--	No	--

Well Inspection Log Photographs

Well ID	Date	Photo	Comments
AS-1	04/08/2024		None
DPE-1	04/08/2024		None
DPE-2	04/08/2024		None
MW-6A	04/09/2024		None

MW-8	04/09/2024		None
MW-9A	04/08/2024		None
MW-10A	04/09/2024		None
MW-12	04/09/2024		None

MW-13	04/08/2024		None
MW-15	04/08/2024		None
MW-16	04/08/2024		None
MW-17	04/09/2024		None

MW-18	04/09/2024		None
MW-19	04/09/2024		None
MW-20	04/09/2024		None
MW-22	04/09/2024		None

MW-23	04/09/2024		None
PZ-1A	04/08/2024		None
PZ-1B	04/08/2024		None
PZ-2A	04/08/2024		None

PZ-2B	04/08/2024		None

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 815 NE College St Pullman				PROJECT NUMBER 240408-AR1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Hanna	08020054101	4/8/24 @ 0710	PH 4.0 7.0 10.0	4.02 7.05 10.03	✓	19.9	AR
			Cond 3900 ORP 237.5 DO 100	3907 238.1 103.9	✓	19.9	AR
Hanna	08020054101	4/9/24 @ 0715	PH 4.0 7.0 10.0	4.04 7.06 10.07	✓	20.0	AR
			Cond 3900 ORP 237.5 DO 100	3909 237.9 102.1	✓	20.0	AR

CHEVRON-WASHINGTON/OREGON TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING**

FOR PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF WASHINGTON AND OREGON. THE PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR AND HAULED TO THEIR FACILITY IN KENT, WASHINGTON FOR TEMPORARILY HOLDING PENDING TRANSPORT BY OTHERS TO FINAL DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 22727 72ND Ave South, Suite D – 102, Kent, WA 98032. BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

2016196	Melissa Caldwell
CHEVRON #	Chevron Project Manager

815	NE	College	St	Pullman	WA
Street number		street name		city	state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-6A	1.0		
MW-8	1.0		
MW-10A	1.0		
MW-12	1.0		
MW-17	1.0		
MW-18	1.0		
MW-19	1.0		
MW-20	1.0		
MW-22	1.0		
MW-23	1.0		

added equip. rinse water 0.5

any other adjustments

TOTAL GALS. RECOVERED 10.5

loaded onto BTS vehicle # 114

BTS event #	time	date
240408-AR1	1600	04/09/24

signature

Blaine Tech Services, Inc.

Permit To Work

for Chevron EMC Sites

Client: Arcadis Date 4/8/24

Site Address: 815 NE College St Pullman WA

Job Number: 240408-AR1 Technician(s): AR

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed. Reviewed: ☑

2. Special Permit Required Task Review

Are there any conditions or tasks that would require:	Yes	No
Confined space entry	☐	☒
Working at height	☐	☒
Lock-out/Tag-out	☐	☒
Excavations greater than 4 feet deep	☐	☒
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	☐	☒
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	☐	☒
Hot work	☐	☒

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

	Yes	No
3. Is a Traffic Control Permit required for today's work?	☐	☒
If so is it in the folder?	☐	☑
Is it current?	☐	☒
Do you understand the Traffic Control Plan and what equipment you will need?	☐	☒

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP.	☒
2. Route to hospital understood.	☒
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.	☒
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.	☒
5. Understands procedure to follow, if site circumstances change, to address new site hazards.	☒
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.	☒
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.	☒
8. After lunch tailgate safety meeting refresher conducted.	☒

If Checklist Task cannot be completed, explain:

Permit To Work Authority:

Name Title Date Time

Blaine Tech Services, Inc.

Permit To Work

for Chevron EMC Sites

Client: Arcadis Date 9/9/24

Site Address: 815 NE College St Pullman

Job Number: 240908-AR2 Technician(s): AR

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed. Reviewed: ☒

2. Special Permit Required Task Review

Are there any conditions or tasks that would require:	Yes	No
Confined space entry	☐	☒
Working at height	☐	☒
Lock-out/Tag-out	☐	☒
Excavations greater than 4 feet deep	☐	☒
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	☐	☒
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	☐	☒
Hot work	☐	☒

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

	Yes	No
3. Is a Traffic Control Permit required for today's work?	☐	☒
If so is it in the folder?	☐	☒
Is it current?	☐	☒
Do you understand the Traffic Control Plan and what equipment you will need?	☐	☒

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP.	☒
2. Route to hospital understood.	☒
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.	☒
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.	☒
5. Understands procedure to follow, if site circumstances change, to address new site hazards.	☒
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.	☒
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.	☒
8. After lunch tailgate safety meeting refresher conducted.	☒

If Checklist Task cannot be completed, explain:

Permit To Work Authority:

Name Title Date Time

BLAINE
TECH SERVICES INC.

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

June 24, 2024

ARCADIS
Melissa Caldwell
320 Commerce, Suite 200
Irvine, CA 92602, CA

Second Quarter 2024 Monitoring at
Site Number 206196
815 NE College Avenue
Pullman, WA

Monitoring performed on June 10 & 11, 2024

Blaine Tech Services, Inc. Groundwater Monitoring Event 240610-DO1

This submission covers the routine monitoring of groundwater wells conducted on June 10 & 11, 2024 at this location. Twenty-One monitoring wells were measured for depth to groundwater (DTW) and presence of separate-phase hydrocarbons (SPH). Nine monitoring wells were sampled. We were unable to access well PZ-2B because there was a bee hive in the wellbox. All sampling activities were performed in accordance with local, state and federal guidelines.

Water levels and separate-phase measurements were collected using an electronic water level meter or oil-water interface detector. All sampled wells were sampled utilizing the Low-flow Sampling Method. Purging was accomplished using peristaltic pumps, bladder pumps, electric submersible pumps, positive air-displacement pumps. All reused equipment was decontaminated with de-ionized water and Liquinox or equivalent.

Samples were delivered under chain-of-custody to Pace Analytical for analysis. Monitoring well purgewater and equipment rinsate water was collected and transported under bill of lading to Blaine Tech Services, Inc.'s yard in Auburn, WA, and bulked for future transportation (within 90 days) under non-hazardous manifest for disposal at Evoqua Water Technologies, a licensed facility.

Enclosed documentation from this event includes copies of the Well Gauging Sheet, Well Monitoring Data Sheets, Bill of lading, and Chain-of-Custody.

SAN JOSE SACRAMENTO LOS ANGELES SAN DIEGO SEATTLE
1680 ROGERS AVENUE SAN JOSE, CA (408) 573-0555 FAX (408) 573-7771 LIC. 746684 WWW.BLAINETECH.COM

Blaine Tech Services, Inc.'s activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrogeologic conditions or formulation of recommendations was performed.

Please call if you have any questions.

Thank you,

Lee Bures
Blaine Tech Services, Inc
Project Manager

attachments: Well Gauging Sheet
Individual Well Monitoring Data Sheets
Chain of Custody Forms
Wellhead Inspection Form
Bill of lading

SAN JOSE SACRAMENTO LOS ANGELES SAN DIEGO SEATTLE
1680 ROGERS AVENUE SAN JOSE, CA (408) 573-0555 FAX (408) 573-7771 LIC. 746684 WWW.BLAINETECH.COM

ARCADIS

Groundwater Gauging Log

Project Number	30064313
Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Measuring Point:	Top of Casing
Date(s):	06/10/2024
Sampler(s):	Diana Ojeda
Gauging Equipment:	Interface Probe

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
MW-6A	06/10/2024	15:15	1.96	ND	13.74	--	--	--
MW-8	06/10/2024	13:23	5.52	5.23	--	--	--	--
MW-9A	06/10/2024	14:13	4.64	4.06	--	--	--	--
MW-10A	06/10/2024	13:58	7.89	ND	14.99	--	--	--
MW-12	06/10/2024	15:22	5.72	ND	12.44	--	--	--
MW-13	06/10/2024	14:02	5.09	ND	13.70	--	--	--
MW-15	06/10/2024	14:04	5.93	ND	18.04	--	--	--
MW-16	06/10/2024	13:30	9.76	5.23	--	--	--	--
MW-17	06/10/2024	13:43	3.24	ND	12.00	--	--	--
MW-18	06/10/2024	15:30	2.33	ND	11.96	--	--	--
MW-19	06/10/2024	15:19	6.16	ND	14.10	--	--	--
MW-20	06/10/2024	15:26	5.31	ND	12.12	--	--	--
MW-21	06/10/2024	13:20	4.11	4.01	--	--	--	--
MW-22	06/10/2024	14:48	2.00	ND	14.60	--	--	--
MW-23	06/10/2024	14:50	3.49	ND	13.92	--	--	--
AS-1	06/10/2024	13:37	2.68	ND	13.10	--	--	--
DPE-1	06/10/2024	13:34	2.03	ND	18.61	--	--	--
DPE-2	06/10/2024	14:12	4.05	3.92	--	--	--	--
PZ-1A	06/10/2024	13:31	2.80	ND	15.11	--	--	--
PZ-1B	06/10/2024	13:39	4.49	3.03	--	--	--	--
PZ-2A	06/10/2024	14:10	4.22	ND	15.92	--	--	--
PZ-2B	06/10/2024	--	--	ND	--	--	--	Unable to Gauge, bees in well box

ft-bmp = feet below measuring point ND = Not Detected PID = Photoionization Detector Reading

ppm = parts per million -- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-6A	**Date**	6/11/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	1.96	**Total Depth (ft-bmp)**	13.74	**Water Column (ft)**	11.78	**Gallons in Well**	1.91
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	09:16	**Well Volumes Purged**	0.41	**Sample ID**	MW-6A-W-20240611	**Purge Equipment**	Peristaltic
Purge Start	08:58	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	09:13	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:01	200	2.1	7.26	1.11	54.0	0.12	14.39	147.9	--	--
09:04	200	2.18	7.25	1.11	42.0	0.11	14.43	146.1	--	--
09:07	200	2.27	7.23	1.11	48.0	0.10	14.53	145	--	--
09:10	200	2.3	7.22	1.11	44.0	0.09	14.52	142.8	--	--
09:13	200	2.37	7.22	1.11	45.0	0.09	14.49	140.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-6A-W-20240611 Sample Time: 09:16 Sample Depth (ft-bmp) (e.g. pump intake): 8

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-10A	**Date**	6/11/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 15	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	7.89	**Total Depth (ft-bmp)**	14.99	**Water Column (ft)**	7.1	**Gallons in Well**	1.15
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	10:20	**Well Volumes Purged**	0.69	**Sample ID**	MW-10A-W-20240611	**Purge Equipment**	Peristaltic
Purge Start	10:02	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	10:17	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:05	200	7.98	7.01	0.787	21.0	0.56	16.33	136.7	--	--
10:08	200	8.05	6.99	0.783	19.0	0.56	16.52	137.5	--	--
10:11	200	8.14	6.97	0.781	15.0	0.55	16.80	136.1	--	--
10:14	200	8.19	6.95	0.782	16.0	0.55	16.82	137.9	--	--
10:17	200	8.23	6.93	0.782	15.0	0.54	16.76	138.4	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-10A-W-20240611 Sample Time: 10:20 Sample Depth (ft-bmp) (e.g. pump intake): 11.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-12	**Date**	6/11/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	-- to --	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	5.72	**Total Depth (ft-bmp)**	12.44	**Water Column (ft)**	6.72	**Gallons in Well**	1.09
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	08:24	**Well Volumes Purged**	0.73	**Sample ID**	MW-12-W-20240611	**Purge Equipment**	Peristaltic
Purge Start	08:06	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	08:21	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
08:09	200	5.89	6.81	1.17	35.0	0.42	13.34	203.5	--	--
08:12	200	6.01	6.66	1.45	29.0	0.81	13.70	206.3	--	--
08:15	200	6.14	6.57	1.47	29.0	0.34	13.52	207.6	--	--
08:18	200	6.19	6.55	1.48	28.0	0.32	13.52	206.7	--	--
08:21	200	6.25	6.52	1.47	27.0	0.33	13.73	206.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-12-W-20240611 Sample Time: 08:24 Sample Depth (ft-bmp) (e.g. pump intake): 9

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-17	**Date**	6/11/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 12	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	3.24	**Total Depth (ft-bmp)**	12	**Water Column (ft)**	8.76	**Gallons in Well**	5.69
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	09:52	**Well Volumes Purged**	0.14	**Sample ID**	MW-17-W-20240611	**Purge Equipment**	Peristaltic
Purge Start	09:34	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	09:49	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:37	200	3.62	7.32	0.857	32.0	0.32	15.70	136.8	--	--
09:40	200	3.64	7.23	0.858	28.0	0.29	15.70	137.5	--	--
09:43	200	3.69	7.06	0.905	24.0	0.16	15.63	139.7	--	--
09:46	200	3.74	6.99	0.911	22.0	0.12	15.52	139.7	--	--
09:49	200	3.81	6.98	0.915	23.0	0.12	15.54	138.8	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-17-W-20240611 Sample Time: 09:52 Sample Depth (ft-bmp) (e.g. pump intake): 7.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-18	**Date**	6/10/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	2.33	**Total Depth (ft-bmp)**	11.96	**Water Column (ft)**	9.63	**Gallons in Well**	1.56
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**			Grab

Sample Time	15:58	**Well Volumes Purged**	0.51	**Sample ID**	MW-18-W-20240610	**Purge Equipment**	Peristaltic
Purge Start	15:40	**Gallons Purged**	0.79	**Duplicate ID**	BD-W-20240610	**Sample Equipment**	Peristaltic
Purge End	15:55	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
15:43	200	2.61	7.03	1.24	33.0	0.23	20.48	174.6	--	--
15:46	200	2.73	7.04	1.22	29.0	0.23	20.74	177.5	--	--
15:49	200	2.78	7.01	1.22	27.0	0.23	20.85	179.8	--	--
15:52	200	2.8	6.98	1.21	26.0	0.21	20.90	182.9	--	--
15:55	200	2.84	6.95	1.21	25.0	0.21	20.90	185.3	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-18-W-20240610 Sample Time: 15:58 Sample Depth (ft-bmp) (e.g. pump intake): 7

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-19	**Date**	6/11/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	6.16	**Total Depth (ft-bmp)**	14.1	**Water Column (ft)**	7.94	**Gallons in Well**	1.29
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	07:52	**Well Volumes Purged**	0.61	**Sample ID**	MW-19-W-20240611	**Purge Equipment**	Peristaltic
Purge Start	07:34	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	07:49	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
07:37	200	6.2	7.22	0.894	42.0	0.15	12.69	170.3	--	--
07:40	200	6.27	7.09	0.891	40.0	0.13	13.01	179.9	--	--
07:43	200	6.32	6.95	0.890	38.0	0.12	13.22	186.8	--	--
07:46	200	6.36	6.93	0.891	36.0	0.12	13.34	188.8	--	--
07:49	200	6.37	6.90	0.889	35.0	0.12	13.41	190.3	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-19-W-20240611 Sample Time: 07:52 Sample Depth (ft-bmp) (e.g. pump intake): 10

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-20	**Date**	6/11/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 12	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	5.31	**Total Depth (ft-bmp)**	12.12	**Water Column (ft)**	6.81	**Gallons in Well**	1.11
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	08:46	**Well Volumes Purged**	0.71	**Sample ID**	MW-20-W-20240611	**Purge Equipment**	Peristaltic
Purge Start	08:28	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	08:43	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
08:31	200	5.66	6.72	1.21	58.0	0.16	13.76	184.5	--	--
08:34	200	5.8	6.70	1.21	51.0	0.18	13.79	183.1	--	--
08:37	200	5.87	6.63	1.20	46.0	0.17	13.87	181	--	--
08:40	200	5.92	6.61	1.19	47.0	0.16	13.94	179.6	--	--
08:43	200	6	6.58	1.18	45.0	0.18	14.04	178.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-20-W-20240611 Sample Time: 08:46 Sample Depth (ft-bmp) (e.g. pump intake): 8.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-22	**Date**	6/11/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4.6 to 14.6	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	2	**Total Depth (ft-bmp)**	14.6	**Water Column (ft)**	12.6	**Gallons in Well**	8.19
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	11:28	**Well Volumes Purged**	0.10	**Sample ID**	MW-22-W-20240611	**Purge Equipment**	Peristaltic
Purge Start	11:10	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	11:25	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
11:13	200	2.18	6.82	1.08	29.0	0.32	21.17	156.3	--	--
11:16	200	2.2	6.76	1.09	25.0	0.27	21.22	157	--	--
11:19	200	2.21	6.71	1.10	24.0	0.21	20.23	157.6	--	--
11:22	200	2.24	6.71	1.10	24.0	0.21	19.90	158.2	--	--
11:25	200	2.26	6.70	1.10	23.0	0.20	19.88	158.2	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-22-W-20240611 Sample Time: 11:28 Sample Depth (ft-bmp) (e.g. pump intake): 8.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064313	**Well ID**	MW-23	**Date**	6/11/2024		
Site Location	Pullman, Washington	**Site ID**	206196	**Weather (°F)**	Cloudy	**Sampled by**	Diana Ojeda
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3.95 to 13.95	**Casing Diameter (in.)**	4	**Well Casing Material**	
Static Water Level (ft-bmp)	3.49	**Total Depth (ft-bmp)**	13.92	**Water Column (ft)**	10.43	**Gallons in Well**	6.78
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	10:51	**Well Volumes Purged**	0.12	**Sample ID**	MW-23-W-20240611	**Purge Equipment**	Peristaltic
Purge Start	10:33	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	10:48	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:36	200	3.55	6.64	0.720	17.0	0.16	19.49	160.1	--	--
10:39	200	3.56	6.57	0.720	16.0	0.16	19.63	161.9	--	--
10:42	200	3.6	6.49	0.720	16.0	0.18	20.09	163.7	--	--
10:45	200	3.62	6.48	0.721	15.0	0.19	20.14	165.4	--	--
10:48	200	3.63	6.47	0.722	15.0	0.19	20.19	166.2	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-23-W-20240611 Sample Time: 10:51 Sample Depth (ft-bmp) (e.g. pump intake): 9

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Company Name/Address:
Arcadis - Chevron - WA

1420 5th Ave
Unit 2400
Seattle, WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to: Melissa Caldwell

Email To: Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description: 206196

City/State Collected: Pullman, WA

Please Circle: PT MT CT ET

Phone: 206-325-5254

Client Project # 30064313 19.45

Lab Project # CHEVARCWA-206196

Collected by (print): Diana Ojeda

Site/Facility ID # 815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature): Diana Ojeda

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG #

Table #

Acctnum: CHEVARCWA
Template: T241266
Prelogin: P1081356
PM: 110 - Brian Ford
PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	HO (aka RRO) NWTPHDX 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	Remarks	Sample # (lab only)
MW-6A-W-20240611	G	GW	–	6/11/24	0916	8	X	X	X		
MW-10A-W-20240611		GW	–	6/11/24	1020	8	X	X	X		
MW-12-W-20240611		GW	–	6/11/24	0824	8	X	X	X		
MW-17-W-20240611		GW	–	6/11/24	0952	8	X	X	X		
MW-18-W-20240610		GW	–	6/10/24	1558	8	X	X	X		
MW-19-W-20240611		GW	–	6/11/24	0752	8	X	X	X		
MW-20-W-20240611		GW	–	6/11/24	0846	8	X	X	X		
MW-22-W-20240611		GW	–	6/11/24	1128	8	X	X	X		
MW-23-W-20240611		GW	–	6/11/24	1051	8	X	X	X		
BD-W-20240610		GW	–	6/10/24	1200	8	X	X	X		

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Samples returned via: __UPS __FedEx __Courier _____

Tracking #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Diana Ojeda					
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: / Condition: NCF / OK

Company Name/Address:
Arcadis - Chevron - WA

1420 5th Ave
Unit 2400
Seattle, WA 98101

Billing Information:
Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Melissa Caldwell

Email To:
Melissa.Caldwell@arcadis.com;Tyler.Green@arc

Project Description:
206196

City/State Collected: Pullman, WA

Please Circle: PT MT CT ET

Phone: 206-325-5254

Client Project #
30064313 19.45

Lab Project #
CHEVARCWA-206196

Collected by (print):
Diana Ojeda

Site/Facility ID #
815 NE COLLEGE ST PULLMAN

P.O. #

Collected by (signature):
Immediately
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX,MTBE 8260 40mlAmb-HCl	HO (aka RRO) NWTPHDX 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl
TB-W-20240611	Gr	GW	-	6/11/24	0900	2	X		X
		GW							
		GW							
		GW							
		GW							
		GW							

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG #

Table #

Acctnum: CHEVARCWA
Template: T241266
Prelogin: P1081356
PM: 110 - Brian Ford
PB:

Shipped Via:

Remarks | Sample # (lab only)

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: / Condition: NCF / OK

Well Inspection Log

ARCADIS

Client:	Chevron
Site ID:	206196
Site Location:	Pullman, Washington
Date(s):	6/11/2024,6/10/2024
Inspector(s):	Diana Ojeda

Well ID	Date	Easy to Locate?	Area Prone to Flooding?	Well Type	Well Housing/Pad in Good Condition?	Well Labels Present Outside Well?	Well Labels Present Inside Well?	Lock Present?	Lock Functioning?	Well Locked at Arrival?	Photos Taken?	Comments
MW-6A	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-8	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-9A	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-10A	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-12	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-13	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-15	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-16	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-17	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-18	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-19	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-20	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-21	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-22	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
MW-23	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
AS-1	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
DPE-1	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
DPE-2	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
PZ-1A	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
PZ-1B	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
PZ-2A	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--
PZ-2B	06/10/2024	yes	no	flushmount	yes	no	yes	yes	yes	yes	No	--

Well Inspection Log Photographs

Well ID	Date	Photo	Comments
MW-6A	06/11/2024		None
MW-8	06/10/2024		None
MW-9A	06/10/2024		None
MW-10A	06/11/2024		None

MW-12	06/11/2024		None
MW-13	06/10/2024		None
MW-15	06/10/2024		None
MW-16	06/10/2024		None

MW-17	06/11/2024		None
MW-18	06/10/2024		None
MW-19	06/11/2024		None
MW-20	06/11/2024		None

MW-21	06/10/2024		None
MW-22	06/11/2024		None
MW-23	06/11/2024		None
AS-1	06/10/2024		None

DPE-1	06/10/2024		None
DPE-2	06/10/2024		None
PZ-1A	06/10/2024		None
PZ-1B	06/10/2024		None

PZ-2A	06/10/2024		None
PZ-2B	06/10/2024		None

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 815 NE College St, Pullman				PROJECT NUMBER 240610-D01			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
HANNA	07460037101	6/10/24 @ 0655	pH 4 7 10	4.04 6.03 9.99	✓	19.8	DO
			Cond 3900 ORP 237.5 DO 100	3890 239.7 106.3	✓	19.7	DO
HANNA	07460037101	6/11/24 @ 0642	pH 4 7 10	4.07 6.02 9.94	✓	20.9	DO
			Cond 3900 ORP 237.5 DO 100	3896 238.2 105.1	✓	20.9	DO

CHEVRON-WASHINGTON/OREGON TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING**

FOR PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF WASHINGTON AND OREGON. THE PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR AND HAULED TO THEIR FACILITY IN KENT, WASHINGTON FOR TEMPORARILY HOLDING PENDING TRANSPORT BY OTHERS TO FINAL DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 22727 72ND Ave South, Suite D – 102, Kent, WA 98032. BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

206196 — CHEVRON #

Melissa Caldwell — Chevron Project Manager

815 NE College St, Pullman, WA

Street number / street name / city / state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-6A	1		
MW-10A	1		
MW-12	1		
MW-17	1		
MW-18	1		
MW-19	1		
MW-20	1		
MW-22	1		
MW-23	1		

added equip. rinse water 0.2

any other adjustments

TOTAL GALS. RECOVERED 9.2

loaded onto BTS vehicle # 162

BTS event # 240610-001 time 1400 date 6/11/24

signature

Blaine Tech Services, Inc.

Permit To Work

for Chevron EMC Sites

Client: Arcadis Date 6/10/24

Site Address: 815 NE College St, Pullman

Job Number: 240610-001 Technician(s): DO

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed. Reviewed: ☑

2. Special Permit Required Task Review

Are there any conditions or tasks that would require:	Yes	No
Confined space entry	☐	☑
Working at height	☐	☑
Lock-out/Tag-out	☐	☑
Excavations greater than 4 feet deep	☐	☑
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	☐	☑
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	☐	☑
Hot work	☐	☑

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

	Yes	No
3. Is a Traffic Control Permit required for today's work?	☐	☑
If so is it in the folder?	☐	☐
Is it current?	☐	☐
Do you understand the Traffic Control Plan and what equipment you will need?	☐	☐

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP.	☑
2. Route to hospital understood.	☑
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.	☑
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.	☑
5. Understands procedure to follow, if site circumstances change, to address new site hazards.	☑
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.	☑
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.	☑
8. After lunch tailgate safety meeting refresher conducted.	☑

If Checklist Task cannot be completed, explain:

Permit To Work Authority: Diana Ojeda (Name) Tech (Title) 6/10/24 (Date) 0630 (Time)

Blaine Tech Services, Inc.

Permit To Work

for Chevron EMC Sites

Client: Arcadis Date 6/11/24

Site Address: 815 NE College St, Pullman

Job Number: 240610-001 Technician(s): DO

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed. Reviewed: ☑

2. Special Permit Required Task Review

Are there any conditions or tasks that would require:	Yes	No
Confined space entry	☐	☑
Working at height	☐	☑
Lock-out/Tag-out	☐	☑
Excavations greater than 4 feet deep	☐	☑
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	☐	☑
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	☐	☑
Hot work	☐	☑

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

	Yes	No
3. Is a Traffic Control Permit required for today's work?	☐	☑
If so is it in the folder?	☐	☐
Is it current?	☐	☐
Do you understand the Traffic Control Plan and what equipment you will need?	☐	☐

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP.	☑
2. Route to hospital understood.	☑
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.	☑
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.	☑
5. Understands procedure to follow, if site circumstances change, to address new site hazards.	☑
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.	☑
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.	☑
8. After lunch tailgate safety meeting refresher conducted.	☑

If Checklist Task cannot be completed, explain:

Permit To Work Authority: ~~Ted~~ Dima Ojeda (Name) Tech (Title) 6/11/24 (Date) 0630 (Time)

Appendix C

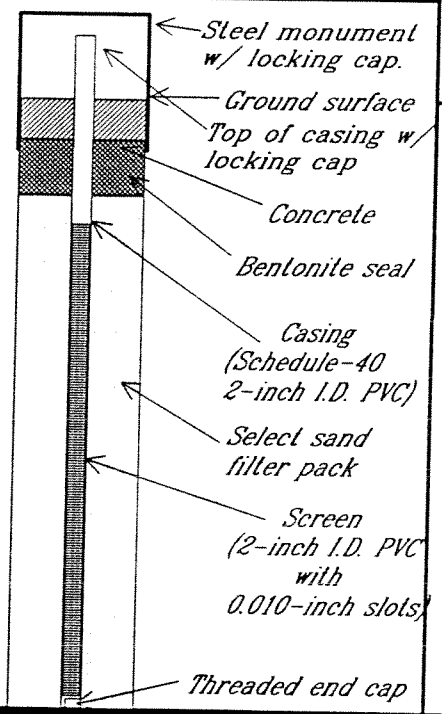
Boring Logs and Well Construction Details

PROJECT *Pullman Level II* W.O. *S-1023* WELL NO. *MW-1*

Elevation reference:
Ground surface elevation: Casing elevation:

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	OVM READING	GROUND WATER
0	*Broken Basalt gravel FILL.*					
			S-1	4	198.1	
5	*Soft to medium stiff, damp to saturated, dark gray to black SILT with trace of organics ans sand. Strong petroleum hydrocarbon odor and sheen in places.*		S-2	5	447.0	ATD
			S-3	4	407.0	
10			S-4	3	600.0	
	Very dense, saturated, dark gray, silty SAND with some gravels. Strong petroleum hydrocarbon-like odor.		S-5	50/6"	557.0	
	Boring terminated at approximately 13.0 feet.					
15						
20						
25						
30						

AS-BUILT DESIGN



TESTING

HCID
BTEX
LEAD

HCID
BTEX
LEAD

LEGEND

2-inch O.D. split-spoon sample

Observed groundwater level (ATD = at time of drilling)

RZA AGRA, Inc.
Engineering & Environmental Services

539 West Sharp, Suite D
Spokane, WA 99201

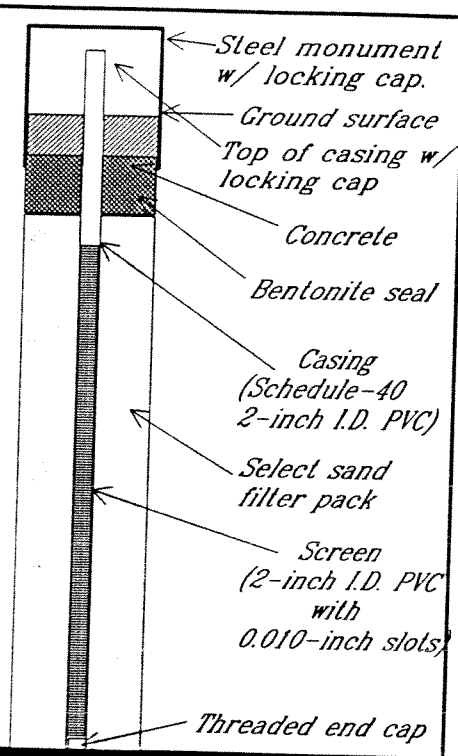
Drilling started: *26 March 1991* Drilling completed: *26 March 1991* Logged by: *ENJS*

PROJECT *Pullman Level II* W.O. *S-1023* WELL NO. *MW-2*

Elevation reference:
Ground surface elevation: Casing elevation:

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	OVM READING	GROUND WATER
0	*Sandy cobbles and GRAVEL for road fill.*					
			S-1	3	0.0	
5	*Soft to damp to wet, dark brown to mottled green-brown/black SILT with trace fine sand and organics. Strong petroleum odor.*		S-2	2	35.0	ATD
			S-3	2	112.0	
10			S-4	3	600.0	
	Very dense, saturated, dark green to yellow green, silty SAND with some gravel.					
	Basalt bedrock		S-5	50/3"	62.0	
	Boring terminated at approximately 13.2 feet.					
15						
20						
25						
30						

AS-BUILT DESIGN



TESTING

HCID
BTEX
LEAD

HCID
BTEX
LEAD

LEGEND

2-inch O.D. split-spoon sample

ATD Observed groundwater level (ATD = at time of drilling)

RZA AGRA, Inc.
Engineering & Environmental Services
539 West Sharp, Suite D
Spokane, WA 99201

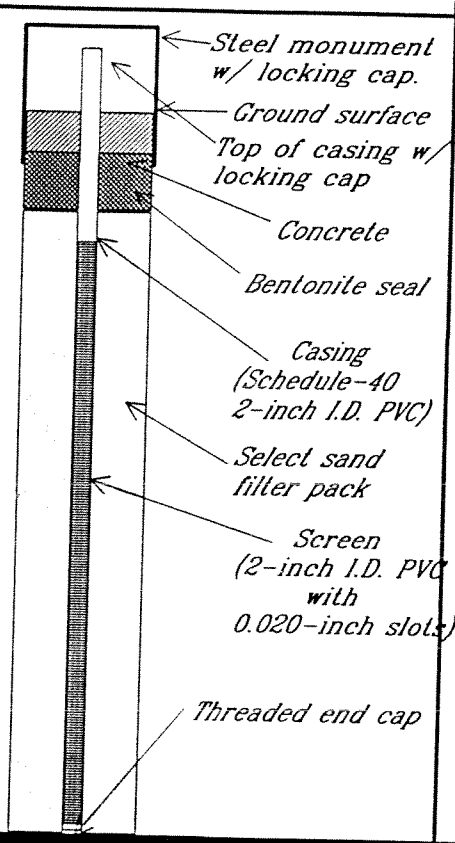
Drilling started: *26 March 1991* Drilling completed: *26 March 1991* Logged by: *ENJS*

PROJECT *Pullman Level II* W.O. *S-1023* WELL NO. *MW-3*

Elevation reference:
Ground surface elevation: Casing elevation:

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	OVM READING	GROUND WATER
0	*Broken basalt gravel fill.*					
	Soft damp to wet, dark brown to greenish brown fine sandy SILT with some organics.		S-1	3	0.0	
5						ATD
			S-2	3	0.0	
10						
	Very dense, saturated, dark green to yelllow green, silty SAND with some gravel.		S-3	84/10"	0.0	
15	*Basalt bedrock*					
	Boring terminated at approximately 15.0 feet.					
20						
25						
30						

AS-BUILT DESIGN



TESTING

HCID
BTEX
LEAD

HCID
BTEX
LEAD

LEGEND

- 2-inch O.D. split-spoon sample
- ATD — Observed groundwater level (ATD = at time of drilling)

RZA AGRA, Inc.
Engineering & Environmental Services
539 West Sharp, Suite D
Spokane, WA 99201

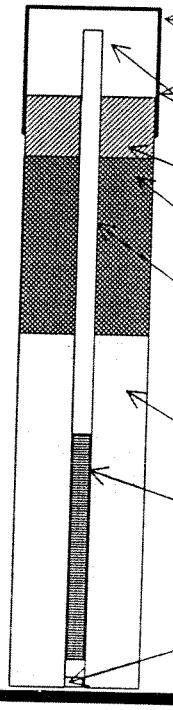
Drilling started: *26 March 1991* Drilling completed: *26 March 1991* Logged by: *ENJS*

PROJECT *Pullman Level II* W.O. *S-1023* WELL NO. *MW-4*

Elevation reference:
*Ground surface elevation: Casing elevation:

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	OVM READING	GROUND WATER
0	*Gravel and cobble fill*					
	Medium stiff, damp brown to dark brown, fine, sandy SILT with organics and trace gravel		S-1	6	0.0	
5				ATD		
	Soft, wet, greenish brown, clayey SILT with thin interbeds of silty fine sand.		S-2		0.0	
10						
	Basalt bedrock					
	Boring terminated at approximately 12.2 feet					
15						
20						
25						
30						

AS-BUILT DESIGN



TESTING

HCID
BTEX
LEAD

HCID
BTEX
LEAD

LEGEND

I 2-inch O.D. split-spoon sample

ATD Observed groundwater level (ATD = at time of drilling)

RZA AGRA, Inc.
Engineering & Environmental Services
539 West Sharp, Suite D
Spokane, WA 99201

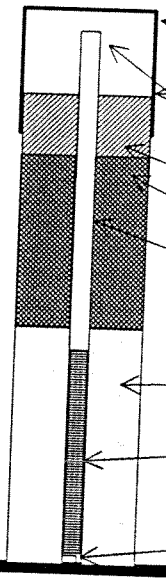
Drilling started: *27 March 1991* Drilling completed: *27 March 1991* Logged by: *ENJS*

ROJECT *Pullman Level II* W.O. *S-1023* WELL NO. *MW-5*

Elevation reference:
Ground surface elevation: Casing elevation:

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	OVM READING	GROUND WATER
0	*Silty gravel and cobble fill.*					
5	*Very stiff, saturated, green, fine sandy SILT with 1-2" silty, medium sand interbeds, slight petroleum hydrocarbon-like odor*		S-1	16	43.6	ATD
10	*Basalt bedrock*					
	Boring terminated at approximately 10.0 feet.					

AS-BUILT DESIGN



TESTING

HCID
BTEX
LEAD

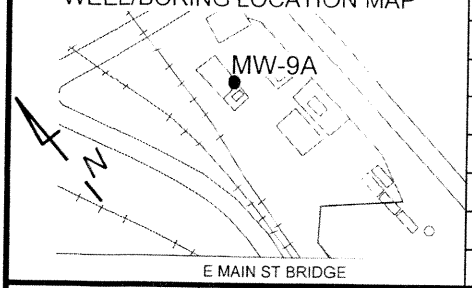
LEGEND

- 2-inch O.D. split-spoon sample
- ATD — Observed groundwater level (ATD = at time of drilling)

RZA AGRA, Inc.
Engineering & Environmental Services
539 West Sharp, Suite D
Spokane, WA 99201

Drilling started: *27 March 1991* Drilling completed: *27 March 1991* Logged by: *ENJS*

WELL/BORING LOCATION MAP



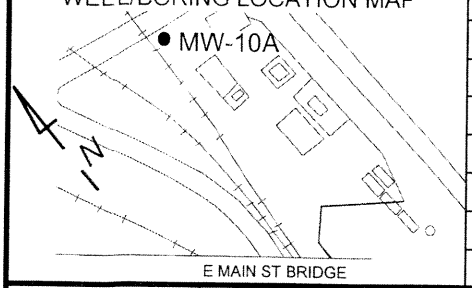
Delta Environmental Consultants, Inc.	WELL/BORING: MW-9A
DATE: 11/16/00	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW26196A	SAMPLING METHOD: Split Spoon
CLIENT: Chevron 100-1224/20-6196	BORING DIAMETER: 8"
LOCATION: 815 College Avenue	BORING DEPTH: 15.5'
CITY: Pullman	WELL CASING: 2" SCH 40 PVC
STATE: WA.	WELL SCREEN: 5-15' (0.020")
DRILLER: Enviro West	SAND PACK: 4-15.5' (#10/20)

WATER LEVEL:			
TIME:			
DATE:			

DESCRIPTION/LOGGED BY: Shawn M.

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	DENSITY BLOWS / 6"	FIELD TEST PID (ppm)	SAMPLE NUMBER	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	USCS SYMBOL	DESCRIPTION
			W	3 2 6			5				SC	CLAYEY SAND: dark olive gray; 20% fines; very fine sand; loose; no TPH odor.
	▽		W	2 3 3			10				SC	CLAYEY SAND: very dark gray; 20%fines; very fine to fine sand; loose; TPH odor.
			S	50			15				SM	SILTY SAND: dark olive gray; 30% fines; 20% very fine sand; coarse sand; 5% cobbles; very dense; TPH odor.
												Bottom of Boring @15.5'.

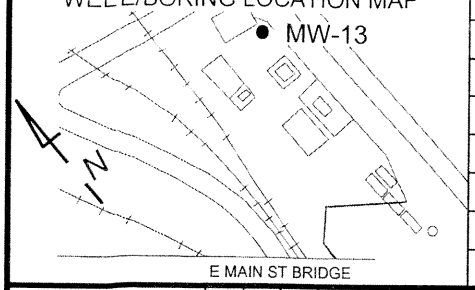
WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.	WELL/BORING: MW-10A
DATE: 11/16/00	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW26196A	SAMPLING METHOD: Split Spoon
CLIENT: Chevron 100-1224/20-6196	BORING DIAMETER: 8"
LOCATION: 815 College Avenue	BORING DEPTH: 15.5'
CITY: Pullman	WELL CASING: 2" SCH 40 PVC
STATE: WA.	WELL SCREEN: 5-15' (0.020")
DRILLER: Enviro West	SAND PACK: 4-15.5' (#10/20)

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	DENSITY BLOWS / 6".	FIELD TEST PID (ppm)	SAMPLE NUMBER	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	USCS SYMBOL	WATER LEVEL:			
												TIME:			
												DATE:			
												DESCRIPTION/LOGGED BY: Shawn M.			
	▽		Dp	4 4 5			1–6				SC	CLAYEY SAND: dark gray; 30% fines; very fine to fine sand; loose; no TPH odor.			
			W	3 5 6			7–11				SC	CLAYEY SAND: dark olive gray; 30% fines; very fine to fine sand; loose; TPH odor.			
			S	50			12–15				SM	SILTY SAND: brown; 30% fines; 20% very fine to fine sand; 50% medium to coarse sand; dense; slight TPH odor.			
							16					Bottom of Boring @15.5'.			
							17–22								

WELL/BORING LOCATION MAP



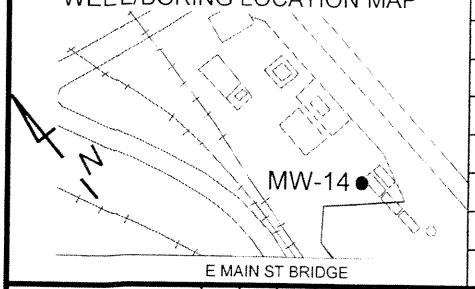
Delta Environmental Consultants, Inc.	WELL/BORING: MW-13
DATE: 11/16/00	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW26196A	SAMPLING METHOD: Split Spoon
CLIENT: Chevron 100-1224/20-6196	BORING DIAMETER: 8"
LOCATION: 815 College Avenue	BORING DEPTH: 14.3'
CITY: Pullman	WELL CASING: 2" SCH 40 PVC
STATE: WA.	WELL SCREEN: 4-14' (0.020")
DRILLER: Enviro West	SAND PACK: 3-14.3' (#10/20)

WATER LEVEL:				
TIME:				
DATE:				

DESCRIPTION/LOGGED BY: Shawn M.

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	DENSITY BLOWS / 6"	FIELD TEST PID (ppm)	SAMPLE NUMBER	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	USCS SYMBOL	DESCRIPTION
	▽	▼	Dp	6 11 14	0		5				SC	CLAYEY SAND: olive brown; 35% fines; very fine to fine sand; loose; no TPH odor.
			W	21 29 13	13		10				SM	SILTY SAND: yellowish brown; 20% fines; very fine to fine sand; 10% gravel; medium dense; slight TPH odor.
			W	50/3	6		14				SM	SILTY SAND: yellowish brown; 20% fines; very fine to fine sand; 10% gravel; medium dense; slight TPH odor.
							16					Bottom of Boring @14.3'. Basalt Layer.

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

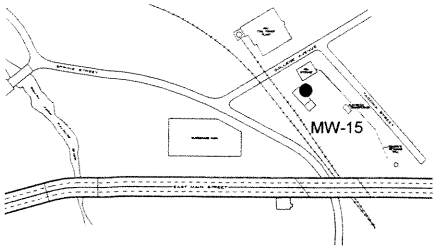
WELL/BORING: MW-14

DATE: 11/16/00	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW26196A	SAMPLING METHOD: Split Spoon
CLIENT: Chevron 100-1224/20-6196	BORING DIAMETER: 8"
LOCATION: 815 College Avenue	BORING DEPTH: 14'
CITY: Pullman	WELL CASING: 2" SCH 40 PVC
STATE: WA.	WELL SCREEN: 4-14' (0.020")
DRILLER: Enviro West	SAND PACK: 3-14' (#10/20)

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	DENSITY BLOWS / 6".	FIELD TEST PID (ppm)	SAMPLE NUMBER	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	USCS SYMBOL	DESCRIPTION/LOGGED BY: Shawn M.
												WATER LEVEL: / TIME: / DATE:
	▽		Dp	3 2 4			5–6				SC	CLAYEY SAND: olive gray; 30% fines; very fine to fine sand: loose; TPH odor.
			W	8 10 30			10–11				SC	CLAYEY SAND: dark grayish brown; 30% fines; very fine to fine sand; medium dense; TPH odor.
			W	100/0			14					Basalt layer Bottom of Boring @14'.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: B-15/MW-15

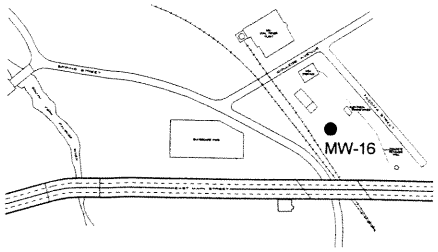
INSTALLATION DATE: 11/13/01	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW 20-6196	SAMPLING METHOD: DM Split Spoon
CLIENT: Chevron 20-6196	BORING DIAMETER: 10"
LOCATION: 815 College Avenue	BORING DEPTH: 17"
CITY: Pullman	WELL CASING: SCH 40 PVC 4"
STATE: WA	WELL SCREEN: 5-17' (0.010")
DRILLER: Cascade	SAND PACK: 4-17' (2X12)

CASING ELEVATION	2356.82
SURVEY DATE:	11-13-01
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	
Concrete / Bentonite / Sand	▽	▼	DP	0	3 2 2	5–6			SM		SILTY SAND: dark gray; 45% fines to very fine sand; loose; no odor.
	▽		DP	172	10 11 8	10–11			OH		ORGANIC CLAY: dark gray; medium plasticity; fines; 20% very fine sand; organics; medium dense; strong odor.
			WT		100/0	15–16					No recovery Basalt.
					100/0	17–18					

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: B-16/MW-16

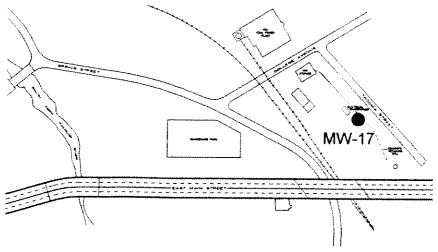
INSTALLATION DATE: 11/13/01	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW 20-6196	SAMPLING METHOD: DM Split Spoon
CLIENT: Chevron 20-6196	BORING DIAMETER: 10"
LOCATION: 815 College Avenue	BORING DEPTH: 15.5"
CITY: Pullman	WELL CASING: SCH 40 PVC 4"
STATE: WA	WELL SCREEN: 5-15' (0.010")
DRILLER: Cascade	SAND PACK: 4-15.5' (2X12)

CASING ELEVATION	2355.96
SURVEY DATE:	11-13-01
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Concrete; Bentonite; Sand			DP	3.1	2 2 2	5–6			SM		SILTY SAND: dark brownish green; 45% fines; very fine sand; 10% organic; loose; strong odor.
			DP	1986	2 3 6	10–11			OL		ORGANIC SILT: very dark gray; fines; organics; medium dense; strong odor.
				81	50/6	15–16			OL		ORGANIC SILT: very dark greenish gray; fines; organics; 30% fractured basalt gravel; very dense; odor.

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: B-17/MW-17

INSTALLATION DATE: 11/13/01	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW 20-6196	SAMPLING METHOD: DM Split Spoon
CLIENT: Chevron 20-6196	BORING DIAMETER: 10"
LOCATION: 815 College Avenue	BORING DEPTH: 12.1"
CITY: Pullman	WELL CASING: SCH 40 PVC 4"
STATE: WA	WELL SCREEN: 5-12' (0.010")
DRILLER: Cascade	SAND PACK: 4-12' (2X12)

CASING ELEVATION	2354.19
SURVEY DATE:	11-13-01
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	
Concrete / Bentonite / Sand	▽	▼	DP	1730	3 2 2	5–6			SM		SILTY SAND: dark gray; 45% fines; very fine to fine sand; loose; strong odor.
			WT	624	70/6	10–11			GM		SILTY GRAVEL: very dark gray; 30% fines; 10% very fine to fine sand; gravel; very dense; strong odor.
					100/1	13–14					No Recovery.

SAIC
From Science to Solutions
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-18

Project: Former Standard Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA
Logged By: Andrew Lembrick

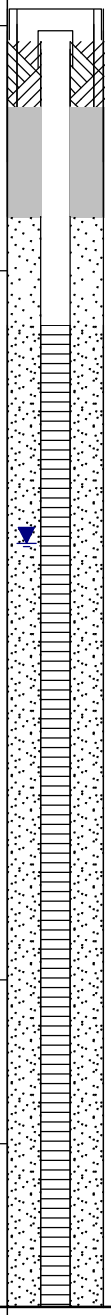
Date Started: 9/10/2008
Date Completed: 9/10/2008
Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ HSA

Total Boring Depth: 12 ft
Hole Diameter: 8.25 in.
Well Depth: 12 ft
TOC Elevation: 2346.62 ft

Well Diameter: 2 in
Well Screen: 10 Slot 3-12 ft
Filter Pack: 2/12 SAND
Well Casing: Sch. 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
						asphalt			(asphalt) Boring was airknifed down to 8 feet bgs.
									(GP) Dark brownish gray, loose, silty, crushed GRAVEL; no odor; no sheen.
						GP		1	
Dry	1.3							2	
									(ML) Dark brown, soft, fine SILT w/ some roots and wood debris; no odor; no sheen.
								3	Railroad ties encountered at 4 feet bgs.
						ML			
Dry	1.3			MW-18-4	G = 3.7 D = 46 HO = 190 B = 0.002			4	
								5	(ML) Dark brown, firm SILT; no odor; no sheen.
Wet	1.3			MW-18-6	G = <1.6 D = <4.2 HO = <14 B = 0.001	ML		6	
								7	(ML) Same as above; no odor, no sheen.
	1.3					ML		8	
Wet		2 10 10							
Moist								9	(SP) Gray, loose, gravelly, coarse SAND w/ silt; no odor; no sheen.
	1.3					SP			
Wet	1.3	15 50		MW-18-10	G = <1.1 D = <3.5 HO = <12 B = <0.0005	SP		10	(SP) Gray, gravelly, coarse SAND w/ silt; no odor, no sheen.
									Encountered bedrock @ approx. 10.5 feet. drilled through bedrock to 12 feet.
								11	
								12	Bottom of borehole at 12.0 feet.
								13	

WELL DIAGRAM



SAIC
From Science to Solutions
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-19

Project: Former Standard Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA
Logged By: Andrew Lembrick

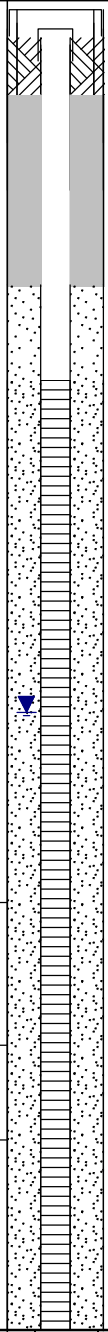
Date Started: 9/9/2008
Date Completed: 9/9/2008
Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ HSA

Total Boring Depth: 14 ft
Hole Diameter: 8.25 in.
Well Depth: 14 ft
TOC Elevation: 2349.45 ft

Well Diameter: 2 in
Well Screen: 10 Slot 4-14 ft
Filter Pack: 2/12 SAND
Well Casing: Sch. 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analytical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
								0	(ML) Brown, firm SILT w/ occ. gravel; no odor, no sheen. Boring was airknifed to 8 feet bgs.
Dry	3.6					ML		1	
								2	
								3	(ML) Grayish brown, firm SILT w/ some med. to coarse sand and occ. gravel; no odor, no sheen.
Dry	3.6			MW-19-4	G = <1.2 D = <3.7 HO = <12 B = 0.001	ML		4	
								5	(ML) Grayish brown, firm SILT w/ occ. coarse sand and occ. gravel; no odor, no sheen.
Dry	3.6					ML		6	
								7	(ML) Grayish brown, firm, fine to coarse, sandy SILT w/ occ. gravel; no odor, no sheen.
Moist	3.6					ML		8	
Wet	1.2					ML			(ML) Grayish brown, firm SILT w/ some dark brown sand and occ. gravel; no odor, no sheen.
	1.2	8 16 16				ML		9	(ML) Brownish gray, firm, fine to coarse, sandy SILT w/ occ. gravel; no odor, no sheen.
Wet	1.2			MW-19-9.5	G = <1.7 D = <4.2 HO = <14 B = 0.0009	GM			(GM) Brownish gray, loose, silty, sandy GRAVEL; no odor, no sheen.
	1.2					GM		10	(GM) Same as above; no odor, no sheen.
	1.2	5 5 14				GM			(GM) Brownish gray, loose, silty sandy GRAVEL; no odor, no sheen.
Wet	1.2							11	
Dry	1.2					GP-GM			(GP-GM) Grayish, dense, coarse, sandy GRAVEL w/ some silt; no odor, no sheen.
								12	
Wet	1.2					GM			(GM) Reddish brown, dense, silty, coarse SAND w/ occ. gravel; no odor, no sheen.
Dry	1.2	10 15 50		MW-19-14	G = <1.0 D = <3.5 HO = <12 B = <0.0005	GM		13	(GM) Brown, dense GRAVEL w/ silt and broken angular cobble; no odor, no sheen.
									Bedrock encountered at 14' bgs.
								14	Bottom of borehole at 14.0 feet.
								15	

WELL DIAGRAM



SAIC
From Science to Solutions

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-20

Project: Former Standard Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA
Logged By: Andrew Lembrick

Date Started: 9/9/2008
Date Completed: 9/9/2008
Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ HSA

Total Boring Depth: 12 ft
Hole Diameter: 8.25 in.
Well Depth: 12 ft
TOC Elevation: 2345.88 ft

Well Diameter: 2 in
Well Screen: 10 Slot 3-12 ft
Filter Pack: 2/12 SAND
Well Casing: Sch. 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analytical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
								0	(ML) Brown, firm, fine to coarse, sandy SILT w/ occ. gravel; no odor, no sheen.
									Boring was airknifed to 8 feet bgs.
						ML		1	
Moist	3.6							2	
								3	(ML) Brown, firm, fine SILT w/ wood debris, occ. gravel. and trace sand; no odor, no sheen.
Moist	1.2			MW-20-4	G = <1.8 D = <4.3 HO = <14 B = 0.001	ML		4	
								5	(ML) Same as above; no odor, no sheen.
Moist	1.2					ML			
								6	(ML) Brown, firm, fine SILT w/ trace fine sand; no odor, no sheen.
Wet	1.2			MW-20-6.5	G = <1.5 D = <4.1 HO = <14 B = 0.0009	ML			
	1.2							7	(ML) Brown, soft, fine SILT w/ med. to coarse sand and gravel; no odor, no sheen.
Wet	1.2					ML			
	1.2							8	(ML) Brown, fine SILT w/ occ. coarse sand.
Wet	1.2	6 8 12				ML			
	1.2							9	(SM) Grayish-brown, loose, gravelly, coarse, silty SAND; no odor, no sheen.
Wet	1.2					SM			
	1.2							10	(SM) Brown grayish, loose, gravelly, fine to coarse, silty SAND; no odor, no sheen.
	1.2	6 15 15				SM			
						GP		11	(GP) Gray, loose, silty, sandy GRAVEL; no odor, no sheen.
Wet	1.2	50		MW-20-12	G = <1.1 D = <3.5 HO = 15 B = <0.0004	GP			(GP) Gray, medium dense, silty, sandy, coarse GRAVEL; no odor, no sheen.
								12	Bottom of borehole at 12.0 feet.
								13	

WELL DIAGRAM

- Concrete Seal Well Box
- Sch 40 PVC Riser
- Bentonite

SAIC
From Science to Solutions
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-21

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA
Logged By: Andrew Lembrick

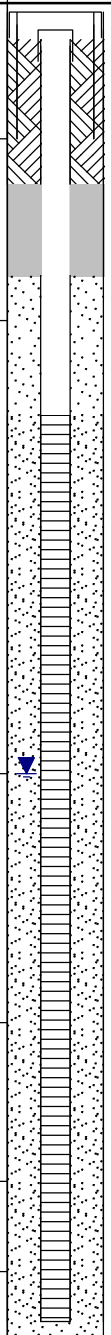
Date Started: 10/28/2009
Date Completed: 10/28/2009
Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe

Total Boring Depth: 14.75 ft
Hole Diameter: 16.25 in.
Well Depth: 14.55 ft
TOC Elevation: ft

Well Diameter: 4 in
Well Screen: 10 Slot 4.55-14.55 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch. 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	FILL to 1.5 feet. Boring was airknifed to 8 feet bgs.
Moist	137.9				ML		1	
							2	(ML) Dark brown, sandy SILT w/ 5% angular gravel. Low plasticity. (slight odor, slight sheen)
							3	
Moist	1060				ML		4	(ML) Dark brown SILT w/ <5% gravel. Soft, low plasticity. (strong odor, heavy sheen)
							5	
Moist	1115		MW-21-6	G = 3600 D = 1500 HO = <320 B = 12	ML		6	(ML) SAME AS ABOVE. Soft, low plasticity. (strong odor, heavy sheen)
							7	
	649				ML		8	(ML) SAME AS ABOVE. Soft, med. plasticity. (strong odor, heavy sheen)
	117							
Moist							9	Dark brown to black, SILT w/ 20% sand. Soft. (moderate odor, slight sheen)
Wet								
Moist	103				ML		10	(ML) SAME AS ABOVE. Med. plasticity. (moderate odor, moderate sheen)
Wet								
Moist							11	
	82				ML		12	(ML) Dark gray to black SILT. Soft, high plasticity. (slight odor, no sheen)
Moist	55.1		MW-21-13	G = 36 D = 20 HO = <12 B = 0.063	SM		13	(SM) Dark gray, fine to coarse, silty SAND w/ 15% gravel and 30% silt. Med. dense. (no odor, no sheen)
	20.6						14	
					SP			(SP) Gray, med. to coarse SAND w/ angular gravel. Very dense. (no odor, no sheen)
							15	Refusal @ 14.5 feet bgs. Bedrock encountered. Bottom of borehole at 14.8 feet.
							16	

WELL DIAGRAM



SAIC
From Science to Solutions
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-22

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA
Logged By: Andrew Lembrick

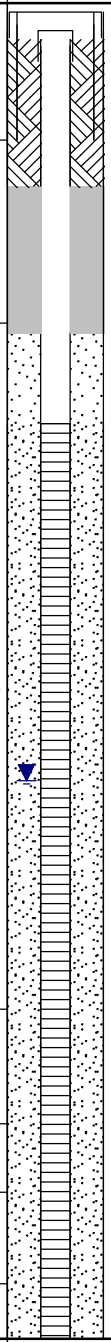
Date Started: 10/28/2009
Date Completed: 10/29/2009
Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe

Total Boring Depth: 14.6 ft
Hole Diameter: 16.25 in.
Well Depth: 14.6 ft
TOC Elevation: ft

Well Diameter: 4 in
Well Screen: 10 Slot 4.6-14.6 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch. 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	FILL to 1.5 feet bgs. Boring was airknifed to 8 feet bgs.
Dry	0.0				SM		1	
							2	(SM) Dark brown, silty, med. SAND w/ orange. Loose. (no odor, no sheen)
Moist	0.0				ML		3	
							4	(ML) Dark brown SILT w/ 10% fine sand and gravel. Soft, low plasticity. (no odor, no sheen)
Moist	0.0		MW-22-6	G = 32 D = 54 HO = 58 B = 0.0009			5	
							6	SAME AS ABOVE. Low plasticity. (no odor, no sheen)
Wet	55.8						7	
	330		MW-22-8	G = 47 D = 150 HO = <14 B = 0.009	ML		8	(ML) Dark brown SILT w/ some organics. Hard, med. plasticity. (moderate odor, heavy sheen)
	14.8						9	SAME AS ABOVE. (no odor, no sheen)
	7						10	
Moist	7				ML		11	(ML) Gray, sandy SILT. Very hard. (no odor, no sheen)
Saturated	7.4				SW		12	(SW) Gray, fine to coarse, silty, gravelly SAND. (no odor, no sheen)
Wet	0.0		MW-22-13	G = <1.2 D = <3.6 HO = <12 B = 0.012	ML		13	(ML) Gray sandy SILT. Very hard. (no odor, no sheen)
Moist							14	Geoprobe refusal @ 14 feet. Bedrock encountered. HSA drilled to 14.6 feet.
							15	Bottom of borehole at 14.6 feet.
							16	

WELL DIAGRAM



SAIC
From Science to Solutions
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-23

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA
Logged By: Andrew Lembrick

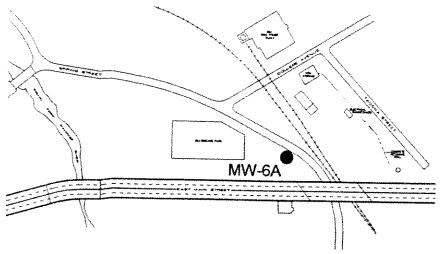
Date Started: 10/28/2009
Date Completed: 10/29/2009
Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe

Total Boring Depth: 14 ft
Hole Diameter: 16.25 in.
Well Depth: 13.95 ft
TOC Elevation: ft

Well Diameter: 4 in
Well Screen: 10 Slot 3.95 to 13.95 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch. 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
							0	FILL. Angular gravel. Boring was airknifed to 8 feet bgs.	Well Box Sch 40 PVC Riser Concrete Seal
Moist	0.0				ML		1	(ML) Dark brown SILT w/ <10% fine sand and occ. gravel. Soft, low plasticity. (no odor, no sheen)	
							2		Bentonite
							3		
Moist	0.0				ML		4	(ML) Brown SILT w/ 20% fine to med. sand. Stiff, low plasticity. (no odor, no sheen)	
							5		
Moist	550		MW-23-6	G = 2000 D = 41 HO = <14 B = <0.17	ML		6	(ML) Dark gray SILT w/ <5% sand. Hard, med. to high plasticity. (moderate odor, moderate sheen)	
							7		
Wet	170				ML		8	(ML) Gray SILT. Hard, high plasticity. (slight odor, no sheen)	
	111				OL		9	(OL) Dark brown organic SILT. (no odor, no sheen)	2/12 Monterey Sand
Wet	14				ML		10	(ML) Dark brown SILT. Very hard, high plasticity. (no odor, no sheen)	
	14				ML		11	(ML) Gray sandy SILT. Very hard, low plasticity. (no odor, no sheen)	
Wet	14						12	(SM) Gray silty gravelly fine to med. SAND. Very dense. (no odor, no sheen)	
	0		MW-23-13	G = <1.3 D = <3.5 HO = <12 B = 0.051	SM		13		
							14	Bottom of borehole at 14.0 feet.	
							15		

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

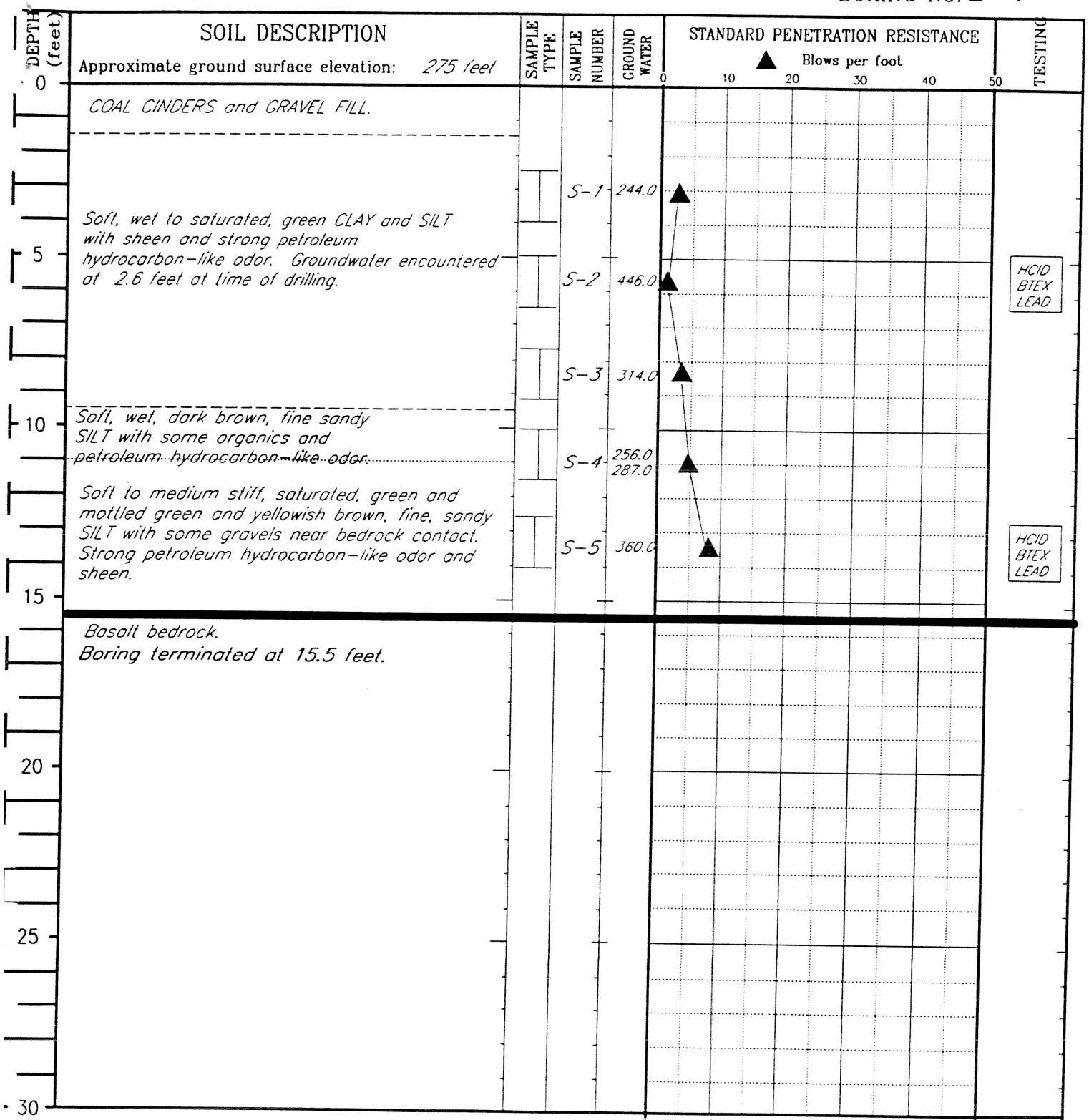
WELL/BORING: B-6A/MW-6A

INSTALLATION DATE: 11/12/01	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW 20-6196	SAMPLING METHOD: DM Split Spoon
CLIENT: Chevron 20-6196	BORING DIAMETER: 8"
LOCATION: 815 College Avenue	BORING DEPTH: 14.2'
CITY: Pullman	WELL CASING: SCH 40 PVC 2"
STATE: WA	WELL SCREEN: 4-14' (0.010")
DRILLER: Cascade	SAND PACK: 3-14' (2X12)

CASING ELEVATION	2353.68
SURVEY DATE:	11-13-01
DTW:	

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION/LOGGED BY: SHAWN MADISON
Concrete											GRASS SURFACE
Bentonite						1					
						2					
						3					
						4					
			DP	0	12	5			GM		SILTY GRAVEL: very dark brown; 20% fines; gravel; 35% organic material; medium dense; no odor.
					8	6					
Sand	▽				8	7					
						8					
						9					
			WT	1.5	30	10			GM		SILTY GRAVEL: very dark brown; 20% fines; gravel; 35% organic material; medium dense; no odor.
					50/6	11					
						12					
						13					
					100/2	14			GM		@14' Bed Rock Refusal.
						15					
						16					
						17					
						18					
						19					
						20					
						21					
						22					

PROJECT *Pullman Level II* W.O. *S-1023* BORING NO. *B-7*



LEGEND

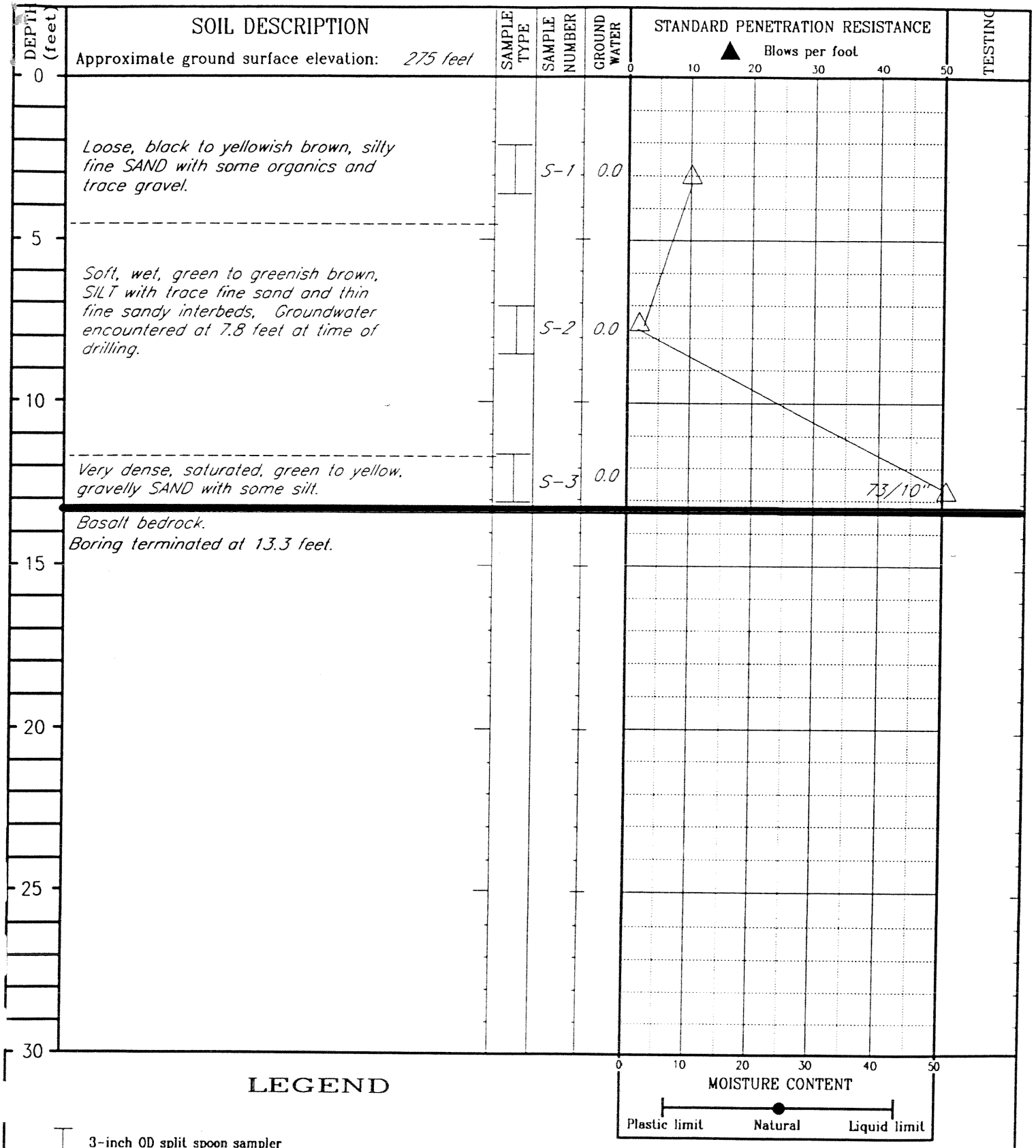
I 3-inch OD split spoon sampler

0 10 20 30 40 50
MOISTURE CONTENT
Plastic limit Natural Liquid limit

RZA AGRA, Inc.
Engineering & Environmental Services
539 West Sharp, Suite 100
Spokane, WA 99201

Drilling started: *27 March 1992* Drilling completed: *27 March 1992* Logged by: *ENJS*

PROJECT *Pullman Level II* W.O. *S-1023* BORING NO. *B-8*



LEGEND

I 3-inch OD split spoon sampler

RZA AGRA, Inc.

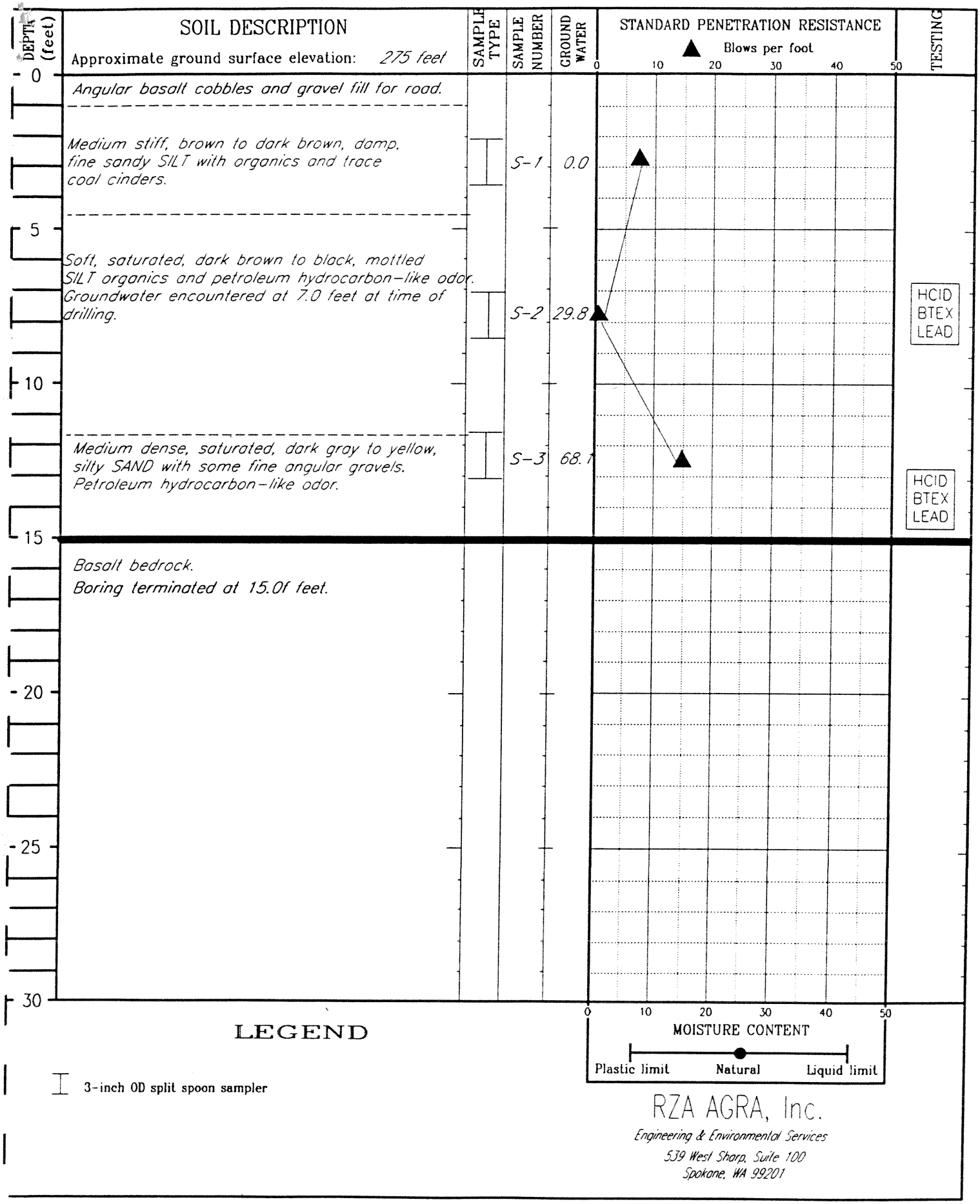
Engineering & Environmental Services

539 West Sharp, Suite 100

Spokane, WA 99201

Drilling started: *27 September 1990* Drilling completed: *27 September 1990* Logged by: *ENJS*

PROJECT *Pullman Level II* W.O. *S-1023* BORING NO. *B-9*



LEGEND

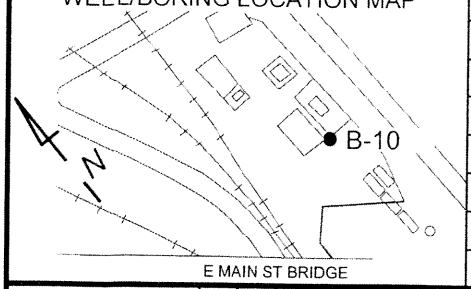
I 3-inch OD split spoon sampler

RZA AGRA, Inc.
Engineering & Environmental Services
539 West Sharp, Suite 100
Spokane, WA 99201

Drilling started: *26 September 1990* Drilling completed: *26 September 1990* Logged by: *ENJS*

V Sample not recovered 200 wash

WELL/BORING LOCATION MAP

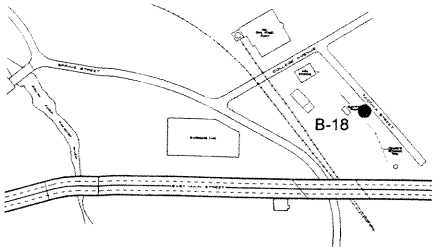


Delta Environmental Consultants, Inc. | WELL/BORING: B-10

DATE: 11/16/00	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW26196A	SAMPLING METHOD: Split Spoon
CLIENT: Chevron 100-1224/20-6196	BORING DIAMETER: 8"
LOCATION: 815 College Avenue	BORING DEPTH: 13.5'
CITY: Pullman	WELL CASING: NA
STATE: WA.	WELL SCREEN: NA
DRILLER: Enviro West	SAND PACK: NA

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	DENSITY BLOWS / 6".	FIELD TEST PID (ppm)	SAMPLE NUMBER	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	USCS SYMBOL	DESCRIPTION/LOGGED BY: Shawn M.
												WATER LEVEL: / TIME: / DATE:
	▽		W	2 3 5			1–6				SC	CLAYEY SAND: dark olive gray; 20% fines; very fine to fine sand; loose; TPH odor.
			S	29 39 42			10–11				SC	CLAYEY SAND: black; 10% fines; very fine to fine sand; dense; TPH odor.
				100/0			14					Bottom of Boring @13.5'. Basalt Bedrock.

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: B-18

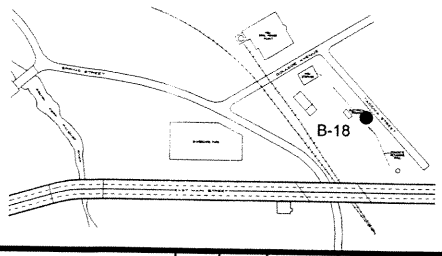
INSTALLATION DATE: 11/13/01	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW 20-6196	SAMPLING METHOD: DM Split Spoon
CLIENT: Chevron 20-6196	BORING DIAMETER: 10"
LOCATION: 815 College Avenue	BORING DEPTH: 30.5'
CITY: Pullman	WELL CASING:
STATE: WA	WELL SCREEN:
DRILLER: Cascade	SAND PACK:

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Concrete						1					
						2					
						3					
						4					
			DP	0	10 30 36	5			SM		SILTY SAND: very dark gray; 20% fines; fine to medium sand; 30% gravel; very dense; no odor.
Bentonite						6					
						7					
						8					
						9					
			DP	0	60/6	10			GM		SILTY GRAVEL: very dark gray; 40% fines; 10% fine to medium sand; 40% gravel; FeO_2 staining; very dense; no odor.
						11					
						12					
						13					
						14					
			DP	0	15 50	15			GM		SILTY GRAVEL: brown; 40% fines; 15% medium to coarse sand; gravel; very dense; no odor.
						16					
						17					
						18					
						19					
			DP	0	26 60	20			SM		SILTY SAND: brown; 40% fines; fine to medium sand; 10% gravel; very dense; no odor.
						21					
						22					

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: B-18

INSTALLATION DATE:11/13/01	DRILLING METHOD: Hollow Stem Auger
PROJECT: CW 206196	SAMPLING METHOD: DM Split Spoon
CLIENT: Chevron 206196	BORING DIAMETER: 10"
LOCATION: 815 College Avenue	BORING DEPTH: 30.5'
CITY: Pullman	WELL CASING:
STATE: WA	WELL SCREEN:
DRILLER: Cascade	SAND PACK:

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	
Sand			DP	0	100/6	25			SM		Same as above.
			DP	0	65/6	30			SM		Same as above.

23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Boring: SB-1

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/22/2009
Date Completed: 10/27/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 11.5 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	DEPTH (ft)	LITHOLOGY/DESCRIPTION
					FILL	1	(FILL) FILL. Angular Gravel 2" minus. Boring was hand augered or airknifed to 8 feet bgs.
Moist	37				ML	2	(ML) Brown SILT w/ <10% fine sand and occ. cobbles to 3.5 feet. Soft, low plasticity. (slight odor, no sheen).
						3	
Wet	22.2					4	Brown SILT w/ <10% fine sand. Stiff, med. plasticity. (v. slight odor, slight sheen)
						5	
Wet	51.8					6	
						7	(ML) SAME AS ABOVE. Stiff, high plasticity. (v. slight odor, slight sheen)
Wet	170.3		SB-1-8	G = 730 D = 160 HO = 58 B = <0.035	ML	8	SAME AS ABOVE. Hard, high plasticity. (moderate odor, slight sheen)
Moist	111.3					9	(ML) SAME AS ABOVE.
Dry	29.6		SB-1-10	G = 310 D = 190 HO = 210 B = <0.032	ML	10	(ML) Light brown SILT w/ 10% fine to med. sand and occ. gravel. (no odor, no sheen)
					ML	11	Refusal at 11.5 feet bgs. Bedrock encountered.
						12	Bottom of borehole at 11.5 feet.
						13	

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Boring: SB-2

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/22/2009
Date Completed: 10/27/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 9.5 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	(FILL) FILL. Angular gravel w/ 10% silt. Loose. (moderate odor, moderate sheen).
								Boring was hand augered or airknifed to 8 feet bgs.
					FILL		1	
Moist	225						2	
							3	(ML) Dark brown SILT w/ <10% fine sand. Stiff, med. plasticity. (heavy odor, heavy sheen)
Moist	415		SB-2-4	G = 1200 D = 280 HO = <26 B = <0.031	ML		4	
							5	SAME AS ABOVE. Stiff. (heavy odor, heavy sheen)
Moist	345						6	
							7	▼
Moist	275		SB-2-7.5	G = 1200 D = 140 HO = <14 B = <0.038				
Wet							8	(ML) SAME AS ABOVE. Hard, high plasticity. (moderate odor, moderate sheen).
					ML			
Moist	111.1		SB-2-9	G = 710 D = 120 HO = <13 B = <0.034				Dark brown SILT w/ <10% fine sand and occ. cobbles and gravel. Refusal at 9.5 feet, bedrock encountered. (slight odor, slight sheen)
							9	
								Bottom of borehole at 9.5 feet.
							10	
							11	

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Boring: SB-3

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/22/2009
Date Completed: 10/27/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 17 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	(FILL) FILL to 2 feet bgs. Large concrete pieces to 5" in diameter.
					FILL		1	Boring was hand augered or airknifed to 8 feet bgs.
Dry	140.7						2	(SM) Dark brown, coarse SAND w/ 25% silt. Loose. (moderate odor, moderate sheen)
					SM		3	(ML) Dark brown SILT w/ 5% coarse sand and 5% gravel. Soft, no plasticity. (strong odor, heavy sheen)
Dry	415		SB-3-4	G = 3500 D = 5000 HO = <630 B = <0.34	ML		4	
							5	Dark brown SILT. Soft, high plasticity. (heavy odor, heavy sheen)
Moist	685						6	
							7	(ML) SAME AS ABOVE. (moderate odor, moderate sheen)
Moist	148.1						8	
					ML		9	
Moist	799		SB-3-9	G = 3300 D = 380 HO = <26 B = 1.9			10	Dark brown SILT w/ occ. roots and gravel. Very soft, low plasticity. (strong odor, heavy sheen)
							11	
Wet	685							(ML) Dark brown SILT w/ 10% fine to med. sand. High plasticity. (strong odor, heavy sheen)
					ML		12	
Moist	103.7							SAME AS ABOVE. High plasticity. (slight odor, slight sheen)
							13	
Moist	66.6		SB-3-14	G = 19 D = <4.0 HO = <13 B = 0.01			14	(ML) Dark brown SILT w/ 10-15% fine sand. Hard, med. plasticity. (no odor, no sheen)
					ML		15	
Moist	29.6						16	Dark brown SILT w/ <10% sand. Med. plasticity. (no odor, no sheen)
					SP		17	(SP) SAND and gravel. Refusal @ 17 feet bgs. Bedrock encountered.
								Bottom of borehole at 17.0 feet.
							18	

SAIC
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18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Boring: SB-4

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/22/2009
Date Completed: 10/28/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 16 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	Gravel to 6 inches.
								Boring was hand augered or airknifed to 8 feet bgs.
					SP		1	(SP) Black fine to med. SAND. Very loose. (no odor, no sheen)
Dry	12.5						2	(ML) Dark brown SILT w/ 15% fine sand. Dry, no plasticity. (no odor, no sheen)
					ML		3	
							4	
							5	Dark brown SILT w/ <10% fine sand. Stiff, med. plasticity. (no odor, no sheen)
Wet	56						6	
							7	(ML) SAME AS ABOVE. Soft, med. plasticity. (strong odor, heavy sheen)
Saturated	1509						8	
			SB-4-8	G = 2200 D = 420 HO = <29 B = 0.34	ML			
Wet	13.7						9	Dark brown SILT w/ <10% fine sand and <5% gravel. Soft, med. plasticity. (no odor, no sheen)
	537		SB-4-10	G = 740 D = 130 HO = <12 B = 0.30	ML		10	(ML) Dark brown SILT w/ 10% fine sand. Hard. (moderate odor, moderate sheen)
	213				SM		11	(SM) Dark brown, med. to coarse, silty SAND w/ 5% gravel. Dense. (slight odor, slight sheen)
Wet	186.2						12	Gray, med. to coarse, gravelly, silty SAND. Loose. (slight odor, slight sheen)
							13	
Wet	13.7		SB-4-14	G = <1.1 D = <3.4 HO = <11 B = 0.008	SM		14	(SM) SAME AS ABOVE. Loose. (no odor, no sheen)
								Refusal @ 16 feet. Bedrock encountered.
							15	
							16	Bottom of borehole at 16.0 feet.
							17	

SAIC
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18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Boring: SB-5

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/22/2009
Date Completed: 10/28/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 14 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	Gravel. FILL to 1.5 feet.
								Boring was hand augered or airknifed to 8 feet bgs.
							1	
Moist	43.7				ML			(ML) Dark brown SILT w/ <10% fine sand. Soft, low plasticity. (no odor, no sheen)
							2	
							3	
								Cobbles at 3.5 feet.
							4	Dark brown SILT w/ <10% fine sand. Soft, low plasticity. (heavy odor, heavy sheen)
Moist	2733		SB-5-4.5	G = 650 D = 57 HO = <13 B = 0.16				
							5	
								SAME AS ABOVE. Stiff. (heavy odor, heavy sheen)
	1703						6	
	118.7						7	(ML) SAME AS ABOVE. Soft. (no odor, no sheen)
					ML			
Moist	168.7		SB-5-8	G = 290 D = 5.7 HO = <14 B = <0.038			8	SAME AS ABOVE. Soft. (no odor, no sheen)
Wet	34.5						9	
							10	
								(ML) Dark brown SILT w/ 10% gravel. Stiff. (no odor, no sheen)
Wet	62		SB-5-11	G = 490 D = 6.3 HO = <12 B = 0.49	ML		11	
							12	
	131				ML			(ML) Dark brown, gravelly, sandy SILT. Soft. (no odor, no sheen)
Wet	27				GM		13	(GM) Light brown, silty GRAVEL w/ 10% coarse sand to 14 feet. Refusal @ 14 feet. Bedrock encountered. (no sheen, no odor)
							14	Bottom of borehole at 14.0 feet.
							15	

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Bothell, WA 98011

Boring: SB-6

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/22/2009
Date Completed: 10/28/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 16 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	Gravel to 6 inches. FILL.
								Boring was hand augered or airknifed to 8 feet bgs.
							1	(ML) Light brown SILT w/ <10% sand and 5% cobbles. Low plasticity.
Dry	0.0				ML		2	
							3	
							4	
					ML			(ML) Dark brown SILT w/ <10% sand and occ. cobbles. Soft, low plasticity. (no odor, no sheen)
Moist	31.2						5	Dark brown, fine, sandy SILT. Stiff, low plasticity. (slight odor, slight sheen).
	331.5						6	SAME AS ABOVE. (strong odor, heavy sheen)
Moist	2370		SB-6-7	G = 3600 D = 240 HO = 33 B = 0.88			7	(ML) Dark brown, sandy SILT. Stiff, no plasticity. (strong odor, heavy sheen)
					ML			
Wet	2370						8	Dark brown SILT w/ 10% fine sand. Hard, med. plasticity. (strong odor, heavy sheen)
Wet	687						9	(ML) Brown-gray SILT w/ 10% fine sand. Hard, med. plasticity. (strong odor, heavy sheen)
					ML		10	Brown SILT w 5% sand. Hard, med. plasticity. (med. odor, med. sheen)
Wet	213						11	
Moist	234						12	Brown-gray SILT w/ <5% sand. Stiff, med plasticity. (slight odor, slilght sheen)
Moist	240						13	(ML) Brown SILT w/ occ. gravel. Soft. (slight odor, slight sheen).
					ML		14	
Dry	27.5		SB-6-15	G = 2.2 D = <3.5 HO = <12 B = 0.001	SP-SM		15	(SP-SM) Brown, gravelly SAND w/ 10% silt. Very dense. (no odor, no sheen)
								Refusal @ 16 feet. Bedrock encountered
							16	Bottom of borehole at 16.0 feet.
							17	

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Boring: SB-7

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/22/2009
Date Completed: 10/27/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 13.5 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
					FILL		1	(FILL) Gravel to 1.5 feet below ground surface. Boring was hand augered or airknifed to 8 feet bgs.
Moist	738				ML		2	(ML) Dark brown SILT. Soft, low plasticity. (strong odor, heavy sheen)
							3	
	911		SB-7-4	G = 3100 D = 590 HO = <70 B = 2.2			4	SAME AS ABOVE w/ some cobbles. (strong odor, heavy sheen)
							5	
Moist	816				ML		6	(ML) SAME AS ABOVE. (strong odor, heavy sheen)
							7	
Wet	344						8	SAME AS ABOVE. (strong odor, heavy sheen)
Moist	340						9	(ML) Brown-gray SILT w/ <5% fine sand. Very hard, high plasticity. (moderate odor, moderate sheen)
	50				ML		10	
							11	
Moist	22.2			G = 7.8 D = <3.8 HO = <13 B = 0.012	ML		12	(ML) SAME AS ABOVE. grades to gray sandy silty at 12.5 feet. Very hard. (moderate odor, moderate sheen)
					SM			(SM) Red-gray, med. to coarse sand w/ 15% silt. (no odor, no sheen)
							13	No recovery. Bedrock encountered.
							14	Bottom of borehole at 13.5 feet.
							15	

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Bothell, WA 98011

Boring: SB-8

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/23/2009
Date Completed: 10/28/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 16 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
					GP		1	(GP) FILL. Gravel to 1.5 feet bgs. Boring was hand augered or airknifed to 8 feet bgs.
Moist	497				ML		2	(ML) Dark brown SILT w/ <10% fine sand. Soft, low plasticity. (strong odor, heavy sheen)
							3	
Moist	1273		SB-8-4	G = 6600 D = 110 HO = 51 B = 48			4	SAME AS ABOVE. Large cobble encountered at 5 feet bgs. (strong odor, heavy sheen)
							5	
Wet	782				ML		6	(ML) Dark brown SILT w/ <5 % fine sand. Soft, low plasticity. (strong odor, heavy sheen)
Wet	1055						7	Dark brown SILT w/ <5% gravel. Soft, low plasticity. (heavy odor, moderate sheen)
Moist	1060						8	SAME AS ABOVE. Stiff, low plasticity. (heavy odor, heavy sheen)
	1100				ML		9	(ML) Dark brown SILT w/ 10% sand and 10% gravel. Stiff, med. plasticity. (heavy odor, heavy sheen)
							10	
	89						11	SAME AS ABOVE. Stiff. (heavy odor, heavy sheen)
Moist	6.8						12	(ML) Gray SILT w/ 10% fine sand. Stiff, med. plasticity. (no odor, no sheen)
					ML		13	
Moist	13.7		SB-8-14	G = <3.3 D = <3.7 HO = <12 B = 0.26			14	Gray SILT w/ orange streaking, 10% fine sand. Stiff, low to med. plasticity. (no odor, no sheen)
							15	
Wet	27				GP-GM		16	(GP-GM) Brown, sandy gravel w/ 10% silt. Loose. (no odor, no sheen) Bottom of borehole at 16.0 feet.
							17	

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Boring: SB-9

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/23/2009
Date Completed: 10/27/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 16 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
					GP		0	(GP) FILL. GRAVEL to 1 foot bgs. Boring was hand augered or airknifed to 8 feet bgs.
Moist	331				ML		1	(ML) Dark brown SILT w/ <10% sand. Soft, low plasticity. (strong odor, heavy sheen)
							2	
							3	(ML) Dark brown SILT w/ <10% fine sand. Soft, low plasticity. (strong odor, heavy sheen)
Moist	974				ML		4	
							5	(ML) Gray, sandy SILT. Soft, high plasticity. (strong odor, heavy sheen)
Wet	922		SB-9-6	G = 2100 D = 430 HO = <140 B = 11	ML		6	
							7	(ML) SAME AS ABOVE. Soft, high plasticity. (strong odor, heavy sheen)
Wet	1390				ML		8	
Moist	221						9	(ML) Dark brown SILT w/ 10% fine sand. Soft, med. plasticity. (strong odor, moderate sheen)
	155				ML		10	(ML) Dark brown, almost black SILT w/ <10% fine sand. Stiff, high plasticity. (strong odor, moderate sheen)
							11	
	51.8				ML		12	
Moist	22.2		SB-9-13	G = 510 D = 6.7 HO = <13 B = 2.0			13	(ML) Dark brown SILT w/ <5% sand. Hard, moderate plasticity. (slight odor, slight sheen)
							14	
Wet	37.1		SB-9-15	G = 17 D = <3.4 HO = <11 B = 0.018	GP		15	(GP) Dark brown-gray GRAVEL w/ 20% med. to coarse sand. (no odor, no sheen). Refusal @ 16 feet bgs. Bedrock encountered.
							16	Bottom of borehole at 16.0 feet.
							17	

18912 North Creek Parkway, Suite 101
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Boring: SB-10

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/23/2009
Date Completed: 10/28/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 4.5 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
					GP		0	(GP) FILL Gravel to 1 foot bgs. Boring was handaugered or airknifed to 4.5 feet bgs.
Dry	13.7				SM		1	(SM) Gray, fine to med. SAND w/ 20% silt and <5% coarse black sand. Very dense. (no odor, no sheen)
							2	
							3	
Moist	75.8		SB-10-4	G = 430 D = 740 HO = <120 B = 0.10	ML		4	(ML) Dark brown SILT w/ 20% angular gravel (weathered bedrock) and 10% fine sand. (slight odor, slight sheen). Refusal @ 4.5 feet. Bedrock encountered.
							5	Bottom of borehole at 4.5 feet.
							6	

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Boring: SB-11

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/23/2009
Date Completed: 10/27/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 11 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	(FILL) FILL. Broken concrete to 2 feet.
								Boring was hand augered or airknifed to 8 feet bgs.
					FILL		1	
Dry	948						2	(SM) Dark gray, silty SAND w/ 5% gravel. Loose. (moderate odor, moderate sheen)
					SM		3	(ML) Dark brown SILT w/ <5% sand and <5% gravel. Soft, med plasticity. (strong odor, heavy sheen)
Moist	1003		SB-11-4	G = 2400 D = 2400 HO = <660 B = 0.24	ML		4	
							5	SAME AS ABOVE. Stiff, med. plasticity. (strong odor, heavy sheen)
Moist	948						6	
							7	(ML) SAME AS ABOVE. Soft. (strong odor, heavy sheen)
Moist	552							
					ML		8	
Wet	963						9	SAME AS ABOVE. Soft, low plasticity. (strong odor, heavy sheen)
Dry	602		SB-11-11	G = 1100 D = 270 HO = <23 B = <0.034	SP-SM		10	(SP-SM) Gray, gravelly SAND w/ 10% silt. Dense. (strong odor, heavy sheen)
							11	Bottom of borehole at 11.0 feet.
							12	

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Boring: SB-12

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/23/2009
Date Completed: 10/29/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 15 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
					FILL		0	(FILL) Concrete fill to 1 foot bgs.
								Boring was handaugered or airknifed to 8 feet bgs.
							1	FILL. Angular gravel and cobbles.
Moist	133				SW		2	(SW) Dark brown, silty, gravelly, fine to coarse sand. Med. dense. (strong odor, moderate sheen)
							3	
Moist	237		SB-12-4	G = 860 D = 2800 HO = 400 B = 0.21	ML		4	(ML) Dark brown, sandy SILT. Hard. (strong odor, heavy sheen)
							5	
Moist	88.1				ML		6	(ML) Gray SILT. Hard, high plasticity. (moderate odor, slight sheen)
							7	
Wet	29							SAME AS ABOVE. (slight sheen, slight odor)
							8	
	802		SB-12-9	G = 2800 D = 2200 HO = <140 B = 4.3	ML		9	(ML) Gray SILT. Hard, high plasticity. (strong odor, heavy sheen)
	406						10	SAME AS ABOVE. (moderate odor, slight sheen)
Wet	177						11	SAME AS ABOVE. (slight odor, slight sheen)
							12	(ML) Gray, sandy SILT. Very hard. (slight odor, no sheen)
Moist	177				ML			
Wet	133						13	(SW) Gray, fine to coarse SAND w/ 20% silt and 20% angular gravel. (no odor, no sheen)
	0.0		SB-12-14	G = 8.1 D = <3.4 HO = <11 B = 0.002	SW		14	
							15	Bottom of borehole at 15.0 feet.
							16	

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Boring: SB-13

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/23/2009
Date Completed: 10/28/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 14.5 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
					FILL		1	(FILL) FILL. Gravel to 1.5 feet bgs. Boring was hand augered or airknifed to 8 feet bgs.
Dry	0.0				OL		2	(OL) Dark brown, organic SILT w/ roots. Very soft. (no odor, no sheen)
					ML-CL		3	(ML-CL) Tan, clayey SILT w/ occ. fine sand. Hard, high plasticity. (slight odor, slight sheen)
Moist	89.6						4	
					ML		5	(ML) Dark brown SILT w/ <10% fine sand. Cobbles at 6 feet. (moderate odor, moderate sheen)
Moist	308		SB-13-6	G = 450 D = 430 HO = 280 B = 0.89			6	
	325				ML		7	(ML) Dark brown, sandy SILT w/ woody debris. Stiff. (moderate odor, slight sheen)
	1022							
	1100		SB-13-8	G = 1800 D = 1200 HO = <72 B = 0.22	ML		8	(ML) Dark brown to black SILT. Hard, med. plasticity. (slight sheen, no odor).
	248							
Moist	20.6						9	(ML) SAME AS ABOVE. (no odor, no sheen)
Wet	13.7				ML		10	
	782						11	(SW) Dark brown, fine to coarse SAND w/ angular gravel and 10% silt. Medium dense. (moderate odor, slight sheen)
	117				SW		12	
Wet	18.7		SB-13-13	G = 2.5 D = <3.5 HO = <12 B = 0.008			13	SAME AS ABOVE. Fine to coarse SAND w/ gravel and silt. (no odor, no sheen) Refusal @14.5 feet bgs.
							14	
							15	Bottom of borehole at 14.5 feet.
							16	

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Boring: SB-14

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/28/2009
Date Completed: 10/28/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 13 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
					GP		0	(GP) FILL. Angular gravel to 1 foot. Boring was hand augered or airknifed to 8 feet bgs.
Dry	6.8				SW		1	(SW) Brown, fine to coarse SAND w/ 15% gravel and 10% silt. Loose. (no odor, no sheen)
Moist	0.0						2	Brown SILT w/ 15% fine sand and occ. gravel. (no odor, no sheen)
							3	
	0.0				ML		4	(ML) Brown SILT w/ 30% fine sand and 15% angular gravel and cobbles. Soft. (no odor, no sheen)
							5	
	0.0		SB-14-6	G = 5.7 D = <3.7 HO = <12 B = 0.0008			6	Brown SILT w/ 20% fine to coarse sand and 10% gravel. Stiff, low plasticity. (no odor, no sheen)
							7	(ML) Gray SILT. Hard, high plasticity. (no odor, no sheen)
Moist	0.0				ML		8	
Wet	0.0						9	
								(ML) Dark brown SILT w/ <10% fine sand. Stiff, high plasticity. (slight odor, no sheen)
Moist	0.0				ML		10	
Moist	580		SB-14-11	G = 840 D = <4.0 HO = <13 B = 0.34	SM		11	(SM) Dark brown, med. to coarse, silty SAND. Dense. (strong odor, moderate sheen)
Wet	13.7						12	
	0.0		SB-14-13	G = 1.5 D = <3.5 HO = <12 B = 0.039	SP-SM		13	(SP-SM) Gray, med. to coarse SAND w/ 10% gravel and 10% silt. Very dense. (no odor, no sheen) Refusal @ 13 feet bgs. Bedrock encountered.
							14	Bottom of borehole at 13.0 feet.

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Boring: SB-15

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/28/2009
Date Completed: 10/28/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 13 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	(SP-SM) Dark brown, fine to coarse SAND w/ orange mottling; 15% gravel and 10% silt. Loose. (no odor, no sheen)
Dry	0.0				SP-SM		1	Boring was handaugered or airknifed to 8 feet bgs.
Dry	452		SB-15-2	G = 360 D = 350 HO = 830 B = 0.41			2	SAME AS ABOVE. Loose. (heavy odor, moderate sheen)
Moist	317						3	(ML) Dark brown SILT w/ <10% fine sand and occ. gravel. Stiff. (moderate odor, moderate sheen)
	20.6				ML		4	SAME AS ABOVE. Stiff, high plasticity. (no odor, no sheen)
							5	
Moist	0.0						6	(ML) SAME AS ABOVE, dark gray. (no odor, no sheen)
					ML		7	
								Dark gray SILT. Stiff, high plasticity. (strong odor, heavy sheen)
Moist	873		SB-15-8	G = 870 D = 39 HO = <14 B = 0.40			8	
								(ML) Dark gray SILT. Stiff, high plasticity. (strong odor, heavy sheen)
Wet	463				ML		9	Dark brown SILT. Hard, high plasticity. (strong odor, heavy sheen)
Moist	55.3						10	
								(SM) Dark brown, fine to coarse, silty SAND. Very dense. (no odor, no sheen)
	20.6				SM		11	
Moist	20.6		SB-15-12	G = 3.1 D = <3.4 HO = <11 B = 0.091			12	(SP-SM) Dark brown, med. to coarse SAND w/ 15% gravel and 10% silt. (no odor, no sheen)
					SP-SM		13	
								Bottom of borehole at 13.0 feet.
							14	

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Boring: SB-16

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/29/2009
Date Completed: 10/29/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 12.25 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
					FILL		0	(FILL) Sandy, gravelly, cobbley FILL.
								Boring was hand augered or airknifed to 8 feet bgs.
								Brown, sandy, angular gravel. Very dense. (no odor, no sheen)
							1	
Moist	0						2	(FILL) SAME AS ABOVE. (no odor, no sheen)
					FILL		3	
								(SW) Brown, silty, gravelly SAND w/ fine to coarse sand and angular gravel. Very dense. (no odor, no sheen)
Moist	0						4	
					SW		5	
	0						6	(SW) SAME AS ABOVE. (no odor, no sheen).
					SW		7	
Moist	29.6							(ML) Gray SILT w/ 10% fine sand. Hard, high plasticity. (slight odor, slight sheen)
			SB-16-8	G = 150 D = 37 HO = <14 B = 0.003	ML		8	
Wet	192		SB-16-9	G = 1600 D = 700 HO = <63 B = <0.039			9	Gray SILT. Very hard, high plasticity. (moderate odor, heavy sheen)
Moist	140						10	(ML) SAME AS ABOVE. (slight odor, slight sheen)
					ML			
	220						11	SAME AS ABOVE. (no odor, no sheen)
Moist	0.0		SB-16-12	G = 160 D = 120 HO = <13 B = 0.0008				Refusal @ 12.25 feet. Bedrock encountered.
							12	
								Bottom of borehole at 12.3 feet.
							13	

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Boring: SB-17

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/29/2009
Date Completed: 10/29/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 13 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	FILL. Angular gravel and sand to 1.5 feet bgs. Boring was hand augered or airknifed to 8 feet bgs.
Moist	44.4				ML		2	(ML) Brown SILT w/ <10% sand. Soft, low plasticity, moist. (slight odor, no sheen)
Moist	482		SB-17-4	G = 24 D = 120 HO = 130 B = 0.012	ML		4	(ML) Brown SILT w/ 10% sand. Stiff, low plasticity. (strong odor, heavy sheen)
Moist/Wet	140.7				ML		6	(ML) SAME AS ABOVE. (moderate odor, moderate sheen)
Wet	303						7	SAME AS ABOVE. w/ occ. gravel. Low plasticity. (moderate odor, moderate sheen)
	51						8	
Wet	29				ML		9	(ML) Gray SILT. Very hard, high plasticity. (no odor, slight sheen)
Moist	14.8						10	SAME AS ABOVE. (no odor, slight sheen)
	14.8				ML		11	(ML) SAME AS ABOVE. (no odor, no sheen)
	66.0		SB-17-12	G = 110 D = 58 HO = 65 B = 0.059	ML		12	(ML) Light brown, sandy SILT. Very hard. (no odor, no sheen)
Moist	7.5				SW		13	(SW) Brownish-gray, fine to coarse SAND w/ 10% silt and 5% gravel. Very dense. (no odor, no sheen) Refusal @ 13 feet. Bedrock encountered.

Bottom of borehole at 13.0 feet.

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Boring: SB-18

Project: Former Std. Oil Bulk Plant 206196
Client: Chevron EMC
Location: 815 NE College St., Pullman, WA

Logged By: Andrew Lembrick
Date Started: 10/29/2009
Date Completed: 10/29/2009

Driller: Cascade Drilling, Inc.
Drill Method: Hand Auger/ Geoprobe
Total Boring Depth: 14 ft

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	Analyical Results (mg/mk)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	Angular cobbles. Sandy. FILL.
								Boring was hand augered or airknifed to 8 feet bgs.
							1	
Moist	547		SB-18-2	G = 1500 D = 3700 HO = <310 B = 2.2	SW		2	(SW) Dark gray, fine to coarse SAND w/ gravel, silt and cobbles. Dense. (strong odor, heavy sheen)
							3	
Moist	388				SW		4	(SW) SAME AS ABOVE. (strong odor, moderate sheen)
							5	
Wet	88.1				ML		6	(ML) Gray SILT. Hard, high plasticity. (slight odor, slight sheen)
							7	
Wet	133						8	SAME AS ABOVE. (strong odor, heavy sheen)
Moist	209		SB-18-9	G = 890 D = 130 HO = 31 B = 1.4			9	(ML) SAME AS ABOVE. (strong odor, heavy sheen)
Moist	14.8				ML		10	
Wet	0						11	
								(ML) Gray SILT. Very hard, high plasticity. (no odor, no sheen)
Wet	0.0 0		SB-18-13	G = 2.2 D = 13 HO = <13 B = 0.035	ML		12	
					SW		13	(SW) Gray, fine to coarse SAND w/ 20% silt and 20% gravel. Very dense. (no odor, no sheen)
							14	Bottom of borehole at 14.0 feet.
							15	

Appendix D

DPE System Installation Field Notes

Report # 001

WEEKLY CONSTRUCTION REPORT

Project: **206196- MPE System Installation Phase II** **Pullman, WA**		**Project No.** 30113992 **Date:** 10/09/2023 to 10/13/2023 ***Severe Weather Lost Work Days:*** *None*
Contractor: Arcadis	**Subcontractors:** GPRS – Private Utility Locator Holt – Construction Contractor	

Summary of Work Performed:

Mobilization

- Mobilized personnel, equipment, and materials
- Set up laydown yard delineations and temporary fencing
- Received roll off bins for waste
- Conducted private utility locate

Concrete Pad Installation

- Exposed existing conveyance piping from wells
- Installed additional conveyance piping stub-ups for future well field expansion
- Exported two bins of overburden soils at concrete pad excavation
- Backfilled and compacted base for concrete pad
- Layout and formed concrete pad

Health and Safety:

- No stop works or health and safety concerns during this week of work.

Upcoming Planned Activities for Week of 10/16/2023

- Pour concrete pad
- Excavate sanitary sewer run to manhole
- Temporarily close street and divert traffic for manhole/sewer connection
- Restore asphalt
- Material testing to confirm concrete strength

Progress Table

Item Description	Unit of Measure	Current Estimated Project Qty	~Complete this Period	~Complete to Date	Percent Complete
Construction Mobilization	Each	1	1	1	100%
Trenching and Piping	LF	75	0	0	0%
Transportation & Disposal	Truck Tons	130	102	102	78%
Concrete Pad	Each	1	75%	75%	75%
Connex Placement and Piping	Each	1	0	0	0
Electric Service Install	Each	1	0	0	0
Sewer Connection and Restoration	Each	1	0	0	0
Demobilization	Each	1	0	0	0

Photos:

Erosion control installation at waste pile	Installation of future conveyance piping
Backfill at concrete pad	Forms for concrete pad

Report # 002

WEEKLY CONSTRUCTION REPORT

Project: **206196- MPE System Installation Phase II** **Pullman, WA**		**Project No.** 30113992 **Date:** 10/16/2023 to 10/19/2023 ***Severe Weather Lost Work Days:*** *None*
Contractor: Arcadis	**Subcontractors:** Holt – Construction Contractor	

Summary of Work Performed:

Concrete Pad Installation

- Special Inspector onsite during concrete pour
- 7 compression test cylinders taken for future break tests
- Concrete pad pour
- Removal of concrete pad forms

Sanitary Sewer Installation

- Closing of street around manhole and re-routing traffic via detour
- Trenching, piping, and backfill of sanitary sewer
- Sanitary sewer line connection to manhole
- Restoration of asphalt to match existing

Health and Safety:

- No stop works or health and safety concerns during this week of work.

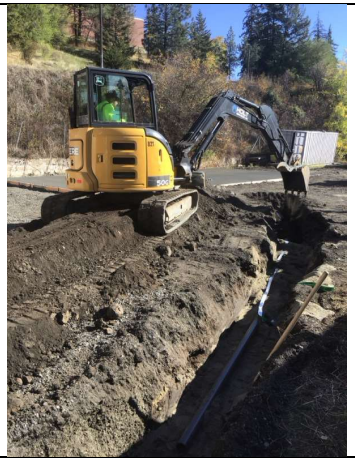
Upcoming Planned Activities for Week of 10/16/2023

- Material testing to confirm concrete strength
- Placing of compound on concrete pad
- Piping and manifold terminations
- Compound buildout

Progress Table

Item Description	Unit of Measure	Current Estimated Project Qty	~Complete this Period	~Complete to Date	Percent Complete
Construction Mobilization	Each	1	1	1	100%
Trenching and Piping	LF	75	75	75	100%
Transportation & Disposal	Truck Tons	130	115	115	100%
Concrete Pad	Each	1	1	1	100%
Connex Placement and Piping	Each	1	0	0	0
Electric Service Install	Each	1	0	0	0
Sewer Connection and Restoration	Each	1	1	1	100%
Demobilization	Each	1	0	0	0

Photos:

	
Concrete Pad Pour	Sewer Line Trenching
Sewer Line Trenching in Street	Sewer Line Restoration

Report # 03

WEEKLY CONSTRUCTION REPORT

Project: **206196- MPE System Installation Phase II** **Pullman, WA**		**Project No.** 30113992 **Date:** 10/23/2023 to 10/29/2023 ***Severe Weather Lost Work Days:*** *None*
Contractor: Arcadis	**Subcontractors:** Holt – Construction Contractor	

Summary of Work Performed:

Connex Box Placement on Concrete Pad

- Lifted small connex box onto pad
- Lifted large connex box onto pad
- Installation of carbon vessels
- Start of internal piping and system connections

Health and Safety:

- No stop works or health and safety concerns during this week of work.

Upcoming Planned Activities for Week of 10/30/2023

- Continued plumbing of DPE system components
- Modification of connex boxes to accommodate ventilation and door function
- Installation of fencing
- Installation of electrical drop components

Progress Table

Item Description	Unit of Measure	Current Estimated Project Qty	~Complete this Period	~Complete to Date	Percent Complete
Construction Mobilization	Each	1	1	1	100%
Trenching and Piping	LF	75	75	75	100%
Transportation & Disposal	Truck Tons	130	115	115	100%
Concrete Pad	Each	1	1	1	100%
Connex Placement and Piping	Each	1	0	0	40%
Electric Service Install	Each	1	0	0	0
Sewer Connection and Restoration	Each	1	1	1	100%
Demobilization	Each	1	0	0	0

Photos:

Placement of small connex	Placement of large connex
Preparing to install system components	Site restoration prior to demobilization for the week

Report # 04

WEEKLY CONSTRUCTION REPORT

Project: **206196- MPE System Installation Phase II** **Pullman, WA**		**Project No.** 30113992
Contractor: Arcadis	**Subcontractors:** Holt – Construction Contractor	**Date:** 10/31/2023 to 11/3/2023 ***Severe Weather Lost Work Days:*** *None*

Summary of Work Performed:

System Hook Up and Site Maintenance

- Internal piping and system connections
- Supply side electrical installations and connections
- Fence installation
- General site grading and clean up

Health and Safety:

- No stop works or health and safety concerns during this week of work.

Upcoming Planned Activities (Date of final work to be driven by power pole lead time: TBD)

- Installation of new power pole as directed by utility company
- Final tank connections with updated fittings
- Installation of fence gate (currently being manufactured)

- Progress Table

Item Description	Unit of Measure	Current Estimated Project Qty	~Complete this Period	~Complete to Date	Percent Complete
Construction Mobilization	Each	1	1	1	100%
Trenching and Piping	LF	75	75	75	100%
Transportation & Disposal	Truck Tons	130	115	115	100%
Concrete Pad	Each	1	1	1	100%
Connex Placement and Piping	Each	1	0	0	95%
Electric Service Install	Each	1	0	0	75%
Sewer Connection and Restoration	Each	1	1	1	100%
Demobilization	Each	1	0	0	0

Photos:

Piping Installation Inside System	Carbon Vessel Piping
Fencing Insallation	Site restoration prior to demobilization for the week

ACS Daily Log

Project Name:	Project Number:	Client Name:	Report Date:
COP5_West__206196_WA_Pullman_ACS	30113992	Chevron Environmental Management Company	11/29/2023
Project Location: 815 NE College Ave. Pullman Washington US		**Time Onsite:** 07:30	**Time Offsite:** 13:28
Arcadis Project Manager: Zack mason		**Construction Manager:** David Beaudoin	
General Weather Conditions: 20s cloudy			**Wind Direction:** N

Personnel Onsite

Name	Company	Employee Task
Dave Beaudoin	Arcadis	PMCoW
Jake	7J Landscape Construction	Fencing installation
Marshall	Holt	Subcontractor supervision
Cody	7J Landscape Construction	Fencing installation
Shawn	7J Landscape Construction	Fencing installation
Lexi	7J Landscape Construction	Fencing's installation
Adam	SHJ	Electrician
Eli	SHJ	Electrician

Scope of Work

☑ Subcontractor Oversight	☐ Third Party Oversight	☐ Heavy Equipment Inspection
☐ Materials Utilized	☐ Materials Shipped and Delivered	☐ Waste Tracking
☐ Health & Safety	☐ Earthwork	☐ Data Collection
☐ Others		

Subcontractor Oversight

Subcontractor #1	
Subcontractor Name: 7J Landscape Construction	Subcontractor Personnel: Jake, Cody, Shawn, & Lexi
Subcontractor Daily Scope Performed: Finish fencing and gate installation.	
Any questions that require engineering input? ☐ Yes ☑ No	
Problems or Deficiencies: None	
Corrective Actions (if applicable): None	
Subcontractor #2	
Subcontractor Name: SHJ	Subcontractor Personnel: Eli & Adam
Subcontractor Daily Scope Performed: Electrical work on current transfer canister and disconnect canister	
Any questions that require engineering input? ☑ Yes ☐ No	
Problems or Deficiencies: State of Washington Labor & Industry virtual inspection partially completed. SHJ working to resolve issues.	
Corrective Actions (if applicable): Follow up with L&I with final inspection - schedule is 5 to 7 days out. L&I to inform SHJ on date of final inspection. SHJ to inform Holt & Arcadis of final inspection schedule.	

General Comments

Any deviations from planned scope, including weather delays? ☑ Yes ☐ No	
Are there any anticipated cost or schedule implications due to change? ☑ Yes ☐ No	
Describe cost or schedule implications: L&I inspection not complete. Additional mobilization for inspection anticipated.	
Approved by PM? ☐ Yes ☑ No	Need SME review prior to forms going to client? ☐ Yes ☐ No

ACS Daily Log

Was any change order work completed? ☐ Yes ☑ No	
Describe change order work and include duration: N/A	
Any site visitors (regulatory agencies, city inspectors, client, public)? ☐ Yes ☑ No	
Please make sure to capture these visitors in the H&S tailgate form	
Are as-built drawings up to date? ☑ Yes ☐ No	Upcoming scope:L&I inspection, power drop completed by Avista
General Comments: Holt on site at 7:45 - completed tailgate meeting. SHJ onsite at 8:00 am - completed tailgate H&S discussion. 7J onsite at 8:39 am - completed tailgate H&S discussion. 7J completed fencing and gate installation. Off site at 11:30 am. SHJ working to schedule L&I electrical inspection. Successful coordinated initial virtual inspection with inspector. Inspector requested changes to the construction: Adding grounding bushings for electrical conduit between the current transfer canister and the power disconnect canister/installation of grounding rod to be tied into the power disconnect canister.	
Name of person completing form	David Beaudoin

Daily Field Photos

Direction photo was taken: N	Direction photo was taken: N

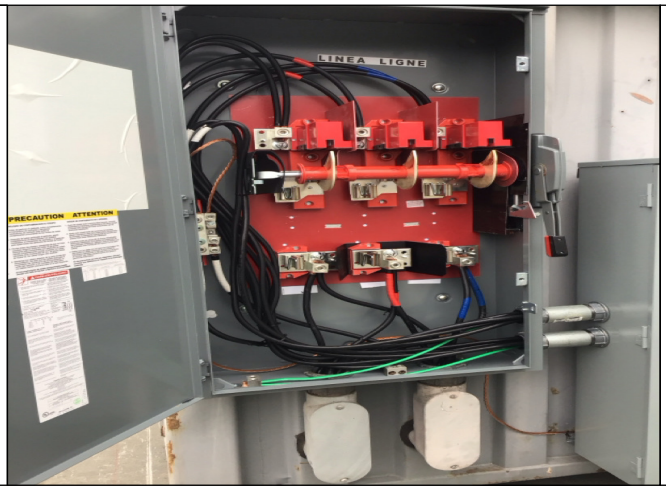



Photo Comments: Disconnect canister	Photo Comments: System fencing enclosure completed.
Direction photo was taken: N	Direction photo was taken: S
Photo Comments: System fenced enclosure completed.	Photo Comments: System fencing enclosure completed.

Direction photo was taken: W	Direction photo was taken: NW
Photo Comments: Grounding rods and cable - landed inside disconnect canister	Photo Comments: Current transfer canister
Direction photo was taken: NW	Direction photo was taken: NE
Photo Comments: System fenced enclosure completed.	Photo Comments: Power pole and fencing install completed.
Direction photo was taken: SE	Direction photo was taken:
Photo Comments: System fencing enclosure completed.	Photo Comments:

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