SITE ASSESSMENT SUMMARY REPORT
LA BAMBA RESTAURANT / FORMER UNOCAL SERVICE STATION NO. 372654 (VCP #CE0394)
3202 Main Street
Union Gap, Washington

May 19, 2016

Prepared for:

Washington State Department of Ecology
1250 West Alder Street
Union Gap, Washington 98903-0009

Prepared by:

Leidos, Inc.
18919 North Creek Parkway, Suite 101
Bothell, Washington 98011

On Behalf of:

Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, California 94583

leidos

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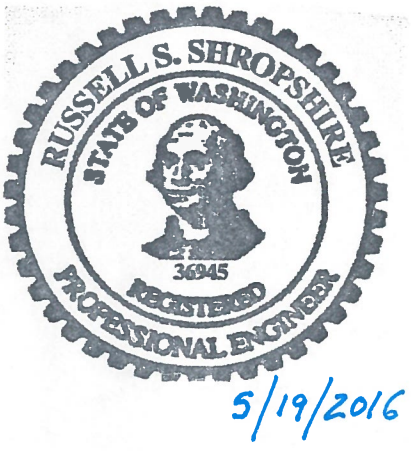

5/19/2016

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Principal Engineer

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SITE ASSESSMENT SUMMARY REPORT
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(VCP #CE0394)

1. INTRODUCTION

Leidos, Inc. (Leidos) prepared this report on behalf of Chevron Environmental Management Company (CEMC) to summarize the results of site assessment activities performed at the former La Bamba Restaurant (the Site), also known as Former Unocal Service Station No. 372654, located at 3202 Main Street in Union Gap, Washington. A vicinity map is included as Figure 1 and a site map is included as Figure 2.

The objective of the site assessment was to evaluate the current nature and extent of petroleum contamination in soil and groundwater at the Site resulting from past operations of a service station on the property. Assessment activities documented in this report were performed in accordance with the procedures described in Leidos' *Draft-Site Assessment Work Plan*, dated October 23, 2013 (Leidos, 2013), which was approved by the Washington State Department of Ecology (Ecology) by letter dated October 30, 2013.

2. BACKGROUND

2.1 SITE DESCRIPTION

The Site is located at the southwest corner of the intersection of Franklin Street and Main Street in Union Gap, Washington. The Site is bordered by Franklin Street to the north and Main Street to the east. In this area, Main Street is a major north-south arterial, with two traffic lanes in each direction.

To the west, the property is bordered by an unpaved alley, with residential properties across the alley to the west. To the south, the property is bordered by a bakery/market, and an auto repair facility is located on the next property to the south.

Per current information available from the Yakima County Assessor's Office, the property is identified as parcel number 19120532449 and is approximately 0.23 acre in size. The current property owner is Enrique Navarrete.

The Site is currently the location of a single-story masonry building (approximately 3,000 square feet), which covers most of the eastern half of the property. The western portion of the property is an asphalt covered parking area. The property is currently leased for use as a Mexican market and restaurant named El Rancho.

2.2 SITE USE HISTORY

The property was reportedly in use as agricultural property in 1927. A residence and apparent commercial structure were present at the site by 1941, through at least 1951 (PBS Engineering and Environmental [PBS], 2003a).

A Certified Sanborn Map for the area indicates that a service station was present on the property by 1959. Polk City Directories for Union Gap indicate that Jim's Union Service was in operation at the site by 1965, through at least 1975. The Polk City Directory for 1980 indicates that the property was vacant, and a review of available aerial photographs of the Site vicinity performed by Leidos at Aerometric in Tukwila, Washington indicates that the above-grade service station infrastructure had been removed by sometime in 1978. To date, Leidos has not located any records documenting the decommissioning of the service station facilities or removal of any underground storage tanks (USTs) or other infrastructure that may have been present at the Site. The approximate layout of the service station building and canopy are shown on Figure 2.

Yakima County Assessor's records indicate that the current building was constructed in 1981. Since that time the building is believed to have operated as a restaurant or market under a number of different owners/operators. According to a 50 year chain-of-title search performed by the Washington State Department of Ecology (Ecology), the current owner purchased the property in 1988.

2.3 SUMMARY OF PREVIOUS ASSESSMENTS AND REGULATORY HISTORY

In 2003, PBS conducted Phase I and Phase II environmental site assessments (PBS, 2003a and 2003b), on behalf of Touchstone Asset Management (a first mortgage lien holder on the property). During the Phase II assessment, five soil borings (B-1 through B-5) were advanced using a truck-mounted direct-push rig to collect soil and grab groundwater samples at the Site. Of the five borings, two borings (B-3 and B-4) were successfully advanced to depths sufficient to collect soil samples in the vicinity of the groundwater interface; however, in three of the five borings (B-1, B-2, and B-5) split-spoon refusal was encountered at depths several feet above groundwater. Grab groundwater samples were collected at each boring location.

Selected soil and groundwater samples were submitted for laboratory analyses. None of the soil samples submitted for analyses had detections of petroleum hydrocarbons at concentrations exceeding their respective Model Toxics Control Act (MTCA) Method A cleanup levels. However, gasoline-range organics (GRO) and diesel-range organics (DRO) were detected at concentrations exceeding Method A cleanup levels in groundwater samples collected from soil borings B-3 and B-4.

The Phase I and Phase II reports by PBS were submitted to Ecology in May 2003. Based on review of the reports, Ecology prepared a Department Decision Recommendation memorandum that recommended an interim action to perform additional groundwater and source investigation. On December 9, 2003, Ecology issued an Early Notice Letter to Mr. Navarrete regarding the release of hazardous substances on the property. In response to this letter, Mr. Navarrete reportedly provided information to Ecology that indicated soil borings B-3 and B-4 were not located on the subject property, but were instead located within the City of Union Gap right-of-way. Ecology responded by letter dated July 6, 2004, which stated that despite this new information, previous assessment information indicated there may be a potential source of contamination on the property, and that the property would remain on Ecology's Confirmed and Suspected Contaminated Sites List.

Ecology performed a Site Hazard Assessment (SHA) on the Site in 2008. The Site's hazard ranking, which is an estimation of the potential threat to human health and/or the environment relative to all other Washington State sites assessed at the time, was determined to be a 2, where 1 represents the highest relative risk and 5 the lowest. This information was published in the August 20, 2008 Special Issue of Ecology's Site Register, and listing of the Site received local media coverage through a September 2008 article in the Yakima Herald Republic newspaper.

Based on review of Ecology's files for the Site, which were obtained through a public records request, no action occurred on the Site following the 2008 SHA, with the exception of some minor communication with the property owner. Ecology issued a Notice of Potential Liability letter to Mr. Navarrete on November 28, 2012, and subsequent letters were issued on January 7, and February 21, 2013.

CEMC received notice of potential liability for the Site by letter dated April 19, 2013, and a determination of potentially liable person (PLP) status was issued by Ecology on May 23, 2013. In response to the PLP letter, CEMC entered the site into Ecology's Voluntary Cleanup Program (VCP) in June 2013. The Site was assigned VCP # CE0394 (Ecology, 2013).

In September 2013, Leidos contracted Geophysical Survey LLC of Kennewick, Washington to perform a geophysical investigation to determine whether evidence of USTs or other subsurface service station infrastructure could be located at the Site. Results of the geophysical investigation provided no conclusive evidence to indicate that USTs or other subsurface service station infrastructure remain at the Site.

3. SITE ASSESSMENT ACTIVITIES

Based on the results of the geophysical survey, the *Draft Site Assessment Work Plan* was developed and submitted to Ecology on October 23, 2013. The following objectives were identified for this site assessment as follows:

1) Fully delineate soil contamination at the Site with a Sonic drill rig, capable of collecting continuous core samples through the gravel and cobbles previously encountered at the Site;

2) Install six groundwater monitoring wells and collect groundwater samples to confirm the presence of groundwater contamination at the Site; and

3) Determine the groundwater flow direction and the potential for seasonal fluctuations in groundwater elevations over four consecutive groundwater sampling events.

Site assessment activities began at the Site following Ecology's acceptance of the *Draft- Site Assessment Work Plan* on October 30, 2013 and following approval of permits and access agreements with adjacent property owners and the City of Union Gap. Permits and access agreements with adjacent property owners were finalized in October 2014. Per the work plan new monitoring wells were installed at the following locations (Figure 2):

- Monitoring well MW-1 was placed near the northwest corner of the Site. This well was installed upgradient of the former service station features in order to provide background groundwater quality conditions for the Site.

- Monitoring well MW-2 was placed along the eastern property boundary, just north of the approximate former location of the service station canopy. This well was installed down gradient of the presumed location of the former USTs or other potential sources that may have been located in the northeast portion of the Site.
- Monitoring well MW-3 was placed along the eastern property boundary, in the approximate location of boring B-4, which contained the highest concentrations of gasoline and diesel in groundwater during the Phase II assessment completed by PBS. It is also located downgradient of the former pump islands location based on the service pump island canopy shown in historic Sanborn maps and aerial photographs of the station.
- Monitoring well MW-4 was placed along the eastern property boundary, in the vicinity of B-3 which contained gasoline and diesel at concentrations exceeding MTCA Method A cleanup levels for groundwater. This location is downgradient from a potential location of the former UST basin.
- Monitoring well MW-5 was placed just south of the southern property boundary in the vicinity of soil borings B-1 and B-2. This well was installed to evaluate potential downgradient contamination in a more southerly direction from the former service station facilities.
- Monitoring well MW-6 was placed in the southern portion of the property in the parking area west of the market building. This well was installed to collect additional hydrogeological data at the Site.

3.1 MONITORING WELL INSTALLATION ACTIVITIES

Monitoring well installation activities were performed between December 8 and 12, 2014, by Cascade Drilling L.P., with oversight by Leidos. Each boring was first cleared to a depth of at least eight feet below ground surface (bgs) using an air-knife excavation rig. The borings were then advanced to their final depth using a limited access sonic drill rig.

During the drilling activities, a Leidos geologist was present to log soil lithology and collect soil samples for field-screening and laboratory analysis. Soil was collected in the upper eight feet of the boring with a stainless steel hand auger at approximately 2-foot intervals, if possible. Below eight feet, soil was collected continuously with the sonic rig sampling core. Soil samples were classified in accordance with the Unified Soil Classification System. Each sample was field screened for the presence of petroleum hydrocarbons by visual and olfactory observations. Headspace vapor measurements were recorded using a photo-ionization detector (PID), and sheen tests were conducted.

At least two soil samples from each boring were collected and submitted for laboratory analysis: one from the capillary fringe, and the second from the deepest sample interval attained in the boring. Additional soil samples were also submitted from depths containing potential hydrocarbon impacts as indicated by field screening observations. Selected soil samples were submitted to Eurofins Lancaster Laboratories for the following analyses:

- Total petroleum hydrocarbons (TPH) as gasoline-range organics (TPH-GRO) by Ecology Method 97-602 NWTPH-Gx;

- TPH as diesel-range organics (TPH-DRO) and heavy oil-range organics (TPH-HRO) by Ecology Method 97-602 NWTPH-Dx;
- TPH-DRO and TPH-HRO by Ecology Method 97-602 NWTPH-Dx with silica gel cleanup;
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX), 1,2-dibromoethane (EDB) and methyl tertiary butyl ether (MTBE), by U.S. Environmental Protection Agency (USEPA) SW-846 8260;
- Naphthalene by SW-846 8270;
- Total lead by SW-846 6010B; and
- Moisture by SM 2540 G-1997.

Selected soil samples were also analyzed for:

- 1,2 – dichloroethane (EDC), halogenated volatile organic compounds (VOCs) and n-hexane by USEPA Method 8260B;
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) by USEPA Method SW-846 8270 with selective ion monitoring (SIM);
- Polychlorinated biphenyls (PCBs) by USEPA Method SW-846 8082; and
- Cadmium, chromium, lead, nickel, and zinc by USEPA Method SW-846 6010B.
- Extractable petroleum hydrocarbons (EPH) by ECY 97-602 WA EPH;
- Volatile petroleum hydrocarbons (VPH) by ECY 97-602 WA VPH; and
- Fractional organic carbon by SM-5310B.

Soil sampling results are summarized in Tables 1 through 3 and are further discussed in Section 4.1.

Each of the six soil borings were installed to total depths of approximately 20 feet bgs based on previous investigations and depth to groundwater field observations at the Site. Each soil boring was completed as a 2-inch diameter monitoring well. Monitoring wells MW-1 through MW-6 were constructed with schedule 40 poly-vinyl chloride casing, 0.020-inch factory slotted screen with a 10-foot screen interval, and with 2/12 Monterey sand for the filter-pack. The monitoring wells were completed at the ground surface with a flush-mounted, traffic-rated well box. Monitoring well elevation measurements were surveyed to the nearest 0.01 foot at the ground surface (top of well-box lid) and at the top of the well casing, relative to the North American Vertical Datum of 1988 by a licensed surveying company. A copy of the monitoring well survey is attached in Appendix A. Well construction details are presented on the boring logs, which are included in Appendix B.

Each of the new monitoring wells were developed by Leidos on February 18, 2015. Well development consisted of surging for 10 minutes, followed by pumping of the well using an electric submersible pump until at least 10 well casing volumes were removed or until water produced from the well was clear and free of sediment.

3.2 GROUNDWATER MONITORING

Following the completion of monitoring well installation activities, a program of quarterly groundwater monitoring was initiated at the Site, which was performed by Gettler-Ryan, Inc. (Gettler-Ryan), on behalf of CEMC. Four consecutive quarterly monitoring events were performed on the following dates:

- March 30, 2015;
- July 1, 2015;
- September 17, 2015; and
- December 8, 2015.

Gettler-Ryan collected depth-to-groundwater measurements and checked for the presence of separate-phase hydrocarbons in all six monitoring wells on the Site. Samples were then collected from each well using low-flow purge and sampling techniques, and the samples were submitted to Eurofins Lancaster Laboratories, Inc. for the following analyses:

- TPH-GRO by Ecology Method 97-602 NWTPH-Gx;
- TPH-DRO and TPH-HRO by Ecology Method 97-602 NWTPH-Dx;
- TPH-DRO and TPH-HRO by Ecology Method 97-602 NWTPH-Dx with silica gel cleanup;
- BTEX, EDC, and MTBE by USEPA Method SW-846 8260;
- EDB by USEPA Method SW-846 8011;
- Naphthalene and 2-Methylnaphthalene by USEPA Method SW-846 8270 SIM; and
- Total lead by USEPA Method SW-846 6010.

A discussion of groundwater monitoring results is presented in Section 4.2. Gettler-Ryan field data sheets for each monitoring event are provided as Appendix C.

4. SUMMARY AND EVALUATION OF RESULTS

4.1 SOIL

Soils encountered during installation of the six monitoring wells completed during this assessment indicate that the lithology beneath the Site, from ground surface to approximately 20 feet bgs, generally consists of brown, loose to medium dense, silty sand to sandy gravel and cobbles with up to 25% fine to coarse sand and up to 20% silt. These observations are consistent with historical boring logs for the Site.

4.1.1 Evaluation of Soil Sampling Results Using Method A

A summary of analytical results for soil samples collected during the installation of the monitoring wells is included in Tables 1 through 3, and the laboratory analytical report for these samples is included as Appendix D. As these results indicate, TPH-GRO was detected at monitoring well MW-3, at a depth of approximately 12 feet bgs (sample ID: MW-3-12), at a concentration of 62 milligrams per kilogram (mg/kg). The duplicate sample (sample ID: DUP-121114) contained TPH-GRO at a concentration of 76 mg/kg. These results are in compliance with the MTCA Method A Soil Cleanup Level for weathered gasoline (100 mg/kg); however, they would exceed the Method A Soil Cleanup Level for TPH-GRO for sites where benzene is present in soil (30 mg/kg). All other soil sampling results are in compliance with Method A cleanup levels for soil.

Based on evaluation of the sampling results for the BTEX analyses, Leidos believes that use of the weathered gasoline cleanup level is appropriate for this Site. Although low levels of benzene were detected in 7 of the 21 soil samples submitted for laboratory analysis, the concentrations of these detections were all below 0.005 mg/kg. Per Tables 12.1 and 12.2 of Ecology's guidance document, *Guidance for Remediation of Petroleum Contaminated Sites* (Ecology, 2011), soils containing less than 0.005 mg/kg of benzene would meet the benzene concentration screening criteria to be classified as Category 1 soils with no detectable or quantifiable levels of petroleum contamination. Toluene, ethylbenzene, and total xylenes were not detected in any of the samples submitted for laboratory analysis. Therefore, the BTEX analytical results for soil appear to satisfy Ecology requirements for use of the 100 mg/kg cleanup level for TPH-GRO.

4.1.2 Evaluation of Soil Sampling Results Using Method B

Although Leidos believes that use of the 100 mg/kg Method A cleanup level for TPH-GRO is appropriate at this site, we also recognize that the benzene detection limits achieved for samples MW-3-12 and DUP-121114 may not be low enough to sufficiently satisfy Ecology to fully support its use. Therefore, Leidos also evaluated the MW-3-12 soil sample data using Method B procedures for petroleum mixtures to provide an additional line of evidence to demonstrate that conditions at the Site are sufficiently protective of human health and the environment to comply with MTCA.

Method B is the standard or universal method for developing cleanup levels under MTCA and can be used for any site, unlike Method A which is intended for relatively simple sites with few hazardous substances. Method A cleanup levels may be overly conservative for some sites because they are based on the most conservative contaminant exposure pathway (protection of drinking water), which may not be present at some sites, and because they are based on standard product compositions for petroleum products, which do not account for reductions in product toxicity that occur due to natural attenuation processes. Under Method B, these site-specific factors are also considered in determining whether current conditions are sufficiently protective of human health and the environment to comply with MTCA.

To perform this evaluation, Leidos used Ecology's MTCATPH 11.1 workbook tool to examine the toxicity for the TPH composition that currently remains present at this Site, using petroleum

fraction data from VPH/EPH analysis. A technical memorandum, which presents the workbook inputs and results, is presented in Appendix E.

Results of the MTCATPH workbook analysis are provided in the following table:

Sample ID	Measured Soil TPH Conc. (mg/kg)	Protective Soil TPH Conc. (mg/kg)	
		Direct Contact	Potable Groundwater
MW-3-12	38.350	3,118	76
		Pass	Pass

As these results show, the MTCATPH workbook was used to calculate a Measured TPH Soil Concentration for soil sample MW-3-12 based on the TPH fraction data provided by laboratory analysis of the sample. The workbook also calculates Protective Soil TPH Concentrations for protection of soil direct contact and protection of Method B groundwater quality using the specific product composition present in the sample. According to these results, the measured soil TPH concentration for in soil sample MW-3-12 is below the estimated concentrations that would be protective of human health under both the direct contact and drinking water exposure pathways[1].

4.2 GROUNDWATER

Results of the four consecutive quarterly groundwater sampling events are presented in Table 4 and laboratory analytical reports are provided as Appendix C. Data from these events indicate that groundwater collected at each monitoring well location was in compliance with MTCA Method A cleanup levels for all tested analytes during each of the four quarterly monitoring events. Petroleum-range organics (TPH-GRO, TPH-DRO, and TPH-HRO) and BTEX compounds were not detected above the method detection limit in samples collected during any of the quarterly monitoring events.

Groundwater elevation data are presented in Table 4, and potentiometric maps for each monitoring event are provided in Figures 3 through 6. Groundwater elevation data collected during the events indicate that the water table was generally encountered at depths of approximately 11 to 12 feet bgs, and that groundwater flow across the Site is consistently toward the southeast at a gradient of approximately 0.007 to 0.028 feet per foot. The maximum seasonal groundwater elevation variation observed between the four quarterly events was 0.77 feet.

[1] Under MTCA Method B, sites must also be evaluated to determine whether terrestrial ecological exposure pathways may be present, which may necessitate an adjustment of calculated Method B cleanup levels. However, per WAC 173-340-7491(1)(c), the Site is excluded from the requirement to complete a terrestrial ecological evaluation because there is less than 1.5 acres of contiguous undeveloped land on the Site or within 500 feet of any area of the Site.

5. CONCLUSIONS

Based on the results of these assessment activities, Leidos believes that current conditions at this Site are in compliance with MTCA standards for protection of human health and the environment.

Results of the groundwater assessment activities at the Site indicate no evidence of petroleum impacts to groundwater based on four consecutive quarterly groundwater sampling events. Results of these events indicate that TPH-GRO, TPH-DRO, TPH-HRO, and BTEX compounds were not detected above laboratory method detection limits during each of the four sampling events. Total lead was detected in each monitoring well at concentrations that are at least one order of magnitude less than the MTCA Method A cleanup level.

Soil sampling results indicate that low-level residual TPH-GRO was detected in two soil borings (MW-3 and MW-4) located along the eastern boundary of the former service station property. The maximum TPH-GRO concentrations (62 - 76 mg/kg) were detected in samples collected from a depth of approximately 12 feet bgs in the boring for MW-3 (samples MW-3-12 and DUP-12114); however, all soil sample concentrations were below MTCA Method A cleanup levels for weathered gasoline (TPH-GRO cleanup level = 100 mg/kg). No other petroleum constituents were not detected above their respective Method A cleanup levels.

Additional analysis of the MW-3-12 soil sample using petroleum fraction data from VPH/EPH analysis and Ecology's MTCATPH 11.1 workbook tool indicates that the residual TPH detected in this sample is below levels that are protective of human health under both the direct contact and drinking water exposure pathways. Sampling results from four consecutive quarters of groundwater monitoring at monitoring well MW-3 also provide empirical evidence that residual soil contamination remaining at this location does not adversely impact groundwater quality at the Site, which has consistently been in compliance with drinking water standards.

Based on current EPA guidance for addressing petroleum vapor intrusion at UST sites (EPA, 2015), further investigation to assess the potential for a vapor intrusion exposure pathway at the Site is not warranted. Per the criteria presented in Table 3 of the EPA guidance, for sites with relatively low levels of benzene and/or TPH in soil or groundwater where LNAPL is not present, no further investigation for petroleum vapor intrusion is necessary where a vertical separation distance of 6 feet is met or exceeded (where no precluding factors such as preferential transport pathways are present). Based on the results of this assessment, Leidos believes that conditions at the Site are consistent with these exclusion criteria and that vapor intrusion is not an exposure pathway of concern. Use of the 2015 EPA guidance for initially assessing the potential for petroleum vapor intrusion was recently recommended by Ecology Implementation Memorandum No. 14, *Updated Process for Initially Assessing the Potential for Petroleum Vapor Intrusion*, dated March 31, 2016.

The results of these site assessment activities indicate that current conditions at the Site are protective of human health and that an exposure pathway for ecological receptors is unlikely due to a lack of undeveloped land at the Site, and in the immediate vicinity. In consideration of these results, Leidos respectfully requests, on behalf of CEMC, that Ecology issue an opinion for No Further Action at the La Bamba Restaurant Site.

6. REFERENCES

City of Union Gap, 2011. Union Gap Zoning Map. July 2011.

Ecology, 2011. Guidance for Remediation of Petroleum Contaminated Sites, Publication No. 10-09-057. September.

Ecology, 2013. Letter from Frosti Smith to Eric Hetrick. June 18, 2013.

EPA, 2015. Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Sites. June 2015.

Leidos, 2013. Draft- Site Assessment Work Plan. October 23, 2013.

PBS, 2003a. Phase One Environmental Site Assessment. March 2003.

PBS, 2003b. Limited Phase II Environmental Site Assessment, 3202 Main Street, Union Gap, Washington. May 5, 2003.

REPORT LIMITATIONS

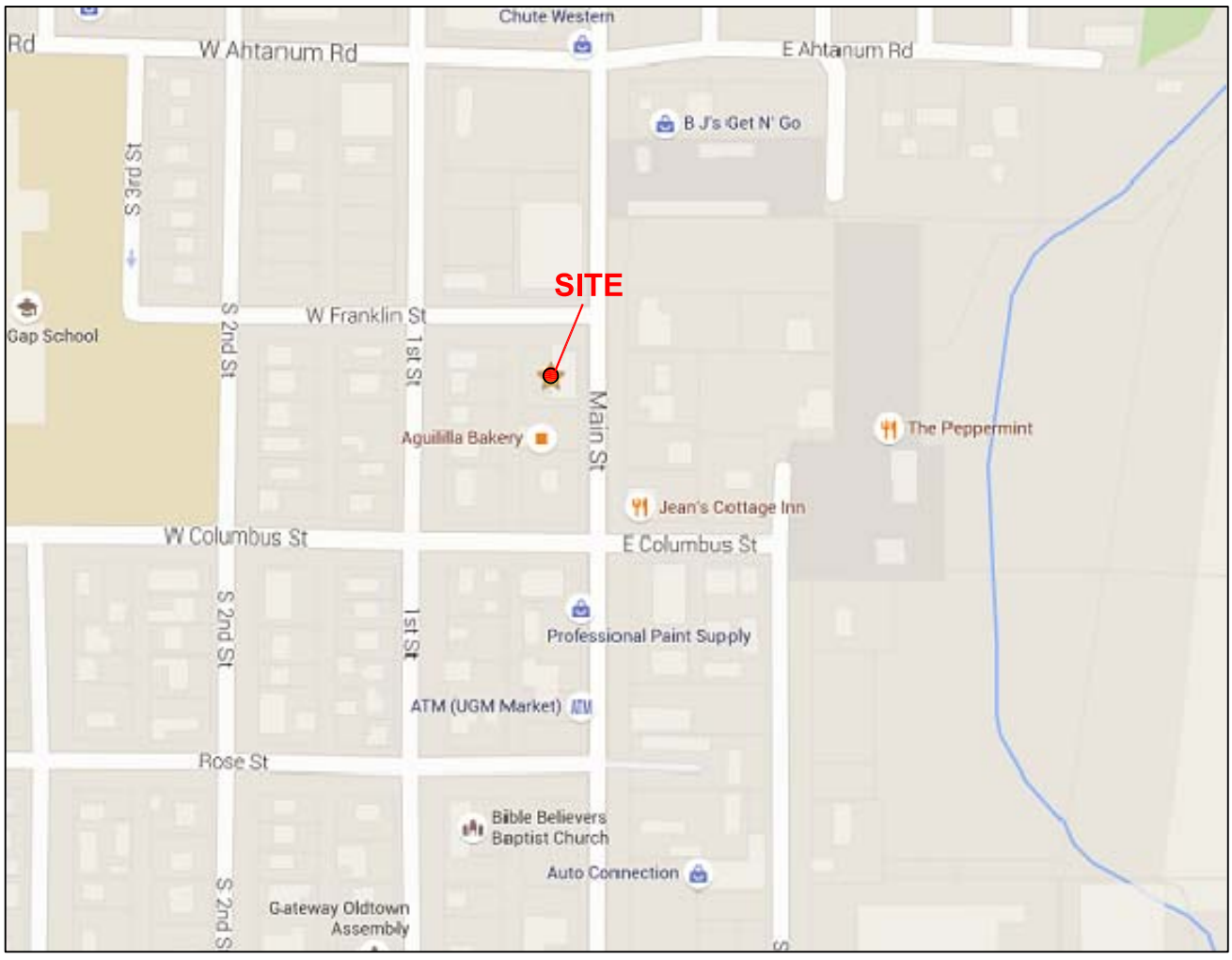
This technical document was prepared on behalf of CEMC and is intended for its sole use and for use by the local, state, or federal regulatory agency that the technical document was sent to by Leidos. Any other person or entity obtaining, using, or relying on this technical document hereby acknowledges that they do so at their own risk, and Leidos shall have no responsibility or liability for the consequences thereof.

Site history and background information provided in this technical document are based on sources that may include interviews with environmental regulatory agencies and property management personnel and a review of acquired environmental regulatory agency documents and property information obtained from CEMC and others. Leidos has not made, nor has it been asked to make, any independent investigation concerning the accuracy, reliability, or completeness of such information beyond that described in this technical document.

Recognizing reasonable limits of time and cost, this technical document cannot wholly eliminate uncertainty regarding the vertical and lateral extent of impacted environmental media.

Opinions and recommendations presented in this technical document apply only to site conditions and features as they existed at the time of Leidos site visits or site work and cannot be applied to conditions and features of which Leidos is unaware and has not had the opportunity to evaluate.

All sources of information on which Leidos has relied in making its conclusions (including direct field observations) are identified by reference in this technical document or in appendices attached to this technical document. Any information not listed by reference or in appendices has not been evaluated or relied on by Leidos in the context of this technical document. The conclusions, therefore, represent our professional opinion based on the identified sources of information.



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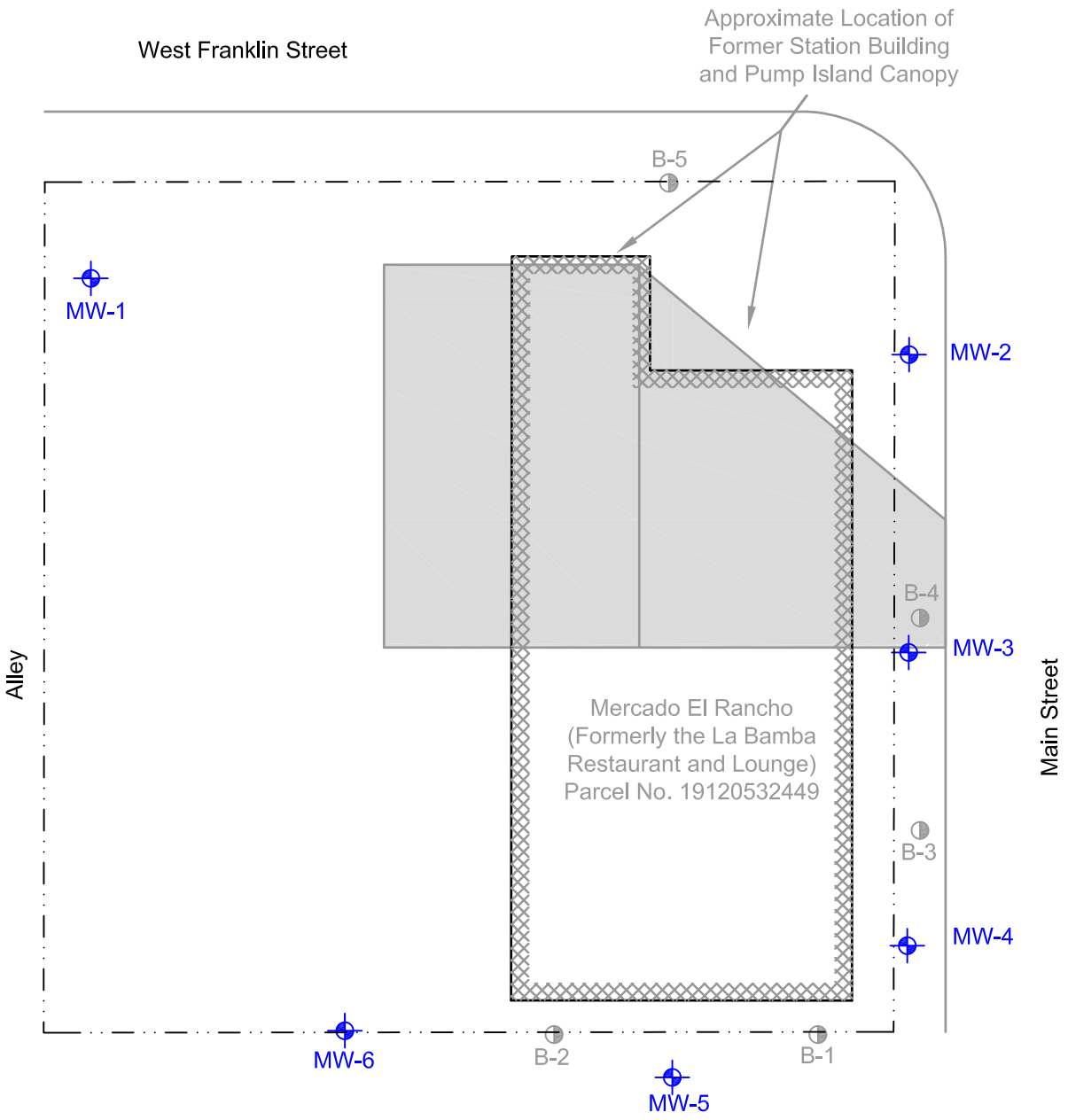
La Bamba Restaurant/
Former Unocal Station No. 372654
3202 Main Street
Union Gap, Washington

FIGURE 1
Vicinity Map

DATE: 5/13/2015 | DRAWING: 372654 Vicinity Map.dwg



LEGEND:

MW-1 GROUNDWATER MONITORING WELL LOCATION

B-1 FORMER SOIL BORING LOCATION

CURRENT SITE FEATURES

FORMER SITE FEATURES

PROPERTY BOUNDARY

N

0' 20'

SCALE

NOTES:
FORMER SITE FEATURES BASED ON 1959 SANBORN MAP.
FORMER SOIL BORING LOCATIONS BASED ON SITE MAP PREPARED BY PBS ENGINEERING (PBS, 2003).
CURRENT SITE FEATURES BASED ON PROPERTY SURVEY PERFORMED IN FEBRUARY 2015 BY GEODIMENSIONS, INC.

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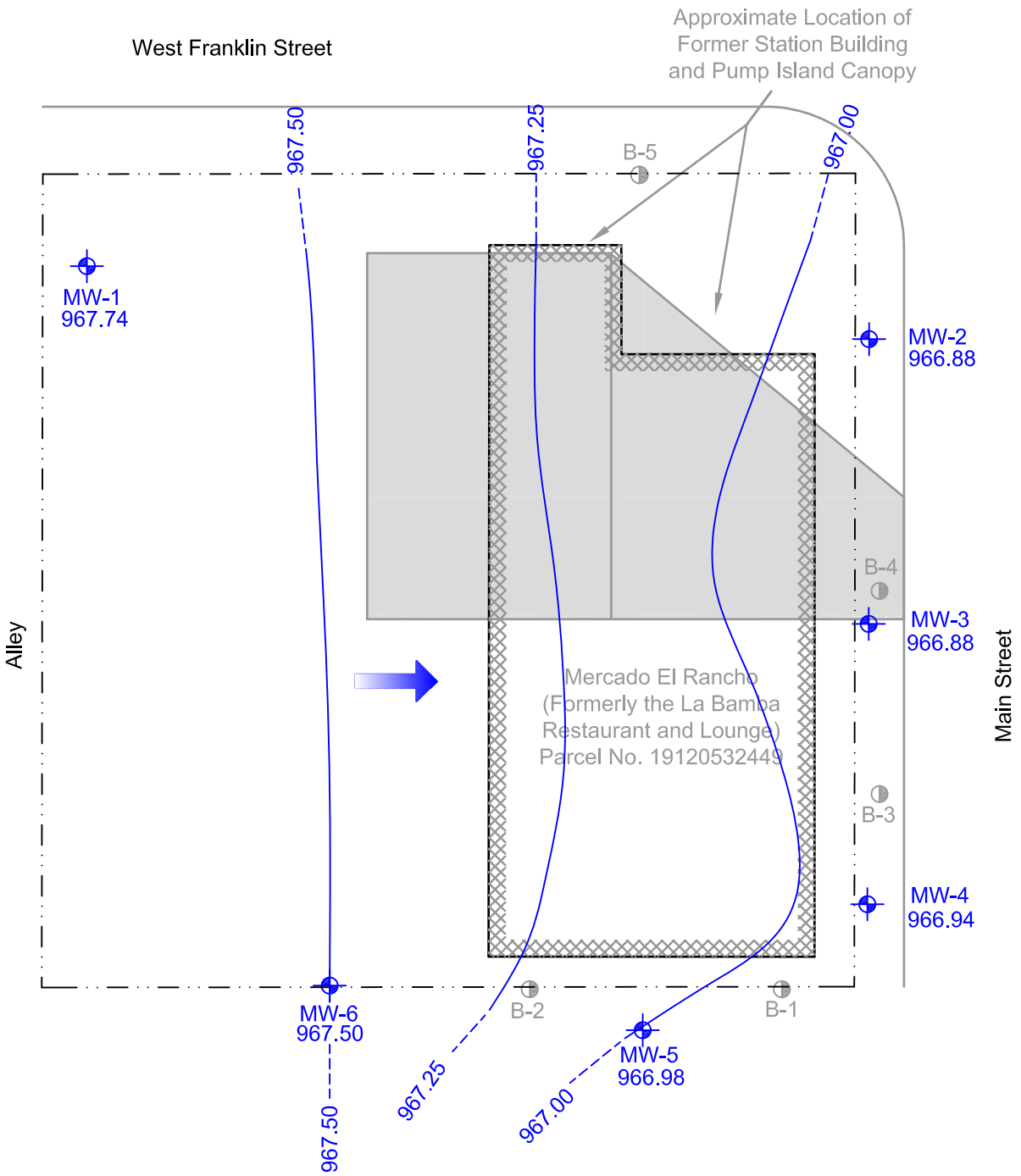
La Bamba Restaurant/
Former Unocal Station No. 372654
3202 Main Street
Union Gap, Washington

FIGURE 2
Site Map

DATE: 3/17/2016 | DRAWING: 372654_Site Map_031716.dwg



LEGEND:

MW-1	GROUNDWATER MONITORING WELL LOCATION
B-1	FORMER SOIL BORING LOCATION
967.50	GROUNDWATER ELEVATION IN FEET
	APPROXIMATE GROUNDWATER FLOW DIRECTION AT A GRADIENT OF 0.009 TO 0.016 FEET PER FOOT
	GROUNDWATER ELEVATION CONTOUR AT A 0.25 FOOT INTERVAL (DASHED WHERE INFERRED)
	CURRENT SITE FEATURES
	FORMER SITE FEATURES
	PROPERTY BOUNDARY

N

0' 20'

SCALE

NOTES:
FORMER SITE FEATURES BASED ON 1959 SANBORN MAP.
FORMER SOIL BORING LOCATIONS BASED ON SITE MAP PREPARED BY PBS ENGINEERING (PBS, 2003).
CURRENT SITE FEATURES BASED ON PROPERTY SURVEY PERFORMED IN FEBRUARY 2015 BY GEODIMENSIONS, INC.

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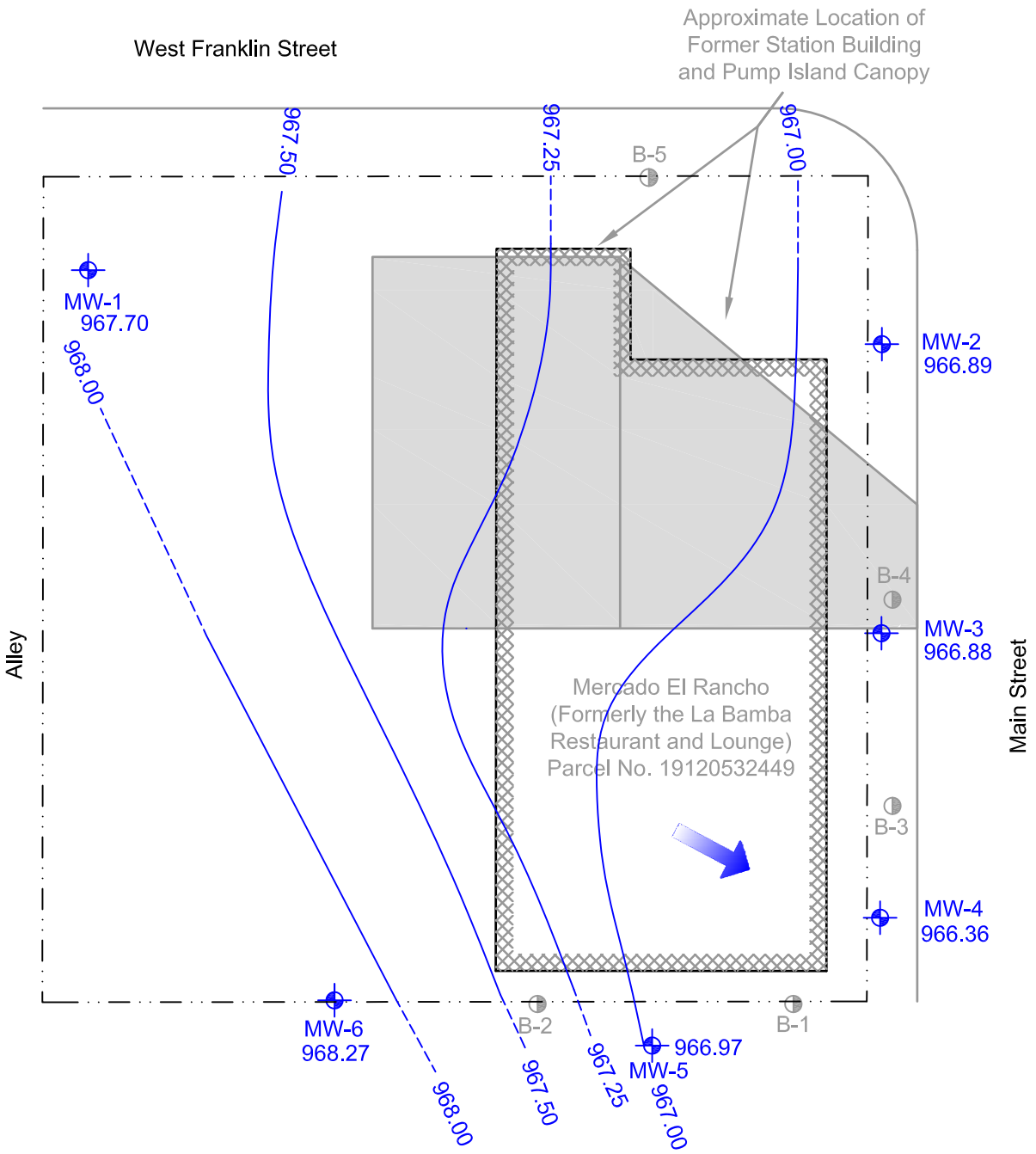
La Bamba Restaurant/
Former Unocal Station No. 372654
3202 Main Street
Union Gap, Washington

FIGURE 3
Potentiometric Map
March 30, 2015

DATE: 3/17/2016 | DRAWING: 372654_Site Map_031716.dwg



LEGEND:

MW-1 — GROUNDWATER MONITORING WELL LOCATION

B-1 — FORMER SOIL BORING LOCATION

967.50 — GROUNDWATER ELEVATION IN FEET

APPROXIMATE GROUNDWATER FLOW DIRECTION AT A GRADIENT OF 0.007 TO 0.028 FEET PER FOOT

GROUNDWATER ELEVATION CONTOUR AT A 0.25 FOOT INTERVAL (DASHED WHERE INFERRED)

CURRENT SITE FEATURES

FORMER SITE FEATURES

PROPERTY BOUNDARY

N

0' 20'

SCALE

NOTES:
FORMER SITE FEATURES BASED ON 1959 SANBORN MAP.
FORMER SOIL BORING LOCATIONS BASED ON SITE MAP PREPARED BY PBS ENGINEERING (PBS, 2003).
CURRENT SITE FEATURES BASED ON PROPERTY SURVEY PERFORMED IN FEBRUARY 2015 BY GEODIMENSIONS, INC.

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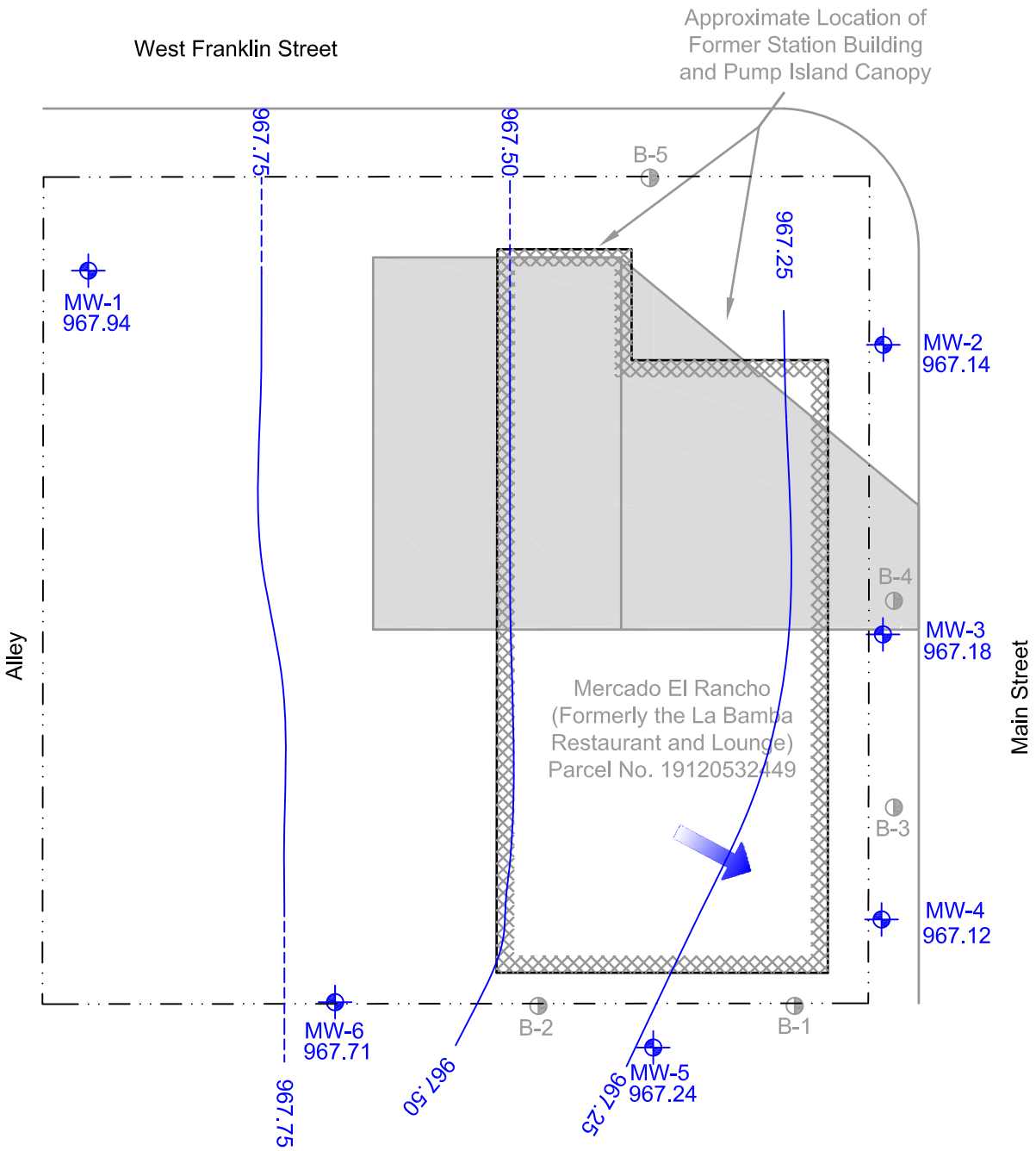
La Bamba Restaurant/
Former Unocal Station No. 372654
3202 Main Street
Union Gap, Washington

FIGURE 4
Potentiometric Map
July 1, 2015

DATE: 3/17/2016 | DRAWING: 372654_Site Map_031716.dwg



LEGEND:

MW-1 — GROUNDWATER MONITORING WELL LOCATION

B-1 — FORMER SOIL BORING LOCATION

967.50 — GROUNDWATER ELEVATION IN FEET

APPROXIMATE GROUNDWATER FLOW DIRECTION AT A GRADIENT OF 0.008 TO 0.012 FEET PER FOOT

GROUNDWATER ELEVATION CONTOUR AT A 0.25 FOOT INTERVAL (DASHED WHERE INFERRED)

CURRENT SITE FEATURES

FORMER SITE FEATURES

PROPERTY BOUNDARY

N

0' 20'

SCALE

NOTES:
FORMER SITE FEATURES BASED ON 1959 SANBORN MAP.
FORMER SOIL BORING LOCATIONS BASED ON SITE MAP PREPARED BY PBS ENGINEERING (PBS, 2003).
CURRENT SITE FEATURES BASED ON PROPERTY SURVEY PERFORMED IN FEBRUARY 2015 BY GEODIMENSIONS, INC.

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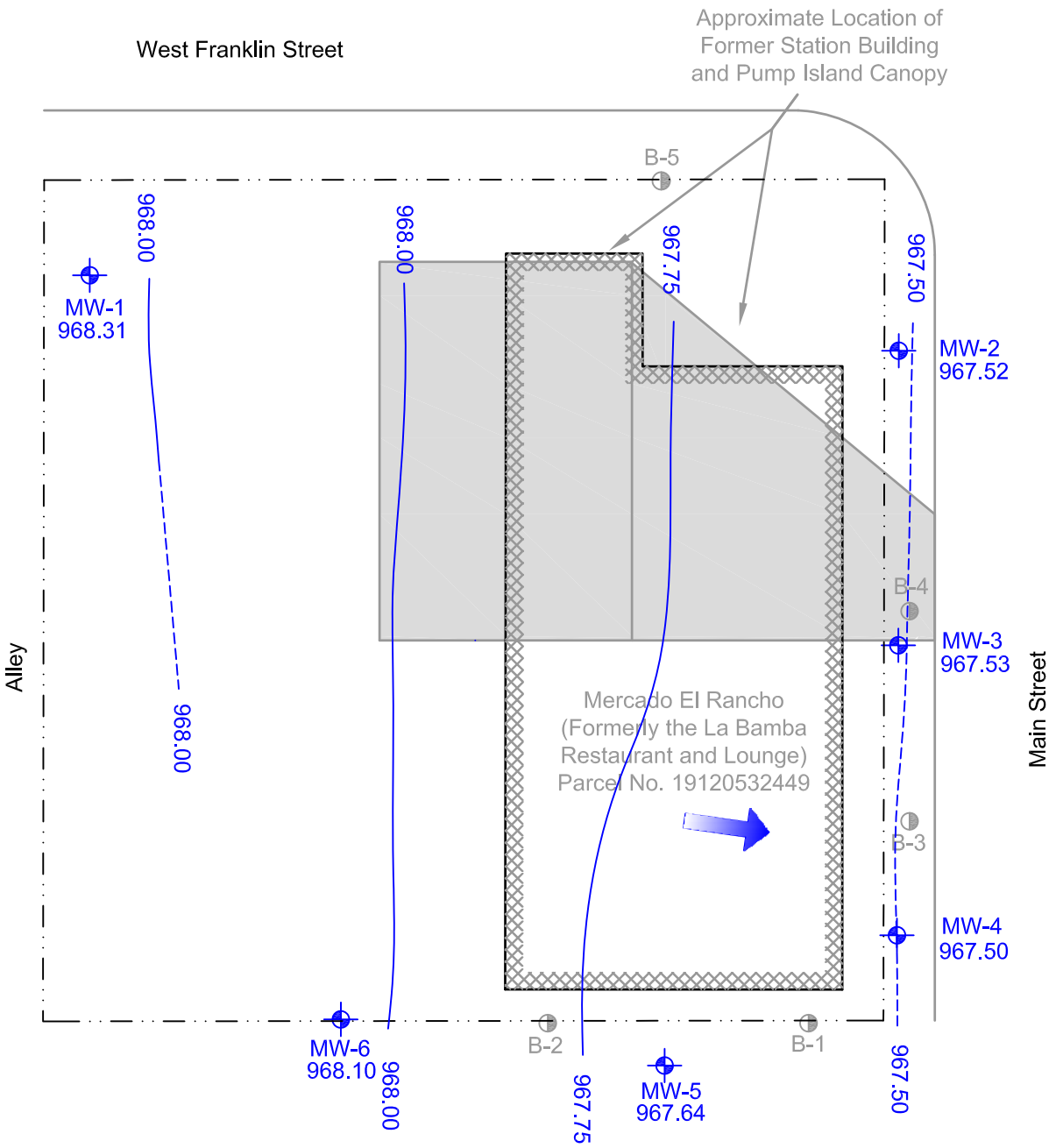
La Bamba Restaurant/
Former Unocal Station No. 372654
3202 Main Street
Union Gap, Washington

FIGURE 5
Potentiometric Map
September 17, 2015

DATE: 3/17/2016 | DRAWING: 372654_Site Map_031716.dwg



LEGEND:

- MW-1 — GROUNDWATER MONITORING WELL LOCATION
- B-1 — FORMER SOIL BORING LOCATION
- 967.50 — GROUNDWATER ELEVATION IN FEET
- APPROXIMATE GROUNDWATER FLOW DIRECTION AT A GRADIENT OF 0.008 TO 0.011 FEET PER FOOT
- GROUNDWATER ELEVATION CONTOUR AT A 0.25 FOOT INTERVAL (DASHED WHERE INFERRED)
- CURRENT SITE FEATURES
- FORMER SITE FEATURES
- PROPERTY BOUNDARY

N

0' 20'

SCALE

NOTES:
FORMER SITE FEATURES BASED ON 1959 SANBORN MAP.
FORMER SOIL BORING LOCATIONS BASED ON SITE MAP PREPARED BY PBS ENGINEERING (PBS, 2003).
CURRENT SITE FEATURES BASED ON PROPERTY SURVEY PERFORMED IN FEBRUARY 2015 BY GEODIMENSIONS, INC.

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La Bamba Restaurant/
Former Unocal Station No. 372654
3202 Main Street
Union Gap, Washington

FIGURE 6
Potentiometric Map
December 8, 2015

DATE: 3/17/2016 | DRAWING: 372654_Site Map_031716.dwg

Table 1
Summary of Soil Sampling Analytical Results- TPHs and Volatile Petroleum Compounds
La Bamba Restaurant/Former Unocal Service Station No. 372654[1]
3202 Main Street
Union Gap, Washington

				Total Petroleum Hydrocarbons					Volatile Petroleum Hydrocarbons			
Sample Location	**Sample ID**	**Depth (ft.)**	**Date Sampled**	**TPH-GRO**	**TPH-DRO**	**TPH-DRO - Silica Gel Cleanup**	**TPH-HRO**	**TPH-HRO - Silica Gel Cleanup**	**Benzene**	**Toluene**	**Ethyl-benzene**	**Total Xylenes**
MW-1	MW-1-11	11	12/11/2014	<1.4	<3.1	<3.1	<10	<10	0.0007	<0.001	<0.001	<0.001
	MW-1-12.5	12.5	12/11/2014	<1.1	<3.2	<3.2	<11	<11	0.0007	<0.001	<0.001	<0.001
	MW-1-14	14	12/11/2014	<1.1	23	<3.2	57	<11	0.0008	<0.001	<0.001	<0.001
	MW-1-20	20	12/11/2014	<1.1	<3.2	<3.2	<11	<11	<0.0005	<0.001	<0.001	<0.001
MW-2	MW-2-9	9	12/11/2014	<1.1	<3.1	<3.1	<10	<10	<0.0005	<0.001	<0.001	<0.001
	MW-2-12	12	12/11/2014	<1	<3.3	<3.3	<11	<11	<0.0005	<0.0009	<0.0009	<0.0009
	MW-2-20	20	12/11/2014	<1.3	<3.6	<3.6	<12	<12	<0.0005	<0.001	<0.001	<0.001
MW-3	MW-3-10	10	12/11/2014	<1.1	<3.1	<3.1	<10	<10	<0.0005	<0.001	<0.001	<0.001
	MW-3-12	12	12/11/2014	62	9.8	9.2	<11	<11	<0.022	<0.044	<0.044	<0.044
	DUP-121114	12	12/11/2014	76	<3.2	5.2	<11	<11	<0.023	<0.046	<0.046	<0.046
	MW-3-15	15	12/11/2014	<11	<3.2	<3.2	<11	<11	<0.0006	0.001	<0.001	<0.001
	MW-3-20	20	12/11/2014	5.7	<3.5	<3.5	<12	<12	<0.0005	<0.001	<0.001	<0.001
MW-4	MW-4-9	9	12/11/2014	<1.1	<3.1	<3.1	<10	<10	0.0008	<0.001	<0.001	<0.001
	MW-4-12	12	12/11/2014	27	<3.3	<3.3	<11	<11	<0.0005	<0.001	<0.001	<0.001
	MW-4-14	14	12/11/2014	12	<3.2	<3.2	<11	<11	0.001	0.0008	<0.0008	<0.0008
	MW-4-20	20	12/11/2014	<1	<3.3	<3.3	<11	<11	<0.0004	<0.0009	<0.0009	<0.0009
MW-5	MW-5-9	9	12/10/2014	<1.0	<3.1	<3.1	19	15	0.0007	<0.001	<0.001	<0.001
	MW-5-11	11	12/10/2014	<1.0	<3.1	<3.1	15	<10	0.001	<0.001	<0.001	<0.001
	MW-5-20	20	12/10/2014	<1.1	<3.3	<3.3	12	12	<0.0005	<0.001	<0.001	<0.001
MW-6	MW-6-12	12	12/10/2014	<1.1	<3.1	<3.1	15	14	<0.0005	<0.001	<0.001	<0.001
	MW-6-20	20	12/10/2014	<1	<3.4	<3.4	<11	<11	<0.0005	<0.001	<0.001	<0.001
MTCA Method A Cleanup Levels:				**100**	**2,000**	**2,000**	**2,000**	**2,000**	**0.03**	**7**	**6**	**9**
Analytical Method:				NWTPH-Gx	NWTPH-Dx Extended				USEPA 8260B			

All concentrations reported in units of mg/kg.

Abbreviations:

DUP = Duplicate
(ft.) = Feet
mg/kg = Milligrams per kilogram
MTCA = Model Toxics Control Act
NW = Northwest
TPH = Total Petroleum Hydrocarbons
TPH-DRO = TPH as Diesel-Range Organics
TPH-GRO = TPH as Gasoline-Range Organics
TPH-HRO = TPH as Heavy Oil-Range Organics
USEPA = United States Environmental Protection Agency

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Table 2
Summary of Soil Sampling Analytical Results- Fuel Additives and PAHs
La Bamba Restaurant/Former Unocal Service Station No. 372654
3202 Main Street
Union Gap, Washington

				Fuel Additives			Naphthalenes				Carcinogenic PAHs							
Sample Location	**Sample ID**	**Depth (ft.)**	**Date Sampled**	**MTBE**	**EDB**	**EDC**	**Naphthalene**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Total Naphthalenes**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluoranthene**	**Benzo(k) fluoranthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno (1,2,3-cd) pyrene**	**Total cPAHs[1]**
MW-1	MW-1-11	11	12/11/2014	<0.0005	<0.001	--	<0.003	--	--	--	--	--	--	--	--	--	--	--
	MW-1-12.5	12.5	12/11/2014	<0.0005	<0.001	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
	MW-1-14	14	12/11/2014	<0.0006	<0.001	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
	MW-1-20	20	12/11/2014	<0.0005	<0.001	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
MW-2	MW-2-9	9	12/11/2014	<0.0005	<0.001	--	<0.003	--	--	--	--	--	--	--	--	--	--	--
	MW-2-12	12	12/11/2014	<0.0005	<0.0009	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
	MW-2-20	20	12/11/2014	<0.0005	<0.001	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
MW-3	MW-3-10	10	12/11/2014	<0.0005	<0.001	--	<0.003	--	--	--	--	--	--	--	--	--	--	--
	MW-3-12	12	12/11/2014	<0.022	<0.044	<0.044	<0.00072	0.024	0.0079	0.0319	0.0017	<0.00072	0.00088	<0.00072	0.0018	<0.00072	<0.00072	0.00438
	DUP-121114	12	12/11/2014	<0.023	<0.046	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
	MW-3-15	15	12/11/2014	<0.0006	<0.001	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
	MW-3-20	20	12/11/2014	<0.0005	<0.001	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
MW-4	MW-4-9	9	12/11/2014	<0.0005	<0.001	--	0.005	--	--	--	--	--	--	--	--	--	--	--
	MW-4-12	12	12/11/2014	<0.0005	<0.001	<0.001	0.0025	0.0017	0.0045	0.0087	<0.00073	<0.00073	<0.00073	<0.00073	<0.00037	<0.00073	<0.00073	<0.00073
	MW-4-14	14	12/11/2014	<0.0004	<0.0008	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
	MW-4-20	20	12/11/2014	<0.0004	<0.0009	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
MW-5	MW-5-9	9	12/10/2014	<0.0005	<0.001	--	<0.003	--	--	--	--	--	--	--	--	--	--	--
	MW-5-11	11	12/10/2014	<0.0005	<0.001	<0.001	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00034	<0.00068	<0.00068	<0.00068
	MW-5-20	20	12/10/2014	<0.0005	<0.001	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
MW-6	MW-6-12	12	12/10/2014	<0.0005	<0.001	--	<0.003	--	--	--	--	--	--	--	--	--	--	--
	MW-6-20	20	12/10/2014	<0.0005	<0.001	--	<0.004	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels:				**0.1**	**0.005**	**--**	**See Total Naphthalenes**			**5**	**See Total Carcinogenic PAHs (Total cPAHs)**							**0.1**
Analytical Method:				USEPA 8260B			USEPA 8270C SIM											

All concentrations reported in units of mg/kg.

Abbreviations:

EDB = Ethylene dibromide
EDC = Ethylene dichloride
DUP = Duplicate
(ft.) = Feet
mg/kg = Milligrams per kilogram
MTBE = Methyl tertiary-butyl ether
MTCA = Model Toxics Control Act
PAHs = Polycyclic Aromatic Hydrocarbons
USEPA = United States Environmental Protection Agency

Notes:

1. Total cPAHs toxic equivalency calculated using the toxic equivalency factors listed in MTCA, Table 708-2.

Table 3
Summary of Soil Sampling Analytical Results- Metals and Other Non-Petroleum Contaminants
La Bamba Restaurant/Former Unocal Service Station No. 372654
3202 Main Street
Union Gap, Washington

				Metals					Halogenated VOCs				PCBs							
Sample Location	**Sample ID**	**Depth (ft.)**	**Date Sampled**	**Cadmium**	**Chromium**	**Lead**	**Nickel**	**Zinc**	**Methylene Chloride**	**PCE**	**1,1,1 - TCA**	**TCE**	**1016**	**1221**	**1232**	**1242**	**1248**	**1254**	**1260**	**Total PCBs**
MW-1	MW-1-11	11	12/11/2014	--	--	2.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-1-12.5	12.5	12/11/2014	--	--	2.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-1-14	14	12/11/2014	--	--	2.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-1-20	20	12/11/2014	--	--	2.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	MW-2-9	9	12/11/2014	--	--	2.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-2-12	12	12/11/2014	--	--	1.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-2-20	20	12/11/2014	--	--	2.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	MW-3-10	10	12/11/2014	--	--	5.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-3-12	12	12/11/2014	0.164	16.4	3.67	23.4	43.2	<0.088	<0.044	<0.044	<0.044	<0.0039	<0.0049	<0.0086	<0.0035	<0.0035	<0.0035	<0.0052	<0.0086
	DUP-121114	12	12/11/2014	--	--	2.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-3-15	15	12/11/2014	--	--	2.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-3-20	20	12/11/2014	--	--	2.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	MW-4-9	9	12/11/2014	--	--	4.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-4-12	12	12/11/2014	0.102	18.5	5.57	27.4	44.7	<0.002	<0.001	<0.001	<0.001	<0.0039	<0.0050	<0.0087	<0.0036	<0.0036	<0.0036	<0.0053	<0.0087
	MW-4-14	14	12/11/2014	--	--	2.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-4-20	20	12/11/2014	--	--	2.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	MW-5-9	9	12/10/2014	--	--	6.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-5-11	11	12/10/2014	0.153	24.0	4.14	11.4	52.7	<0.002	<0.001	<0.001	<0.001	<0.0037	<0.0047	<0.0082	<0.0034	<0.0034	<0.0034	<0.0050	<0.0082
	MW-5-20	20	12/10/2014	--	--	3.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	MW-6-12	12	12/10/2014	--	--	2.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-6-20	20	12/10/2014	--	--	2.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels:				**2**	**--**	**250**	**--**	**--**	**0.02**	**0.05**	**2**	**0.03**	**See Total PCBs**							**1**
Analytical Method:				USEPA 6010B					USEPA 8260B				USEPA 8082							

All concentrations reported in units of mg/kg.

Abbreviations:

DUP = Duplicate
(ft.) = Feet
mg/kg = Milligrams per kilogram
MTCA = Model Toxics Control Act
NW = Northwest
PCBs = Polychlorinated biphenyls
PCE = Tetrachloroethylene
TCA = Trichloroethane
TCE = Trichloroethylene
USEPA = United States Environmental Protection Agency
VOCs = Volatile Organic Compounds

Table 4
Summary of Groundwater Sampling Analytical Results
La Bamba Restaurant/Former Unocal Service Station No. 372654
3202 Main Street
Union Gap, Washington

Well ID/Date Sampled	TOC[1] (ft.)	DTW (ft.)	GWE (ft.)	TPH-GRO	TPH-DRO	TPH-DRO - Silica Gel Cleanup	TPH-HRO	TPH-HRO - Silica Gel Cleanup	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Naphthalene	2-Methyl-Naphthalene	Total Lead
MW-1																		
3/30/2015	980.62	12.88	967.74	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5	<0.1	<0.1	<4.7
7/1/2015	980.62	12.92	967.70	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0095	<0.5	<0.1	<0.1	<4.7
9/17/2015	980.62	12.68	967.94	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	<5.1
12/8/2015	980.62	12.31	968.31	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5	<0.1	<0.1	6.6
MW-2																		
3/30/2015	979.57	12.69	966.88	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5	<0.1	<0.1	<4.7
7/1/2015	979.57	12.68	966.89	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	<4.7
9/17/2015	979.57	12.43	967.14	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	<5.1
12/8/2015	979.57	12.05	967.52	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5	<0.1	<0.1	6.5
MW-3																		
3/30/2015	979.79	12.91	966.88	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	<4.7
7/1/2015	979.79	12.91	966.88	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	<4.7
9/17/2015	979.79	12.61	967.18	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5	<0.1	<0.1	<5.1
12/8/2015	979.79	12.26	967.53	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5	<0.1	<0.1	7.7
MW-4																		
3/30/2015	979.27	12.43	966.84	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	<4.7
7/1/2015	979.27	12.91	966.36	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	<4.7
9/17/2015	979.27	12.15	967.12	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5	<0.1	<0.1	<5.1
12/8/2015	979.27	11.77	967.50	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	7.1
MW-5																		
3/30/2015	979.79	12.81	966.98	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	<4.7
7/1/2015	979.79	12.82	966.97	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5	<0.1	<0.1	<4.7
9/17/2015	979.79	12.55	967.24	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	<5.1
12/8/2015	979.79	12.15	967.64	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0095	<0.5	<0.1	<0.1	8.9
MW-6																		
3/30/2015	980.38	12.88	967.50	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5	<0.1	<0.1	<4.7
7/1/2015	980.38	12.11	968.27	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0095	<0.5	<0.1	<0.1	<4.7
9/17/2015	980.38	12.67	967.71	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5	<0.1	<0.1	<5.1
12/8/2015	980.38	12.28	968.10	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5	<0.1	<0.1	6.5
QA																		
3/30/2015	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
7/1/2015	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
9/17/2015	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
12/8/2015	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
MTCA Method A Cleanup Levels:				**800/1,000[2]**	**500**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**0.01**	**5**	**160**	**--**	**15**
Current Method:				NWTPH-Gx	NWTPH-Dx Extended				USEPA 8260B									USEPA 6010

All concentrations reported in units of µg/L

Abbreviations:

DTW = Depth to Water
EDB = Ethylene dibromide
EDC = Ethylene dichloride
(ft.) = Feet
GWE = Groundwater Elevation
MTBE = Methyl tertiary-butyl ether
MTCA = Model Toxics Control Act
QA = Quality Assurance/Trip Blank
TOC = Top of Casing
TPH = Total Petroleum Hydrocarbons
-- = Not Measured/Not Analyzed
µg/L = Micrograms per liter
TPH-DRO = TPH as Diesel-Range Organics
TPH-GRO = TPH as Gasoline-Range Organics
TPH-HRO = TPH as Heavy Oil-Range Organics
USEPA = United States Environmental Protection Agency
VOCs = Volatile Organic Compounds

Notes:

1. TOC elevations have been surveyed in feet relative to the 1988 North American Vertical Datum.
2. TPH-GRO MTCA Method A cleanup level is 800 µg/L if benzene is present and 1,000 µg/L if benzene is not present.

Appendix A:
Monitoring Well Survey

SITE ADDRESS:
3202 MAIN ST
UNION GAP, WA 98903

TAX PARCEL NUMBER:
19120532449

AREA:
TOTAL SITE AREA IS 9,990± SQUARE FEET OR 0.2± ACRES.

METHOD OF SURVEY:
INSTRUMENTATION FOR THIS SURVEY WAS A TRIMBLE ELECTRONIC DISTANCE MEASURING UNIT. PROCEDURES USED IN THIS SURVEY WERE DIRECT AND REVERSE ANGLES, NO CORRECTION NECESSARY. MEETS STATE STANDARDS SET BY WAC 332–130–090.

BASIS OF BEARINGS:
THE CENTERLINE OF 1ST STREET BEARS N 00°04'12" E BETWEEN FOUND MONUMENTS, PER RECORD OF SURVEY, VOLUME 61, PAGE 56, RECORDS OF YAKIMA COUNTY, WASHINGTON.

LEGAL DESCRIPTION:
LOTS 11, AND 12, BLOCK 8, YAKIMA CITY, NOW UNION GAP, AS RECORDED IN VOLUME A OF PLATS, PAGE 33, RECORDS OF YAKIMA COUNTY, WASHINGTON.

TITLE REPORT REFERENCE:
THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.

DATE OF SURVEY:
FEBRUARY OF 2015

20 0 10 20
(IN FEET)
1 inch = 20 ft.

TABLE OF COORIDNATES AND ELEVATIONS

MW1:
N5328.88, E10175.63
TOP OF PIPE= 980.62'
TOP OF LID = 980.97'

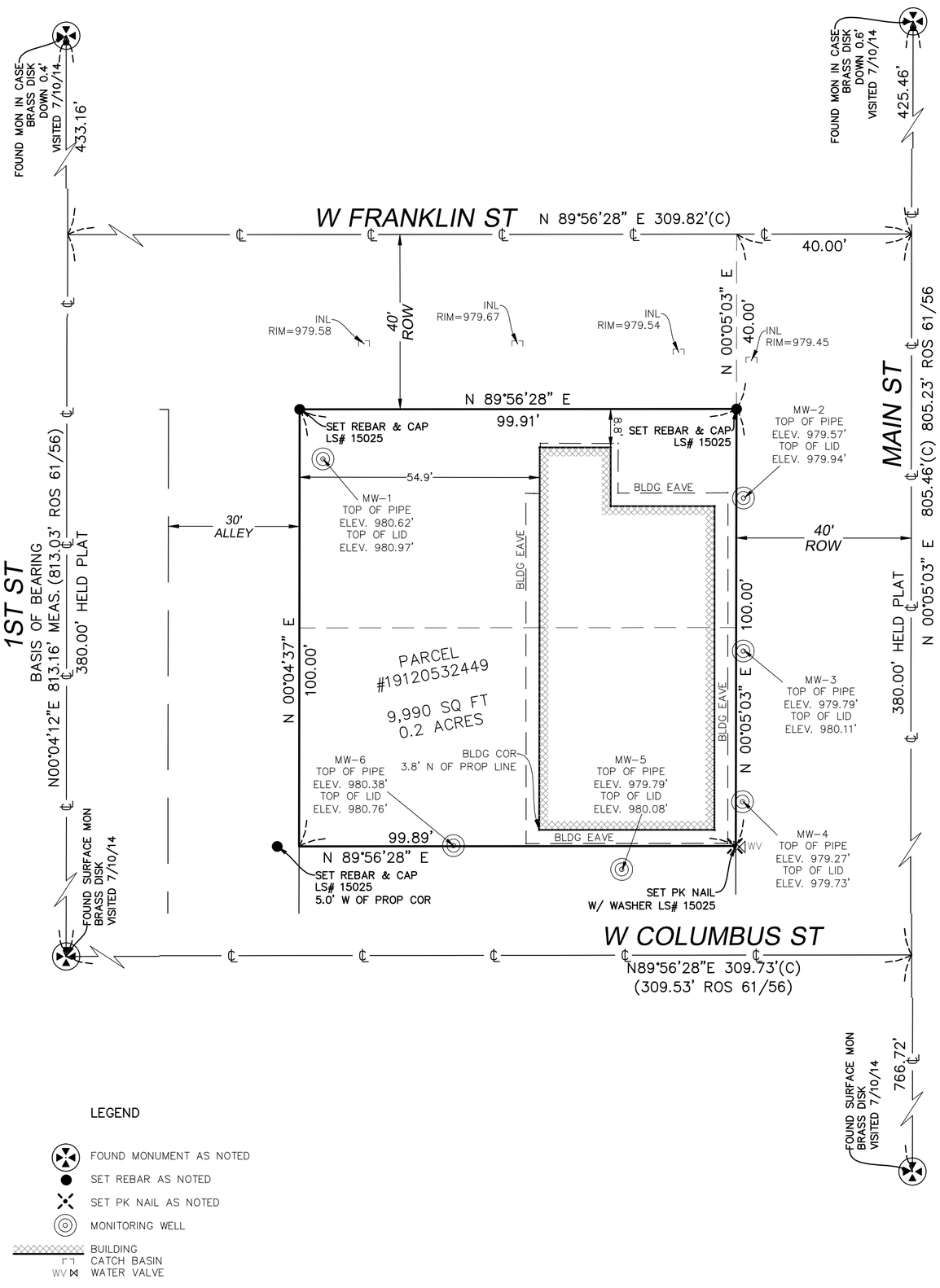
MW2:
N5319.88, E10271.90
TOP OF PIPE = 979.57'
TOP OF LID = 979.94'

MW3:
N5284.84, E10271.89
TOP OF PIPE = 979.79'
TOP OF LID = 980.11'

MW4:
N5250.31, E10271.74
TOP OF PIPE = 979.27'
TOP OF LID = 979.73'

MW5:
N5234.72, E10244.05
TOP OF PIPE = 979.79'
TOP OF LID = 980.08'

MW6:
N5240.33, E10205.48
TOP OF PIPE = 980.38'
TOP OF LID = 980.76'



LEGEND

- FOUND MONUMENT AS NOTED
- SET REBAR AS NOTED
- SET PK NAIL AS NOTED
- MONITORING WELL
- BUILDING
- CATCH BASIN
- WV WATER VALVE

GeoDimensions
GeoDimensions, Inc., 10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4488 support@geodimensions.net
www.geodimensions.net

JOHN J. GREEN JR. 15025 REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF WASHINGTON

MONITORING WELL SURVEY

NW 1/4, SW 1/4, SEC. 5, T. 12N., R. 19E., W.M.

LEIDOS

PARCEL NO. 19120532449
3202 MAIN ST
UNION GAP WA 98903

JOB NO.:	140863
DATE:	05/05/15
DRAFTED BY:	VLJ
CHECKED BY:	EJG/JGM
SCALE:	1" = 20'
	1 OF 1

Appendix B:
Boring Logs and Well Construction Diagrams

leidos

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-1

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/8/2014
Date Completed: 12/11/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 980.62 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	Asphalt top 2 inches.
Moist	1.7				SM		2	(SM) Brown, medium dense, silty SAND with 30% silt and 70% fine sand; no odor, no sheen.
Moist	1.4						4	Brown, dense, silty SAND with 5% gravel, 25% silt, 70% fine sand; no odor, no sheen.
					GM		5	(GM) Cobbles.
							6	Well graded, silty, sandy GRAVEL with 5% silt and 35% fine to coarse sand. No recovery with hand auger.
					GM		7	(GM) Same as above except 70% cobbles and 25% fine to coarse sand. No recovery with hand auger.
Moist	0.0				SM		8	(SM) Gray-brown, gravelly SAND with 5-10% silt, 5-10% cobbles, 20% gravel, and 60% fine to coarse sand; no sheen.
Moist	0.0						9	Same as above; no sheen.
							10	

WELL DIAGRAM

- Well box
- Sch. 40 PVC riser
- Cement Seal
- Ecology well tag ID # BHN 932
- Hydrated bentonite chip seal

leidos

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-1

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/8/2014
Date Completed: 12/11/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 980.62 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
Moist	0.0				SM			(SM) Same as above; no sheen.	
Moist	0.0		MW-1-11	G <1.4 D <3.1 HO <10 B = 0.0007			11	Same as above; no odor, no sheen.	Filter Pack (2/12 Monterey Sand)
Moist	0.0						12	Same as above; no, odor, no sheen.	
Wet	0.0		MW-1-12.5	G <1.1 D <3.2 HO <11 B = 0.0007	SM			(SM) Same as above except gray; slight odor, slight sheen.	
Wet	0.0						13	(GM) Gray-brown, dense, sandy GRAVEL; no odor, no sheen.	
Wet	0.0		MW-1-14	G <1.1 D = 23 HO = 57 B = 0.0008	GM		14	Same as above; no odor, no sheen.	20 Slot PVC Screen
Wet	0.0						15	Same as above; no sheen.	
Wet	0.0						16	(GM) Same as above; no odor, no sheen.	
Wet	0.0				GM		17	Same as above; no odor, no sheen.	
Wet	0.0						18	Gray-brown, sandy GRAVEL with 5% silt, 20% cobbles, 30% fine to coarse sand, and 45% gravel.	
Wet	0.0						19	(GM) Same as above; no odor, no sheen.	
Wet	0.0		MW-1-20	G <1.1 D <3.2 HO <11 B <0.0005	GM		20		

Bottom of borehole at 20.0 feet.

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18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-2

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/9/2014
Date Completed: 12/11/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 979.57 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	Asphalt top 2 inches.
Moist	1.1				SM		2	(SM) Olive gray-brown, well graded, silty SAND with 5-10% gravel (fine to cobbles), 15% silt, and 80% fine to coarse sand; no odor, no sheen.
Moist	0.0						4	Same as above; no odor, no sheen.
					GM		4.5	(GM) 40% cobbles with 10% sand matrix.
							5	Same as above.
							6	No recovery from 4 to 8 feet.
Moist	0.0				SW		8	(SW) Gray-brown, gravelly SAND with 5-10% silt, 10% cobbles, and 20% gravel; no sheen.
Moist	0.0		MW-2-9	G <1.1 D <3.1 HO <10 B <0.0005			9	Same as above; slight sheen.
							10	

WELL DIAGRAM

- Well box
- Sch. 40 PVC riser
- Cement Seal
- Ecology well tag ID # BIM 575
- Hydrated bentonite chip seal

leidos

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-2

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/9/2014
Date Completed: 12/11/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 979.57 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
Moist	0.0				GM		10	(GM) Gray-brown, well graded, sandy GRAVEL with 5-10% cobbles; slight sheen.
Moist	0.0						11	Same as above; no sheen.
Wet	0.0		MW-2-12	G <1 D <3.3 HO <11 B <0.0005			12	Gray-brown, sandy GRAVEL with 15% cobbles; no sheen.
Wet	0.0						13	(GM) Same as above; no sheen.
Wet	0.0				GM		14	Same as above; no sheen.
Wet	0.0						15	(SW) Gray-brown, well graded, gravelly SAND with 15% cobbles, 15% gravel, and 5% silt; no odor, no sheen.
Wet	0.0				SW		16	(GM) Gray-brown, sandy GRAVEL; no odor, no sheen.
Wet	0.0				GM		17	
Wet	0.0						18	Gray-brown, sandy GRAVEL with 5% silt and 20% cobbles; no odor, no sheen.
Wet	0.0						19	Same as above; no odor, no sheen.
Wet	0.0		MW-2-20	G <1.3 D <3.6 HO <12 B <0.0005	SW		20	(SW) Gray-brown, gravelly SAND with 5% cobbles, 20% gravel, 5% silt, and 60% fine to coarse, well graded sand; no sheen.

Bottom of borehole at 20.0 feet.

WELL DIAGRAM

- Filter Pack (2/12 Monterey Sand)
- 20 Slot PVC Screen

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18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-3

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/10/2014
Date Completed: 12/11/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 979.79 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	Asphalt top 2 inches.
Moist	0.0				SM		2	(SM) Brown, silty SAND with 20% silt, and 80% fine to medium sand; no odor, no sheen.
Moist	0.0						4	Same as above; no odor, no sheen.
							5	Cobbles at 4.5 feet.
							6	No recovery from 4 to 8 feet.
Moist	0.0				SW		8	(SW) Gray-brown, well graded, gravelly SAND with 10% cobbles and 5% silt; no odor, slight sheen.
Moist	0.0						9	Same as above; slight odor, no sheen.
							10	

WELL DIAGRAM

- Well box
- Sch. 40 PVC riser
- Cement Seal
- Ecology well tag ID # BBC 193
- Hydrated bentonite chip seal

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18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-3

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/10/2014
Date Completed: 12/11/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 979.79 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
Moist	0.0		MW-3-10	G <1.1 D <3.1 HO <10 B <0.0005	SW			(SW) Same as above; no odor, no sheen.	
Moist	0.0						11	Same as above; slight odor, slight sheen.	Filter Pack (2/12 Monterey Sand)
Wet	156		MW-3-12	G = 62 D = 9.8 HO <11 B <0.022			12	Gray, gravelly SAND with 5% cobbles; strong odor, slight sheen.	
								(GM) Gray-brown, sandy GRAVEL with 5% silt; no sheen.	▼
Wet	0.0				GM		13		
Wet	0.0						14	Same as above; slight odor, no sheen.	20 Slot PVC Screen
Wet	0.0		MW-3-15	G <11 D <3.2 HO <11 B <0.0006			15	Same as above; slight odor, no sheen.	
Wet	0.0						16	(GM) Same as above; no sheen.	
Wet	0.0				GM		17	Same as above; no sheen.	
Wet	0.0						18	Same as above; no odor, no sheen.	
Wet	0.0						19	(GM) Same as above; no odor, no sheen.	
Wet	0.0		MW-3-20	G = 5.7 D <3.5 HO <12 B <0.0005	GM		20	Same as above; no odor, no sheen.	

Bottom of borehole at 20.0 feet.

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18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-4

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/10/2014
Date Completed: 12/11/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 979.27 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	Asphalt top 2 inches.
Moist	0.0				SW		2	(SW) Brown, well graded, gravelly SAND with 15% cobbles and 5% silt; no odor, no sheen.
							3	
							4	(GM) Sandy GRAVEL with 25% cobbles; no odor, no sheen.
Moist	0.0						5	
					GM		6	No recovery from 4 to 8 feet.
							7	
Moist	0.9						8	(SW) Gray-brown, gravelly SAND with 5-10% cobbles, 15-20% gravel, and 5% silt; no sheen.
					SW			
Moist	1.6		MW-4-9	G <1.1 D <3.1 HO <10 B = 0.0008			9	Same as above; slight sheen.
							10	

WELL DIAGRAM

- Well box
- Sch. 40 PVC riser
- Cement Seal
- Ecology well tag ID # BCC 173
- Hydrated bentonite chip seal

leidos

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-4

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/10/2014
Date Completed: 12/11/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 979.27 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
Moist	1.1				SW			(SW) Gray-brown, gravelly SAND; slight sheen.	
Moist	1.6						11	Same as above; slight sheen.	Filter Pack (2/12 Monterey Sand)
Wet	49.1		MW-4-12	G = 27 D <3.3 HO <11 B <0.0005			12	Same as above; slight sheen.	
Wet	3.9				SM/SW		13	(SM/SW) Gray-brown, gravelly SAND with 20% gravel, 10% silt, 5% cobbles, and 55% coarse to fine sand; no odor, no sheen.	
Wet	3.8		MW-4-14	G = 12 D <3.2 HO <11 B = 0.001			14	Same as above; no odor, no sheen.	20 Slot PVC Screen
Wet	0.0				GM		15	(GM) Gray-brown, sandy GRAVEL with 5% silt and 20% cobbles; no odor, no sheen.	
Wet	0..0						16	Same as above; no sheen.	
Wet	0.0						17	Same as above; no odor, no sheen.	
Wet	0.0				GM		18	(GM) Gray-brown, well graded, sandy GRAVEL with 10% cobbles and 5% silt; no sheen.	
Wet	0.0						19	Same as above; no sheen.	
Wet	0.0		MW-4-20	G <1 D <3.3 HO <11 B <0.0004			20	Gray-brown, well graded, sandy GRAVEL with 5% silt, 30% coarse to fine sand, 5% cobbles, 60% fine to coarse gravel; no sheen.	

Bottom of borehole at 20.0 feet.

leidos

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-5

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/9/2014
Date Completed: 12/10/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 979.79 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
					GP		0	(GP) GRAVEL top 3-4 inches.	Well box; Sch. 40 PVC riser; Cement Seal
Moist	2.0				SW		2	(SW) Olive brown-gray, well graded, gravelly SAND with 20% gravel (fine gravel to cobbles), 10% silt, and 65% fine to coarse sand; no odor, no sheen.	Ecology well tag ID # BBC 172
							4	(GM) Cobbles with 5-10% fines. No recovery from 3.5 to 8 feet.	Hydrated bentonite chip seal
Moist	0.0				GM		8	Cobbles; no odor, slight sheen.	
Moist	0.0		MW-5-9	G <1.0 D <3.1 HO = 19 B = 0.0007	SW		9	(SW) Gray-brown, well graded, gravelly SAND with 25% fine to coarse gravel, 10% cobbles, and a matrix of fine to coarse sand; no odor, slight sheen.	
							10		

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18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-5

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/9/2014
Date Completed: 12/10/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

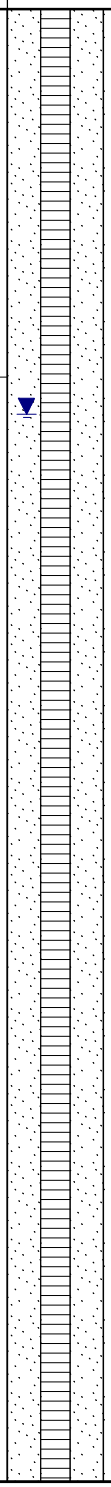
Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 979.79 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
Moist	0.0				SW			(SW) Same as above; slight sheen.
Moist	0.0		MW-5-11	G <1.0 D <3.1 HO = 15 B = 0.001			11	Same as above; slight sheen.
Wet	0.0						12	Same as above.
Wet	0.0				GM		13	(GM) Gray-brown, well graded, sandy GRAVEL with 5% silt, 20% fine to coarse sand, 10% cobbles, and 65% fine to coarse gravel; no odor, no sheen.
Wet	0.0						14	Same as above; no sheen.
Wet	0.0						15	Same as above; no sheen.
Wet	0.0						16	(GM) Same as above; no sheen.
Wet	0.0				GM		17	Same as above; no sheen.
Wet	0.0						18	Same as above; no sheen.
Wet	0.0						19	(GM) Same as above; no sheen.
Wet	0.0		MW-5-20	G <1.1 D <3.3 HO = 12 B <0.0005	GM		20	Same as above; no sheen.

Bottom of borehole at 20.0 feet.

WELL DIAGRAM



leidos

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-6

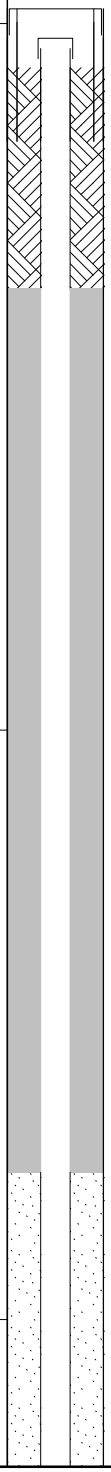
Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/9/2014
Date Completed: 12/10/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 980.38 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
							0	Asphalt top 2 inches.
Moist	0.2				SM		2	(SM) Brown, silty SAND with 30% silt and 70% fine sand; no odor, no sheen.
							3	Cobbles encountered at 3.5 feet.
Moist	0.3				SM		4	(SM) Brown, silty SAND with 15% cobbles, 10% silt, and 75% fine sand; no odor, no sheen.
							5	(GM) Brown, well graded, silty GRAVEL with 75% cobbles, 5% silt, and 20% fine sand.
					GM		7	No recovery with hand auger 6 to 8 feet.
Moist	0.0						8	GRAVEL with 10% fines; no sheen.
Dry					SW		9	(SW) Gravelly SAND with 10% silt, 35% gravel, and 55% fine to coarse sand; no odor, no sheen.
							10	



leidos

18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Monitoring Well: MW-6

Project: Former Unocal Station No. 372654
Client: Chevron EMC
Location: 3202 Main Street, Union Gap, WA
Logged By: R. Otteman

Date Started: 12/9/2014
Date Completed: 12/10/2014
Driller: Cascade Drilling
Drill Method: Air Knife/Sonic

Total Boring Depth: 20 ft
Hole Diameter: 6-12 in
Well Depth: 20 ft
TOC Elevation: 980.38 ft

Well Diameter: 2 in
Well Screen: 10-20 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
Dry	0.0				SW		10	(SW) Same as above; no sheen.	
Moist	0.0						11	Gravelly SAND with 10% silt, 35% gravel, and 55% fine to coarse sand; no odor, no sheen.	Filter Pack (2/12 Monterey Sand)
Moist	0.0		MW-6-12	G <1.1 D <3.1 HO = 15 B <0.0005			12	Same as above; no odor, no sheen.	
Wet	0.0				GM		13	(GM) Gray-brown, dense, well graded GRAVEL with 15% sand and 5% silt; no odor, no sheen.	
Wet	0.0						14	Same as above; no odor, no sheen.	20 Slot PVC Screen
Wet	0.0				GW		15	(GW) Gray-brown, well graded GRAVEL with 5% silt and 5% sand; no odor, no sheen.	
Wet	0.0						16	Same as above; no odor, no sheen.	
Wet	0.0				GM		17	(GM) Gray-brown GRAVEL with 15% fine to coarse sand, 5% silt, and 80% fine gravel to cobbles; no odor, no sheen.	
Wet	0.0						18		
Wet	0.0						19		
Wet	0.0		MW-6-20	G <1 D <3.4 HO <11 B <0.0005			20	Same as above; no sheen.	

Bottom of borehole at 20.0 feet.

Appendix C:
Groundwater Monitoring and Sampling Data Packages

GETTLER-RYAN INC.

TRANSMITTAL

April 3, 2015
G-R #386773

TO: Mr. Russell Shropshire
Leidos, Inc.
18912 North Creek Parkway, Suite 101
Bothell, Washington 98011

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6805 Sierra Court, Suite G
Dublin, California 94568

RE: Former Unocal Station
#372654
3202 Main Street
Union Gap, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **First Quarter Event of March 30, 2015**

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/211556

GETTLER-RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	**Chevron #372654**	Date:	3.30.15
Address:	**3203 Main Street**		
City/St.:	**Union Gap, WA**		
Status of Site:	C-STORE		

DRUMS:

Please list below ALL DRUMS on site:
(i.e., drum description, condition, labeling, contents and location of drums)

#	Description	Condition	Labeling	Contents/Capacity	Location
	NO DRUMS ONSITE				

WELLS:

Please check the condition of ALL WELLS on site:
(i.e., gaskets, bolts, replaced well plug and/or well lock, well box condition and etc.)

Well ID	Gaskets *(M) Missing (R) Replaced*	Bolts *(M) Missing (R) Replaced*	Replaced Plug *Y/N*	Replaced Lock *Y/N*	Well Box *Manufacturer/Size/# of Bolts*	Other
MW-1	OK	OK	OK	OK	8" Morris x 3	
MW-2	↓	↓	↓	↓	↓	
MW-3	↓	↓	↓	↓	↓	
MW-4	↓	↓	↓	↓	↓	
MW-5	↓	↓	↓	↓	↓	
MW-6	↓	↓	↓	↓	↓	

Additional Comments/Observations: _____

Standard Operating Procedure, Low-Flow Purging and Sampling

Gettler-Ryan Inc. field personnel adhere to the following Standard Operating Procedure (SOP) for the collection and handling of representative groundwater samples using the Low-Flow (Minimal-Drawdown) Purging technique. This SOP incorporates purging and sampling methods discussed in U.S. EPA, Ground Water Issue, Publication Number EPA/540/S-95/504, April 1996 by Puls, R.W. and M.J. Barcelona - *"Low-Flow (Minimal-Drawdown) Ground-Water Sampling Procedures."*

A QED Well Wizard™ (or equivalent) bladder pump or Peristaltic Pump will be used to purge and sample selected wells as outlined in the scope-of-work. An in-line flow cell or other multi-parameter meter is used to collect water quality indicating parameters during purging.

Initial Pump Discharge Test Procedures

The Static Water Level (SWL) is measured in all wells at the site prior to the installation of the pump or tubing and initiation of the test procedures in any well. In addition, the presence or absence of separate-phase hydrocarbons (SPH) is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot. The SWL measurement and SPH thickness, if any, will be recorded on the field data sheet.

The bladder pump or suction inlet tubing of the peristaltic pump is then positioned with its inlet located within the screened interval of the well. The in-line flow cell is then connected to the discharge tubing. After pump installation, the SWL is allowed to recover to its original level. The pump is then started at a discharge rate between 100 ml to 300 ml per minute with the in-line flow cell connected. The water level is monitored continuously for any change from the original measurement and the discharge rate is adjusted until an optimum discharge rate (ODR) is determined. The goal for the ODR is to produce a stable drawdown of less than 0.1 meter as allowed by site conditions; however the total drawdown from the initial SWL should not exceed 25% of the distance between pump inlet location and the top of the well screen. Once achieved, the ODR will be confirmed by volumetric discharge measurement and recorded on the field data sheet.

Purging and Water Quality Parameter Measurement

When the ODR has been determined and the SWL drawdown has been established within the acceptable range, and a minimum of one pump system volume (bladder volume and/or discharge tubing volume) has been purged, field measurements for temperature (T), pH, conductivity (Ec), and if required, oxygen reduction potential (ORP) and dissolved oxygen (DO) will be collected and documented on the field data sheet. Measurements should be taken every three to five minutes until parameters stabilize for three consecutive readings. The minimum parameter subset of T (± 10%), pH (± 0.1 unit), and Ec (± 10 uS) are required to stabilize. Additional parameters that may be required are DO (± 0.2 mg/l) and ORP (± 20 mV).

Sample Collection

When water quality parameters have stabilized, and the SWL drawdown remains established within the acceptable range, groundwater sample collection may begin. If used, the in-line flow cell and its tubing are disconnected from the discharge tubing prior to sample collection. Water samples are collected from the discharge tubing into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler,

maintained at 4°C for transport to the laboratory. A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 3.30.15 (inclusive)
City: **Union Gap, WA** Sampler: J.P

Well ID MW-1 Date Monitored: 3.30.15
Well Diameter 2 in.
Total Depth 19.71 ft.
Depth to Water 12.80 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.91 xVF ~ = ~ x3 case volume = Estimated Purge Volume: ~ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.24

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	x	Peristaltic Pump	x
QED Bladder Pump		QED Bladder Pump	
Other: X6I MP6 666		Other: TOBING	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1210 Weather Conditions: SUN
Sample Time/Date: 1240 / 3.30.15 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: ~ Volume: ~ ltrs DTW @ Sampling: 12.91

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS (mS) µmhos/cm)	Temperature ((C) / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1229	3.6	6.70	.316	13.55	7.20	73.7	12.91
1231	4.2	6.70	.317	15.51	7.20	73.6	12.91
1234	4.8	6.71	.317	15.48	7.18	73.9	12.91

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 15'-16'

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Plug: _____ Add/Replaced Lock: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 3.30.15 (inclusive)
City: **Union Gap, WA** Sampler: J.P

Well ID **MW-2** Date Monitored: 3.30.15
Well Diameter 2 in.
Total Depth 19.10 ft.
Depth to Water 12.69 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.41 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.97

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Peristaltic Pump x
QED Bladder Pump
Other: YSI MP5 556

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Metal Filters
Peristaltic Pump x
QED Bladder Pump
Other: TUBING

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1005 Weather Conditions: SUN
Sample Time/Date: 1035 / 3.30.15 Water Color: CLEAR Odor: Y (N)
Approx. Flow Rate: 225 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.70

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1023	4.0	6.77	.321	15.03	6.45	43.2	12.69
1026	6.7 10.0	6.76	.321	14.94	6.53	44.4	12.70
1029	10.0	6.78	.320	14.91	6.41	44.6	12.70

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 15-16'

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 3.30.15 (inclusive)
City: **Union Gap, WA** Sampler: J.P

Well ID **MW-3** Date Monitored: 3.30.15
Well Diameter **2** in.
Total Depth 19.24 ft.
Depth to Water 12.91 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.33 xVF ~ = ~ x3 case volume = Estimated Purge Volume: ~ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.17

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	x	Peristaltic Pump	x
QED Bladder Pump		QED Bladder Pump	
Other: YSI MPS 556		Other: TOBINO	

Start Time (purge): 1539 Weather Conditions: SUN
Sample Time/Date: 1610 / 3.30.15 Water Color: CLEAR Odor: Y (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: ~ Volume: ~ ltrs DTW @ Sampling: 12.93

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS (mS) µmhos/cm)	Temperature (C F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1557	3.6	6.76	.318	16.64	0.84	72.9	12.93
1600	4.2	6.74	.319	16.69	3.51	73.16	12.93
1603	4.8	6.74	.319	16.74	5.49	74.1	12.93

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 15'-16'

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 3.30.15 (inclusive)
City: **Union Gap, WA** Sampler: J.P

Well ID **MW-4** Date Monitored: 3.30.15
Well Diameter **2** in.
Total Depth 19.68 ft.
Depth to Water 12.43 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.25 xVF ___ = ___ x3 case volume = Estimated Purge Volume: ___ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.88

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	X	Peristaltic Pump	X
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: ___ (2400 hrs)
Time Completed: ___ (2400 hrs)
Depth to Product: ___ ft
Depth to Water: ___ ft
Hydrocarbon Thickness: ___ ft
Visual Confirmation/Description: ___
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ___ ltr
Amt Removed from Well: ___ ltr
Water Removed: ___ ltr
Product Transferred to: ___

Start Time (purge): 1429 Weather Conditions: Sun
Sample Time/Date: 1500 / 3.30.15 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: ~~NONE~~ SLIGHTLY GREY
Did well de-water? NO If yes, Time: - Volume: - ltrs DTW @ Sampling: 12.46

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS (mS) µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1447	3.6	6.91	.323	16.49	5.69	63.8	12.46
1460	4.2	6.90	.322	16.55	5.66	63.3	12.46
1453	4.8	6.90	.323	16.59	5.63	62.9	12.46

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	10 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 16-16' PURGE AN EXTRA 10 MIN TO GET TURBIDITY DOWN, PHOTO

Add/Replaced Gasket: ___ Add/Replaced Bolt: ___ Add/Replaced Plug: ___ Add/Replaced Lock: ___

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 3·30·15 (inclusive)
City: **Union Gap, WA** Sampler: J.P

Well ID **MW-5** Date Monitored: 3·30·15
Well Diameter 2 in.
Total Depth 19.78 ft.
Depth to Water 12.81 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.97 xVF - = - x3 case volume = Estimated Purge Volume: - gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.20

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Peristaltic Pump x
QED Bladder Pump
Other: YSI MP5 556

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Metal Filters
Peristaltic Pump x
QED Bladder Pump
Other: TUBING

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1323 Weather Conditions: Sun
Sample Time/Date: 1350 / 3·30·15 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? No If yes, Time: - Volume: - ltrs DTW @ Sampling: 12.83

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / (mS) µmhos/cm)	Temperature (C) / F	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1341	3.6	6.91	.335	15.97	7.85	64.3	12.83
1344	4.2	6.90	.334	16.91	7.82	64.6	12.83
1347	4.8	6.90	.334	16.86	7.80	64.0	12.83

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 15'-16'

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 3.30.15 (inclusive)
City: **Union Gap, WA** Sampler: J.P

Well ID MW-6 Date Monitored: 3.30.15
Well Diameter 2 in.
Total Depth 16.00 ft.
Depth to Water 12.80 ft.
1.20 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.32

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr
Product Transferred to: _____

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	x	Peristaltic Pump	x
QED Bladder Pump		QED Bladder Pump	
Other: YSI MPS 556		Other: RUBIN 16	

Start Time (purge): 1100 Weather Conditions: Sun
Sample Time/Date: 1135 / 3.30.15 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? No If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.90

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C) / F	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1124	3.6	6.79	.332	15.81	6.75	41.4	12.90
1127	4.2	6.80	.332	15.702	6.92	41.8	12.90
1130	4.8	6.80	.334	15.66	7.04	42.3	12.90

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 16'-17'

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Plug: _____ Add/Replaced Lock: _____

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

For Eurofins Lancaster Laboratories use only
Acct. # _____ Group # _____ Sample # _____
Instructions on reverse side correspond with circled numbers.

(1) Client Information

Facility # SS#372654-OML G-R#385900 WBS

Site Address: 3202 MAIN STREET, UNION GAP, WA

Chevron PM: EH Lead Consultant: LEIDOSRS Russell Shropshire

Consultant/Office: Gettler-Ryan, Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568

Consultant Project Mgr.: Deanna L. Harding, (deanna@grinc.com)

Consultant Phone #: (925) 551-7444 x180

Sampler: J. PAYNE

(2) Sample Identification

Sample Identification	Collected Date	Collected Time	(3) Grab	Composite	(4) Matrix: Soil	Water	Sediment	Potable	Ground	NPDES	Surface	Oil	Air	Total Number of Containers	(5) Analyses Requested: BTEX + MTBE 8021	8260	Naphth	8260 full scan	Oxygenates	NWTPH-Gx	NWTPH-Dx with Silica Gel Cleanup	NWTPH-Dx without Silica Gel Cleanup	WA VPH	WA EPH	Lead	Total	Diss.	Method	Naphthalene 1,2 Methyl Naphthalene 8270	EDB 8011	1,2 DCE 8260B
RA	3.30.15		X			X								2	X					X										
MW-1		1240	X			X								13	X					X	X	X			X	X	X	X	X	X
MW-2		1035	X			X								13	X					X	X	X			X	X	X	X	X	X
MW-3		1610	X			X								13	X					X	X	X			X	X	X	X	X	X
MW-4		1600	X			X								13	X					X	X	X			X	X	X	X	X	X
MW-5		1350	X			X								13	X					X	X	X			X	X	X	X	X	X
MW-6		1135	X			X								13	X					X	X	X			X	X	X	X	X	X

SCR #: _____

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Mu t meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run _____ oxy's on highest hit
- ☐ Run _____ oxy's on all hits

(6) Remarks

Requesting results for both Dx and Dx with silica gel cleanup

(7) Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | EDF/EDD 24 hour

Relinquished by	Date	Time	Received by	Date	Time (9)
	3-31-15	1600			
Relinquished by			Received by	Date	Time
Relinquished by Commercial Carrier: UPS X FedEx _____ Other _____			Received by	Date	Time
Temperature Upon Receipt _____ °C			Custody Seals Intact? Yes No		

(8) Data Package (circle if required)

Type I - Full

Type VI (Raw Data)

EDD (circle if required)

CVX-RTBU-FI_05 (default)

Other: _____

GETTLER-RYAN INC.

TRANSMITTAL

July 10, 2015
G-R #386773

TO: Mr. Russell Shropshire
Leidos, Inc.
18912 North Creek Parkway, Suite 101
Bothell, Washington 98011

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6805 Sierra Court, Suite G
Dublin, California 94568

RE: Former Unocal Station
#372654
3202 Main Street
Union Gap, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Second Quarter Event of July 1, 2015**

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/211556

GETTLER-RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	**Chevron #372654**	Date:	7/1/15
Address:	**3203 Main Street**		
City/St.:	**Union Gap, WA**		
Status of Site:	STORE PARKING LOT		

DRUMS:

Please list below ALL DRUMS on site:
(i.e., drum description, condition, labeling, contents and location of drums)

#	Description	Condition	Labeling	Contents/Capacity	Location
	NO DRUMS	ON	SITE		

WELLS:

Please check the condition of ALL WELLS on site:
(i.e., gaskets, bolts, replaced well plug and/or well lock, well box condition and etc.)

Well ID	Gaskets (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Replaced Plug Y/N	Replaced Lock Y/N	Well Box Manufacturer/Size/# of Bolts	Other
MW-1	OK	OK	NO	NO	MORRIS / 8 / 3	
MW-2	↓	↓	↓	↓	↓ ↓ ↓	
MW-3						
MW-4						
MW-5						
MW-6						

Additional Comments/Observations: _____

Standard Operating Procedure, Low-Flow Purging and Sampling

Gettler-Ryan Inc. field personnel adhere to the following Standard Operating Procedure (SOP) for the collection and handling of representative groundwater samples using the Low-Flow (Minimal-Drawdown) Purging technique. This SOP incorporates purging and sampling methods discussed in U.S. EPA, Ground Water Issue, Publication Number EPA/540/S-95/504, April 1996 by Puls, R.W. and M.J. Barcelona - *"Low-Flow (Minimal-Drawdown) Ground-Water Sampling Procedures."*

A QED Well Wizard™ (or equivalent) bladder pump or Peristaltic Pump will be used to purge and sample selected wells as outlined in the scope-of-work. An in-line flow cell or other multi-parameter meter is used to collect water quality indicating parameters during purging.

Initial Pump Discharge Test Procedures

The Static Water Level (SWL) is measured in all wells at the site prior to the installation of the pump or tubing and initiation of the test procedures in any well. In addition, the presence or absence of separate-phase hydrocarbons (SPH) is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot. The SWL measurement and SPH thickness, if any, will be recorded on the field data sheet.

The bladder pump or suction inlet tubing of the peristaltic pump is then positioned with its inlet located within the screened interval of the well. The in-line flow cell is then connected to the discharge tubing. After pump installation, the SWL is allowed to recover to its original level. The pump is then started at a discharge rate between 100 ml to 300 ml per minute with the in-line flow cell connected. The water level is monitored continuously for any change from the original measurement and the discharge rate is adjusted until an optimum discharge rate (ODR) is determined. The goal for the ODR is to produce a stable drawdown of less than 0.1 meter as allowed by site conditions; however the total drawdown from the initial SWL should not exceed 25% of the distance between pump inlet location and the top of the well screen. Once achieved, the ODR will be confirmed by volumetric discharge measurement and recorded on the field data sheet.

Purging and Water Quality Parameter Measurement

When the ODR has been determined and the SWL drawdown has been established within the acceptable range, and a minimum of one pump system volume (bladder volume and/or discharge tubing volume) has been purged, field measurements for temperature (T), pH, conductivity (Ec), and if required, oxygen reduction potential (ORP) and dissolved oxygen (DO) will be collected and documented on the field data sheet. Measurements should be taken every three to five minutes until parameters stabilize for three consecutive readings. The minimum parameter subset of T (± 10%), pH (± 0.1 unit), and Ec (± 10 uS) are required to stabilize. Additional parameters that may be required are DO (± 0.2 mg/l) and ORP (± 20 mV).

Sample Collection

When water quality parameters have stabilized, and the SWL drawdown remains established within the acceptable range, groundwater sample collection may begin. If used, the in-line flow cell and its tubing are disconnected from the discharge tubing prior to sample collection. Water samples are collected from the discharge tubing into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler,

maintained at 4°C for transport to the laboratory. A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 7/1/15 (inclusive)
City: **Union Gap, WA** Sampler: GM

Well ID **MW-1** Date Monitored: 7/1/15
Well Diameter **2** in.
Total Depth 19.71 ft.
Depth to Water 12.92 ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

6.79 xVF ~ = ~ x3 case volume = Estimated Purge Volume: ~ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: ~

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Peristaltic Pump X
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Metal Filters
Peristaltic Pump X
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1234 Weather Conditions: SUNNY
Sample Time/Date: 1325/7/1/15 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: ~ Volume: ~ ltrs DTW @ Sampling: 12.96

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature ((C) / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1252	3.6	7.15	197	20.1			12.96
1255	4.2	7.16	194	20.0			12.96
1258	4.8	7.14	196	20.0			12.96

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	4 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ~ 14.00

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #372654 Job Number: 385900
Site Address: 3203 Main Street Event Date: 7/1/15 (inclusive)
City: Union Gap, WA Sampler: GM

Well ID MW-2 Date Monitored: 7/1/15
Well Diameter 2 in.
Total Depth 19.10 ft.
Depth to Water 12.68 ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

16.42 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: —

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Peristaltic Pump X
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Metal Filters
Peristaltic Pump X
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 0953 Weather Conditions: Sunny
Sample Time/Date: 1045 / 7/1/15 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.71

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS) mS µmhos/cm	Temperature (C) F	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1011	3.6	7.04	296	20.4			12.71
1014	4.2	7.01	296	20.4			12.71
1017	4.8	7.00	299	20.3			12.71

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ≈ 14.00

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #372654 Job Number: 385900
Site Address: 3203 Main Street Event Date: 7/1/15 (inclusive)
City: Union Gap, WA Sampler: GM

Well ID MW-3 Date Monitored: 7/1/15
Well Diameter 2 in.
Total Depth 19.24 ft.
Depth to Water 12.91 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.33 xVF ___ = ___ x3 case volume = Estimated Purge Volume: ___ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: ___

Purge Equipment:
Disposable Bailer ___
Stainless Steel Bailer ___
Stack Pump ___
Peristaltic Pump X
QED Bladder Pump ___
Other: ___

Sampling Equipment:
Disposable Bailer ___
Pressure Bailer ___
Metal Filters ___
Peristaltic Pump X
QED Bladder Pump ___
Other: ___

Time Started: ___ (2400 hrs)
Time Completed: ___ (2400 hrs)
Depth to Product: ___ ft
Depth to Water: ___ ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description: ___
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ___ ltr
Amt Removed from Well: ___ ltr
Water Removed: ___ ltr
Product Transferred to: ___

Start Time (purge): 1615 Weather Conditions: Sunny
Sample Time/Date: 1705 / 7/1/15 Water Color: CLEAR Odor: Y / N
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: ~ Volume: ~ ltrs DTW @ Sampling: 12.95

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1633	3.6	7.14	225	20.8			12.95
1636	4.2	7.12	223	20.6			12.95
1639	4.8	7.10	224	20.7			12.95

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	12 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ≈ 14.00

Add/Replaced Gasket: ___ Add/Replaced Bolt: ___ Add/Replaced Plug: ___ Add/Replaced Lock: ___

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 7/1/15 (inclusive)
City: **Union Gap, WA** Sampler: GM

Well ID **MW-4** Date Monitored: 7/1/15
Well Diameter 2 in.
Total Depth 19.68 ft.
Depth to Water 12.91 ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

6.77 xVF ___ = ___ x3 case volume = Estimated Purge Volume: ___ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: ___

Purge Equipment:
Disposable Bailer ___
Stainless Steel Bailer ___
Stack Pump ___
Peristaltic Pump X
QED Bladder Pump ___
Other: ___

Sampling Equipment:
Disposable Bailer ___
Pressure Bailer ___
Metal Filters ___
Peristaltic Pump X
QED Bladder Pump ___
Other: ___

Time Started: ___ (2400 hrs)
Time Completed: ___ (2400 hrs)
Depth to Product: ___ ft
Depth to Water: ___ ft
Hydrocarbon Thickness: ~~0~~ ___ ft
Visual Confirmation/Description: ___
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ___ ltr
Amt Removed from Well: ___ ltr
Water Removed: ___ ltr
Product Transferred to: ___

Start Time (purge): 1505 Weather Conditions: SUNNY
Sample Time/Date: 1555 / 7/1/15 Water Color: CLEAR Odor: Y (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.92

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1523	3.6	7.18	204	21.0			12.92
1526	4.2	7.19	206	20.9			12.92
1529	4.8	7.27	205	20.9			12.92

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ≈ 14.00

Add/Replaced Gasket: ___ Add/Replaced Bolt: ___ Add/Replaced Plug: ___ Add/Replaced Lock: ___

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 7/1/15 (inclusive)
City: **Union Gap, WA** Sampler: GM

Well ID **MW-5** Date Monitored: 7/1/15
Well Diameter **2** in.
Total Depth 19.78 ft.
Depth to Water 12.32 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

1.96 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: —

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Peristaltic Pump X
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Metal Filters
Peristaltic Pump X
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1350 Weather Conditions: SUNNY
Sample Time/Date: 1440 / 7/1/15 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.82

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS) mS µmhos/cm)	Temperature (C) / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1408	3.6	7.24	169	21.4			12.83
1411	4.2	7.22	169	21.3			12.83
1414	4.8	7.23	170	21.4			12.82

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ~ 14.00

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #372654 Job Number: 385900
Site Address: 3203 Main Street Event Date: 7/1/15 (inclusive)
City: Union Gap, WA Sampler: GM

Well ID MW-6 Date Monitored: 7/1/15
Well Diameter 2 in.
Total Depth 20.08 ft.
Depth to Water 12.11 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.97 xVF ~ = ~ x3 case volume = Estimated Purge Volume: ~ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: ~

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	X	Peristaltic Pump	X
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1120 Weather Conditions: SUNNY
Sample Time/Date: 1210/7/1/15 Water Color: CLEAR Odor: Y (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: ~ Volume: ~ ltrs DTW @ Sampling: 12.11

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS/mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1138	3.6	7.27	244	23.2			12.11
1141	4.2	7.30	242	23.0			12.11
1144	4.8	7.29	241	22.7			12.11

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ≈ 17.10

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

For Eurofins Lancaster Laboratories use only
Acct. # _____ Group # _____ Sample # _____
Instructions on reverse side correspond with circled numbers.

SCR #: _____

1 Client Information

Facility # SS#372654-OML G-R#385900 WBS
Site Address 8202 MAIN STREET, UNION GAP, WA
Chevron PM EH LEIDOSRS Lead Consultant Russell Shropshire
Consultant/Office Gettler-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568
Consultant Project Mgr. Deanna L. Harding, (deanna@grinc.com)
Consultant Phone # (925) 551-7444 x180
Sampler GILBERT MEDINA

4 Matrix

Soil ☐ Water ☐ Oil ☐ Sediment ☐ Potable ☐ Ground ☐ NPDES ☐ Surface ☐ Air ☐

3 Grab / Composite

2 Sample Identification / Collected

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total Number of Containers
QA	7/1/15	—	X		2
MW-1		1325			13
MW-2		1045			
MW-3		1705			
MW-4		1555			
MW-5		1440			
MW-6		1210			

5 Analyses Requested

- BTEX + MTBE ☐ 8021 ☐ 8260 ☒ Naphth
- 8260 full scan
- Oxygenates ____
- NWTPH-Gx
- NWTPH-Dx with Silica Gel Cleanup ☒
- NWTPH-Dx without Silica Gel Cleanup ☒
- WA VPH ☐ WA EPH ☐
- Lead Total ☒ Diss. ☐ Method 6010
- 1,2 DCE (8260B)
- NAPHTHALENE / 2-METHYLNAPHTHALENE (8270)
- TEDB (8011)

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run _____ oxy's on highest hit
- ☐ Run _____ oxy's on all hits

6 Remarks

Requesting results for both Dx and Dx with silica gel cleanup.

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | EDF/EDD | 72 hour | 48 hour | 24 hour

8 Data Package (circle if required)

Type I - Full
Type VI (Raw Data)

EDD (circle if required)
CVX-RTBU-FI_05 (default)
Other: _____

Relinquished by	Date	Time	Received by	Date	Time
[signature]	7/2/15	1130	[signature]	7/2/15	11:30
[signature]	7/2/15				

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____

Temperature Upon Receipt _____ °C

Received by | Date | Time

Custody Seals Intact? Yes No

9

GETTLER-RYAN INC.

TRANSMITTAL

September 28, 2015
G-R #386773

TO: Mr. Russell Shropshire
Leidos, Inc.
18912 North Creek Parkway, Suite 101
Bothell, Washington 98011

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6805 Sierra Court, Suite G
Dublin, California 94568

RE: Former Unocal Station
#372654
3202 Main Street
Union Gap, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Third Quarter Event of September 17, 2015**

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/211556

GETTLER-RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	**Chevron #372654**	Date:	9-17-15
Address:	**3203 Main Street**		
City/St.:	**Union Gap, WA**		
Status of Site:	Store parking lot		

DRUMS:

Please list below ALL DRUMS on site:
(i.e., drum description, condition, labeling, contents and location of drums)

#	Description	Condition	Labeling	Contents/Capacity	Location
	NO DRUMS				

WELLS:

Please check the condition of ALL WELLS on site:
(i.e., gaskets, bolts, replaced well plug and/or well lock, well box condition and etc.)

Well ID	Gaskets *(M) Missing (R) Replaced*	Bolts *(M) Missing (R) Replaced*	Replaced Plug *Y/N*	Replaced Lock *Y/N*	Well Box *Manufacturer/Size/# of Bolts*	Other
MW-1	OK	OK	N	N	marks 18"3	
MW-2	↓	↓	↓	↓	↓	
MW-3						
MW-4						
MW-5						
MW-6						

Additional Comments/Observations: _____

Standard Operating Procedure, Low-Flow Purging and Sampling

Gettler-Ryan Inc. field personnel adhere to the following Standard Operating Procedure (SOP) for the collection and handling of representative groundwater samples using the Low-Flow (Minimal-Drawdown) Purging technique. This SOP incorporates purging and sampling methods discussed in U.S. EPA, Ground Water Issue, Publication Number EPA/540/S-95/504, April 1996 by Puls, R.W. and M.J. Barcelona - *"Low-Flow (Minimal-Drawdown) Ground-Water Sampling Procedures."*

A QED Well Wizard™ (or equivalent) bladder pump or Peristaltic Pump will be used to purge and sample selected wells as outlined in the scope-of-work. An in-line flow cell or other multi-parameter meter is used to collect water quality indicating parameters during purging.

Initial Pump Discharge Test Procedures

The Static Water Level (SWL) is measured in all wells at the site prior to the installation of the pump or tubing and initiation of the test procedures in any well. In addition, the presence or absence of separate-phase hydrocarbons (SPH) is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot. The SWL measurement and SPH thickness, if any, will be recorded on the field data sheet.

The bladder pump or suction inlet tubing of the peristaltic pump is then positioned with its inlet located within the screened interval of the well. The in-line flow cell is then connected to the discharge tubing. After pump installation, the SWL is allowed to recover to its original level. The pump is then started at a discharge rate between 100 ml to 300 ml per minute with the in-line flow cell connected. The water level is monitored continuously for any change from the original measurement and the discharge rate is adjusted until an optimum discharge rate (ODR) is determined. The goal for the ODR is to produce a stable drawdown of less than 0.1 meter as allowed by site conditions; however the total drawdown from the initial SWL should not exceed 25% of the distance between pump inlet location and the top of the well screen. Once achieved, the ODR will be confirmed by volumetric discharge measurement and recorded on the field data sheet.

Purging and Water Quality Parameter Measurement

When the ODR has been determined and the SWL drawdown has been established within the acceptable range, and a minimum of one pump system volume (bladder volume and/or discharge tubing volume) has been purged, field measurements for temperature (T), pH, conductivity (Ec), and if required, oxygen reduction potential (ORP) and dissolved oxygen (DO) will be collected and documented on the field data sheet. Measurements should be taken every three to five minutes until parameters stabilize for three consecutive readings. The minimum parameter subset of T (± 10%), pH (± 0.1 unit), and Ec (± 10 uS) are required to stabilize. Additional parameters that may be required are DO (± 0.2 mg/l) and ORP (± 20 mV).

Sample Collection

When water quality parameters have stabilized, and the SWL drawdown remains established within the acceptable range, groundwater sample collection may begin. If used, the in-line flow cell and its tubing are disconnected from the discharge tubing prior to sample collection. Water samples are collected from the discharge tubing into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler,

maintained at 4°C for transport to the laboratory. A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 9-17-15 (inclusive)
City: **Union Gap, WA** Sampler: AW

Well ID **MW- 1** Date Monitored: 9-17-15
Well Diameter 2 in.
Total Depth 19.71 ft.
Depth to Water 12.68 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.03 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.08

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	✓	Peristaltic Pump	✓
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1230 Weather Conditions: Cloudy
Sample Time/Date: 1320 / 9-17-15 Water Color: Clear Odor: Y (N)
Approx. Flow Rate: 200 mlpm Sediment Description: Clear
Did well de-water? N If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.80

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1248	3.6	6.79	274	20.4			12.72
1251	4.2	6.82	279	20.5			12.77
1254	4.8	6.85	285	20.5			12.80

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 1	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ~ 14.0

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 9-17-15 (inclusive)
City: **Union Gap, WA** Sampler: AW

Well ID MW-2 Date Monitored: 9-17-15
Well Diameter 2 in.
Total Depth 19.10 ft.
Depth to Water 12.43 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.67 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.76

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	✓	Peristaltic Pump	✓
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 0830 Weather Conditions: Cloudy
Sample Time/Date: 0920 / 9-17-15 Water Color: Clear Odor: Y / N
Approx. Flow Rate: 200 mlpm Sediment Description: Clear
Did well de-water? N If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.53

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS/ mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0848	3.6	7.65	281	17.3			12.48
0851	4.2	7.62	287	17.4			12.51
0854	4.8	7.61	290	17.4			12.53

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ~ 13.5 ft.

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Plug: _____ Add/Replaced Lock: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #372654 Job Number: 385900
Site Address: 3203 Main Street Event Date: 9-17-15 (inclusive)
City: Union Gap, WA Sampler: AW

Well ID MW-3 Date Monitored: 9-17-15
Well Diameter 2 in.
Total Depth 19.24 ft.
Depth to Water 12.61 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.63 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.93

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	✓	Peristaltic Pump	✓
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 0930 Weather Conditions: Cloudy
Sample Time/Date: 1018 / 9-17-15 Water Color: Clear Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: Clear
Did well de-water? N If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.74

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS umhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0948	3.6	6.94	280	18.2			12.66
0951	4.2	6.99	286	18.3			12.70
0954	4.8	7.02	290	18.3			12.74

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ~14.0ft.

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #372654 Job Number: 385900
Site Address: 3203 Main Street Event Date: 9-17-15 (inclusive)
City: Union Gap, WA Sampler: AW

Well ID MW-4 Date Monitored: 9-17-15
Well Diameter 2 in.
Total Depth 19.68 ft.
Depth to Water 12.15 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.53 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.65

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	✓	Peristaltic Pump	✓
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1030 Weather Conditions: Sunny
Sample Time/Date: 1120 / 9-17-15 Water Color: Clear Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: Clear
Did well de-water? N If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.28

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS/ mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1048	3.6	6.79	294	18.3			12.19
1051	4.2	6.82	300	18.4			12.23
1054	4.8	6.85	300	18.4			12.28

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ~13.0ft.

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #372654 Job Number: 385900
Site Address: 3203 Main Street Event Date: 9-17-15 (inclusive)
City: Union Gap, WA Sampler: AW

Well ID MW- 5 Date Monitored: 9-17-15
Well Diameter 2 in.
Total Depth 19.78 ft.
Depth to Water 12.55 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.23 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.99

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	✓	Peristaltic Pump	✓
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 0700 Weather Conditions: Cloudy
Sample Time/Date: 0750 / 9-17-15 Water Color: Clear Odor: Y (N)
Approx. Flow Rate: 200 mlpm Sediment Description: Clear
Did well de-water? N If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.68

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0718	3.6	6.93	285	17.0			12.60
0721	4.2	6.97	293	17.1			12.63
0724	4.8	6.99	299	17.1			12.68

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 5	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ~ 13.5ft.

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 9-17-15 (inclusive)
City: **Union Gap, WA** Sampler: AW

Well ID MW- 6 Date Monitored: 9-17-15
Well Diameter 2 in.
Total Depth 20.08 ft.
Depth to Water 12.67 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.41 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.15

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump /
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Metal Filters /
Peristaltic Pump /
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1130 Weather Conditions: Cloudy
Sample Time/Date: 1220 / 9-17-15 Water Color: Clear Odor: Y / N
Approx. Flow Rate: 200 mlpm Sediment Description: Clear
Did well de-water? N If yes, Time: — Volume: — ltrs DTW @ Sampling: 12.77

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1148	3.6	6.79	275	19.3			12.71
1151	4.2	6.82	286	19.4			12.74
1154	4.8	6.84	292	19.4			12.77

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 6	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: ~ 14.0 ft.

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

For Eurofins Lancaster Laboratories use only
Acct. # _____ Group # _____ Sample # _____
Instructions on reverse side correspond with circled numbers.

SCR #: _____

1 Client Information

Facility # SS#372654-OML G-R#385900 WBS
Site Address 3202 Main Street, UNION GAP, WA
Chevron PM EH LEIDOSRS Lead Consultant Russell Shropshire
Consultant/Office Gettler-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568
Consultant Project Mgr. Deanna L. Harding, (deanna@grinc.com)
Consultant Phone # (925) 551-7444 x180
Sampler Alex Wong

4 Matrix

Soil ☐ Sediment ☐ Water ☑ Ground ☐ Potable ☐ Surface ☐ NPDES ☐ Oil ☐ Air ☐

3 Grab / Composite

2 Sample Identification / Collected

Sample Identification	Date	Time	Grab	Composite	Total Number of Containers
QA	9-17-15		X		2
MW-1		1320	X		13
MW-2		0920			
MW-3		1018			
MW-4		1120			
MW-5		0750			
MW-6		1220			

5 Analyses Requested

BTEX + MTBE 8021 ☐ 8260 ☒ Naphth ☐
8260 full scan
Oxygenates ____
NWTPH-Gx
NWTPH-Dx with Silica Gel Cleanup ☒
NWTPH-Dx without Silica Gel Cleanup ☒
WA VPH ☐ WA EPH ☐
Lead Total: ☒ Diss. ☐ Method 6010
1,2 DCE (8260B)
EDB (8011)
NAPHTHALENE / 2-METHYL NAPHTHALENE (8270)

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run _____ oxy's on highest hit
- ☐ Run _____ oxy's on all hits

6 Remarks

7 Turnaround Time Requested (TAT) (please circle)

Standard 5 day 4 day EDF/EDD
72 hour 48 hour 24 hour

8 Data Package (circle if required)

Type I - Full
Type VI (Raw Data)

EDD (circle if required)
CVX-RTBU-FI_05 (default)
Other: _____

9

Relinquished by	Date	Time	Received by	Date	Time
	9-18-15			9/18/15	9:50
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other ____			Received by	Date	Time

Temperature Upon Receipt _____ °C

Custody Seals Intact? Yes No

GETTLER-RYAN INC.

TRANSMITTAL

December 18, 2015
G-R #386773

TO: Mr. Russell Shropshire
Leidos, Inc.
18912 North Creek Parkway, Suite 101
Bothell, Washington 98011

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6805 Sierra Court, Suite G
Dublin, California 94568

RE: Former Unocal Station
#372654
3202 Main Street
Union Gap, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Fourth Quarter Event of December 8, 2015**

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/211556

GETTLER-RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	**Chevron #372654**	Date:	12/8/11
Address:	**3203 Main Street**		
City/St.:	**Union Gap, WA**		
Status of Site:	PARKing Lot		

DRUMS:

Please list below ALL DRUMS on site:
(i.e., drum description, condition, labeling, contents and location of drums)

#	Description	Condition	Labeling	Contents/Capacity	Location
	NO Drums				

WELLS:

Please check the condition of ALL WELLS on site:
(i.e., gaskets, bolts, replaced well plug and/or well lock, well box condition and etc.)

Well ID	Gaskets *(M) Missing (R) Replaced*	Bolts *(M) Missing (R) Replaced*	Replaced Plug *Y/N*	Replaced Lock *Y/N*	Well Box *Manufacturer/Size/# of Bolts*	Other
MW-1	Ok	Ok	N	N	8" Morris	
MW-2	↓	↓	↓	↓	↓	
MW-3						
MW-4						
MW-5						
MW-6						

Additional Comments/Observations: _____

Standard Operating Procedure, Low-Flow Purging and Sampling

Gettler-Ryan Inc. field personnel adhere to the following Standard Operating Procedure (SOP) for the collection and handling of representative groundwater samples using the Low-Flow (Minimal-Drawdown) Purging technique. This SOP incorporates purging and sampling methods discussed in U.S. EPA, Ground Water Issue, Publication Number EPA/540/S-95/504, April 1996 by Puls, R.W. and M.J. Barcelona - *"Low-Flow (Minimal-Drawdown) Ground-Water Sampling Procedures."*

A QED Well Wizard™ (or equivalent) bladder pump or Peristaltic Pump will be used to purge and sample selected wells as outlined in the scope-of-work. An in-line flow cell or other multi-parameter meter is used to collect water quality indicating parameters during purging.

Initial Pump Discharge Test Procedures

The Static Water Level (SWL) is measured in all wells at the site prior to the installation of the pump or tubing and initiation of the test procedures in any well. In addition, the presence or absence of separate-phase hydrocarbons (SPH) is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot. The SWL measurement and SPH thickness, if any, will be recorded on the field data sheet.

The bladder pump or suction inlet tubing of the peristaltic pump is then positioned with its inlet located within the screened interval of the well. The in-line flow cell is then connected to the discharge tubing. After pump installation, the SWL is allowed to recover to its original level. The pump is then started at a discharge rate between 100 ml to 300 ml per minute with the in-line flow cell connected. The water level is monitored continuously for any change from the original measurement and the discharge rate is adjusted until an optimum discharge rate (ODR) is determined. The goal for the ODR is to produce a stable drawdown of less than 0.1 meter as allowed by site conditions; however the total drawdown from the initial SWL should not exceed 25% of the distance between pump inlet location and the top of the well screen. Once achieved, the ODR will be confirmed by volumetric discharge measurement and recorded on the field data sheet.

Purging and Water Quality Parameter Measurement

When the ODR has been determined and the SWL drawdown has been established within the acceptable range, and a minimum of one pump system volume (bladder volume and/or discharge tubing volume) has been purged, field measurements for temperature (T), pH, conductivity (Ec), and if required, oxygen reduction potential (ORP) and dissolved oxygen (DO) will be collected and documented on the field data sheet. Measurements should be taken every three to five minutes until parameters stabilize for three consecutive readings. The minimum parameter subset of T (± 10%), pH (± 0.1 unit), and Ec (± 10 uS) are required to stabilize. Additional parameters that may be required are DO (± 0.2 mg/l) and ORP (± 20 mV).

Sample Collection

When water quality parameters have stabilized, and the SWL drawdown remains established within the acceptable range, groundwater sample collection may begin. If used, the in-line flow cell and its tubing are disconnected from the discharge tubing prior to sample collection. Water samples are collected from the discharge tubing into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler,

maintained at 4°C for transport to the laboratory. A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 12/8/15 (inclusive)
City: **Union Gap, WA** Sampler: JH

Well ID MW- 1 Date Monitored: 12/8/15
Well Diameter 2 in.
Total Depth 19.71 ft.
Depth to Water 12.31 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.40 xVF ____ = ____ x3 case volume = Estimated Purge Volume: ____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.79

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	X	Peristaltic Pump	X
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: ____ (2400 hrs)
Time Completed: ____ (2400 hrs)
Depth to Product: ____ ft
Depth to Water: ____ ft
Hydrocarbon Thickness: ____ ft
Visual Confirmation/Description: ____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ____ ltr
Amt Removed from Well: ____ ltr
Water Removed: ____ ltr
Product Transferred to: ____

Start Time (purge): 1145 Weather Conditions: Cloudy
Sample Time/Date: 1225 / 12/8/15 Water Color: Clear Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: Clear
Did well de-water? NO If yes, Time: ____ Volume: ____ ltrs DTW @ Sampling: 12.41

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1203	3.6	6.95	295	11.9			12.33
1206	4.2	6.97	299	11.8			12.37
1209	4.8	7.01	302	11.8			12.41

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 1	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 14.00

Add/Replaced Gasket: ____ Add/Replaced Bolt: ____ Add/Replaced Plug: ____ Add/Replaced Lock: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**

Site Address: **3203 Main Street** Event Date: 12/8/15 (inclusive)

City: **Union Gap, WA** Sampler: JH

Well ID **MW- 2** Date Monitored: 12/8/15

Well Diameter 2 in.

Total Depth 19.10 ft.

Depth to Water 12.05 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.05 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.46

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	X	Peristaltic Pump	X
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1620 Weather Conditions: Cloudy

Sample Time/Date: 1705 / 12/8/15 Water Color: Clear Odor: Y / N

Approx. Flow Rate: 200 mlpm Sediment Description: Clear

Did well de-water? no If yes, Time: Volume: ltrs DTW @ Sampling: 12.18

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1638	3.6	7.71	327	16.8			12.11
1641	4.2	7.66	331	11.7			12.14
1644	4.8	7.62	338	11.6			12.18

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 2	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 14.00

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**

Site Address: **3203 Main Street** Event Date: 12/8/15 (inclusive)

City: **Union Gap, WA** Sampler: JW

Well ID MW-3 Date Monitored: 12/8/15

Well Diameter 2 in.

Total Depth 19.24 ft.

Depth to Water 12.26 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.98 xVF ___ = ___ x3 case volume = Estimated Purge Volume: ___ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.65

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	X	Peristaltic Pump	X
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: ___ (2400 hrs)
Time Completed: ___ (2400 hrs)
Depth to Product: ___ ft
Depth to Water: ___ ft
Hydrocarbon Thickness: ___ ft
Visual Confirmation/Description: ___
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ___ ltr
Amt Removed from Well: ___ ltr
Water Removed: ___ ltr
Product Transferred to: ___

Start Time (purge): 1525 Weather Conditions: Cloudy

Sample Time/Date: 1605 / 12/8/15 Water Color: Clear Odor: Y / (N)

Approx. Flow Rate: 200 mlpm Sediment Description: Clear

Did well de-water? NO If yes, Time: ___ Volume: ___ ltrs DTW @ Sampling: 12.37

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1543	3.6	7.13	312	11.9			12.29
1546	4.2	7.16	320	11.7			12.34
1549	4.8	7.20	324	11.6			12.37

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 14.50

Add/Replaced Gasket: ___ Add/Replaced Bolt: ___ Add/Replaced Plug: ___ Add/Replaced Lock: ___

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**
Site Address: **3203 Main Street** Event Date: 12/8/15 (inclusive)
City: **Union Gap, WA** Sampler: JH

Well ID MW-4 Date Monitored: 12/8/15
Well Diameter 2 in.
Total Depth 19.68 ft.
Depth to Water 11.77 ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

7.91 xVF ____ = ____ x3 case volume = Estimated Purge Volume: ____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.35

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump	X	Peristaltic Pump	X
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: ____ (2400 hrs)
Time Completed: ____ (2400 hrs)
Depth to Product: ____ ft
Depth to Water: ____ ft
Hydrocarbon Thickness: ____ ft
Visual Confirmation/Description: ____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ____ ltr
Amt Removed from Well: ____ ltr
Water Removed: ____ ltr
Product Transferred to: ____

Start Time (purge): 1430 Weather Conditions: Cloudy
Sample Time/Date: 1510 / 12/8/15 Water Color: Clear Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: Clear
Did well de-water? NO If yes, Time: ____ Volume: ____ ltrs DTW @ Sampling: 11.90

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1448	3.6	7.01	311	11.8			11.80
1451	4.2	7.05	315	11.7			11.84
1454	4.8	7.07	317	11.6			11.90

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 13.00

Add/Replaced Gasket: ____ Add/Replaced Bolt: ____ Add/Replaced Plug: ____ Add/Replaced Lock: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: **Chevron #372654** Job Number: **385900**

Site Address: **3203 Main Street** Event Date: 12/8/15 (inclusive)

City: **Union Gap, WA** Sampler: JH

Well ID MW-5 Date Monitored: 12/8/15

Well Diameter 2 in.

Total Depth 19.78 ft.

Depth to Water 12.15 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.63 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.67

Purge Equipment:

Disposable Bailer	
Stainless Steel Bailer	
Stack Pump	
Peristaltic Pump	X
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	
Pressure Bailer	
Metal Filters	
Peristaltic Pump	X
QED Bladder Pump	
Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1335 Weather Conditions: Cloudy

Sample Time/Date: 1415 / 12/8/15 Water Color: Clear Odor: Y / (N)

Approx. Flow Rate: 200 mlpm Sediment Description: Clear

Did well de-water? No If yes, Time: Volume: ltrs DTW @ Sampling: 12.31

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1353	3.6	7.11	317	11.8			12.19
1356	4.2	7.15	324	11.7			12.26
1359	4.8	7.19	329	11.6			12.31

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 14.30

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #372654 Job Number: 385900
Site Address: 3203 Main Street Event Date: 12/8/15 (inclusive)
City: Union Gap, WA Sampler: JH

Well ID MW-6 Date Monitored: 12/8/15
Well Diameter 2 in.
Total Depth 20.08 ft.
Depth to Water 12.28 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.80 xVF ~ = ~ x3 case volume = Estimated Purge Volume: ~ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.84

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Peristaltic Pump X
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Metal Filters
Peristaltic Pump X
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr
Product Transferred to:

Start Time (purge): 1240 Weather Conditions: Cloudy
Sample Time/Date: 1320 / 12/8/15 Water Color: clear Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: clear
Did well de-water? no If yes, Time: Volume: ltrs DTW @ Sampling: 12.42

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1258	3.6	6.62	287	11.8			12.31
1301	4.2	6.67	290	11.8			12.35
1304	4.8	6.70	296	11.7			12.42

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260B)/1,2 DCE(8260B)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	2 x 250ml ambers	YES	NP	LANCASTER	NAPHTHALENE/2-METHYL NAPHTHALENE(8270)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6010)

COMMENTS: Depth Pump Set At: 15.00

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Plug: Add/Replaced Lock:

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

For Eurofins Lancaster Laboratories use only
Acct. # ________ Group # ________ Sample # ________
Instructions on reverse side correspond with circled numbers.

SCR #: ________

① Client Information

Facility # SS#372654-OML G-R#385900 WBS

Site Address 3202 Main Street, UNION GAP, WA

Chevron PM EH LEIDOSRS Lead Consultant Russell Shropshire

Consultant/Office Gettler-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568

Consultant Project Mgr. Deanna L. Harding, (deanna@grinc.com)

Consultant Phone # (925) 551-7444 x180

Sampler Jim Herzer

④ Matrix: Sediment ☐ Ground ☐ Surface ☐ / Potable ☐ NPDES ☐ Air ☐ / Soil ☐ Water Oil ☐

⑤ Analyses Requested: BTEX + MTBE 8021 ☐ 8260 ☒ Naphth ☐; 8260 full scan 1,2 DCE; Oxygenates; NWTPH-Gx; NWTPH-Dx with Silica Gel Cleanup ☒; NWTPH-Dx without Silica Gel Cleanup ☒; WA VPH ☐ WA EPH ☐; Lead Total ☒ Diss. ☐ Method 6010; EDB (8011); Naphthalene/2-METHYL Naphthalene 8270

② Sample Identification	Collected Date	Collected Time	③ Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX + MTBE	8260 full scan 1,2 DCE	Oxygenates	NWTPH-Gx	NWTPH-Dx with Silica Gel Cleanup	NWTPH-Dx without Silica Gel Cleanup	WA VPH / WA EPH	Lead	EDB (8011)	Naphthalene/2-Methyl Naphthalene 8270		
QA	12/8/15		X			X		2	X			X								
MW-1	↓	1225	↓			↓		13	↓	X		↓	X	X		X	X	X		
MW-2	↓	1705	↓			↓		↓	↓	↓		↓	↓	↓		↓	↓	↓		
MW 3	↓	1605	↓			↓		↓	↓	↓		↓	↓	↓		↓	↓	↓		
MW-4	↓	1510	↓			↓		↓	↓	↓		↓	↓	↓		↓	↓	↓		
MW-5	↓	1415	↓			↓		↓	↓	↓		↓	↓	↓		↓	↓	↓		
MW-6	↓	1320	↓			↓		↓	↓	↓		↓	↓	↓		↓	↓	↓		

☐ Results in Dry Weight
☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
☐ 8021 MTBE Confirmation
☐ Confirm MTBE + Naphthalene
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

⑥ Remarks

⑦ Turnaround Time Requested (TAT) (please circle)

Standard (circled) | 5 day | 4 day
72 hour | 48 hour | 24 hour

EDF/EDD

Relinquished by	Date	Time	Received by	Date	Time
[signature]	12/8/15	2100	[signature]	12/10/15	10:45
[signature]	12/10/15				

Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other ________ | Received by | Date | Time

⑧ Data Package (circle if required): Type I - Full; Type VI (Raw Data)

EDD (circle if required): CVX-RTBU-FI_05 (default); Other: ________

Temperature Upon Receipt ________ °C

Custody Seals Intact? Yes No

Appendix D:
Laboratory Analytical Reports

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

January 08, 2015

Project: 372654

Submittal Date: 12/16/2014
Group Number: 1526087
PO Number: 0015159072
Release Number: HETRICK
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
MW-6-20 Grab Soil	7714400
MW-6-12 Grab Soil	7714401
MW-5-20 Grab Soil	7714402
MW-5-9 Grab Soil	7714403
MW-5-11 Grab Soil	7714404
ER-1-121114 Grab Water	7714405
ER-2-121114 Grab Water	7714406
MW-4-9 Grab Soil	7714407
MW-4-12 Grab Soil	7714408
MW-4-14 Grab Soil	7714409
MW-3-20 Grab Soil	7714410
MW-3-12 Grab Soil	7714411
DUP-121114 Grab Soil	7714412
MW-3-15 Grab Soil	7714413
MW-3-10 Grab Soil	7714414
MW-2-20 Grab Soil	7714415
MW-2-9 Grab Soil	7714416
MW-2-12 Grab Soil	7714417
MW-1-20 Grab Soil	7714418
MW-1-12.5 Grab Soil	7714419
MW-1-14 Grab Soil	7714420
MW-1-11 Grab Soil	7714421
MW-4-20 Grab Soil	7714422
TB-1-121514 NA Water	7714423

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO Leidos Attn: Russ Shropshire

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: MW-6-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714400
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 11:35 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG620

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.89
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.89
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.89
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.89
10237	Toluene	108-88-3	N.D.	0.001	0.89
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.89
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1	21.64
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.4	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.4	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.61	0.566	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	12.6	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143521AA	12/18/2014 18:08	Chelsea B Stong	0.89

Sample Description: MW-6-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714400
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 11:35 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG620

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/10/2014 11:35	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/10/2014 11:35	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/10/2014 11:35	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 09:56	Joseph M Gambler	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 15:34	Angela D Sneeringer	21.64
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/10/2014 11:35	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510027A	12/18/2014 15:47	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510028A	12/29/2014 17:22	Lisa A Reinert	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510028A	12/18/2014 02:30	Sherry L Morrow	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510027A	12/18/2014 02:30	Sherry L Morrow	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 14:28	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001A	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-6-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714401
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 11:52 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG612

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.91
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.91
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.91
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.91
10237	Toluene	108-88-3	N.D.	0.001	0.91
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.91
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.003	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.1	25.01
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.1	1
08272	Heavy Range Organics C24-C40	n.a.	15	10	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.1	1
12006	HRO C24-C40 w/Si Gel	n.a.	14	10	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.76	0.513	1
Wet Chemistry	**SM 5310 B modified-2000**		**% by wt.**	**% by wt.**	
02079	TOC Solids/Sludges Combustion	n.a.	N.D.	0.0106	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	5.3	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Sample Description: MW-6-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714401
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 11:52 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG612

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143521AA	12/18/2014 18:31	Chelsea B Stong	0.91
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/10/2014 11:52	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/10/2014 11:52	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	3	201435136443	12/10/2014 11:52	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	4	201435136443	12/10/2014 11:52	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/10/2014 11:52	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 11:36	Joseph M Gambler	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 16:10	Angela D Sneeringer	25.01
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/10/2014 11:52	Client Supplied	n.a.
06647	GC-5g Field Preserved MeOH	SW-846 5035A	2	201435136445	12/10/2014 11:52	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510027A	12/18/2014 16:29	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510028A	12/29/2014 17:43	Lisa A Reinert	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510028A	12/18/2014 02:30	Sherry L Morrow	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510027A	12/18/2014 02:30	Sherry L Morrow	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 14:32	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
02079	TOC Solids/Sludges Combustion	SM 5310 B modified-2000	1	14351049531A	12/18/2014 01:04	James S Mathiot	1
00111	Moisture	SM 2540 G-1997	1	14357820001A	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-5-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714402
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 14:02 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG520

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.92
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.92
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.92
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.92
10237	Toluene	108-88-3	N.D.	0.001	0.92
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.92
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.1	25.78
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	12	11	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	12	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	3.17	0.543	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	9.7	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143521AA	12/18/2014 18:54	Chelsea B Stong	0.92

Sample Description: MW-5-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714402
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 14:02 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG520

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/10/2014 14:02	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/10/2014 14:02	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/10/2014 14:02	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 12:01	Joseph M Gambler	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 16:45	Angela D Sneeringer	25.78
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/10/2014 14:02	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510027A	12/18/2014 16:50	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510028A	12/29/2014 18:04	Lisa A Reinert	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510028A	12/18/2014 02:30	Sherry L Morrow	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510027A	12/18/2014 02:30	Sherry L Morrow	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 14:36	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001A	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-5-9 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714403
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 14:30 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG509

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.0007	0.0005	0.94
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.94
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.94
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.94
10237	Toluene	108-88-3	N.D.	0.001	0.94
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.94
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.003	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.0	24.65
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.1	1
08272	Heavy Range Organics C24-C40	n.a.	19	10	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.1	1
12006	HRO C24-C40 w/Si Gel	n.a.	15	10	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	6.38	0.500	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	3.9	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143521AA	12/18/2014 19:16	Chelsea B Stong	0.94

Sample Description: MW-5-9 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714403
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 14:30 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG509

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/10/2014 14:30	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/10/2014 14:30	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/10/2014 14:30	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 12:26	Joseph M Gambler	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 17:21	Angela D Sneeringer	24.65
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/10/2014 14:30	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510027A	12/18/2014 19:17	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510028A	12/29/2014 18:25	Lisa A Reinert	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510028A	12/18/2014 02:30	Sherry L Morrow	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510027A	12/18/2014 02:30	Sherry L Morrow	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 14:40	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001A	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-5-11 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714404
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 14:50 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG511

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.001	0.0005	1.01
10237	Bromodichloromethane	75-27-4	N.D.	0.001	1.01
10237	Bromoform	75-25-2	N.D.	0.001	1.01
10237	Bromomethane	74-83-9	N.D.	0.002	1.01
10237	Carbon Tetrachloride	56-23-5	N.D.	0.001	1.01
10237	Chlorobenzene	108-90-7	N.D.	0.001	1.01
10237	Chloroethane	75-00-3	N.D.	0.002	1.01
10237	Chloroform	67-66-3	N.D.	0.001	1.01
10237	Chloromethane	74-87-3	N.D.	0.002	1.01
10237	Dibromochloromethane	124-48-1	N.D.	0.001	1.01
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	1.01
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	1.01
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	1.01
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	1.01
10237	1,1-Dichloroethane	75-34-3	N.D.	0.001	1.01
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	1.01
10237	1,1-Dichloroethene	75-35-4	N.D.	0.001	1.01
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	1.01
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	1.01
10237	1,2-Dichloropropane	78-87-5	N.D.	0.001	1.01
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	1.01
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	1.01
10237	Freon 113	76-13-1	N.D.	0.002	1.01
10237	n-Hexane	110-54-3	0.010	0.001	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	1.01
10237	Methylene Chloride	75-09-2	N.D.	0.002	1.01
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	1.01
10237	Tetrachloroethene	127-18-4	N.D.	0.001	1.01
10237	Toluene	108-88-3	N.D.	0.001	1.01
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	1.01
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	1.01
10237	Trichloroethene	79-01-6	N.D.	0.001	1.01
10237	Trichlorofluoromethane	75-69-4	N.D.	0.002	1.01
10237	Vinyl Chloride	75-01-4	N.D.	0.001	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1.01
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00068	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00068	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00068	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00068	1
10725	Chrysene	218-01-9	N.D.	0.00034	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00068	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00068	1
10725	1-Methylnaphthalene	90-12-0	N.D.	0.00068	1
10725	2-Methylnaphthalene	91-57-6	N.D.	0.00068	1
10725	Naphthalene	91-20-3	N.D.	0.00068	1

Sample Description: MW-5-11 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714404
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 14:50 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG511

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.0	25.08
Pesticides/PCBs	**SW-846 8082**		**mg/kg**	**mg/kg**	
10736	PCB-1016	12674-11-2	N.D.	0.0037	1
10736	PCB-1221	11104-28-2	N.D.	0.0047	1
10736	PCB-1232	11141-16-5	N.D.	0.0082	1
10736	PCB-1242	53469-21-9	N.D.	0.0034	1
10736	PCB-1248	12672-29-6	N.D.	0.0034	1
10736	PCB-1254	11097-69-1	N.D.	0.0034	1
10736	PCB-1260	11096-82-5	N.D.	0.0050	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.1	1
08272	Heavy Range Organics C24-C40	n.a.	15	10	1
GC Petroleum Hydrocarbons	**ECY 97-602 WA EPH**		**mg/kg**	**mg/kg**	
05970	>C10-C12 Aliphatic	n.a.	N.D.	1.0	1
05970	>C10-C12 Aromatic	n.a.	N.D.	1.0	1
05970	>C12-C16 Aliphatic	n.a.	N.D.	1.0	1
05970	>C12-C16 Aromatic	n.a.	N.D.	1.0	1
05970	>C16-C21 Aliphatic	n.a.	N.D.	3.1	1
05970	>C16-C21 Aromatic	n.a.	N.D.	2.1	1
05970	>C21-C34 Aliphatic	n.a.	N.D.	6.2	1
05970	>C21-C34 Aromatic	n.a.	N.D.	2.1	1
GC Petroleum Hydrocarbons	**ECY 97-602 WA VPH**		**mg/kg**	**mg/kg**	
05666	Benzene	71-43-2	N.D.	0.0495	47.73
05666	C5-C6 Aliphatic Hydrocarbons	n.a.	N.D.	2.48	47.73
05666	C6-C8 Aliphatic Hydrocarbons	n.a.	N.D.	2.48	47.73
05666	C8-C10 Aliphatic Hydrocarbons	n.a.	N.D.	2.48	47.73
05666	C8-C10 Aromatic Hydrocarbons	n.a.	N.D.	2.48	47.73
05666	Ethylbenzene	100-41-4	N.D.	0.0495	47.73
05666	Methyl t-butyl ether	1634-04-4	N.D.	0.0495	47.73
05666	Toluene	108-88-3	N.D.	0.0495	47.73
05666	o-Xylene	95-47-6	N.D.	0.0495	47.73
05666	m,p-Xylenes	179601-23-1	N.D.	0.0990	47.73
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.1	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	10	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	

Sample Description: MW-5-11 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714404
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 14:50 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG511

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.153	0.0329	1
06951	Chromium	7440-47-3	24.0	0.110	1
06955	Lead	7439-92-1	4.14	0.499	1
06961	Nickel	7440-02-0	11.4	0.150	1
06972	Zinc	7440-66-6	52.7	0.259	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	3.6	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs- Solid by 8260B	SW-846 8260B	1	A143521AA	12/18/2014 17:46	Chelsea B Stong	1.01
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/10/2014 14:50	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/10/2014 14:50	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	3	201435136443	12/10/2014 14:50	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	4	201435136443	12/10/2014 14:50	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/10/2014 14:50	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	14354SLG026	12/26/2014 15:09	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	14354SLG026	12/22/2014 07:15	Joseph S Feister	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 18:32	Angela D Sneeringer	25.08
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/10/2014 14:50	Client Supplied	n.a.
06647	GC-5g Field Preserved MeOH	SW-846 5035A	2	201435136445	12/10/2014 14:50	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	143510016A	12/18/2014 15:31	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	143510016A	12/17/2014 15:45	JoElla L Rice	1

Sample Description: MW-5-11 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714404
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/10/2014 14:50 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG511

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510027A	12/18/2014 18:56	Christine E Dolman	1
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	143540007A	12/23/2014 21:57	Heather E Williams	1
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	143540007A	12/23/2014 22:37	Heather E Williams	1
05666	WA- VPH soils	ECY 97-602 WA VPH	1	14353A08A	12/19/2014 14:38	Nicholas R Rossi	47.73
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510028A	12/29/2014 18:46	Lisa A Reinert	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510028A	12/18/2014 02:30	Sherry L Morrow	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510027A	12/18/2014 02:30	Sherry L Morrow	1
11213	WA EPH Soils Extraction	ECY 97-602 WA EPH	1	143540007A	12/22/2014 08:20	Roman Kuropatkin	1
00388	GC - Field Preserved (MA-VPH)	MA DEP VPH modified	1	201435136445	12/10/2014 14:50	Client Supplied	1
00497	Silica Gel Fractionation	SW-846 3630C modified	1	143540007A	12/22/2014 14:45	Roman Kuropatkin	1
06949	Cadmium	SW-846 6010B	1	143525708002	12/22/2014 14:44	Eric L Eby	1
06951	Chromium	SW-846 6010B	1	143525708002	12/22/2014 14:44	Eric L Eby	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 14:44	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	143525708002	12/22/2014 14:44	Eric L Eby	1
06972	Zinc	SW-846 6010B	1	143525708002	12/22/2014 14:44	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001A	12/23/2014 12:19	William C Schwebel	1

Sample Description: ER-1-121114 Grab Water
Facility# 302095
3202 Main Street - Union Gap, WA

LL Sample # WW 7714405
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 08:15 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UGER1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

General Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	F143562AA	12/22/2014 13:06	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F143562AA	12/22/2014 13:06	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 13:00	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 13:00	Miranda P Tillinghast	1

Sample Description: ER-2-121114 Grab Water
Facility# 302095
3202 Main Street - Union Gap, WA

LL Sample # WW 7714406
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 08:30 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UGER2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

General Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	F143571AA	12/23/2014 08:21	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F143571AA	12/23/2014 08:21	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 13:27	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 13:27	Miranda P Tillinghast	1

Sample Description: MW-4-9 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714407
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 10:24 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

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6001 Bollinger Canyon Road
San Ramon CA 94583

UG409

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.0008	0.0005	0.97
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.97
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.97
10237	Toluene	108-88-3	N.D.	0.001	0.97
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.97
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	0.005	0.003	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.1	26.55
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.1	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	10	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.1	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	10	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	4.81	0.500	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	3.8	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143521AA	12/18/2014 19:39	Chelsea B Stong	0.97

Sample Description: MW-4-9 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714407
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 10:24 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG409

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 10:24	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 10:24	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 10:24	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 12:51	Joseph M Gambler	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 19:08	Angela D Sneeringer	26.55
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 10:24	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510027A	12/18/2014 18:14	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510028A	12/29/2014 19:07	Lisa A Reinert	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510028A	12/18/2014 02:30	Sherry L Morrow	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510027A	12/18/2014 02:30	Sherry L Morrow	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 14:48	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001A	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-4-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714408
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 10:30 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG412

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.92
10237	Bromodichloromethane	75-27-4	N.D.	0.001	0.92
10237	Bromoform	75-25-2	N.D.	0.001	0.92
10237	Bromomethane	74-83-9	N.D.	0.002	0.92
10237	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.92
10237	Chlorobenzene	108-90-7	N.D.	0.001	0.92
10237	Chloroethane	75-00-3	N.D.	0.002	0.92
10237	Chloroform	67-66-3	N.D.	0.001	0.92
10237	Chloromethane	74-87-3	N.D.	0.002	0.92
10237	Dibromochloromethane	124-48-1	N.D.	0.001	0.92
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.92
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.92
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.92
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.92
10237	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.92
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.92
10237	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.92
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.92
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.92
10237	1,2-Dichloropropane	78-87-5	N.D.	0.001	0.92
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	0.92
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	0.92
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.92
10237	Freon 113	76-13-1	N.D.	0.002	0.92
10237	n-Hexane	110-54-3	N.D.	0.001	0.92
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.92
10237	Methylene Chloride	75-09-2	N.D.	0.002	0.92
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	0.92
10237	Tetrachloroethene	127-18-4	N.D.	0.001	0.92
10237	Toluene	108-88-3	N.D.	0.001	0.92
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.92
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	0.92
10237	Trichloroethene	79-01-6	N.D.	0.001	0.92
10237	Trichlorofluoromethane	75-69-4	N.D.	0.002	0.92
10237	Vinyl Chloride	75-01-4	N.D.	0.001	0.92
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.92
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00073	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00073	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00073	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00073	1
10725	Chrysene	218-01-9	N.D.	0.00037	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00073	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00073	1
10725	1-Methylnaphthalene	90-12-0	0.0017	0.00073	1
10725	2-Methylnaphthalene	91-57-6	0.0045	0.00073	1
10725	Naphthalene	91-20-3	0.0025	0.00073	1

Sample Description: MW-4-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714408
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 10:30 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG412

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	27	1.1	25.26
Pesticides/PCBs	**SW-846 8082**		**mg/kg**	**mg/kg**	
10736	PCB-1016	12674-11-2	N.D.	0.0039	1
10736	PCB-1221	11104-28-2	N.D.	0.0050	1
10736	PCB-1232	11141-16-5	N.D.	0.0087	1
10736	PCB-1242	53469-21-9	N.D.	0.0036	1
10736	PCB-1248	12672-29-6	N.D.	0.0036	1
10736	PCB-1254	11097-69-1	N.D.	0.0036	1
10736	PCB-1260	11096-82-5	N.D.	0.0053	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons	**ECY 97-602 WA EPH**		**mg/kg**	**mg/kg**	
05970	>C10-C12 Aliphatic	n.a.	N.D.	1.1	1
05970	>C10-C12 Aromatic	n.a.	N.D.	1.1	1
05970	>C12-C16 Aliphatic	n.a.	N.D.	1.1	1
05970	>C12-C16 Aromatic	n.a.	N.D.	1.1	1
05970	>C16-C21 Aliphatic	n.a.	N.D.	3.2	1
05970	>C16-C21 Aromatic	n.a.	N.D.	2.2	1
05970	>C21-C34 Aliphatic	n.a.	N.D.	6.5	1
05970	>C21-C34 Aromatic	n.a.	N.D.	2.2	1
GC Petroleum Hydrocarbons	**ECY 97-602 WA VPH**		**mg/kg**	**mg/kg**	
05666	Benzene	71-43-2	N.D.	0.0562	51.1
05666	C5-C6 Aliphatic Hydrocarbons	n.a.	N.D.	2.81	51.1
05666	C6-C8 Aliphatic Hydrocarbons	n.a.	N.D.	2.81	51.1
05666	C8-C10 Aliphatic Hydrocarbons	n.a.	N.D.	2.81	51.1
05666	C8-C10 Aromatic Hydrocarbons	n.a.	N.D.	2.81	51.1
05666	Ethylbenzene	100-41-4	N.D.	0.0562	51.1
05666	Methyl t-butyl ether	1634-04-4	N.D.	0.0562	51.1
05666	Toluene	108-88-3	N.D.	0.0562	51.1
05666	o-Xylene	95-47-6	N.D.	0.0562	51.1
05666	m,p-Xylenes	179601-23-1	N.D.	0.112	51.1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	

Sample Description: MW-4-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714408
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 10:30 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG412

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.102	0.0359	1
06951	Chromium	7440-47-3	18.5	0.120	1
06955	Lead	7439-92-1	5.57	0.545	1
06961	Nickel	7440-02-0	27.4	0.163	1
06972	Zinc	7440-66-6	44.7	0.283	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	9.1	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs- Solid by 8260B	SW-846 8260B	1	A143521AA	12/18/2014 20:02	Chelsea B Stong	0.92
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 10:30	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 10:30	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	3	201435136443	12/11/2014 10:30	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	4	201435136443	12/11/2014 10:30	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 10:30	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	14354SLG026	12/26/2014 15:43	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	14354SLG026	12/22/2014 07:15	Joseph S Feister	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 19:44	Angela D Sneeringer	25.26
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 10:30	Client Supplied	n.a.
06647	GC-5g Field Preserved MeOH	SW-846 5035A	2	201435136445	12/11/2014 10:30	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	143510016A	12/18/2014 15:42	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	143510016A	12/17/2014 15:45	JoElla L Rice	1

Sample Description: MW-4-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714408
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 10:30 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG412

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510027A	12/18/2014 17:32	Christine E Dolman	1
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	143540007A	12/24/2014 03:17	Heather E Williams	1
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	143540007A	12/24/2014 03:57	Heather E Williams	1
05666	WA- VPH soils	ECY 97-602 WA VPH	1	14353A08A	12/19/2014 15:19	Nicholas R Rossi	51.1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510028A	12/29/2014 19:28	Lisa A Reinert	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510028A	12/18/2014 02:30	Sherry L Morrow	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510027A	12/18/2014 02:30	Sherry L Morrow	1
11213	WA EPH Soils Extraction	ECY 97-602 WA EPH	1	143540007A	12/22/2014 08:20	Roman Kuropatkin	1
00388	GC - Field Preserved (MA-VPH)	MA DEP VPH modified	1	201435136445	12/11/2014 10:30	Client Supplied	1
00497	Silica Gel Fractionation	SW-846 3630C modified	1	143540007A	12/22/2014 14:45	Roman Kuropatkin	1
06949	Cadmium	SW-846 6010B	1	143525708002	12/22/2014 14:52	Eric L Eby	1
06951	Chromium	SW-846 6010B	1	143525708002	12/22/2014 14:52	Eric L Eby	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 14:52	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	143525708002	12/22/2014 14:52	Eric L Eby	1
06972	Zinc	SW-846 6010B	1	143525708002	12/22/2014 14:52	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001A	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-4-14 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714409
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 11:00 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG414

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.001	0.0004	0.78
10237	1,2-Dibromoethane	106-93-4	N.D.	0.0008	0.78
10237	Ethylbenzene	100-41-4	N.D.	0.0008	0.78
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0004	0.78
10237	Toluene	108-88-3	0.0008	0.0008	0.78
10237	Xylene (Total)	1330-20-7	N.D.	0.0008	0.78
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	12	0.9	20.21
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.66	0.523	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	7.1	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 03:55	Stephanie A Selis	0.78

Sample Description: MW-4-14 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714409
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 11:00 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG414

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 11:00	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 11:00	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 11:00	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 13:15	Joseph M Gambler	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 20:19	Angela D Sneeringer	20.21
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 11:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510027A	12/18/2014 18:35	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510028A	12/29/2014 19:49	Lisa A Reinert	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510028A	12/18/2014 02:30	Sherry L Morrow	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510027A	12/18/2014 02:30	Sherry L Morrow	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 14:56	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001A	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-3-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714410
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 11:17 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG320

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.9
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.9
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.9
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.9
10237	Toluene	108-88-3	N.D.	0.001	0.9
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.9
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	5.7	1.2	26.06
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.5	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	12	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.5	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	12	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.35	0.570	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	14.8	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 04:26	Stephanie A Selis	0.9

Sample Description: MW-3-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714410
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 11:17 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG320

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 11:17	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 11:17	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 11:17	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 13:40	Joseph M Gambler	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14358A34A	12/24/2014 13:37	Angela D Sneeringer	26.06
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 11:17	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510027A	12/18/2014 17:11	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510028A	12/29/2014 20:10	Lisa A Reinert	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510028A	12/18/2014 02:30	Sherry L Morrow	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510027A	12/18/2014 02:30	Sherry L Morrow	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 15:00	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001A	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-3-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714411
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 12:05 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG312

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.022	40.7
10237	Bromodichloromethane	75-27-4	N.D.	0.044	40.7
10237	Bromoform	75-25-2	N.D.	0.044	40.7
10237	Bromomethane	74-83-9	N.D.	0.088	40.7
10237	Carbon Tetrachloride	56-23-5	N.D.	0.044	40.7
10237	Chlorobenzene	108-90-7	N.D.	0.044	40.7
10237	Chloroethane	75-00-3	N.D.	0.088	40.7
10237	Chloroform	67-66-3	N.D.	0.044	40.7
10237	Chloromethane	74-87-3	N.D.	0.088	40.7
10237	Dibromochloromethane	124-48-1	N.D.	0.044	40.7
10237	1,2-Dibromoethane	106-93-4	N.D.	0.044	40.7
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.044	40.7
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.044	40.7
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.044	40.7
10237	1,1-Dichloroethane	75-34-3	N.D.	0.044	40.7
10237	1,2-Dichloroethane	107-06-2	N.D.	0.044	40.7
10237	1,1-Dichloroethene	75-35-4	N.D.	0.044	40.7
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.044	40.7
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.044	40.7
10237	1,2-Dichloropropane	78-87-5	N.D.	0.044	40.7
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.044	40.7
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.044	40.7
10237	Ethylbenzene	100-41-4	N.D.	0.044	40.7
10237	Freon 113	76-13-1	N.D.	0.088	40.7
10237	n-Hexane	110-54-3	N.D.	0.044	40.7
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.022	40.7
10237	Methylene Chloride	75-09-2	N.D.	0.088	40.7
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.044	40.7
10237	Tetrachloroethene	127-18-4	N.D.	0.044	40.7
10237	Toluene	108-88-3	N.D.	0.044	40.7
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.044	40.7
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.044	40.7
10237	Trichloroethene	79-01-6	N.D.	0.044	40.7
10237	Trichlorofluoromethane	75-69-4	N.D.	0.088	40.7
10237	Vinyl Chloride	75-01-4	N.D.	0.044	40.7
10237	Xylene (Total)	1330-20-7	N.D.	0.044	40.7
Reporting limits were raised due to interference from the sample matrix.					
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
10725	Benzo(a)anthracene	56-55-3	0.0017	0.00072	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00072	1
10725	Benzo(b)fluoranthene	205-99-2	0.00088	0.00072	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00072	1
10725	Chrysene	218-01-9	0.0018	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00072	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00072	1
10725	1-Methylnaphthalene	90-12-0	0.024	0.00072	1
10725	2-Methylnaphthalene	91-57-6	0.0079	0.00072	1
10725	Naphthalene	91-20-3	N.D.	0.00072	1

Sample Description: MW-3-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714411
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 12:05 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG312

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	62	2.4	54.52
Pesticides/PCBs	**SW-846 8082**		**mg/kg**	**mg/kg**	
10736	PCB-1016	12674-11-2	N.D.	0.0039	1
10736	PCB-1221	11104-28-2	N.D.	0.0049	1
10736	PCB-1232	11141-16-5	N.D.	0.0086	1
10736	PCB-1242	53469-21-9	N.D.	0.0035	1
10736	PCB-1248	12672-29-6	N.D.	0.0035	1
10736	PCB-1254	11097-69-1	N.D.	0.0035	1
10736	PCB-1260	11096-82-5	N.D.	0.0052	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	9.8	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons	**ECY 97-602 WA EPH**		**mg/kg**	**mg/kg**	
05970	>C10-C12 Aliphatic	n.a.	N.D.	1.0	1
05970	>C10-C12 Aromatic	n.a.	N.D.	1.0	1
05970	>C12-C16 Aliphatic	n.a.	2.7	1.0	1
05970	>C12-C16 Aromatic	n.a.	1.3	1.0	1
05970	>C16-C21 Aliphatic	n.a.	N.D.	3.1	1
05970	>C16-C21 Aromatic	n.a.	N.D.	2.1	1
05970	>C21-C34 Aliphatic	n.a.	N.D.	6.2	1
05970	>C21-C34 Aromatic	n.a.	N.D.	2.1	1
GC Petroleum Hydrocarbons	**ECY 97-602 WA VPH**		**mg/kg**	**mg/kg**	
05666	Benzene	71-43-2	N.D.	0.0688	63.89
05666	C5-C6 Aliphatic Hydrocarbons	n.a.	N.D.	3.44	63.89
05666	C6-C8 Aliphatic Hydrocarbons	n.a.	6.31	3.44	63.89
05666	C8-C10 Aliphatic Hydrocarbons	n.a.	20.0	3.44	63.89
05666	C8-C10 Aromatic Hydrocarbons	n.a.	7.98	3.44	63.89
05666	Ethylbenzene	100-41-4	N.D.	0.0688	63.89
05666	Methyl t-butyl ether	1634-04-4	N.D.	0.0688	63.89
05666	Toluene	108-88-3	N.D.	0.0688	63.89
05666	o-Xylene	95-47-6	N.D.	0.0688	63.89
05666	m,p-Xylenes	179601-23-1	N.D.	0.138	63.89
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	9.2	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	

Sample Description: MW-3-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714411
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 12:05 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG312

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010B**	**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.164	0.0349	1
06951	Chromium	7440-47-3	16.4	0.116	1
06955	Lead	7439-92-1	3.67	0.528	1
06961	Nickel	7440-02-0	23.4	0.158	1
06972	Zinc	7440-66-6	43.2	0.275	1
Wet Chemistry		**SM 2540 G-1997**	**%**	**%**	
00111	Moisture	n.a.	7.2	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs- Solid by 8260B	SW-846 8260B	1	Q143551AA	12/21/2014 13:28	Sarah A Guill	40.7
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 12:05	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 12:05	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	3	201435136443	12/11/2014 12:05	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	4	201435136443	12/11/2014 12:05	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 12:05	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	14354SLG026	12/26/2014 16:15	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	14354SLG026	12/22/2014 07:15	Joseph S Feister	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 21:30	Angela D Sneeringer	54.52
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 12:05	Client Supplied	n.a.
06647	GC-5g Field Preserved MeOH	SW-846 5035A	2	201435136445	12/11/2014 12:05	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	143510016A	12/18/2014 15:54	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	143510016A	12/17/2014 15:45	JoElla L Rice	1

Sample Description: MW-3-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714411
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 12:05 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG312

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510027A	12/18/2014 17:53	Christine E Dolman	1
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	143540007A	12/24/2014 04:37	Heather E Williams	1
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	143540007A	12/24/2014 05:17	Heather E Williams	1
05666	WA- VPH soils	ECY 97-602 WA VPH	1	14353A08A	12/19/2014 15:59	Nicholas R Rossi	63.89
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510028A	12/29/2014 20:31	Lisa A Reinert	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510028A	12/18/2014 02:30	Sherry L Morrow	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510027A	12/18/2014 02:30	Sherry L Morrow	1
11213	WA EPH Soils Extraction	ECY 97-602 WA EPH	1	143540007A	12/22/2014 08:20	Roman Kuropatkin	1
00388	GC - Field Preserved (MA-VPH)	MA DEP VPH modified	1	201435136445	12/11/2014 12:05	Client Supplied	1
00497	Silica Gel Fractionation	SW-846 3630C modified	1	143540007A	12/22/2014 14:45	Roman Kuropatkin	1
06949	Cadmium	SW-846 6010B	1	143525708002	12/22/2014 15:04	Eric L Eby	1
06951	Chromium	SW-846 6010B	1	143525708002	12/22/2014 15:04	Eric L Eby	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 15:04	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	143525708002	12/22/2014 15:04	Eric L Eby	1
06972	Zinc	SW-846 6010B	1	143525708002	12/22/2014 15:04	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001A	12/23/2014 12:19	William C Schwebel	1

Sample Description: DUP-121114 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714412
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 12:13 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UGFD1

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**		**mg/kg**	
10237	Benzene	71-43-2	N.D.		0.023	42.59
10237	1,2-Dibromoethane	106-93-4	N.D.		0.046	42.59
10237	Ethylbenzene	100-41-4	N.D.		0.046	42.59
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.023	42.59
10237	Toluene	108-88-3	N.D.		0.046	42.59
10237	Xylene (Total)	1330-20-7	N.D.		0.046	42.59
	Reporting limits were raised due to interference from the sample matrix.					
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**		**mg/kg**	
10724	Naphthalene	91-20-3	N.D.		0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**		**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	76	E	2.2	51.32
	The concentration reported for Northwest Gx is estimated since it exceeds the calibration range of the instrument. The sample could not be repeated at a higher dilution within the method hold time.					
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**		**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.		3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.		11	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**		**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	5.2		3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.		11	1
	The reverse surrogate, capric acid, is present at <1%.					
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06955	Lead	7439-92-1	2.86		0.524	1
Wet Chemistry	**SM 2540 G-1997**		**%**		**%**	
00111	Moisture	n.a.	7.4		0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Sample Description: DUP-121114 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714412
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 12:13 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UGFD1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	Q143551AA	12/21/2014 16:34	Sarah A Guill	42.59
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 12:13	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 12:13	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 12:13	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 18:27	Holly Berry	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 22:06	Angela D Sneeringer	51.32
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 12:13	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510031A	12/18/2014 20:41	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510032A	12/24/2014 13:42	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510032A	12/18/2014 11:10	Denise L Trimby	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510031A	12/18/2014 11:10	Denise L Trimby	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 15:15	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001B	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-3-15 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714413
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 12:40 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG315

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0006	1.04
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	1.04
10237	Ethylbenzene	100-41-4	N.D.	0.001	1.04
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	1.04
10237	Toluene	108-88-3	0.001	0.001	1.04
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1.04
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	11	268.16
	Reporting limits were raised due to sample foaming.				
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.12	0.524	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	6.5	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

Sample Description: MW-3-15 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714413
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 12:40 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG315

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 04:48	Stephanie A Selis	1.04
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 12:40	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 12:40	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 12:40	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 18:52	Holly Berry	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14358A34A	12/24/2014 14:13	Angela D Sneeringer	268.16
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 12:40	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510031A	12/18/2014 21:23	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510032A	12/24/2014 09:51	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510032A	12/18/2014 11:10	Denise L Trimby	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510031A	12/18/2014 11:10	Denise L Trimby	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 15:19	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001B	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-3-10 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714414
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 12:50 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG310

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	1
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	1
10237	Toluene	108-88-3	N.D.	0.001	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.003	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.1	25.21
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.1	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	10	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.1	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	10	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	5.74	0.508	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	4.5	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 05:11	Stephanie A Selis	1

Sample Description: MW-3-10 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714414
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 12:50 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG310

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 12:50	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 12:50	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 12:50	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 19:17	Holly Berry	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 23:17	Angela D Sneeringer	25.21
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 12:50	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510031A	12/18/2014 21:44	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510032A	12/24/2014 10:12	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510032A	12/18/2014 11:10	Denise L Trimby	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510031A	12/18/2014 11:10	Denise L Trimby	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 15:23	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001B	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-2-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714415
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 13:20 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG220

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.82
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.82
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.82
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.82
10237	Toluene	108-88-3	N.D.	0.001	0.82
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.82
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.3	26.26
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.6	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	12	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.6	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	12	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.82	0.588	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	16.6	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 05:33	Stephanie A Selis	0.82

Sample Description: MW-2-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714415
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 13:20 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG220

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 13:20	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 13:20	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 13:20	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 19:42	Holly Berry	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14353A31A	12/19/2014 23:53	Angela D Sneeringer	26.26
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 13:20	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510031A	12/18/2014 22:05	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510032A	12/24/2014 10:33	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510032A	12/18/2014 11:10	Denise L Trimby	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510031A	12/18/2014 11:10	Denise L Trimby	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 15:27	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001B	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-2-9 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714416
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 13:37 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG209

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	1
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	1
10237	Toluene	108-88-3	N.D.	0.001	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.003	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.1	27.34
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.1	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	10	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.1	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	10	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.91	0.510	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	4.8	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 05:56	Stephanie A Selis	1

Sample Description: MW-2-9 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714416
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 13:37 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG209

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 13:37	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 13:37	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	3	201435136443	12/11/2014 13:37	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	4	201435136443	12/11/2014 13:37	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 13:37	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 20:07	Holly Berry	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14358A34A	12/24/2014 14:49	Angela D Sneeringer	27.34
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 13:37	Client Supplied	n.a.
06647	GC-5g Field Preserved MeOH	SW-846 5035A	2	201435136445	12/11/2014 13:37	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510031A	12/18/2014 22:26	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510032A	12/24/2014 11:36	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510032A	12/18/2014 11:10	Denise L Trimby	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510031A	12/18/2014 11:10	Denise L Trimby	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 15:31	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001B	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-2-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714417
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 14:13 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG212

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.85
10237	1,2-Dibromoethane	106-93-4	N.D.	0.0009	0.85
10237	Ethylbenzene	100-41-4	N.D.	0.0009	0.85
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.85
10237	Toluene	108-88-3	N.D.	0.0009	0.85
10237	Xylene (Total)	1330-20-7	N.D.	0.0009	0.85
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1	22.35
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	1.73	0.532	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	9.6	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 06:18	Stephanie A Selis	0.85

Sample Description: MW-2-12 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714417
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 14:13 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG212

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 14:13	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 14:13	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 14:13	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 20:32	Holly Berry	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14358A34A	12/24/2014 15:25	Angela D Sneeringer	22.35
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 14:13	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510031A	12/18/2014 22:47	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510032A	12/24/2014 11:57	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510032A	12/18/2014 11:10	Denise L Trimby	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510031A	12/18/2014 11:10	Denise L Trimby	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 15:35	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001B	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-1-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714418
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 15:50 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG120

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.96
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.96
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.96
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.96
10237	Toluene	108-88-3	N.D.	0.001	0.96
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.96
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.1	24.94
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.13	0.532	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	7.9	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 06:41	Stephanie A Selis	0.96

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Analysis Report

Sample Description: MW-1-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714418
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 15:50 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG120

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 15:50	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 15:50	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 15:50	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 20:56	Holly Berry	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14358A34A	12/24/2014 16:01	Angela D Sneeringer	24.94
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 15:50	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510031A	12/18/2014 23:08	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510032A	12/24/2014 12:18	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510032A	12/18/2014 11:10	Denise L Trimby	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510031A	12/18/2014 11:10	Denise L Trimby	1
06955	Lead	SW-846 6010B	1	143525708002	12/22/2014 15:39	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143525708002	12/21/2014 21:58	Annamaria Kuhns	1
00111	Moisture	SM 2540 G-1997	1	14357820001B	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-1-12.5 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714419
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 16:00 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG112

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.0007	0.0005	0.98
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.98
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.98
10237	Toluene	108-88-3	N.D.	0.001	0.98
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.98
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.1	25.85
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.56	0.537	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	6.9	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 07:04	Stephanie A Selis	0.98

Sample Description: MW-1-12.5 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714419
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 16:00 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG112

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 16:00	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 16:00	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	3	201435136443	12/11/2014 16:00	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	4	201435136443	12/11/2014 16:00	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 16:00	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 21:21	Holly Berry	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14358A34A	12/24/2014 16:37	Angela D Sneeringer	25.85
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 16:00	Client Supplied	n.a.
06647	GC-5g Field Preserved MeOH	SW-846 5035A	2	201435136445	12/11/2014 16:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510031A	12/18/2014 23:50	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510032A	12/24/2014 12:39	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510032A	12/18/2014 11:10	Denise L Trimby	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510031A	12/18/2014 11:10	Denise L Trimby	1
06955	Lead	SW-846 6010B	1	143585708004	12/29/2014 06:52	Joanne M Gates	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143585708004	12/28/2014 08:49	James L Mertz	1
00111	Moisture	SM 2540 G-1997	1	14357820001B	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-1-14 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714420
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 16:10 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG114

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.0008	0.0006	1.07
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	1.07
10237	Ethylbenzene	100-41-4	N.D.	0.001	1.07
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	1.07
10237	Toluene	108-88-3	N.D.	0.001	1.07
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1.07
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.1	26.49
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	23	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	57	11	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.73	0.520	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	6.6	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 07:26	Stephanie A Selis	1.07

Sample Description: MW-1-14 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714420
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 16:10 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG114

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 16:10	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 16:10	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 16:10	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14357SLB026	12/24/2014 11:34	Linda M Hartenstine	1
10814	BNA Soil Microwave PAH	SW-846 3546	2	14357SLB026	12/23/2014 14:30	Kelli M Barto	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14358A34A	12/24/2014 17:49	Angela D Sneeringer	26.49
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 16:10	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510031A	12/19/2014 09:04	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510032A	12/24/2014 13:00	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510032A	12/18/2014 11:10	Denise L Trimby	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510031A	12/18/2014 11:10	Denise L Trimby	1
06955	Lead	SW-846 6010B	1	143585708004	12/29/2014 06:56	Joanne M Gates	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143585708004	12/28/2014 08:49	James L Mertz	1
00111	Moisture	SM 2540 G-1997	2	14358820002A	12/24/2014 09:37	William C Schwebel	1

Sample Description: MW-1-11 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714421
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 16:15 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG111

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	0.0007	0.0005	1.02
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	1.02
10237	Toluene	108-88-3	N.D.	0.001	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1.02
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.003	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1.4	32.03
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.1	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	10	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.1	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	10	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.41	0.513	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	5.3	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 07:49	Stephanie A Selis	1.02

Sample Description: MW-1-11 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714421
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 16:15 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG111

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 16:15	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 16:15	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 16:15	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 22:11	Holly Berry	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14358A34A	12/24/2014 18:25	Angela D Sneeringer	32.03
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 16:15	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143510031A	12/19/2014 00:11	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510032A	12/24/2014 13:21	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143510032A	12/18/2014 11:10	Denise L Trimby	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143510031A	12/18/2014 11:10	Denise L Trimby	1
06955	Lead	SW-846 6010B	1	143585708004	12/29/2014 07:00	Joanne M Gates	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143585708004	12/28/2014 08:49	James L Mertz	1
00111	Moisture	SM 2540 G-1997	1	14357820001B	12/23/2014 12:19	William C Schwebel	1

Sample Description: MW-4-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714422
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 10:00 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG420

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0004	0.78
10237	1,2-Dibromoethane	106-93-4	N.D.	0.0009	0.78
10237	Ethylbenzene	100-41-4	N.D.	0.0009	0.78
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0004	0.78
10237	Toluene	108-88-3	N.D.	0.0009	0.78
10237	Xylene (Total)	1330-20-7	N.D.	0.0009	0.78
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.004	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	
02005	NWTPH-GX Soil C7-C12	n.a.	N.D.	1	22.05
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.3	1
08272	Heavy Range Organics C24-C40	n.a.	N.D.	11	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	N.D.	3.3	1
12006	HRO C24-C40 w/Si Gel	n.a.	N.D.	11	1

The reverse surrogate, capric acid, is present at <1%.
The recovery for the method blank surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	2.23	0.537	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	11.4	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Sample Description: MW-4-20 Grab Soil
Facility# 372654
3202 Main Street - Union Gap, WA

LL Sample # SW 7714422
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/11/2014 10:00 by RO

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UG420

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX, MTBE, EDB	SW-846 8260B	1	A143531AA	12/19/2014 08:11	Stephanie A Selis	0.78
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201435136443	12/11/2014 10:00	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201435136443	12/11/2014 10:00	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201435136445	12/11/2014 10:00	Client Supplied	1
10724	PAH's 8270C Soil	SW-846 8270C	1	14352SLE026	12/22/2014 22:35	Holly Berry	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	14352SLE026	12/20/2014 16:20	JoElla L Rice	1
02005	NWTPH-GX Soil C7-C12	ECY 97-602 NWTPH-Gx	1	14358A34A	12/24/2014 19:01	Angela D Sneeringer	22.05
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201435136445	12/11/2014 10:00	Client Supplied	n.a.
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	143520019A	12/19/2014 12:49	Lisa A Reinert	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	143520020A	12/30/2014 09:59	Christine E Dolman	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	143520020A	12/18/2014 19:00	Sally L Appleyard	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	143520019A	12/18/2014 19:00	Sally L Appleyard	1
06955	Lead	SW-846 6010B	1	143585708004	12/29/2014 07:11	Joanne M Gates	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	143585708004	12/28/2014 08:49	James L Mertz	1
00111	Moisture	SM 2540 G-1997	1	14357820002A	12/23/2014 10:54	William C Schwebel	1

Sample Description: TB-1-121514 NA Water
Facility# 302095
3202 Main Street - Union Gap, WA

LL Sample # WW 7714423
LL Group # 1526087
Account # 11255

Project Name: 372654

Collected: 12/15/2014 14:00

Submitted: 12/16/2014 10:20
Reported: 01/08/2015 14:23

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

UGTB1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

General Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	D143552AA	12/21/2014 17:59	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D143552AA	12/21/2014 17:59	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 04:21	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 04:21	Miranda P Tillinghast	1

Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: A143521AA	Sample number(s): 7714400-7714404,7714407-7714408							
Benzene	N.D.	0.0005	mg/kg	100	100	80-120	1	30
Bromodichloromethane	N.D.	0.001	mg/kg	97	95	75-120	3	30
Bromoform	N.D.	0.001	mg/kg	89	83	70-126	6	30
Bromomethane	N.D.	0.002	mg/kg	94	94	32-162	0	30
Carbon Tetrachloride	N.D.	0.001	mg/kg	112	110	69-130	2	30
Chlorobenzene	N.D.	0.001	mg/kg	102	101	80-120	1	30
Chloroethane	N.D.	0.002	mg/kg	90	91	17-171	1	30
Chloroform	N.D.	0.001	mg/kg	106	103	80-125	3	30
Chloromethane	N.D.	0.002	mg/kg	93	94	56-120	1	30
Dibromochloromethane	N.D.	0.001	mg/kg	97	96	77-120	2	30
1,2-Dibromoethane	N.D.	0.001	mg/kg	98	95	80-120	3	30
1,2-Dichlorobenzene	N.D.	0.001	mg/kg	96	97	80-120	1	30
1,3-Dichlorobenzene	N.D.	0.001	mg/kg	99	100	80-120	1	30
1,4-Dichlorobenzene	N.D.	0.001	mg/kg	100	101	80-120	1	30
1,1-Dichloroethane	N.D.	0.001	mg/kg	97	97	80-122	1	30
1,2-Dichloroethane	N.D.	0.001	mg/kg	108	105	77-130	3	30
1,1-Dichloroethene	N.D.	0.001	mg/kg	106	104	73-129	1	30
cis-1,2-Dichloroethene	N.D.	0.001	mg/kg	104	103	80-120	1	30
trans-1,2-Dichloroethene	N.D.	0.001	mg/kg	107	106	80-129	2	30
1,2-Dichloropropane	N.D.	0.001	mg/kg	95	95	80-120	0	30
cis-1,3-Dichloropropene	N.D.	0.001	mg/kg	91	92	74-120	0	30
trans-1,3-Dichloropropene	N.D.	0.001	mg/kg	95	95	76-120	0	30
Ethylbenzene	N.D.	0.001	mg/kg	103	102	80-120	2	30
Freon 113	N.D.	0.002	mg/kg	109	104	64-137	5	30
n-Hexane	N.D.	0.001	mg/kg	100	99	42-134	1	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	mg/kg	95	94	76-122	1	30
Methylene Chloride	N.D.	0.002	mg/kg	101	101	80-124	0	30
1,1,2,2-Tetrachloroethane	N.D.	0.001	mg/kg	87	86	71-123	1	30
Tetrachloroethene	N.D.	0.001	mg/kg	101	99	78-120	2	30
Toluene	N.D.	0.001	mg/kg	100	100	80-120	0	30
1,1,1-Trichloroethane	N.D.	0.001	mg/kg	95	95	63-135	1	30
1,1,2-Trichloroethane	N.D.	0.001	mg/kg	96	93	80-120	3	30
Trichloroethene	N.D.	0.001	mg/kg	105	104	80-125	1	30
Trichlorofluoromethane	N.D.	0.002	mg/kg	116	110	58-133	6	30
Vinyl Chloride	N.D.	0.001	mg/kg	102	101	59-120	1	30
Xylene (Total)	N.D.	0.001	mg/kg	103	102	80-120	1	30
Batch number: A143531AA	Sample number(s): 7714409-7714410,7714413-7714422							
Benzene	N.D.	0.0005	mg/kg	88	85	80-120	3	30
1,2-Dibromoethane	N.D.	0.001	mg/kg	87	84	80-120	3	30
Ethylbenzene	N.D.	0.001	mg/kg	93	88	80-120	6	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	mg/kg	81	81	76-122	0	30
Toluene	N.D.	0.001	mg/kg	90	86	80-120	4	30

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Xylene (Total)	N.D.	0.001	mg/kg	92	88	80-120	4	30
Batch number: D143552AA	Sample number(s): 7714423							
Benzene	N.D.	0.5	ug/l	102	97	78-120	5	30
Ethylbenzene	N.D.	0.5	ug/l	100	97	79-120	3	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	103	96	75-120	7	30
Toluene	N.D.	0.5	ug/l	101	97	80-120	4	30
Xylene (Total)	N.D.	0.5	ug/l	105	102	80-120	3	30
Batch number: F143562AA	Sample number(s): 7714405							
Benzene	N.D.	0.5	ug/l	93		78-120		
Ethylbenzene	N.D.	0.5	ug/l	93		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	91		75-120		
Toluene	N.D.	0.5	ug/l	99		80-120		
Xylene (Total)	N.D.	0.5	ug/l	91		80-120		
Batch number: F143571AA	Sample number(s): 7714406							
Benzene	N.D.	0.5	ug/l	101		78-120		
Ethylbenzene	N.D.	0.5	ug/l	98		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	97		75-120		
Toluene	N.D.	0.5	ug/l	104		80-120		
Xylene (Total)	N.D.	0.5	ug/l	97		80-120		
Batch number: Q143551AA	Sample number(s): 7714411-7714412							
Benzene	N.D.	0.025	mg/kg	99	88	80-120	12	30
Bromodichloromethane	N.D.	0.050	mg/kg	98	86	75-120	12	30
Bromoform	N.D.	0.050	mg/kg	92	82	70-126	10	30
Bromomethane	N.D.	0.10	mg/kg	112	102	32-162	9	30
Carbon Tetrachloride	N.D.	0.050	mg/kg	102	91	69-130	11	30
Chlorobenzene	N.D.	0.050	mg/kg	99	90	80-120	9	30
Chloroethane	N.D.	0.10	mg/kg	88	78	17-171	12	30
Chloroform	N.D.	0.050	mg/kg	105	94	80-125	11	30
Chloromethane	N.D.	0.10	mg/kg	86	74	56-120	15	30
Dibromochloromethane	N.D.	0.050	mg/kg	96	85	77-120	12	30
1,2-Dibromoethane	N.D.	0.050	mg/kg	100	89	80-120	11	30
1,2-Dichlorobenzene	N.D.	0.050	mg/kg	97	88	80-120	10	30
1,3-Dichlorobenzene	N.D.	0.050	mg/kg	100	90	80-120	10	30
1,4-Dichlorobenzene	N.D.	0.050	mg/kg	99	90	80-120	10	30
1,1-Dichloroethane	N.D.	0.050	mg/kg	103	91	80-122	12	30
1,2-Dichloroethane	N.D.	0.050	mg/kg	114	101	77-130	12	30
1,1-Dichloroethene	N.D.	0.050	mg/kg	93	84	73-129	10	30
cis-1,2-Dichloroethene	N.D.	0.050	mg/kg	99	89	80-120	11	30
trans-1,2-Dichloroethene	N.D.	0.050	mg/kg	100	89	80-129	12	30
1,2-Dichloropropane	N.D.	0.050	mg/kg	99	88	80-120	12	30
cis-1,3-Dichloropropene	N.D.	0.050	mg/kg	98	89	74-120	10	30
trans-1,3-Dichloropropene	N.D.	0.050	mg/kg	101	93	76-120	9	30
Ethylbenzene	N.D.	0.050	mg/kg	99	89	80-120	10	30
Freon 113	N.D.	0.10	mg/kg	81	70	64-137	14	30
n-Hexane	N.D.	0.050	mg/kg	76	66	42-134	14	30
Methyl Tertiary Butyl Ether	N.D.	0.025	mg/kg	105	93	76-122	11	30
Methylene Chloride	N.D.	0.10	mg/kg	102	90	80-124	12	30
1,1,2,2-Tetrachloroethane	N.D.	0.050	mg/kg	98	91	71-123	8	30
Tetrachloroethene	N.D.	0.050	mg/kg	99	89	78-120	11	30
Toluene	N.D.	0.050	mg/kg	97	89	80-120	9	30
1,1,1-Trichloroethane	N.D.	0.050	mg/kg	106	95	63-135	12	30
1,1,2-Trichloroethane	N.D.	0.050	mg/kg	98	89	80-120	10	30

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Trichloroethene	N.D.	0.050	mg/kg	101	90	80-125	11	30
Trichlorofluoromethane	N.D.	0.10	mg/kg	89	83	58-133	7	30
Vinyl Chloride	N.D.	0.050	mg/kg	85	74	59-120	14	30
Xylene (Total)	N.D.	0.050	mg/kg	96	87	80-120	10	30
Batch number: 14352SLE026	Sample number(s): 7714400-7714403,7714407,7714409-7714410,7714412-7714419,7714421-7714422							
Naphthalene	N.D.	0.003	mg/kg	93		77-115		
Batch number: 14354SLG026	Sample number(s): 7714404,7714408,7714411							
Benzo(a)anthracene	N.D.	0.00067	mg/kg	103		84-126		
Benzo(a)pyrene	N.D.	0.00067	mg/kg	102		80-117		
Benzo(b)fluoranthene	N.D.	0.00067	mg/kg	113		87-135		
Benzo(k)fluoranthene	N.D.	0.00067	mg/kg	101		79-123		
Chrysene	N.D.	0.00033	mg/kg	109		82-122		
Dibenz(a,h)anthracene	N.D.	0.00067	mg/kg	112		83-123		
Indeno(1,2,3-cd)pyrene	N.D.	0.00067	mg/kg	110		82-123		
1-Methylnaphthalene	N.D.	0.00067	mg/kg	94		78-119		
2-Methylnaphthalene	N.D.	0.00067	mg/kg	94		78-121		
Naphthalene	N.D.	0.00067	mg/kg	101		79-113		
Batch number: 14357SLB026	Sample number(s): 7714420							
Naphthalene	N.D.	0.003	mg/kg	96		77-115		
Batch number: 14353A31A	Sample number(s): 7714400-7714404,7714407-7714409,7714411-7714412,7714414-7714415							
NWTPH-GX Soil C7-C12	N.D.	1.0	mg/kg	90	96	65-120	6	30
Batch number: 14356A20A	Sample number(s): 7714405-7714406,7714423							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	103		75-135		
Batch number: 14358A34A	Sample number(s): 7714410,7714413,7714416-7714422							
NWTPH-GX Soil C7-C12	N.D.	1.0	mg/kg	90	99	65-120	9	30
Batch number: 143510016A	Sample number(s): 7714404,7714408,7714411							
PCB-1016	N.D.	0.0036	mg/kg	99		76-121		
PCB-1221	N.D.	0.0046	mg/kg					
PCB-1232	N.D.	0.0080	mg/kg					
PCB-1242	N.D.	0.0033	mg/kg					
PCB-1248	N.D.	0.0033	mg/kg					
PCB-1254	N.D.	0.0033	mg/kg					
PCB-1260	N.D.	0.0049	mg/kg	117		79-132		
Batch number: 143510027A	Sample number(s): 7714400-7714404,7714407-7714411							
Diesel Range Organics C12-C24	N.D.	3.0	mg/kg	86		71-115		
Heavy Range Organics C24-C40	N.D.	10.	mg/kg					
Batch number: 143510031A	Sample number(s): 7714412-7714421							
Diesel Range Organics C12-C24	N.D.	3.0	mg/kg	78		71-115		
Heavy Range Organics C24-C40	N.D.	10.	mg/kg					
Batch number: 143520019A	Sample number(s): 7714422							
Diesel Range Organics C12-C24	N.D.	3.0	mg/kg	86		71-115		
Heavy Range Organics C24-C40	N.D.	10.	mg/kg					
Batch number: 14353A08A	Sample number(s): 7714404,7714408,7714411							

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Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzene	N.D.	0.0500	mg/kg	92	91	70-130	1	50
C5-C6 Aliphatic Hydrocarbons	N.D.	2.50	mg/kg	103	101	70-130	2	50
C6-C8 Aliphatic Hydrocarbons	N.D.	2.50	mg/kg	102	99	70-130	3	50
C8-C10 Aliphatic Hydrocarbons	N.D.	2.50	mg/kg	101	101	70-130	0	50
C8-C10 Aromatic Hydrocarbons	N.D.	2.50	mg/kg	94	93	70-130	1	50
Ethylbenzene	N.D.	0.0500	mg/kg	94	93	70-130	1	50
Methyl t-butyl ether	N.D.	0.0500	mg/kg	90	88	70-130	2	50
Toluene	N.D.	0.0500	mg/kg	94	93	70-130	1	50
o-Xylene	N.D.	0.0500	mg/kg	88	87	70-130	0	50
m,p-Xylenes	N.D.	0.100	mg/kg	93	92	70-130	1	50
Batch number: 143540007A	Sample number(s): 7714404,7714408,7714411							
>C10-C12 Aliphatic	N.D.	1.0	mg/kg	91		31-137		
>C10-C12 Aromatic	N.D.	1.0	mg/kg	86		22-119		
>C12-C16 Aliphatic	N.D.	1.0	mg/kg	94		42-146		
>C12-C16 Aromatic	N.D.	1.0	mg/kg	86		24-136		
>C16-C21 Aliphatic	N.D.	3.0	mg/kg	94		57-111		
>C16-C21 Aromatic	N.D.	2.0	mg/kg	92		34-143		
>C21-C34 Aliphatic	N.D.	6.0	mg/kg	91		50-124		
>C21-C34 Aromatic	N.D.	2.0	mg/kg	87		44-134		
Batch number: 143510028A	Sample number(s): 7714400-7714404,7714407-7714411							
DRO C12-C24 w/Si Gel	N.D.	3.0	mg/kg	96		50-133		
HRO C24-C40 w/Si Gel	N.D.	10.	mg/kg					
Batch number: 143510032A	Sample number(s): 7714412-7714421							
DRO C12-C24 w/Si Gel	N.D.	3.0	mg/kg	83		50-133		
HRO C24-C40 w/Si Gel	N.D.	10.	mg/kg					
Batch number: 143520020A	Sample number(s): 7714422							
DRO C12-C24 w/Si Gel	N.D.	3.0	mg/kg	64		50-133		
HRO C24-C40 w/Si Gel	N.D.	10.	mg/kg					
Batch number: 143525708002	Sample number(s): 7714400-7714404,7714407-7714418							
Cadmium	N.D.	0.0330	mg/kg	101		80-120		
Chromium	N.D.	0.110	mg/kg	101		80-120		
Lead	N.D.	0.500	mg/kg	106		80-120		
Nickel	N.D.	0.150	mg/kg	103		80-120		
Zinc	N.D.	0.260	mg/kg	101		80-120		
Batch number: 143585708004	Sample number(s): 7714419-7714422							
Lead	N.D.	0.500	mg/kg	105		80-120		
Batch number: 14351049531A	Sample number(s): 7714401							
TOC Solids/Sludges Combustion	N.D.	0.0100	% by wt.	95		47-143		
Batch number: 14357820001A	Sample number(s): 7714400-7714404,7714407-7714411							
Moisture				100		99-101		
Batch number: 14357820001B	Sample number(s): 7714412-7714419,7714421							
Moisture				100		99-101		
Batch number: 14357820002A	Sample number(s): 7714422							
Moisture				100		99-101		

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Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 14358820002A	Sample number(s): 7714420							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: A143521AA	Sample number(s): 7714400-7714404,7714407-7714408					BKG: P711207			
Benzene						N.D.	N.D.	0 (1)	30
Bromodichloromethane						N.D.	N.D.	0 (1)	30
Bromoform						N.D.	N.D.	0 (1)	30
Bromomethane						N.D.	N.D.	0 (1)	30
Carbon Tetrachloride						N.D.	N.D.	0 (1)	30
Chlorobenzene						N.D.	N.D.	0 (1)	30
Chloroethane						N.D.	N.D.	0 (1)	30
Chloroform						N.D.	N.D.	0 (1)	30
Chloromethane						N.D.	N.D.	0 (1)	30
Dibromochloromethane						N.D.	N.D.	0 (1)	30
1,2-Dibromoethane						N.D.	N.D.	0 (1)	30
1,1-Dichloroethane						N.D.	N.D.	0 (1)	30
1,2-Dichloroethane						N.D.	N.D.	0 (1)	30
1,1-Dichloroethene						N.D.	N.D.	0 (1)	30
cis-1,2-Dichloroethene						N.D.	N.D.	0 (1)	30
trans-1,2-Dichloroethene						N.D.	N.D.	0 (1)	30
1,2-Dichloropropane						N.D.	N.D.	0 (1)	30
cis-1,3-Dichloropropene						N.D.	N.D.	0 (1)	30
trans-1,3-Dichloropropene						N.D.	N.D.	0 (1)	30
Ethylbenzene						N.D.	N.D.	0 (1)	30
Methylene Chloride						N.D.	N.D.	0 (1)	30
1,1,2,2-Tetrachloroethane						N.D.	N.D.	0 (1)	30
Tetrachloroethene						N.D.	N.D.	0 (1)	30
Toluene						N.D.	0.001	200* (1)	30
1,1,1-Trichloroethane						N.D.	N.D.	0 (1)	30
1,1,2-Trichloroethane						N.D.	N.D.	0 (1)	30
Trichloroethene						N.D.	N.D.	0 (1)	30
Trichlorofluoromethane						N.D.	N.D.	0 (1)	30
Vinyl Chloride						N.D.	N.D.	0 (1)	30
Xylene (Total)						N.D.	N.D.	0 (1)	30
Batch number: F143562AA	Sample number(s): 7714405 UNSPK: P720895								
Benzene	101	94	72-134	7	30				
Ethylbenzene	98	95	71-134	3	30				
Methyl Tertiary Butyl Ether	93	128*	72-126	32*	30				
Toluene	102	92	80-125	10	30				
Xylene (Total)	95	95	79-125	0	30				
Batch number: F143571AA	Sample number(s): 7714406 UNSPK: P721641								
Benzene	105	108	72-134	3	30				
Ethylbenzene	104	105	71-134	1	30				
Methyl Tertiary Butyl Ether	101	102	72-126	1	30				

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Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Toluene	106	108	80-125	2	30				
Xylene (Total)	101	102	79-125	1	30				
Batch number: 14352SLE026	Sample number(s): 7714400-7714403,7714407,7714409-7714410,7714412-7714419,7714421-7714422 UNSPK: 7714400								
Naphthalene	95	93	44-142	0	30				
Batch number: 14354SLG026	Sample number(s): 7714404,7714408,7714411 UNSPK: P714098								
Benzo(a)anthracene	95	99	54-149	5	30				
Benzo(a)pyrene	89	95	40-154	6	30				
Benzo(b)fluoranthene	87	92	26-142	6	30				
Benzo(k)fluoranthene	83	88	49-144	7	30				
Chrysene	94	99	43-141	5	30				
Dibenz(a,h)anthracene	109	115	24-138	5	30				
Indeno(1,2,3-cd)pyrene	107	112	26-139	5	30				
1-Methylnaphthalene	81	84	69-121	4	30				
2-Methylnaphthalene	82	84	63-130	4	30				
Naphthalene	91	94	44-148	3	30				
Batch number: 14357SLB026	Sample number(s): 7714420 UNSPK: P719011								
Naphthalene	96	94	44-142	2	30				
Batch number: 14356A20A	Sample number(s): 7714405-7714406,7714423 UNSPK: P711069								
NWTPH-Gx water C7-C12	118	118	75-135	0	30				
Batch number: 143510016A	Sample number(s): 7714404,7714408,7714411 UNSPK: P712588								
PCB-1016	92	98	41-135	7	50				
PCB-1260	108	110	38-148	2	50				
Batch number: 143510027A	Sample number(s): 7714400-7714404,7714407-7714411 BKG: 7714400								
Diesel Range Organics C12-C24						N.D.	N.D.	0 (1)	20
Heavy Range Organics C24-C40						N.D.	N.D.	0 (1)	20
Batch number: 143510031A	Sample number(s): 7714412-7714421 BKG: 7714412								
Diesel Range Organics C12-C24						N.D.	3.6	200* (1)	20
Heavy Range Organics C24-C40						N.D.	N.D.	0 (1)	20
Batch number: 143520019A	Sample number(s): 7714422 BKG: 7714422								
Diesel Range Organics C12-C24						N.D.	N.D.	0 (1)	20
Heavy Range Organics C24-C40						N.D.	N.D.	0 (1)	20
Batch number: 143540007A	Sample number(s): 7714404,7714408,7714411 UNSPK: 7714404 BKG: 7714404								
>C10-C12 Aliphatic	89		31-137			N.D.	N.D.	0 (1)	25
>C10-C12 Aromatic	78		22-119			N.D.	N.D.	0 (1)	25
>C12-C16 Aliphatic	93		42-146			N.D.	N.D.	0 (1)	25
>C12-C16 Aromatic	81		42-122			N.D.	N.D.	0 (1)	25
>C16-C21 Aliphatic	91		57-111			N.D.	N.D.	0 (1)	25
>C16-C21 Aromatic	90		53-132			N.D.	N.D.	0 (1)	25
>C21-C34 Aliphatic	91		38-120			N.D.	N.D.	0 (1)	25
>C21-C34 Aromatic	86		55-126			N.D.	N.D.	0 (1)	25
Batch number: 143510028A	Sample number(s): 7714400-7714404,7714407-7714411 BKG: 7714400								

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Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
DRO C12-C24 w/Si Gel						N.D.	N.D.	0 (1)	20
HRO C24-C40 w/Si Gel						N.D.	N.D.	0 (1)	20
Batch number: 143510032A	Sample number(s): 7714412-7714421 BKG: 7714412								
DRO C12-C24 w/Si Gel						4.8	7.5	44* (1)	20
HRO C24-C40 w/Si Gel						N.D.	N.D.	0 (1)	20
Batch number: 143520020A	Sample number(s): 7714422 BKG: 7714422								
DRO C12-C24 w/Si Gel						N.D.	N.D.	0 (1)	20
HRO C24-C40 w/Si Gel						N.D.	N.D.	0 (1)	20
Batch number: 143525708002	Sample number(s): 7714400-7714404,7714407-7714418 UNSPK: P713972 BKG: P713972								
Cadmium	96	96	75-125	0	20	0.272	0.259	5 (1)	20
Chromium	140*	146*	75-125	2	20	21.5	23.7	10	20
Lead	107	109	75-125	1	20	5.37	5.84	8 (1)	20
Nickel	100	101	75-125	1	20	12.4	12.8	3	20
Zinc	112	107	75-125	2	20	65.5	66.8	2	20
Batch number: 143585708004	Sample number(s): 7714419-7714422 UNSPK: P720905 BKG: P720905								
Lead	99 (2)	380 (2)	75-125	26*	20	126	112	11	20
Batch number: 14351049531A	Sample number(s): 7714401 UNSPK: 7714401 BKG: 7714401								
TOC Solids/Sludges Combustion	108		22-155			N.D.	N.D.	0 (1)	13
Batch number: 14357820001A	Sample number(s): 7714400-7714404,7714407-7714411 BKG: 7714407								
Moisture						3.8	3.8	2	5
Batch number: 14357820001B	Sample number(s): 7714412-7714419,7714421 BKG: P714420								
Moisture						5.8	5.0	14*	5
Batch number: 14357820002A	Sample number(s): 7714422 BKG: P715250								
Moisture						11.2	11.0	1	5
Batch number: 14358820002A	Sample number(s): 7714420 BKG: 7714420								
Moisture						6.6	6.5	1	5

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- Solid by 8260B
Batch number: A143521AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7714400	108	105	94	98
7714401	110	109	94	95
7714402	109	107	93	94
7714403	109	107	93	96
7714404	104	103	96	96

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Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Surrogate Quality Control

7714407	108	104	93	95
7714408	109	107	88	107
Blank	105	101	96	96
DUP	108	100	92	93
LCS	105	101	100	102
LCSD	103	98	100	101
Limits:	50-141	54-135	52-141	50-131

Analysis Name: BTEX, MTBE, EDB
Batch number: A143531AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7714409	104	105	96	104
7714410	101	105	98	101
7714413	103	107	97	101
7714414	105	108	97	96
7714415	104	105	96	95
7714416	106	106	97	97
7714417	106	106	97	98
7714418	106	106	96	98
7714419	106	109	96	96
7714420	102	101	97	99
7714421	107	108	97	97
7714422	105	107	97	98
Blank	107	104	96	94
LCS	103	100	102	103
LCSD	104	101	101	102
Limits:	50-141	54-135	52-141	50-131

Analysis Name: BTEX/MTBE
Batch number: D143552AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7714423	106	101	95	95
Blank	106	100	95	94
LCS	103	101	95	105
LCSD	103	101	95	106
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX/MTBE
Batch number: F143562AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7714405	108	89	108	99
Blank	94	100	107	95
LCS	93	104	108	98
MS	95	104	106	97
MSD	98	98	101	104
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX/MTBE
Batch number: F143571AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7714406	92	102	105	96
Blank	92	100	106	96
LCS	92	101	109	98
MS	93	103	105	99
MSD	92	102	106	98

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Surrogate Quality Control

Limits:	80-116	77-113	80-113	78-113

Analysis Name: VOCs- Solid by 8260B
Batch number: Q143551AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7714411	92	93	96	94
7714412	81	82	84	83
Blank	88	90	92	91
LCS	98	98	100	97
LCSD	89	88	90	88
Limits:	50-141	54-135	52-141	50-131

Analysis Name: PAH's 8270C Soil
Batch number: 14352SLE026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7714400	95	88	114
7714401	92	90	109
7714402	90	89	107
7714403	88	90	107
7714407	65	86	107
7714409	69	86	108
7714410	91	90	112
7714412	86	86	108
7714413	98	91	114
7714414	89	86	107
7714415	91	85	106
7714416	86	86	109
7714417	89	85	108
7714418	91	89	114
7714419	61	85	106
7714421	82	87	105
7714422	92	86	106
Blank	94	92	110
LCS	94	91	107
MS	94	88	108
MSD	93	87	105
Limits:	54-123	63-124	61-142

Analysis Name: SIM SVOA (microwave)
Batch number: 14354SLG026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7714404	91	138	85
7714408	89	111	87
7714411	89	115	95
Blank	85	105	84
LCS	90	117	91
MS	84	104	81
MSD	86	109	82
Limits:	58-128	55-144	62-121

Analysis Name: PAH's 8270C Soil
Batch number: 14357SLB026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7714420	65	97	106

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Surrogate Quality Control

Blank	82	85	97
LCS	89	93	106
MS	86	95	108
MSD	84	93	103
Limits:	54-123	63-124	61-142

Analysis Name: NWTPH-GX Soil C7-C12
Batch number: 14353A31A

	Trifluorotoluene-F
7714400	74
7714401	54
7714402	74
7714403	76
7714404	81
7714407	91
7714408	75
7714409	81
7714411	83
7714412	89
7714414	72
7714415	72
Blank	90
LCS	104
LCSD	102
Limits:	50-142

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 14356A20A

	Trifluorotoluene-F
7714405	86
7714406	90
7714423	89
Blank	89
LCS	96
MS	94
MSD	97
Limits:	63-135

Analysis Name: NWTPH-GX Soil C7-C12
Batch number: 14358A34A

	Trifluorotoluene-F
7714410	74
7714413	93
7714416	78
7714417	69
7714418	70
7714419	78
7714420	79
7714421	84
7714422	66
Blank	102
LCS	96
LCSD	103
Limits:	50-142

Analysis Name: PCBs Soil 8082 Microwave

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Surrogate Quality Control

Batch number: 143510016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7714404	107	111
7714408	106	118
7714411	98	113
Blank	106	114
LCS	107	113
MS	100	101
MSD	101	100
Limits:	41-146	48-151

Analysis Name: NWTPH-Dx soil
Batch number: 143510027A

	Orthoterphenyl
7714400	97
7714401	97
7714402	97
7714403	93
7714404	99
7714407	94
7714408	81
7714409	94
7714410	98
7714411	96
Blank	95
DUP	92
LCS	96
Limits:	50-150

Analysis Name: NWTPH-Dx soil w/ 10g Si Gel
Batch number: 143510028A

	Orthoterphenyl
7714400	109
7714401	108
7714402	109
7714403	107
7714404	108
7714407	106
7714408	81
7714409	104
7714410	111
7714411	114
Blank	103
DUP	111
LCS	110
Limits:	50-150

Analysis Name: NWTPH-Dx soil
Batch number: 143510031A

	Orthoterphenyl
7714412	91
7714413	90
7714414	91
7714415	93
7714416	82

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Surrogate Quality Control

7714417	90
7714418	95
7714419	99
7714420	95
7714421	94
Blank	89
DUP	93
LCS	85
Limits:	50-150

Analysis Name: NWTPH-Dx soil w/ 10g Si Gel
Batch number: 143510032A

	Orthoterphenyl
7714412	107
7714413	107
7714414	90
7714415	100
7714416	102
7714417	86
7714418	118
7714419	116
7714420	106
7714421	112
Blank	101
DUP	108
LCS	100
Limits:	50-150

Analysis Name: NWTPH-Dx soil
Batch number: 143520019A

	Orthoterphenyl
7714422	99
Blank	91
DUP	96
LCS	93
Limits:	50-150

Analysis Name: NWTPH-Dx soil w/ 10g Si Gel
Batch number: 143520020A

	Orthoterphenyl
7714422	65
Blank	31*
DUP	58
LCS	70
Limits:	50-150

Analysis Name: WA- VPH soils
Batch number: 14353A08A

	Trifluorotoluene-P	Trifluorotoluene-F
7714404	77	85
7714408	81	88
7714411	89	99
Blank	99	105
LCS	96	105
LCSD	96	104

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Group Number: 1526087
Reported: 01/08/15 at 02:23 PM

Surrogate Quality Control

Limits: 60-140 60-140

Analysis Name: WA EPH in Soil
Batch number: 143540007A

	Orthoterphenyl	1-chlorooctadecane
7714404	87	68
7714408	84	67
7714411	106	70
Blank	85	73
DUP	97	50
LCS	86	79
MS	83	68
Limits:	50-142	33-122

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 11255 Group # 1526087 Sample # 7714400-23

For Lancaster Laboratories use only

Instructions on reverse side correspond with circled numbers.

SCR #: _____

1 Client Information

Facility # 372654	WBS
Site Address 3202 Main Street, Union Gap, WA	
Chevron PM: Eric Hetrick	Lead Consultant: Leidos
Consultant/Office: Leidos / Bothell, WA	
Consultant Project Mgr.: Russ Shropshire	
Consultant Phone #: 425-482-3323	
Sampler: Ruth Otteman / Julie Wartes	

2 Sample Identification

3 Collected

4 Matrix

5 Analyses Requested

Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	4 Soil	4 Sediment	4 Water: Potable	4 Water: Ground	4 Water: NPDES	4 Water: Surface	4 Oil	4 Air	Total Number of Containers	BTEX + MTBE	8260 full scan	Metals by 6010B	NWTPH GX by Ecy 97-602	NWTPH DX	Silica Gel Cleanup	Lead: Total	Lead: Diss.	Lead Method 6010B	WAEPH	WAVPH	Naphthalene by 8270	PCBs by 8082	NWTPH-Dx	cPAHs by 8270 SIM	FOC by SM-5310B
MW-6-20	12/10/14	1135											7																
MW-6-12	12/10/14	1152											13																
MW-5-20	12/10/14	1402											7																
MW-5-9	12/10/14	1430											7																
MW-5-11	12/10/14	1450											13																
ER-1-121114	12/11/14	0815											6																
ER-2-121114	12/11/14	0830											6																
MW-4-9	12/11/14	1024											7																
MW-4-12	12/11/14	1030											13																
MW-4-14	12/11/14	1100											7																
MW-3-20	12/11/14	1117											7																
MW-3-12	12/11/14	1205											13																
DUP-121114	12/11/14	1213											7																

- [ ] Results in Dry Weight
- [ ] J value reporting needed
- [ ] Must meet lowest detection limits possible for 8260 compounds
- [ ] 8021 MTBE Confirmation
- [ ] Confirm MTBE + Naphthalene
- [ ] Confirm highest hit by 8260
- [ ] Confirm all hits by 8260
- [ ] Run _____ oxy's on highest hit
- [ ] Run _____ oxy's on all hits

6 Remarks

* all Soil samples to also be analyzed for moisture by SM 2540 G-1997

X do not ~~san~~ analyze for EDB on ER-1-121114 and ER-2-121114

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day

72 hour | 48 hour | 24 hour

8 Data Package Options (please circle if required)

Type I - Full | Type VI (Raw Data)

Relinquished by	Date	Time	Received by	Date	Time
Ruth Otteman	12/15/14	1500			

9

Relinquished by Commerical Carrier: UPS X FedEx _____ Other _____

Temperature Upon Receipt 0.2-2.3 °C

Custody Seals Intact? Yes No

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

For Lancaster Laboratories use only
Acct. # 11255 Group # 1526087 Sample # 7714400-23
Instructions on reverse side correspond with circled numbers.

SCR #: ______

① Client Information

Facility #: 372654
WBS:
Site Address: 3202 Main Street, Union Gap, WA
Chevron PM: Eric Hetrick
Lead Consultant: Leidos
Consultant/Office: Leidos / Bothell, WA
Consultant Project Mgr.: Russ Shropshire
Consultant Phone #: 425-482-3323
Sampler: R. Otteman / Sulie Warte

④ Matrix: ☐ Sediment ☐ Ground ☐ Surface ☐ Soil ☐ Potable ☐ NPDES ☐ Air ☐ Water ☐ Oil

⑤ Analyses Requested

- BTEX + MTBE (circled) 8021 ☐ 8260 ☒ Naphth ☒ / EDB
- ~~8260 full scan~~ n-hexane/halogenated VOCs 8260
- ~~Oxygenates~~ metals by 6010B
- NWTPH GX by ECY 97-602
- NWTPH DX ☒ Silica Gel Cleanup ☒
- Lead Total ☒ Diss. ☐ Method 6010B
- WAVPH ☒ WAEPH ☒
- Napthalene by 8270
- PCBs by 8082
- NWTPH-Dx
- cPAHs by 8270 SIM
- FOC by SM-5310B

☐ Results in Dry Weight
☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
☐ 8021 MTBE Confirmation
☐ Confirm MTBE + Naphthalene
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ______ oxy's on highest hit
☐ Run ______ oxy's on all hits

② Sample Identification

Sample Identification	Collected Date	Collected Time	③ Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX + MTBE	8260 full scan / n-hexane/halogenated VOCs 8260	metals by 6010B	NWTPH GX	NWTPH DX	Lead	WAVPH	Napthalene by 8270	PCBs by 8082	NWTPH-Dx	cPAHs by 8270 SIM	FOC by SM-5310B
MW-3-15	12/11/14	1240	X		X			7	/			/	/	/		/		/		
MW-3-10	↓	1250	X		X			7	/			/	/	/		/		/		
MW-2-20		1320	X		X			7	/			/	/	/		/		/		
MW-2-9		1337	X		X			14	/			/	/	/		/		/		
MW-2-12		1413	X		X			7	/			/	/	/		/		/		
MW-1-20		1550	X		X			7	/			/	/	/		/		/		
MW-1-12.5		1606	X		X			14	/			/	/	/		/		/		
MW-1-14		1610	X		X			7	/			/	/	/		/		/		
MW-1-11		1615	X		X			8	/			/	/	/		/		/		
MW-4-20	↓	1000	X		X			7	/			/	/	/		/		/		
TB-1-121514	12/15/14	1400	X			X		4	/			/	/	/		/		/		

⑥ Remarks

* all soil samples to be analyzed for moisture by SM 2540 G-1997
* do not analyze for EDB for TB-1-121514

⑦ Turnaround Time Requested (TAT) (please circle)

Standard (circled) 5 day 4 day
72 hour 48 hour 24 hour

⑧ Data Package Options (please circle if required)

Type I - Full Type VI (Raw Data)

⑨

Relinquished by	Date	Time	Received by	Date	Time
[signature]	12/15/14	1500			
Relinquished by					
Relinquished by Commerical Carrier: UPS X FedEx ____ Other ______			[signature]	12-16-14	1020

Temperature Upon Receipt 0.2-2.3 °C
Custody Seals Intact? Yes (circled) No

Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300
The white copy should accompany samples to Lancaster Laboratories. The yellow copy should be retained by the client.

Issued by Dept. 40 Management 7051.01

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

April 30, 2015

Project: 372654

Submittal Date: 04/01/2015
Group Number: 1549955
PO Number: 0015164161
Release Number: HETRICK
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
QA NA Water	7830311
MW-1 Grab Groundwater	7830312
MW-2 Grab Groundwater	7830313
MW-3 Grab Groundwater	7830314
MW-4 Grab Groundwater	7830315
MW-5 Grab Groundwater	7830316
MW-6 Grab Groundwater	7830317

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	Gettler-Ryan Inc.	Attn: Gettler Ryan
ELECTRONIC COPY TO	Leidos	Attn: Jamalyn Agyei
ELECTRONIC COPY TO	Leidos	Attn: Russ Shropshire

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: QA NA Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830311
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUPQA

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

General Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	P150991AA	04/09/2015 12:46	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P150991AA	04/09/2015 12:46	Amanda K Richards	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15096A94A	04/06/2015 12:52	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15096A94A	04/06/2015 12:52	Brett W Kenyon	1

Sample Description: MW-1 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830312
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 12:40 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP01

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P150991AA	04/09/2015 16:55	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P150991AA	04/09/2015 16:55	Amanda K Richards	1
07805	PAHs 8270C Water	SW-846 8270C	1	15093WAA026	04/06/2015 02:21	Brian K Graham	1

Sample Description: MW-1 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830312
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 12:40 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07807	BNA Water Extraction	SW-846 3510C	1	15093WAA026	04/03/2015 17:00	Seth A Farrier	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15093B20A	04/03/2015 19:14	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15093B20A	04/03/2015 19:14	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	150930028A	04/07/2015 01:30	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	150930028A	04/04/2015 16:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	150960015A	04/07/2015 20:10	Heather E Williams	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	150960014A	04/08/2015 11:45	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	150960014A	04/06/2015 20:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	150960015A	04/06/2015 20:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	150941848003	04/10/2015 00:34	Elaine F Stoltzfus	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	150941848003	04/06/2015 09:10	James L Mertz	1

Sample Description: MW-2 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830313
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 10:35 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	29	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	67	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P150991AA	04/09/2015 17:18	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P150991AA	04/09/2015 17:18	Amanda K Richards	1
07805	PAHs 8270C Water	SW-846 8270C	1	15093WAA026	04/06/2015 02:50	Brian K Graham	1

Sample Description: MW-2 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830313
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 10:35 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07807	BNA Water Extraction	SW-846 3510C	1	15093WAA026	04/03/2015 17:00	Seth A Farrier	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15093B20A	04/03/2015 19:42	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15093B20A	04/03/2015 19:42	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	150930028A	04/07/2015 01:46	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	150930028A	04/04/2015 16:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	150960015A	04/07/2015 20:31	Heather E Williams	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	150960014A	04/08/2015 12:06	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	150960014A	04/06/2015 20:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	150960015A	04/06/2015 20:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	150941848003	04/10/2015 00:00	Elaine F Stoltzfus	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	150941848003	04/06/2015 09:10	James L Mertz	1

Sample Description: MW-3 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830314
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 16:10 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	29	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	67	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P150991AA	04/09/2015 17:41	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P150991AA	04/09/2015 17:41	Amanda K Richards	1
07805	PAHs 8270C Water	SW-846 8270C	1	15093WAA026	04/06/2015 03:20	Brian K Graham	1

Sample Description: MW-3 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830314
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 16:10 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07807	BNA Water Extraction	SW-846 3510C	1	15093WAA026	04/03/2015 17:00	Seth A Farrier	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15093B20A	04/03/2015 20:09	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15093B20A	04/03/2015 20:09	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	150930028A	04/07/2015 02:01	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	150930028A	04/04/2015 16:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	150960015A	04/07/2015 20:53	Heather E Williams	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	150960014A	04/08/2015 12:50	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	150960014A	04/06/2015 20:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	150960015A	04/06/2015 20:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	150941848003	04/10/2015 00:36	Elaine F Stoltzfus	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	150941848003	04/06/2015 09:10	James L Mertz	1

Sample Description: MW-4 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830315
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 15:00 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P150991AA	04/09/2015 18:03	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P150991AA	04/09/2015 18:03	Amanda K Richards	1
07805	PAHs 8270C Water	SW-846 8270C	1	15093WAA026	04/06/2015 03:49	Brian K Graham	1

Sample Description: MW-4 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830315
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 15:00 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07807	BNA Water Extraction	SW-846 3510C	1	15093WAA026	04/03/2015 17:00	Seth A Farrier	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15093B20A	04/03/2015 21:05	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15093B20A	04/03/2015 21:05	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	150930028A	04/07/2015 02:17	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	150930028A	04/04/2015 16:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	150960015A	04/07/2015 21:14	Heather E Williams	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	150960014A	04/08/2015 12:28	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	150960014A	04/06/2015 20:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	150960015A	04/06/2015 20:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	150941848003	04/10/2015 00:39	Elaine F Stoltzfus	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	150941848003	04/06/2015 09:10	James L Mertz	1

Sample Description: MW-5 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830316
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 13:50 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P150991AA	04/09/2015 18:26	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P150991AA	04/09/2015 18:26	Amanda K Richards	1
07805	PAHs 8270C Water	SW-846 8270C	1	15093WAA026	04/06/2015 04:19	Brian K Graham	1

Sample Description: MW-5 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830316
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 13:50 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07807	BNA Water Extraction	SW-846 3510C	1	15093WAA026	04/03/2015 17:00	Seth A Farrier	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15093B20A	04/03/2015 21:33	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15093B20A	04/03/2015 21:33	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	150930028A	04/07/2015 03:03	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	150930028A	04/04/2015 16:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	150960015A	04/07/2015 21:35	Heather E Williams	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	150960014A	04/08/2015 13:11	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	150960014A	04/06/2015 20:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	150960015A	04/06/2015 20:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	150941848003	04/10/2015 00:41	Elaine F Stoltzfus	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	150941848003	04/06/2015 09:10	James L Mertz	1

Sample Description: MW-6 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830317
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 11:35 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
	The recovery for the method blank surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.				
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

Sample Description: MW-6 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7830317
LL Group # 1549955
Account # 11260

Project Name: 372654

Collected: 03/30/2015 11:35 by JP

Submitted: 04/01/2015 10:00
Reported: 04/30/2015 19:20

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUP06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P150991AA	04/09/2015 18:49	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P150991AA	04/09/2015 18:49	Amanda K Richards	1
07805	PAHs 8270C Water	SW-846 8270C	1	15096WAH026	04/07/2015 07:40	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	15096WAH026	04/06/2015 15:30	Seth A Farrier	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15093B20A	04/03/2015 22:00	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15093B20A	04/03/2015 22:00	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	150930028A	04/07/2015 03:19	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	150930028A	04/04/2015 16:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	150960015A	04/07/2015 21:57	Heather E Williams	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	150960014A	04/08/2015 13:33	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	150960014A	04/06/2015 20:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	150960015A	04/06/2015 20:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	150941848003	04/10/2015 00:44	Elaine F Stoltzfus	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	150941848003	04/06/2015 09:10	James L Mertz	1

Quality Control Summary

Client Name: Chevron Group Number: 1549955
Reported: 04/30/2015 19:20

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: P150991AA	Sample number(s): 7830311-7830317							
Benzene	N.D.	0.5	ug/l	101	97	78-120	4	30
1,2-Dichloroethane	N.D.	0.5	ug/l	99	96	72-127	3	30
Ethylbenzene	N.D.	0.5	ug/l	92	90	80-120	3	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	107	103	75-120	4	30
Toluene	N.D.	0.5	ug/l	94	91	80-120	3	30
Xylene (Total)	N.D.	0.5	ug/l	95	92	80-120	3	30
Batch number: 15093WAA026	Sample number(s): 7830312-7830316							
2-Methylnaphthalene	N.D.	0.1	ug/l	83		69-103		
Naphthalene	N.D.	0.1	ug/l	87		75-108		
Batch number: 15096WAH026	Sample number(s): 7830317							
2-Methylnaphthalene	N.D.	0.1	ug/l	88	85	69-103	3	30
Naphthalene	N.D.	0.1	ug/l	93	90	75-108	4	30
Batch number: 15093B20A	Sample number(s): 7830312-7830317							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	99	99	80-123	0	30
Batch number: 15096A94A	Sample number(s): 7830311							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	94	95	80-123	0	30
Batch number: 150930028A	Sample number(s): 7830312-7830317							
Ethylene dibromide	N.D.	0.010	ug/l	108	110	60-140	2	20
Batch number: 150960015A	Sample number(s): 7830312-7830317							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	62	65	50-113	4	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					
Batch number: 150960014A	Sample number(s): 7830312-7830317							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	57	59	32-117	3	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 150941848003	Sample number(s): 7830312-7830317							
Lead	N.D.	4.7	ug/l	104		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

	MS	MSD	MS/MSD	RPD	BKG	DUP	DUP	Dup RPD

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1549955
Reported: 04/30/2015 19:20

Analysis Name	%REC	%REC	Limits	RPD	MAX	Conc	Conc	RPD	Max
Batch number: 15093WAA026	Sample number(s): 7830312-7830316 UNSPK: P832527								
2-Methylnaphthalene	91	90	65-109	4	30				
Naphthalene	94	95	68-118	6	30				
Batch number: 150930028A	Sample number(s): 7830312-7830317 UNSPK: P830365								
Ethylene dibromide	120	109	60-140	10	20				
Batch number: 150941848003	Sample number(s): 7830312-7830317 UNSPK: 7830313 BKG: 7830313								
Lead	106	103	75-125	2	20	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 BTEX/MTBE/EDC - Water
Batch number: P150991AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7830311	103	100	94	99
7830312	104	101	93	98
7830313	103	100	94	99
7830314	103	100	94	99
7830315	104	101	94	98
7830316	103	102	94	99
7830317	104	99	94	99
Blank	102	100	94	98
LCS	102	104	95	98
LCSD	103	104	94	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs 8270C Water
Batch number: 15093WAA026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7830312	93	84	35
7830313	93	84	59
7830314	93	82	84
7830315	92	83	82
7830316	92	84	80
Blank	92	82	82
LCS	93	83	75
MS	99	87	70
MSD	99	87	80
Limits:	60-123	61-112	35-144

Analysis Name: PAHs 8270C Water
Batch number: 15096WAH026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7830317	93	82	86
Blank	28*	26*	78
LCS	100	86	67
LCSD	97	85	81
Limits:	60-123	61-112	35-144

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Group Number: 1549955
Reported: 04/30/2015 19:20

Surrogate Quality Control

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 15093B20A

	Trifluorotoluene-F
7830312	93
7830313	95
7830314	94
7830315	95
7830316	93
7830317	90
Blank	91
LCS	100
LCSD	99
Limits:	63-135

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 15096A94A

	Trifluorotoluene-F
7830311	82
Blank	82
LCS	102
LCSD	101
Limits:	63-135

Analysis Name: EDB by 8011
Batch number: 150930028A

	1,1,2,2-Tetrachloroethane
7830312	109
7830313	112
7830314	108
7830315	109
7830316	115
7830317	126
Blank	99
LCS	103
LCSD	105
MS	115
MSD	106
Limits:	46-136

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 150960014A

	Orthoterphenyl
7830312	91
7830313	85
7830314	86
7830315	80
7830316	89
7830317	78
Blank	85
LCS	87
LCSD	82
Limits:	50-150

Analysis Name: NWTPH-Dx water

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Quality Control Summary

Client Name: Chevron
Group Number: 1549955
Reported: 04/30/2015 19:20

Surrogate Quality Control

Batch number: 150960015A

	Orthoterphenyl
7830312	83
7830313	84
7830314	70
7830315	81
7830316	85
7830317	83
Blank	76
LCS	84
LCSD	85
Limits:	50-150

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Chevron Northwest Region Analysis Request/Chain of Custody

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For Eurofins Lancaster Laboratories use only
Acct. # 11260 Group # 1549955 Sample # 783031 1-17
Instructions on reverse side correspond with circled numbers.

SCR #: _____

1 Client Information

Facility # SS#372654-OML G-R#385900 WBS
Site Address 3202 MAIN STREET, UNION GAP, WA
Chevron PM EH Lead Consultant LEIDOSRS Russell Shropshire
Consultant/Office Gettler-Ryan, Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568
Consultant Project Mgr. Deanna L. Harding, (deanna@grinc.com)
Consultant Phone # (925) 551-7444 x180
Sampler J. PAYNE

2 Sample Identification

3 Collected / Grab / Composite

4 Matrix

Soil ☐ Water ☒ Sediment ☒ Potable ☐ Ground ☐ NPDES ☐ Surface ☐ Oil ☐ Air ☐

5 Analyses Requested

Total Number of Containers
BTEX + MTBE ☐ 8021 ☐ 8260 ☒ Naphth ☐
8260 full scan
Oxygenates ____
NWTPH-Gx
NWTPH-Dx with Silica Gel Cleanup ☒
NWTPH-Dx without Silica Gel Cleanup ☒
WA VPH ☐ WA EPH ☐
Lead Total ☒ Diss. ☐ Method 6010
NAPHTHALENE / 2-METHYL NAPHTHALENE 8270
EDB 8011
1,2 DCE 8260B

Sample Identification	Date	Time	Grab	Composite	Soil	Water	Sediment	Potable	Ground	NPDES	Surface	Oil	Air	Total Number of Containers	BTEX + MTBE	8260 full scan	Oxygenates	NWTPH-Gx	NWTPH-Dx with Silica Gel Cleanup	NWTPH-Dx without Silica Gel Cleanup	WA VPH	WA EPH	Lead Total	Lead Diss.	NAPHTHALENE / 2-METHYL NAPHTHALENE 8270	EDB 8011	1,2 DCE 8260B
QA	3-30-15		X			X								8	X			X									
MW-1		1240	X			X								13	X			X	X	X			X		X	X	X
MW-2		1035	X			X								13	X			X	X	X			X		X	X	X
MW-3		1610	X			X								13	X			X	X	X			X		X	X	X
MW-4		1505	X			X								13	X			X	X	X			X		X	X	X
MW-5		1350	X			X								13	X			X	X	X			X		X	X	X
MW-6		1135	X			X								13	X			X	X	X			X		X	X	X

6 Remarks

Requesting results for both Dx and Dx with silica gel cleanup

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run _____ oxy's on highest hit
- ☐ Run _____ oxy's on all hits

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day
72 hour | 48 hour | EDF/EDD 24 hour

8 Data Package (circle if required)

Type I - Full
Type VI (Raw Data)

EDD (circle if required)

CVX-RTBU-FI_05 (default)
Other: _____

9

	Date	Time	Received by	Date	Time
Relinquished by	3-31-15	1600			
Relinquished by			Received by		

Relinquished by Commercial Carrier: UPS X FedEx _____ Other _____

Received by 4/1/15 Date 3-4/1/15 Time 1000

Temperature Upon Receipt 0.2-0.9 °C

Custody Seals Intact? Yes No

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and the < Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, ISO17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

October 30, 2015

Project: 372654

Submittal Date: 07/03/2015
Group Number: 1574333
PO Number: 0015164161
Release Number: HETRICK
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
QA NA Water	7954470
MW-1 Grab Water	7954471
MW-2 Grab Water	7954472
MW-3 Grab Water	7954473
MW-4 Grab Water	7954474
MW-5 Grab Water	7954475
MW-6 Grab Water	7954476

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	Leidos	Attn: Russ Shropshire
ELECTRONIC COPY TO	Leidos	Attn: Jamalyn Agyei
ELECTRONIC COPY TO	Gettler-Ryan Inc.	Attn: Gettler Ryan

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: QA NA Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954470
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUGQA

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

General Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	D151932AA	07/12/2015 13:49	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D151932AA	07/12/2015 13:49	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15187A94A	07/06/2015 22:07	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15187A94A	07/06/2015 22:07	Marie D Beamenderfer	1

Sample Description: MW-1 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954471
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 13:25 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG01

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0095	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D151941AA	07/13/2015 12:36	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D151941AA	07/13/2015 12:36	Amanda K Richards	1

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Analysis Report

Sample Description: MW-1 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954471
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 13:25 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15187WAB026	07/11/2015 01:24	William H Saadeh	1
07807	BNA Water Extraction	SW-846 3510C	1	15187WAB026	07/06/2015 18:00	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15187A94A	07/07/2015 00:40	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15187A94A	07/07/2015 00:40	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	151870016A	07/10/2015 13:46	Richard A Shober	1
07786	EDB Extraction (8011)	SW-846 8011	1	151870016A	07/07/2015 17:15	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	151910010A	07/17/2015 10:34	Christine E Dolman	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	151910009A	07/16/2015 06:05	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	151910009A	07/13/2015 21:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	151910010A	07/13/2015 21:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	151871848003	07/08/2015 03:58	Elaine F Stoltzfus	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	151871848003	07/07/2015 11:57	James L Mertz	1

Sample Description: MW-2 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954472
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 10:45 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D151941AA	07/13/2015 14:08	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D151941AA	07/13/2015 14:08	Amanda K Richards	1

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Analysis Report

Sample Description: MW-2 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954472
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 10:45 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15187WAB026	07/11/2015 01:54	William H Saadeh	1
07807	BNA Water Extraction	SW-846 3510C	1	15187WAB026	07/06/2015 18:00	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15187A94A	07/07/2015 01:06	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15187A94A	07/07/2015 01:06	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	151870016A	07/10/2015 14:17	Richard A Shober	1
07786	EDB Extraction (8011)	SW-846 8011	1	151870016A	07/07/2015 17:15	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	151910010A	07/17/2015 10:56	Christine E Dolman	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	151910009A	07/16/2015 06:27	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	151910009A	07/13/2015 21:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	151910010A	07/13/2015 21:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	151871848003	07/08/2015 04:01	Elaine F Stoltzfus	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	151871848003	07/07/2015 11:57	James L Mertz	1

Sample Description: MW-3 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954473
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 17:05 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D151941AA	07/13/2015 14:31	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D151941AA	07/13/2015 14:31	Amanda K Richards	1

Sample Description: MW-3 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954473
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 17:05 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15187WAB026	07/11/2015 02:23	William H Saadeh	1
07807	BNA Water Extraction	SW-846 3510C	1	15187WAB026	07/06/2015 18:00	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15187A94A	07/07/2015 01:32	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15187A94A	07/07/2015 01:32	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	151870016A	07/10/2015 15:20	Richard A Shober	1
07786	EDB Extraction (8011)	SW-846 8011	1	151870016A	07/07/2015 17:15	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	151910010A	07/17/2015 11:18	Christine E Dolman	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	151910009A	07/16/2015 06:48	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	151910009A	07/13/2015 21:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	151910010A	07/13/2015 21:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	151871848003	07/08/2015 04:04	Elaine F Stoltzfus	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	151871848003	07/07/2015 11:57	James L Mertz	1

Sample Description: MW-4 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954474
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 15:55 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D151941AA	07/13/2015 14:54	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D151941AA	07/13/2015 14:54	Amanda K Richards	1

Sample Description: MW-4 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954474
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 15:55 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15187WAB026	07/11/2015 02:52	William H Saadeh	1
07807	BNA Water Extraction	SW-846 3510C	1	15187WAB026	07/06/2015 18:00	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15187A94A	07/07/2015 01:57	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15187A94A	07/07/2015 01:57	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	151870016A	07/10/2015 15:35	Richard A Shober	1
07786	EDB Extraction (8011)	SW-846 8011	1	151870016A	07/07/2015 17:15	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	151910010A	07/17/2015 11:39	Christine E Dolman	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	151910009A	07/16/2015 07:10	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	151910009A	07/13/2015 21:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	151910010A	07/13/2015 21:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	151871848004	07/08/2015 08:52	Joanne M Gates	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	151871848004	07/07/2015 09:31	Katlin N Cataldi	1

Sample Description: MW-5 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954475
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 14:40 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D151941AA	07/13/2015 15:17	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D151941AA	07/13/2015 15:17	Amanda K Richards	1

Sample Description: MW-5 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954475
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 14:40 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15187WAB026	07/11/2015 03:22	William H Saadeh	1
07807	BNA Water Extraction	SW-846 3510C	1	15187WAB026	07/06/2015 18:00	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15187A94A	07/07/2015 02:23	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15187A94A	07/07/2015 02:23	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	151870016A	07/10/2015 15:51	Richard A Shober	1
07786	EDB Extraction (8011)	SW-846 8011	1	151870016A	07/07/2015 17:15	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	151910010A	07/17/2015 12:23	Christine E Dolman	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	151910009A	07/16/2015 07:32	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	151910009A	07/13/2015 21:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	151910010A	07/13/2015 21:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	151871848005	07/07/2015 18:32	Tara L Snyder	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	151871848005	07/07/2015 09:31	Katlin N Cataldi	1

Sample Description: MW-6 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954476
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 12:10 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0095	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	4.7	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D151941AA	07/13/2015 15:40	Amanda K Richards	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D151941AA	07/13/2015 15:40	Amanda K Richards	1

Sample Description: MW-6 Grab Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 7954476
LL Group # 1574333
Account # 11260

Project Name: 372654

Collected: 07/01/2015 12:10 by GM

Submitted: 07/03/2015 09:30
Reported: 10/30/2015 12:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15187WAB026	07/11/2015 03:51	William H Saadeh	1
07807	BNA Water Extraction	SW-846 3510C	1	15187WAB026	07/06/2015 18:00	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15187A94A	07/07/2015 02:48	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15187A94A	07/07/2015 02:48	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	151870016A	07/10/2015 16:07	Richard A Shober	1
07786	EDB Extraction (8011)	SW-846 8011	1	151870016A	07/07/2015 17:15	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	151910010A	07/17/2015 12:01	Christine E Dolman	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	151910009A	07/16/2015 07:56	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	151910009A	07/13/2015 21:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	151910010A	07/13/2015 21:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	151891848002	07/13/2015 10:26	Eric L Eby	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	151891848002	07/10/2015 07:08	James L Mertz	1

Quality Control Summary

Client Name: Chevron Group Number: 1574333
Reported: 10/30/2015 12:48

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: D151932AA	Sample number(s): 7954470							
Benzene	N.D.	0.5	ug/l	87		78-120		
Ethylbenzene	N.D.	0.5	ug/l	88		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	88		75-120		
Toluene	N.D.	0.5	ug/l	89		80-120		
Xylene (Total)	N.D.	0.5	ug/l	91		80-120		
Batch number: D151941AA	Sample number(s): 7954471-7954476							
Benzene	N.D.	0.5	ug/l	90		78-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	93		72-127		
Ethylbenzene	N.D.	0.5	ug/l	85		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	86		75-120		
Toluene	N.D.	0.5	ug/l	87		80-120		
Xylene (Total)	N.D.	0.5	ug/l	87		80-120		
Batch number: 15187WAB026	Sample number(s): 7954471-7954476							
2-Methylnaphthalene	N.D.	0.1	ug/l	84	87	69-103	3	30
Naphthalene	N.D.	0.1	ug/l	91	93	75-108	3	30
Batch number: 15187A94A	Sample number(s): 7954470-7954476							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	83	90	75-135	8	30
Batch number: 151870016A	Sample number(s): 7954471-7954476							
Ethylene dibromide	N.D.	0.010	ug/l	107	108	60-140	0	20
Batch number: 151910010A	Sample number(s): 7954471-7954476							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	62	75	50-113	19	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					
Batch number: 151910009A	Sample number(s): 7954471-7954476							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	50	60	32-117	19	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 151871848003	Sample number(s): 7954471-7954473							
Lead	N.D.	4.7	ug/l	104		80-120		
Batch number: 151871848004	Sample number(s): 7954474							
Lead	N.D.	4.7	ug/l	103		80-120		
Batch number: 151871848005	Sample number(s): 7954475							
Lead	N.D.	4.7	ug/l	103		80-120		
Batch number: 151891848002	Sample number(s): 7954476							
Lead	N.D.	4.7	ug/l	104		80-120		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1574333
Reported: 10/30/2015 12:48

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: D151932AA	Sample number(s): 7954470 UNSPK: P954426								
Benzene	90	104	72-134	15	30				
Ethylbenzene	89	105	71-134	16	30				
Methyl Tertiary Butyl Ether	78	94	72-126	19	30				
Toluene	88	104	80-125	17	30				
Xylene (Total)	89	105	79-125	17	30				
Batch number: D151941AA	Sample number(s): 7954471-7954476 UNSPK: 7954471								
Benzene	91	95	72-134	5	30				
1,2-Dichloroethane	92	97	63-142	5	30				
Ethylbenzene	90	94	71-134	5	30				
Methyl Tertiary Butyl Ether	86	91	72-126	5	30				
Toluene	90	95	80-125	6	30				
Xylene (Total)	91	96	79-125	5	30				
Batch number: 151870016A	Sample number(s): 7954471-7954476 UNSPK: 7954471 BKG: 7954472								
Ethylene dibromide	108		60-140			N.D.	N.D.	0 (1)	30
Batch number: 151871848003	Sample number(s): 7954471-7954473 UNSPK: P952101 BKG: P952101								
Lead	103	102	75-125	1	20	N.D.	N.D.	0 (1)	20
Batch number: 151871848004	Sample number(s): 7954474 UNSPK: P949666 BKG: P949666								
Lead	100	97	75-125	3	20	N.D.	N.D.	0 (1)	20
Batch number: 151871848005	Sample number(s): 7954475 UNSPK: P953732 BKG: P953732								
Lead	100	107	75-125	7	20	N.D.	N.D.	0 (1)	20
Batch number: 151891848002	Sample number(s): 7954476 UNSPK: P949471 BKG: P949471								
Lead	96	91	75-125	3	20	99.9	90.5	10	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX/MTBE
Batch number: D151932AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7954470	102	100	98	96
Blank	101	98	99	97
LCS	99	101	99	101
MS	100	99	99	103

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1574333
Reported: 10/30/2015 12:48

Surrogate Quality Control

MSD	98	100	99	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 BTEX/MTBE/EDC - Water
Batch number: D151941AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7954471	101	99	98	98
7954472	101	99	97	97
7954473	101	99	97	97
7954474	101	99	98	97
7954475	102	97	97	97
7954476	103	100	98	97
Blank	101	99	98	97
LCS	101	102	96	102
MS	100	99	98	101
MSD	100	99	98	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs 8270C Water
Batch number: 15187WAB026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7954471	83	81	72
7954472	81	81	66
7954473	84	85	69
7954474	82	84	69
7954475	75	76	73
7954476	81	86	78
Blank	88	87	48
LCS	86	87	80
LCSD	87	83	81
Limits:	60-123	61-112	35-144

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 15187A94A

	Trifluorotoluene-F
7954470	77
7954471	77
7954472	78
7954473	74
7954474	78
7954475	77
7954476	88
Blank	79
LCS	94
LCSD	96
Limits:	63-135

Analysis Name: EDB by 8011
Batch number: 151870016A

	1,1,2,2-Tetrachloroethane
7954471	123
7954472	124
7954473	134
7954474	127

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1574333
Reported: 10/30/2015 12:48

Surrogate Quality Control

7954475	126
7954476	127
Blank	124
DUP	130
LCS	117
LCSD	119
MS	122
Limits:	46-136

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 151910009A

	Orthoterphenyl
7954471	77
7954472	83
7954473	79
7954474	77
7954475	72
7954476	83
Blank	75
LCS	75
LCSD	83
Limits:	50-150

Analysis Name: NWTPH-Dx water
Batch number: 151910010A

	Orthoterphenyl
7954471	88
7954472	95
7954473	91
7954474	91
7954475	89
7954476	82
Blank	93
LCS	89
LCSD	100
Limits:	50-150

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 11260 For Eurofins Lancaster Laboratories use only Group # 1574333 Sample # 795447O-76

Instructions on reverse side correspond with circled numbers.

(1) Client Information

Facility # SS#372654-OML G-R#385900 WBS

Site Address 3202 MAIN STREET, UNION GAP, WA

Chevron PM EH LEIDOSRS Lead Consultant Russell Shropshire

Consultant/Office Gettler-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568

Consultant Project Mgr. Deanna L. Harding, (deanna@grinc.com)

Consultant Phone # (925) 551-7444 x180

Sampler GILBERT MEDINA

(4) Matrix

Soil ☐ Sediment ☐ Water ☐ Potable ☐ Ground ☐ NPDES ☐ Surface ☐ Oil ☐ Air ☐

(3) Grab / Composite

(5) Analyses Requested

SCR #: _____

☐ Results in Dry Weight
☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
☐ 8021 MTBE Confirmation
☐ Confirm MTBE + Naphthalene
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run _____ oxy's on highest hit
☐ Run _____ oxy's on all hits

(2) Sample Identification	Collected Date	Collected Time	Grab	Composite	Total Number of Containers	BTEX + MTBE	8260 full scan	Oxygenates	NWTPH-Gx	NWTPH-Dx with Silica Gel Cleanup	NWTPH-Dx without Silica Gel Cleanup	WA VPH	WA EPH	Lead Total	Lead Diss.	Method 6010	1,2 DCE (8260)	NAPHTHALENE & 2-METHYL NAPHTHALENE (8270)	TEDB (8011)
QA	7/1/15	—	X		2	X			X										
MW-1		1325			13					X	X			X			X	X	X
MW-2		1045																	
MW-3		1705																	
MW-4		1555																	
MW-5		1440																	
MW-6		1210																	

(6) Remarks

Requesting results for both Dx and Dx with silica gel cleanup.

(7) Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | EDF/EDD | 72 hour | 48 hour | 24 hour

Relinquished by	Date	Time	Received by	Date	Time
	7/2/15	1130		7/2/15	11:30
	7/2/15				

(8) Data Package (circle if required)

Type I - Full

Type VI (Raw Data)

EDD (circle if required)

CVX-RTBU-FI_05 (default)

Other: _____

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____

Received by _____ Date 7/3/15 Time 930

Temperature Upon Receipt 0.5-1.8 °C

Custody Seals Intact? Yes No

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

October 30, 2015

Project: 372654

Submittal Date: 09/19/2015
Group Number: 1594231
PO Number: 0015164161
Release Number: HETRICK
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
QA NA Water	8054787
MW-1 Grab Groundwater	8054788
MW-2 Grab Groundwater	8054789
MW-3 Grab Groundwater	8054790
MW-4 Grab Groundwater	8054791
MW-5 Grab Groundwater	8054792
MW-6 Grab Groundwater	8054793

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	Leidos	Attn: Russ Shropshire
ELECTRONIC COPY TO	Leidos	Attn: Jamalyn Agyei
ELECTRONIC COPY TO	Gettler-Ryan Inc.	Attn: Gettler Ryan

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

eurofins | Lancaster Laboratories Environmental

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Analysis Report

Sample Description: QA NA Water
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054787
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUGQA

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

General Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	P152711AA	09/28/2015 10:51	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P152711AA	09/28/2015 10:51	Brett W Kenyon	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15266A53A	09/24/2015 17:57	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15266A53A	09/24/2015 17:57	Brett W Kenyon	1

Sample Description: MW-1 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054788
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 13:20 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG01

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	29	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	67	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P152711AA	09/28/2015 17:26	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P152711AA	09/28/2015 17:26	Brett W Kenyon	1

Sample Description: MW-1 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054788
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 13:20 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15266WAG026	09/28/2015 17:04	Holly B Ziegler	1
07807	BNA Water Extraction	SW-846 3510C	1	15266WAG026	09/23/2015 16:30	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15264A53A	09/22/2015 17:17	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15264A53A	09/22/2015 17:17	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	152640006A	09/23/2015 08:20	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	152640006A	09/22/2015 11:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	152720023A	10/01/2015 10:30	Tracy A Cole	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	152720024A	10/14/2015 10:21	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	152720024A	09/30/2015 08:20	Olivia Arosemena	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	152720023A	09/30/2015 08:20	Olivia Arosemena	1
07055	Lead	SW-846 6010B	1	152711848003	09/30/2015 08:33	Tara L Snyder	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	152711848003	09/29/2015 09:24	James L Mertz	1

Sample Description: MW-2 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054789
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 09:20 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	29	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	67	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P152711AA	09/28/2015 17:53	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P152711AA	09/28/2015 17:53	Brett W Kenyon	1

Sample Description: MW-2 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054789
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 09:20 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
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San Ramon CA 94583

MUG02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15266WAG026	09/28/2015 17:32	Holly B Ziegler	1
07807	BNA Water Extraction	SW-846 3510C	1	15266WAG026	09/23/2015 16:30	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15264A53A	09/22/2015 17:45	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15264A53A	09/22/2015 17:45	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	152640006A	09/23/2015 08:36	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	152640006A	09/22/2015 11:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	152720023A	10/01/2015 10:52	Tracy A Cole	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	152720024A	10/14/2015 10:42	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	152720024A	09/30/2015 08:20	Olivia Arosemena	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	152720023A	09/30/2015 08:20	Olivia Arosemena	1
07055	Lead	SW-846 6010B	1	152711848003	09/30/2015 08:41	Tara L Snyder	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	152711848003	09/29/2015 09:24	James L Mertz	1

Sample Description: MW-3 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054790
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 10:18 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P152711AA	09/28/2015 18:19	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P152711AA	09/28/2015 18:19	Brett W Kenyon	1

Sample Description: MW-3 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054790
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 10:18 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15266WAG026	09/28/2015 18:00	Holly B Ziegler	1
07807	BNA Water Extraction	SW-846 3510C	1	15266WAG026	09/23/2015 16:30	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15264A53A	09/22/2015 18:13	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15264A53A	09/22/2015 18:13	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	152640006A	09/23/2015 09:24	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	152640006A	09/22/2015 11:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	152720023A	10/01/2015 11:13	Tracy A Cole	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	152720024A	10/14/2015 11:04	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	152720024A	09/30/2015 08:20	Olivia Arosemena	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	152720023A	09/30/2015 08:20	Olivia Arosemena	1
07055	Lead	SW-846 6010B	1	152711848003	09/30/2015 08:43	Tara L Snyder	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	152711848003	09/29/2015 09:24	James L Mertz	1

Sample Description: MW-4 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054791
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 11:20 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P152711AA	09/28/2015 18:45	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P152711AA	09/28/2015 18:45	Brett W Kenyon	1

Sample Description: MW-4 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054791
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 11:20 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15266WAG026	09/28/2015 18:28	Holly B Ziegler	1
07807	BNA Water Extraction	SW-846 3510C	1	15266WAG026	09/23/2015 16:30	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15264A53A	09/22/2015 18:41	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15264A53A	09/22/2015 18:41	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	152640006A	09/23/2015 09:40	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	152640006A	09/22/2015 11:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	152740005A	10/02/2015 09:43	Tracy A Cole	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	152740004A	10/14/2015 12:30	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	152740004A	10/01/2015 19:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	152740005A	10/01/2015 19:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	152671848006	09/27/2015 18:48	Tara L Snyder	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	152671848006	09/27/2015 10:59	James L Mertz	1

Sample Description: MW-5 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054792
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 07:50 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P152711AA	09/28/2015 19:12	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P152711AA	09/28/2015 19:12	Brett W Kenyon	1

Sample Description: MW-5 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054792
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 07:50 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15266WAG026	09/28/2015 18:56	Holly B Ziegler	1
07807	BNA Water Extraction	SW-846 3510C	1	15266WAG026	09/23/2015 16:30	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15264A53A	09/22/2015 19:08	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15264A53A	09/22/2015 19:08	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	152640006A	09/23/2015 09:55	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	152640006A	09/22/2015 11:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	152740005A	10/02/2015 10:04	Tracy A Cole	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	152740004A	10/14/2015 12:51	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	152740004A	10/01/2015 19:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	152740005A	10/01/2015 19:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	152671848006	09/27/2015 18:52	Tara L Snyder	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	152671848006	09/27/2015 10:59	James L Mertz	1

Sample Description: MW-6 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054793
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 12:20 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	N.D.	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	P152711AA	09/28/2015 19:38	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P152711AA	09/28/2015 19:38	Brett W Kenyon	1

Sample Description: MW-6 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main Street - Union Gap, WA

LL Sample # WW 8054793
LL Group # 1594231
Account # 11260

Project Name: 372654

Collected: 09/17/2015 12:20 by AW

Submitted: 09/19/2015 09:10
Reported: 10/30/2015 12:47

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUG06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15266WAG026	09/28/2015 19:24	Holly B Ziegler	1
07807	BNA Water Extraction	SW-846 3510C	1	15266WAG026	09/23/2015 16:30	Ryan A Schafran	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15264A53A	09/22/2015 19:36	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	15264A53A	09/22/2015 19:36	Brett W Kenyon	1
10398	EDB by 8011	SW-846 8011	1	152640006A	09/23/2015 10:11	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	152640006A	09/22/2015 11:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	152740005A	10/02/2015 10:26	Tracy A Cole	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	152740004A	10/14/2015 13:13	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	152740004A	10/01/2015 19:00	Samantha L Bronder	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	152740005A	10/01/2015 19:00	Samantha L Bronder	1
07055	Lead	SW-846 6010B	1	152671848006	09/27/2015 19:01	Tara L Snyder	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	152671848006	09/27/2015 10:59	James L Mertz	1

Quality Control Summary

Client Name: Chevron Group Number: 1594231
Reported: 10/30/2015 12:47

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: P152711AA	Sample number(s): 8054787-8054793							
Benzene	N.D.	0.5	ug/l	93		78-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	88		72-127		
Ethylbenzene	N.D.	0.5	ug/l	95		78-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	100		75-120		
Toluene	N.D.	0.5	ug/l	94		80-120		
Xylene (Total)	N.D.	0.5	ug/l	96		80-120		
Batch number: 15266WAG026	Sample number(s): 8054788-8054793							
2-Methylnaphthalene	N.D.	0.1	ug/l	87	87	69-103	0	30
Naphthalene	N.D.	0.1	ug/l	85	87	69-109	2	30
Batch number: 15264A53A	Sample number(s): 8054788-8054793							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	103	105	80-123	2	30
Batch number: 15266A53A	Sample number(s): 8054787							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	103	101	80-123	2	30
Batch number: 152640006A	Sample number(s): 8054788-8054793							
Ethylene dibromide	N.D.	0.010	ug/l	93	92	60-140	1	20
Batch number: 152720023A	Sample number(s): 8054788-8054790							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	59	60	50-113	2	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					
Batch number: 152740005A	Sample number(s): 8054791-8054793							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	56	62	50-113	10	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					
Batch number: 152720024A	Sample number(s): 8054788-8054790							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	45	54	32-117	18	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 152740004A	Sample number(s): 8054791-8054793							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	45	57	32-117	24*	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 152671848006	Sample number(s): 8054791-8054793							
Lead	N.D.	5.1	ug/l	104		80-120		
Batch number: 152711848003	Sample number(s): 8054788-8054790							
Lead	N.D.	5.1	ug/l	101		80-120		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1594231
Reported: 10/30/2015 12:47

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: P152711AA	Sample number(s): 8054787-8054793 UNSPK: P055231								
Benzene	107	104	78-120	3	30				
1,2-Dichloroethane	94	93	72-127	1	30				
Ethylbenzene	107	105	78-120	3	30				
Methyl Tertiary Butyl Ether	106	104	75-120	2	30				
Toluene	105	103	80-120	2	30				
Xylene (Total)	108	105	80-120	3	30				
Batch number: 152640006A	Sample number(s): 8054788-8054793 UNSPK: P054178 BKG: P054179								
Ethylene dibromide	95		60-140			N.D.	N.D.	0 (1)	30
Batch number: 152671848006	Sample number(s): 8054791-8054793 UNSPK: P056342 BKG: P056342								
Lead	105	104	75-125	1	20	N.D.	N.D.	0 (1)	20
Batch number: 152711848003	Sample number(s): 8054788-8054790 UNSPK: P061689 BKG: P061689								
Lead	107	103	75-125	3	20	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 BTEX/MTBE/EDC - Water
Batch number: P152711AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8054787	102	99	98	97
8054788	100	102	97	96
8054789	100	100	99	98
8054790	99	101	99	96
8054791	100	101	98	97
8054792	100	103	98	97
8054793	99	100	98	97
Blank	101	103	98	98
LCS	99	103	99	99
MS	101	103	99	98
MSD	100	102	98	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs 8270C Water
Batch number: 15266WAG026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
8054788	72	78	69
8054789	78	85	77
8054790	78	84	73
8054791	74	81	73

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1594231
Reported: 10/30/2015 12:47

Surrogate Quality Control

8054792	73	83	73
8054793	69	79	76
Blank	68	77	72
LCS	74	82	82
LCSD	74	84	76
Limits:	46-128	61-112	43-131

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 15264A53A

	Trifluorotoluene-F
8054788	111
8054789	116
8054790	113
8054791	116
8054792	111
8054793	117
Blank	116
LCS	114
LCSD	115
Limits:	63-135

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 15266A53A

	Trifluorotoluene-F
8054787	116
Blank	113
LCS	115
LCSD	114
Limits:	63-135

Analysis Name: EDB by 8011
Batch number: 152640006A

	1,1,2,2-Tetrachloroethane
8054788	100
8054789	103
8054790	103
8054791	102
8054792	100
8054793	101
Blank	104
DUP	102
LCS	101
LCSD	101
MS	102
Limits:	46-136

Analysis Name: NWTPH-Dx water
Batch number: 152720023A

	Orthoterphenyl
8054788	96
8054789	96
8054790	96
Blank	87
LCS	92

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Group Number: 1594231
Reported: 10/30/2015 12:47

Surrogate Quality Control

LCSD	91
Limits:	50-150

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 152720024A

	Orthoterphenyl
8054788	74
8054789	78
8054790	56
Blank	78
LCS	68
LCSD	78
Limits:	50-150

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 152740004A

	Orthoterphenyl
8054791	77
8054792	70
8054793	78
Blank	78
LCS	77
LCSD	85
Limits:	50-150

Analysis Name: NWTPH-Dx water
Batch number: 152740005A

	Orthoterphenyl
8054791	93
8054792	84
8054793	89
Blank	92
LCS	97
LCSD	98
Limits:	50-150

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 11260 For Eurofins Lancaster Laboratories use only. Group # 1594231 Sample # 8054787-93

Instructions on reverse side correspond with circled numbers.

(1) Client Information

Facility # SS#372654-OML G-R#385900 WBS

Site Address 3202 Main Street, UNION GAP, WA

Chevron PM EH Lead Consultant LEIDOSRS Russell Shropshire

Consultant/Office Gettler-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568

Consultant Project Mgr. Deanna L. Harding, (deanna@grinc.com)

Consultant Phone # (925) 551-7444 x180

Sampler Alex Wong

(4) Matrix

Soil ☐ Sediment ☐ Water ☒ Potable ☐ Ground ☒ NPDES ☐ Surface ☐ Oil ☐ Air ☐

(5) Analyses Requested

(2) Sample Identification	Collected Date	Collected Time	(3) Grab	Composite	Total Number of Containers	BTEX + MTBE	8260 full scan	Oxygenates	NWTPH-Gx	NWTPH-Dx with Silica Gel Cleanup	NWTPH-Dx without Silica Gel Cleanup	WA VPH	WA EPH	Lead	Total ☒ Diss. ☐ Method 6010	1,2 DCE (8260B)	EDB (8011)	NAPHTHALENE/2-METHYL NAPHTHALENE (8270)
QA	9-17-15		X		2	X			X									
MW-1		1320	X		13	X			X	X	X			X	X	X	X	X
MW-2		0920																
MW-3		1018																
MW-4		1120																
MW-5		0750																
MW-6		1220																

SCR #: _____

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run _____ oxy's on highest hit
- ☐ Run _____ oxy's on all hits

(6) Remarks

Requesting results for both Dx and Dx with silica gel cleanup.

(7) Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | EDF/EDD | 72 hour | 48 hour | 24 hour

Relinquished by	Date	Time	Received by	Date	Time
	9-18-15			9/18/15	9:50
	9/18/15	11:00			
Relinquished by Commercial Carrier: UPS ☒ FedEx ☐ Other ☐			Received by	9.19.15	9:10

(8) Data Package (circle if required): Type I - Full; Type VI (Raw Data)

EDD (circle if required): CVX-RTBU-FI_05 (default); Other: _____

Temperature Upon Receipt 0.6 - 2.8 °C

Custody Seals Intact? Yes No

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

January 07, 2016

Project: 372654

Submittal Date: 12/12/2015
Group Number: 1616977
PO Number: 0015164161
Release Number: HETRICK
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
QA Water	8174652
MW-1 Grab Groundwater	8174653
MW-2 Grab Groundwater	8174654
MW-3 Grab Groundwater	8174655
MW-4 Grab Groundwater	8174656
MW-5 Grab Groundwater	8174657
MW-6 Grab Groundwater	8174658

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	Leidos	Attn: Russ Shropshire
ELECTRONIC COPY TO	Leidos	Attn: Jamalyn Agyei
ELECTRONIC COPY TO	Gettler-Ryan Inc.	Attn: Gettler Ryan

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: QA Water
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174652
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUGQA

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

General Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX/MTBE	SW-846 8260B	1	D153494AA	12/15/2015 19:51	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D153494AA	12/15/2015 19:51	Hu Yang	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15349B20A	12/16/2015 18:39	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15349B20A	12/16/2015 18:39	Marie D Beamenderfer	1

Sample Description: MW-1 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174653
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 12:25 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUGM1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	6.6	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D153494AA	12/15/2015 23:18	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D153494AA	12/15/2015 23:18	Hu Yang	1

Sample Description: MW-1 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174653
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 12:25 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

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MUGM1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15348WAC026	12/30/2015 16:50	Ankitaben A Patel	1
07807	BNA Water Extraction	SW-846 3510C	1	15348WAC026	12/15/2015 08:00	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15349B20A	12/16/2015 19:55	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15349B20A	12/16/2015 19:55	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	153480008A	12/15/2015 16:29	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	153480008A	12/15/2015 00:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	153520034A	12/22/2015 04:32	Thomas C Wildermuth	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	153520035A	12/29/2015 06:02	Thomas C Wildermuth	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	153520035A	12/19/2015 16:45	JoElla L Rice	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	153520034A	12/19/2015 16:45	JoElla L Rice	1
07055	Lead	SW-846 6010B	1	153511848003	01/06/2016 16:42	Eric L Eby	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	153511848003	12/19/2015 14:39	James L Mertz	1

Sample Description: MW-2 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174654
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 17:05 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

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San Ramon CA 94583

MUGM2

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	6.5	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D153494AA	12/15/2015 23:41	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D153494AA	12/15/2015 23:41	Hu Yang	1

Sample Description: MW-2 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174654
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 17:05 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

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MUGM2

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15348WAC026	12/30/2015 17:18	Ankitaben A Patel	1
07807	BNA Water Extraction	SW-846 3510C	1	15348WAC026	12/15/2015 08:00	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15349B20A	12/16/2015 20:22	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15349B20A	12/16/2015 20:22	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	153480008A	12/15/2015 17:00	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	153480008A	12/15/2015 00:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	153520034A	12/22/2015 04:54	Thomas C Wildermuth	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	153520035A	12/29/2015 06:24	Thomas C Wildermuth	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	153520035A	12/19/2015 16:45	JoElla L Rice	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	153520034A	12/19/2015 16:45	JoElla L Rice	1
07055	Lead	SW-846 6010B	1	153511848003	01/06/2016 16:46	Eric L Eby	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	153511848003	12/19/2015 14:39	James L Mertz	1

Sample Description: MW-3 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174655
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 16:05 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

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MUGM3

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	7.7	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D153501AA	12/17/2015 01:13	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D153501AA	12/17/2015 01:13	Hu Yang	1

Sample Description: MW-3 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174655
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 16:05 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

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MUGM3

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15348WAC026	12/30/2015 17:45	Ankitaben A Patel	1
07807	BNA Water Extraction	SW-846 3510C	1	15348WAC026	12/15/2015 08:00	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15349B20A	12/16/2015 20:50	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15349B20A	12/16/2015 20:50	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	153480008A	12/15/2015 17:31	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	153480008A	12/15/2015 00:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	153520034A	12/22/2015 05:15	Thomas C Wildermuth	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	153520035A	12/29/2015 06:45	Thomas C Wildermuth	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	153520035A	12/19/2015 16:45	JoElla L Rice	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	153520034A	12/19/2015 16:45	JoElla L Rice	1
07055	Lead	SW-846 6010B	1	153511848003	01/06/2016 16:49	Eric L Eby	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	153511848003	12/19/2015 14:39	James L Mertz	1

Sample Description: MW-4 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174656
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 15:10 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

Chevron
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MUGM4

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	29	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	67	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	7.1	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D153501AA	12/17/2015 01:36	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D153501AA	12/17/2015 01:36	Hu Yang	1

Sample Description: MW-4 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174656
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 15:10 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

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MUGM4

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15348WAC026	12/30/2015 18:13	Ankitaben A Patel	1
07807	BNA Water Extraction	SW-846 3510C	1	15348WAC026	12/15/2015 08:00	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15349B20A	12/16/2015 21:17	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15349B20A	12/16/2015 21:17	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	153480008A	12/15/2015 17:47	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	153480008A	12/15/2015 00:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	153520034A	12/22/2015 05:37	Thomas C Wildermuth	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	153520035A	12/29/2015 07:07	Thomas C Wildermuth	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	153520035A	12/19/2015 16:45	JoElla L Rice	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	153520034A	12/19/2015 16:45	JoElla L Rice	1
07055	Lead	SW-846 6010B	1	153511848003	01/06/2016 16:52	Eric L Eby	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	153511848003	12/19/2015 14:39	James L Mertz	1

Sample Description: MW-5 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174657
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 14:15 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

Chevron
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San Ramon CA 94583

MUGM5

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0095	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	8.9	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D153501AA	12/17/2015 01:59	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D153501AA	12/17/2015 01:59	Hu Yang	1

Sample Description: MW-5 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174657
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 14:15 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

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MUGM5

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15348WAC026	12/30/2015 18:41	Ankitaben A Patel	1
07807	BNA Water Extraction	SW-846 3510C	1	15348WAC026	12/15/2015 08:00	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15349B20A	12/16/2015 21:44	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15349B20A	12/16/2015 21:44	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	153480008A	12/15/2015 18:03	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	153480008A	12/15/2015 00:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	153520034A	12/22/2015 05:58	Thomas C Wildermuth	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	153520035A	12/29/2015 07:28	Thomas C Wildermuth	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	153520035A	12/19/2015 16:45	JoElla L Rice	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	153520034A	12/19/2015 16:45	JoElla L Rice	1
07055	Lead	SW-846 6010B	1	153511848003	01/06/2016 16:55	Eric L Eby	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	153511848003	12/19/2015 14:39	James L Mertz	1

Sample Description: MW-6 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174658
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 13:20 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUGM6

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1
10945	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	28	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	66	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07055	Lead	7439-92-1	6.5	5.1	1

General Sample Comments

State of Washington Lab Certification No. C457
Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX/MTBE/EDC - Water	SW-846 8260B	1	D153501AA	12/17/2015 02:22	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D153501AA	12/17/2015 02:22	Hu Yang	1

Sample Description: MW-6 Grab Groundwater
Facility# 372654 Job# 385900
3202 Main St - Union Gap, WA

LL Sample # WW 8174658
LL Group # 1616977
Account # 11260

Project Name: 372654

Collected: 12/08/2015 13:20 by JH

Submitted: 12/12/2015 09:15
Reported: 01/07/2016 11:27

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

MUGM6

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07805	PAHs 8270C Water	SW-846 8270C	1	15348WAC026	12/30/2015 19:09	Ankitaben A Patel	1
07807	BNA Water Extraction	SW-846 3510C	1	15348WAC026	12/15/2015 08:00	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	15349B20A	12/16/2015 22:12	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	15349B20A	12/16/2015 22:12	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	153480008A	12/15/2015 18:49	Heather M Manns	1
07786	EDB Extraction (8011)	SW-846 8011	1	153480008A	12/15/2015 00:00	Roman Kuropatkin	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	153520034A	12/22/2015 06:19	Thomas C Wildermuth	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	153520035A	12/29/2015 07:50	Thomas C Wildermuth	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	153520035A	12/19/2015 16:45	JoElla L Rice	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	153520034A	12/19/2015 16:45	JoElla L Rice	1
07055	Lead	SW-846 6010B	1	153511848003	01/06/2016 15:56	Eric L Eby	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	153511848003	12/19/2015 14:39	James L Mertz	1

Quality Control Summary

Client Name: Chevron Group Number: 1616977
Reported: 01/07/2016 11:27

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: D153494AA	Sample number(s): 8174652-8174654							
Benzene	N.D.	0.5	ug/l	90		78-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	86		72-127		
Ethylbenzene	N.D.	0.5	ug/l	98		78-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	90		75-120		
Toluene	N.D.	0.5	ug/l	97		80-120		
Xylene (Total)	N.D.	0.5	ug/l	98		80-120		
Batch number: D153501AA	Sample number(s): 8174655-8174658							
Benzene	N.D.	0.5	ug/l	96		78-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	92		72-127		
Ethylbenzene	N.D.	0.5	ug/l	104		78-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	93		75-120		
Toluene	N.D.	0.5	ug/l	106		80-120		
Xylene (Total)	N.D.	0.5	ug/l	105		80-120		
Batch number: 15348WAC026	Sample number(s): 8174653-8174658							
2-Methylnaphthalene	N.D.	0.1	ug/l	95	93	69-103	3	30
Naphthalene	N.D.	0.1	ug/l	96	93	69-109	3	30
Batch number: 15349B20A	Sample number(s): 8174652-8174658							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	95	94	80-123	1	30
Batch number: 153480008A	Sample number(s): 8174653-8174658							
Ethylene dibromide	N.D.	0.010	ug/l	107	112	60-140	4	20
Batch number: 153520034A	Sample number(s): 8174653-8174658							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	74	72	50-113	2	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					
Batch number: 153520035A	Sample number(s): 8174653-8174658							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	68	63	32-117	8	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 153511848003	Sample number(s): 8174653-8174658							
Lead	N.D.	5.1	ug/l	109		80-120		

Sample Matrix Quality Control

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Chevron Group Number: 1616977
Reported: 01/07/2016 11:27
Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: D153494AA	Sample number(s): 8174652-8174654 UNSPK: P173535								
Benzene	102	89	78-120	13	30				
1,2-Dichloroethane	92	80	72-127	14	30				
Ethylbenzene	108	96	78-120	12	30				
Methyl Tertiary Butyl Ether	95	83	75-120	13	30				
Toluene	111	95	80-120	15	30				
Xylene (Total)	109	96	80-120	13	30				
Batch number: D153501AA	Sample number(s): 8174655-8174658 UNSPK: P175297								
Benzene	100	103	78-120	3	30				
1,2-Dichloroethane	91	94	72-127	3	30				
Ethylbenzene	108	112	78-120	4	30				
Methyl Tertiary Butyl Ether	93	96	75-120	4	30				
Toluene	109	113	80-120	4	30				
Xylene (Total)	109	114	80-120	4	30				
Batch number: 153480008A	Sample number(s): 8174653-8174658 UNSPK: 8174653 BKG: 8174654								
Ethylene dibromide	107		60-140			N.D.	N.D.	0 (1)	30
Batch number: 153511848003	Sample number(s): 8174653-8174658 UNSPK: 8174658 BKG: 8174658								
Lead	107	107	75-125	0	20	6.5	6.7	3 (1)	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 BTEX/MTBE/EDC - Water
Batch number: D153494AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8174652	104	99	102	94
8174653	102	97	105	92
8174654	104	96	104	92
Blank	103	98	104	92
LCS	101	99	103	96
MS	100	97	105	96
MSD	102	102	105	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 BTEX/MTBE/EDC - Water
Batch number: D153501AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8174655	102	98	103	92
8174656	105	97	103	91
8174657	103	100	103	92
8174658	105	101	103	92

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Chevron Group Number: 1616977
Reported: 01/07/2016 11:27

Surrogate Quality Control

Blank	103	100	106	91
LCS	101	99	104	96
MS	102	99	103	95
MSD	101	102	106	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs 8270C Water
Batch number: 15348WAC026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
8174653	93	90	83
8174654	88	88	90
8174655	89	87	92
8174656	91	90	93
8174657	90	89	90
8174658	89	87	88
Blank	86	85	79
LCS	93	91	91
LCSD	92	92	89
Limits:	46-128	61-112	43-131

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 15349B20A

	Trifluorotoluene-F
8174652	87
8174653	89
8174654	86
8174655	88
8174656	86
8174657	88
8174658	87
Blank	86
LCS	96
LCSD	95
Limits:	63-135

Analysis Name: EDB by 8011
Batch number: 153480008A

	1,1,2,2-Tetrachloroethane
8174653	99
8174654	97
8174655	100
8174656	98
8174657	96
8174658	101
Blank	101
DUP	104
LCS	98
LCSD	99
MS	101
Limits:	46-136

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Chevron
Group Number: 1616977
Reported: 01/07/2016 11:27

Surrogate Quality Control

Analysis Name: NWTPH-Dx water
Batch number: 153520034A

	Orthoterphenyl
8174653	96
8174654	92
8174655	99
8174656	93
8174657	93
8174658	91
Blank	86
LCS	98
LCSD	103
Limits:	50-150

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 153520035A

	Orthoterphenyl
8174653	80
8174654	79
8174655	77
8174656	75
8174657	76
8174658	77
Blank	77
LCS	90
LCSD	88
Limits:	50-150

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

For Eurofins Lancaster Laboratories use only
Acct. # 11260 Group # 1616977 Sample # 8174652-58
Instructions on reverse side correspond with circled numbers.

(1) Client Information

Facility # SS#372654-OML G-R#385900 WBS

Site Address 3202 Main Street, UNION GAP, WA

Chevron PM EH LEIDOSRS Lead Consultant Russell Shropshire

Consultant/Office Gettler-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568

Consultant Project Mgr. Deanna L. Harding, (deanna@grinc.com)

Consultant Phone # (925) 551-7444 x180

Sampler Jim Herr

SCR #: ____

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run ____ oxy's on highest hit
- ☐ Run ____ oxy's on all hits

(2) Sample Identification / (3) / (4) Matrix / (5) Analyses Requested

Sample Identification	Collected Date	Collected Time	Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX + MTBE 8021 ☐ 8260 ☒ Naphth ☐	8260 1,2 DCE	Oxygenates	NWTPH-Gx	NWTPH-Dx with Silica Gel Cleanup ☒	NWTPH-Dx without Silica Gel Cleanup ☒	WA VPH ☐	WA EPH ☐	Lead Total ☒ Diss. ☐ Method 6010	EDB (8011)	Naphthalene / 2-Methyl Naphthalene 8270
QA	12/8/15		X			X		2	X			X							
MW-1	↓	1225	↓			↓		13	↓	X		↓	X	X			X	X	X
MW-2	↓	1705	↓			↓		↓	↓	↓		↓	↓	↓			↓	↓	↓
MW-3	↓	1605	↓			↓		↓	↓	↓		↓	↓	↓			↓	↓	↓
MW-4	↓	1510	↓			↓		↓	↓	↓		↓	↓	↓			↓	↓	↓
MW-5	↓	1415	↓			↓		↓	↓	↓		↓	↓	↓			↓	↓	↓
MW-6	↓	1320	↓			↓		↓	↓	↓		↓	↓	↓			↓	↓	↓

Matrix options: Soil ☐ Sediment ☐; Water: Potable ☐ Ground ☐ NPDES ☐ Surface ☐; Oil ☐ Air ☐

(6) Remarks

Requesting results for both Dx and Dx with silica gel cleanup.

(7) Turnaround Time Requested (TAT) (please circle)

(Standard) 5 day 4 day
72 hour 48 hour 24 hour
EDF/EDD

(8) Data Package (circle if required)
Type I - Full
Type VI (Raw Data)

EDD (circle if required)
CVX-RTBU-FI_05 (default)
Other: ____

Relinquished by	Date	Time	Received by	Date	Time
[signature]	12/8/15	2100	[signature]	12/10/15	10:45
[signature]	12/10/15				
Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other ____			[signature]	12/12/15	915

(9) Temperature Upon Receipt 0.7-2.9 °C Custody Seals Intact? (Yes) No

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Appendix E:
MTCA Method B Calculations Using MTCATPH11.1

May 16, 2016

leidos

Technical Memorandum

To: Project File
From: Ruth Otteman

Re: Evaluation of Soil Sampling Results Under Method B Using MTCATPH 11.1
La Bamba Restaurant / Former Unocal Service Station No. 372654
3202 Main Street, Union Gap, Washington (VCP #CE0394)

This memorandum presents the approach, input, and results of an evaluation of soil sampling results, which was performed for the above-referenced site using the Washington State Department of Ecology's MTCATPH 11.1 workbook tool. These calculations were performed in accordance with the Ecology's guidance document, *Workbook Tool for Calculating Soil and Ground Water Cleanup Levels under the Model Toxics Control Act Cleanup Regulation: User's Guide for MTCATPH 11.1 & MTCASGL 11.0*, dated December 2007 (Ecology Workbook).

Approach

Analytical results from soil sample MW-3-12 (collected from soil boring MW-3) were input into the MTCATPH 11.1 workbook in order to evaluate the potential human health risk associated with exposure to the petroleum product composition existing under current conditions at the site. The sample selected for this analysis contained the highest concentrations of petroleum-range hydrocarbon contamination detected in soil during the December 2014 monitoring well installation event at the site.

The workbook was used to determine the total measured TPH soil concentration based on fractional analysis results, and to calculate and assess the Hazard Index and Total Risk for a soil direct contact exposure pathway as well as a the groundwater leaching pathway for the specific petroleum composition found in the sample.

Model Inputs/Assumptions

The following inputs and assumptions were used in the MTCATPH11.1 calculation worksheet:

- **Soil Concentration Data**

  - **Half Detection Limits** – For concentrations that were below the detection limit but have been detected on the property in other samples, one-half the detection limit was used.
  - **Zero Values –** A zero value was entered for petroleum fractions that have not been detected in any sample at the site.
  - **Double Counting** – The petroleum fractions include hazardous substances that may also be individually quantified, depending upon the type of mixture(s) present at a site (e.g. naphthalene). If one or more hazardous substances are included in one of the TPH Equivalent Carbon (EC) fractions, then those fractions must be subtracted from the appropriate EC-fraction concentrations. Otherwise, the model is "double-counting" that particular substance. Double counting was avoided for EC fractions in the model. Table 3-3 of the Ecology Workbook provides information on the individual substances that are represented by a particular EC fraction.
- **Site-Specific Hydrogeological Data –** The site-specific hydrogeological parameters are considered in calculating soil concentrations that are protective of groundwater. However, for this evaluation the MTCATPH workbook was used to evaluate the soil direct contact and the leaching exposure pathway. Therefore, the values entered for these parameters have bearing on the results of the analysis. Values were assigned using the following parameters:
  - **Total Soil Porosity** – The default value of "0.43" was used.
  - **Volumetric Water Content** –The default value of "0.30" was used.
  - **Soil Bulk Density** – The default value of "1.50" was used.
  - **Fraction Organic Carbon** – A site specific value for fraction soil organic carbon (FOC) was collected from soil sample MW-6-12. This sample was collected outside the area of contamination and below the root zone. .
  - **Dilution Factor** – This parameter has two default values: "20" for soil within the unsaturated zone and "1" for soil within the saturated zone. The sample was collected above the saturated soil zone so a default value of "20" was used.

Results

The following table provides a summary of results for the MTCATPH workbook analysis. As these data show, based on consideration of the site-specific petroleum compositions found in this sample, the Measured TPH Soil Concentration for sample MW-3-12 were significantly lower than the Protective TPH Soil Concentrations that were determined to be protective of human health for a direct contact exposure scenario as well as the leaching pathway for potable groundwater. The most stringent pathway, however is the leaching pathway with Protective TPH Soil Concentrations of 76 mg/kg. This soil sample passes the RISK and Hazard Index criteria established by MTCA for the direct contact and leaching exposure pathways.

Sample ID	Measured TPH Soil Conc. (mg/kg)	Exposure Pathway	Protective TPH Soil Conc. (mg/kg)	RISK @ Measured TPH Soil Conc.	HI @ Measured TPH Soil Conc.	Measured TPH Soil Conc. Pass or Fail?
MW-3-12	38.350	Soil Direct Contact	3,118	3.27E-09	1.23E-02	Pass
		Potable GW: Human Health Protection	76	2.97E-06	8.33E-01	Pass

Attachments

- A1 Soil Cleanup Levels: Worksheet for Soil Data Entry – Sample MW-3-12
- A2 Soil Cleanup Levels: Calculation and Summary of Results – Sample MW-3-12

A1 Soil Cleanup Levels: Worksheet for Soil Data Entry: Refer to WAC 173-340-720, 740,745, 747, 750

1. Enter Site Information

Date: 05/06/16
Site Name: Chevron Site 372654 Union Gap, WA
Sample Name: MW-3-12

2. Enter Soil Concentration Measured

Chemical of Concern or Equivalent Carbon Group	Measured Soil Conc dry basis mg/kg	Composition Ratio %
Petroleum EC Fraction		
AL_EC >5-6	0	0.00%
AL_EC >6-8	6.31	16.45%
AL_EC >8-10	20	52.15%
AL_EC >10-12	0	0.00%
AL_EC >12-16	2.7	7.04%
AL_EC >16-21	0	0.00%
AL_EC >21-34	0	0.00%
AR_EC >8-10	7.958	20.75%
AR_EC >10-12	0	0.00%
AR_EC >12-16	1.2681	3.31%
AR_EC >16-21	0	0.00%
AR_EC >21-34	0	0.00%
Benzene	0.011	0.03%
Toluene	0.022	0.06%
Ethylbenzene	0	0.00%
Total Xylenes	0.022	0.06%
Naphthalene	0.00036	0.00%
1-Methyl Naphthalene	0.024	0.06%
2-Methyl Naphthalene	0.0079	0.02%
n-Hexane	0.022	0.06%
MTBE	0	0.00%
Ethylene Dibromide (EDB)	0	0.00%
1,2 Dichloroethane (EDC)	0	0.00%
Benzo(a)anthracene	0.0017	0.00%
Benzo(b)fluoranthene	0.00088	0.00%
Benzo(k)fluoranthene	0	0.00%
Benzo(a)pyrene	0	0.00%
Chrysene	0.0018	0.00%
Dibenz(a,h)anthracene	0	0.00%
Indeno(1,2,3-cd)pyrene	0	0.00%
Sum	38.34974	100.00%

Notes for Data Entry | Set Default Hydrogeology

Clear All Soil Concentration Data Entry Cells

Restore All Soil Concentration Data cleared previously

REMARK:
1) Toluene, Total Xylenes, and Naphthalene were entered at half of the method detection limit.

2) AL_EC >5-6, AL_EC >10-12, AL_EC >16-21, AL_EC >21-34, AR_EC >10-12, AR_EC >16-21, AR_EC >21-34, EDB, EDC, MTBE, Ethylbenzene, Benzo(k)fluoranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, and Indeno(1,2,3-cd)pyrene have never been detected in any sample at the site and are not suspected of being present on the site, so a value of "0" was entered.

3) n-Hexane, Ethylbenzene and Xylenes, Naphthalene, 1-Methyl Naphthalene, 2-Methylnaphthalene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Chrysene, Dibenz(a,h)anthracene and Indeno(1,2,3-cd)pyrene were subtracted from their Equivalent Carbon to avoid double counting.

4) Default Hydrogeologic data were used, except for fraction organic carbon value of 0.000053. The FOC value came from sample MW-6-12.

3. Enter Site-Specific Hydrogeological Data

Total soil porosity:	0.43	Unitless
Volumetric water content:	0.3	Unitless
Volumetric air content:	0.13	Unitless
Soil bulk density measured:	1.5	kg/L
Fraction Organic Carbon:	0.000053	Unitless
Dilution Factor:	20	Unitless

4. Target TPH Ground Water Concentation (if adjusted)

If you adjusted the target TPH ground water concentration, enter adjusted value here:	800	ug/L

A2 Soil Cleanup Levels: Calculation and Summary of Results. Refer to WAC 173-340-720, 740, 745, 747, 750

Site Information

Date: 5/6/2016
Site Name: Chevron Site 372654 Union Gap, WA
Sample Name: MW-3-12
Measured Soil TPH Concentration, mg/kg: **38.350**

1. Summary of Calculation Results

Exposure Pathway	Method/Goal	Protective Soil TPH Conc, mg/kg	With Measured Soil Conc		Does Measured Soil Conc Pass or Fail?
			RISK @	HI @	
Protection of Soil Direct Contact: Human Health	Method B	3,118	3.27E-09	1.23E-02	Pass
	Method C	55,424	7.42E-10	6.92E-04	Pass
Protection of Method B Ground Water Quality (Leaching)	Potable GW: Human Health Protection	76	2.97E-06	8.33E-01	Pass
	Target TPH GW Conc. @ 800 ug/L	425	NA	NA	Pass

2. Results for Protection of Soil Direct Contact Pathway: Human Health

	Method B: Unrestricted Land Use	Method C: Industrial Land Use
Protective Soil Concentration, TPH mg/kg	**3,117.68**	**55,424.39**
Most Stringent Criterion	**HI =1**	**HI =1**

Soil Criteria	Protective Soil Concentration @Method B				Protective Soil Concentration @Method C			
	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @	Most Stringent?	TPH Conc, mg/kg	RISK @	HI @
HI =1	YES	3.12E+03	2.66E-07	1.00E+00	YES	5.54E+04	1.07E-06	1.00E+00
Total Risk=1E-5	*NO*	1.17E+05	1.00E-05	3.76E+01	*NO*	5.17E+05	1.00E-05	9.32E+00
Risk of Benzene= 1E-6	*NO*	6.33E+04	5.40E-06	2.03E+01	NA			
Risk of cPAHs mixture= 1E-6	*NO*	1.44E+04	1.23E-06	4.62E+00				
EDB	NA	NA	NA	NA				
EDC	NA	NA	NA	NA				

3. Results for Protection of Ground Water Quality (Leaching Pathway)

3.1. Protection of Potable Ground Water Quality (Method B): Human Health Protection

Most Stringent Criterion	**HI=1**
Protective Ground Water Concentration, ug/L	**700.20**
Protective Soil Concentration, mg/kg	**76.26**

Ground Water Criteria	Protective Potable Ground Water Concentration @Method B				Protective Soil Conc, mg/kg
	Most Stringent?	TPH Conc, ug/L	RISK @	HI @	
HI=1	YES	7.00E+02	5.59E-06	1.00E+00	7.63E+01
Total Risk = 1E-5	*NO*	7.55E+02	1.00E-05	1.17E+00	1.51E+02
Total Risk = 1E-6	YES	3.70E+02	1.00E-06	5.14E-01	1.25E+01
Risk of cPAHs mixture= 1E-5	*NO*	8.46E+02	5.02E-05	2.23E+00	100% NAPL
Benzene MCL = 5 ug/L	*NO*	7.14E+02	6.29E-06	1.03E+00	8.71E+01
MTBE = 20 ug/L	NA	NA	NA	NA	NA

Note: 100% NAPL is 65000 mg/kg TPH.

3.2 Protection of Ground Water Quality for TPH Ground Water Concentration previously adjusted and entered

Ground Water Criteria	Protective Ground Water Concentration			Protective Soil Conc, mg/kg
	TPH Conc, ug/L	Risk @	HI @	
Target TPH GW Conc = 800 ug/L	8.00E+02	2.07E-05	1.47E+00	**4.25E+02**