SUPPLEMENTAL SITE ASSESSMENT
SUMMARY REPORT
ALDERS CHEVRON / FORMER CHEVRON SERVICE STATION NO. 93883 (VCP #CE0391)
1702 East Yakima Avenue
Yakima, Washington

March 31, 2015

Prepared for:

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, California 94583

Prepared by:

Leidos Engineering, LLC
18919 North Creek Parkway, Suite 101
Bothell, Washington 98011

leidos

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SUPPLEMENTAL SITE ASSESSMENT SUMMARY REPORT
ALDERS CHEVRON / FORMER CHEVRON SERVICE STATION NO. 93883
(VCP #CE0391)

1. INTRODUCTION

Leidos Engineering, LLC (Leidos), formerly SAIC Energy, Environment & Infrastructure, LLC (SAIC)[1], prepared this report on behalf of Chevron Environmental Management Company (CEMC) to summarize the results of supplemental site assessment activities performed at the Alders Chevron site (the Site), also known as Former Chevron Service Station No. 93883, located at 1702 East Yakima Avenue (formerly 1602 Terrace Heights Road) in Yakima, Washington. A vicinity map is included as Figure 1 and a site map is included as Figure 2.

The objective of the supplemental site assessment was to address data gaps from past investigation and cleanup activities of the Site, which were previously highlighted in a Partial Sufficiency and Further Action Determination issued by the Washington State Department of Ecology (Ecology) in May 2006 (Ecology, 2006). Specifically, Ecology requested the following additional information for the Site:

- Evidence that the previously abandoned wells were decommissioned in accordance with WAC 173-160, or the existing wells are located and abandoned; and

- Four consecutive quarters of groundwater monitoring showing contamination below MTCA.

Assessment activities documented in this report were performed in accordance with the procedures described in SAIC's *Supplemental Site Assessment Work Plan*, dated August 9, 2013 (SAIC, 2013), which was approved by the Washington State Department of Ecology (Ecology) by letter dated August 30, 2013 (Ecology, 2013B).

2. BACKGROUND

Property records indicate that Standard Oil Company of California (a predecessor of Chevron) purchased the property in 1970. Chevron reportedly operated a service station at the Site through 1992, when the property was sold to the current owner, Mr. Bob Hall. In 1993, the property was redeveloped to its current configuration, which is used as vehicle display parking for Bob Hall's Mazda automobile dealership.

The potential presence of petroleum contamination at the Site was first confirmed following assessment activities performed by Rittenhouse-Zeman & Associates, Inc. (RZA) in 1989, which included advancement of five soil borings and the installation of monitoring wells MW-1, MW-2 and MW-3 (RZA, 1989A). Subsequent groundwater sampling results indicated the presence of gasoline-range hydrocarbon contamination in monitoring wells MW-2 (C-4) and MW-3 (C-5) at

[1] The transition of SAIC to Leidos occurred on October 1, 2013. Within this report, each company name is used in association with the work that was performed or directed by that company.

concentrations of 14,000 micrograms per liter (µg/L) and 13,000 µg/L, respectively (RZA, 1989B).

Subsequent remedial actions were performed at the Site in 1992 and 1993, and consisted of the following:

- Removal of the heating oil underground storage tank (UST), waste oil UST, dry well, and 325 cubic yards of impacted soil (RZA, 1992A);
- Removal of the three gasoline product USTs (Chen-Northern, 1993A); and
- Removal of approximately 429 cubic yards of additional contaminated soil, which was discovered during the removal of the former service station building and canopy (Chen-Northern, 1993B). This work was apparently performed in association with Mr. Hall's redevelopment of the property.

In March 2004, Mr. Hall entered the Site into Ecology's Voluntary Cleanup Program (VCP) and the Site was assigned VCP # CE0191. Following review of available site assessment and remedial action reports prepared for the Site, Ecology issued a No Further Action (NFA) determination for soil at the Site, but indicated that additional assessment would be required to obtain an NFA determination for groundwater (Ecology, 2004).

In response to Ecology's determination letter, PLSA Engineering & Surveying (PLSA), on behalf of Mr. Hall, prepared a groundwater transport model which indicated that due to natural attenuation over the 12 years since the remedial actions were completed, residual petroleum hydrocarbon concentrations in groundwater at the Site would be reduced to less than 500 µg/L, below MTCA Method A cleanup levels (PLSA, 2004). Ecology reviewed the model results and recommended groundwater sampling to confirm the results and demonstrate the absence of petroleum contaminants in groundwater (Ecology, 2005).

Ecology's 2004 NFA determination for soil was later rescinded and replaced by a Partial Sufficiency and Further Action Determination in May 2006 (Ecology, 2006). The 2006 further action determination letter provided the following requirements for closure of the site:

- Four consecutive quarters of groundwater monitoring showing contamination below MTCA Method A cleanup levels; and
- Evidence that the previously abandoned wells were decommissioned in accordance with WAC 173-160, or the existing wells are located and decommissioned.

The letter also recommended that "A single monitoring well be installed near MW-3 [or use MW-3 if it exists] to demonstrate groundwater contamination is below MTCA method A cleanup levels for four consecutive quarters. The groundwater should be sampled for the "waste oil" contaminants listed in Table 830-1, Required Testing for Petroleum Releases."

Available records for the Site suggest that no additional assessment or cleanup activity occurred at the Site until approximately 2012, when the Site was apparently elevated to priority status by the Department of Ecology. Ecology contacted CEMC regarding potential liability for

petroleum contamination at Site, and requested that additional assessment actions be performed. Following negotiations with the property owner for an access agreement to perform work on the Site, CEMC re-entered the Site into the VCP in April 2013. The Site was assigned VCP # CE0391 (Ecology, 2013A).

3. SITE ASSESSMENT ACTIVITIES

3.1 GEOPHYSICAL MONITORING WELL LOCATION SURVEY

Based on the recommendations provided in Ecology's 2006 Partial Sufficiency and Further Action determination letter, SAIC contracted ULS Services Corporation (ULS) to perform a subsurface geophysical survey to locate monitoring wells MW-1, MW-2, and MW-4, which were believed to have been paved over during redevelopment of the property in 1993. Monitoring well MW-3 was known to have been decommissioned in July 1992 (RZA, 1992B). ULS performed the survey work on April 17, 2013, which consisted of scanning suspected monitoring well location areas using a magnetic locator and electromagnetic induction metal detector to locate metallic monitoring well components such as well boxes, and a 500 megahertz ground penetrating radar (GPR) to locate the monitoring well casings.

Results of the survey did not provide any conclusive evidence to identify the locations of the missing monitoring wells; however, metallic survey and GPR results identified one location of interest in the vicinity of former wells MW-3 and MW-4. This location was marked and more fully investigated by air-knife excavation during subsequent monitoring well installation activities performed in August 2013, which are described in more detail in the following section. The air-knife investigation at this location revealed the presence of some small metal debris in the upper three feet of soil in this area; however, no evidence of an existing monitoring well was found.

During performance of the the geophysical survey, SAIC also spoke with the property owner, Mr. Bob Hall, regarding what efforts were made to preserve the monitoring wells during redevelopment of the property in 1993. Mr. Hall indicated that the surface grade of the former service station property had been cut by several feet during the redevelopment, which would indicate that the well casings would have required modifications to account for the change in ground surface elevation. Later that day, Mr. Hall spoke with PLSA, the engineering and land surveying firm involved with the redevelopment efforts on the property, in order to determine if they had any record of modifying the wells in this manner. However, PLSA reportedly found no mention of the wells in a review of their field notes for the project.

Based on the results of the geophysical survey, including the discussions with Mr. Hall, Leidos believes that monitoring wells MW-1, MW-2, and MW-4 were destroyed during redevelopment of the site in 1993. Therefore, the decommissioning of these wells in accordance with WAC 173-160 will not be possible. The area in which these monitoring wells were formerly located is currently covered by asphalt paving that is in good condition and is well maintained; therefore, Leidos believes that there is limited potential for the remains of these wells to serve as preferential conduits for migration of ground surface contamination to groundwater at this Site.

3.2 GROUNDWATER QUALITY ASSESSMENT

Following the determination that the previously existing monitoring wells were likely destroyed during redevelopment of the property in 1993, SAIC prepared a work plan (SAIC, 2013) to install and sample three new monitoring wells at the Site, in order to satisfy Ecology's request for four consecutive quarters of groundwater monitoring results. New monitoring wells were installed at the following locations (Figure 2):

- Monitoring well MW-5 was placed in the vicinity of the former dry well, heating oil UST, and waste oil UST location. This well is a replacement for former monitoring wells MW-3 and MW-4.

- Monitoring well MW-6 was placed approximately downgradient of the former gasoline UST basin. This well serves as a replacement for former monitoring well MW-2.

- Monitoring well MW-7 was placed southeast of the former service station property. This location is approximately downgradient of all former service station infrastructure at the Site.

3.2.1 Monitoring Well Installation Activities

Monitoring well installation activities were performed between August 27 and 29, 2013 by Cascade Drilling L.P., with oversight by SAIC. 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, an SAIC 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 flame-ionization detector (FID) and 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. However, additional soil samples were also submitted from depths containing the highest potential hydrocarbon impacts as indicated via 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), methyl tertiary butyl ether (MTBE), and halogenated volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (USEPA) SW-846 8260;

- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) and naphthalene by USEPA Method SW-846 8270 with selective ion monitoring (SIM);

- Polychlorinated biphenyls (PCBs) by USEPA Method SW-846 8082; and

- Total cadmium, chromium, lead, nickel, and zinc by USEPA Method SW-846 6010.

Selected soil samples were also analyzed for:

- Extractable petroleum hydrocarbons (EPH) by ECY 97-602 WA EPH; and

- Volatile petroleum hydrocarbons (VPH) by ECY 97-602 WA VPH.

Soil sampling results are summarized in Table 2 and are further discussed in Section 4.2.

Each soil boring was completed as a 2-inch diameter monitoring well. Monitoring wells MW-5, MW-6, and MW-7 were installed at total depths of approximately 20, 19.5, and 19.5 feet bgs, respectively, which is consistent with the depth of the historical monitoring wells at the Site. The monitoring wells 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. Well construction details are presented on the boring logs, which are included in Appendix A.

Each of the new monitoring wells were developed by SAIC on August 30, 2013. 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.

3.2.2 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:

- September 21, 2013
- March 26, 2014

- December 23, 2013
- June 27, 2014

Gettler-Ryan collected depth-to-groundwater measurements and checked for the presence of separate-phase hydrocarbons in all three 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, 1,2 dichloroethane (EDC), MTBE, and halogenated VOCs by USEPA Method SW-846 8260;
- EDB by USEPA Method SW-846 8011;
- cPAHs and naphthalenes by USEPA Method SW-846 8270 SIM;
- PCBs by USEPA Method SW-846 8082; and
- Total cadmium, chromium, lead, nickel, and zinc by USEPA Method SW-846 6010.

A discussion of groundwater monitoring results is presented in Section 4. Gettler-Ryan field data sheets for each monitoring event are provided as Appendix B.

4. SUMMARY AND EVALUATION OF RESULTS

4.1 GROUNDWATER

Results of the four consecutive quarterly groundwater monitoring events are presented in Table 1 and laboratory analysis 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 1, and potentiometric maps for each monitoring event are provided in Figures 3 through 6. Groundwater elevation data collected during these events indicate that groundwater was generally encountered at depths of approximately 10 to 12 feet bgs, and that groundwater flow across the Site is consistently toward the southeast at a gradient of approximately 0.003 to 0.004 feet per foot. The maximum seasonal groundwater elevation variation observed between the four quarterly events was 1.35 feet.

4.2 SOIL

Soils encountered during installation of the three 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, sandy gravel and cobbles with up to 15% fine to coarse sand and up to 20% silt. These observations are consistent with historical boring logs for the Site.

A summary of analytical results for soil samples collected during the installation of the monitoring wells is included in Table 2, and the laboratory analytical report for these samples is included as Appendix C. As these results indicate, petroleum-range impacts were detected above MTCA Method A cleanup levels for soil in two of the three monitoring wells installed. TPH-GRO was detected at monitoring well MW-5, at a depth of approximately 10 feet bgs (sample ID: MW-5-10), at a concentration of 480 milligrams per kilogram (mg/kg), and at monitoring well MW-6, at a depth of approximately 8 feet bgs (sample ID: MW-6-8), at a concentration of 50 mg/kg. TPH-DRO was detected in sample MW-5-10 at a concentration of 2,100 mg/kg. All other sampling results were in compliance with Method A cleanup levels for soil.

4.2.1 Evaluation of Soil Sampling Results Using Method B

In addition to a standard comparison of soil sampling results to MTCA Method A cleanup levels, Leidos also used Method B tools to evaluate whether site-specific factors result in conditions at the Site that 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 D. For this Site, groundwater monitoring data from four consecutive sampling events provides empirical evidence that TPH impacts remaining at the Site do not impact groundwater quality, and that groundwater at the Site meets drinking water standards. Therefore, the MCTATPH workbook was used to determine whether current conditions at the Site are protective of human health under a direct-contact exposure scenario, instead of protection of groundwater quality.

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

Sample ID	Measured TPH Soil Conc. (mg/kg)	Protective TPH Soil Conc. (mg/kg)	RISK @ Measured TPH Soil Conc.	HI @ Measured TPH Soil Conc.	Measured TPH Soil Conc. Pass or Fail?
MW-5-10	1,850.755	3,372.59	3.229E-07	5.488E-01	Pass
MW-6-8	441.143	4,104.53	7.141E-08	1.075E-01	Pass

As these results show, the MTCATPH workbook was used to calculate a Measured TPH Soil Concentration for each sample, based on the TPH fraction data provided by laboratory analysis of the samples. The workbook also calculates a Protective TPH Soil Concentration for the specific product composition determined to be present in each sample. In both cases, the Measured TPH Soil Concentration was less than the Protective TPH Soil Concentration, Risk was determined to be less than 1×10^{-6}, and the Hazard Index was less than 1. Therefore, both samples meet the criteria to demonstrate protection of human health for a direct-contact exposure pathway[2].

5. CONCLUSIONS

Based on recommendations for further action at the Site, which were provided by Ecology's Partial Sufficiency and Further Action Determination from 2006 (Ecology, 2006), supplemental site assessment activities were conducted at the Site between 2013 and 2014 in order to document the status of previously existing groundwater monitoring wells and to complete evaluation of groundwater conditions at the Site

The results of geophysical survey performed on April 17, 2013, and historical information gathered from discussions with Mr. Hall at the time of the survey, suggest that previously existing monitoring wells MW-1, MW-2, and MW-4 were likely destroyed during redevelopment activities on the property in 1993. No positive identification of the wells was found by the geophysical survey, and one area identified as a potential location (based on GPR and magnetometer survey results) was dismissed after using air-knife excavation equipment to clear the location to a depth of 8 feet bgs on August 27, 2013. Based on this information, the decommissioning of these wells in accordance with WAC 173-160 is not considered possible. The area in which these monitoring wells were formerly located is currently covered by asphalt paving that is in good condition and is well maintained, and there is limited potential for the remains of these wells to serve as preferential conduits for migration of ground surface contamination to groundwater at this Site. Therefore, Leidos requests that Ecology waive the requirement that these wells be decommissioned in accordance with WAC 173-160 as a condition for closure of the Site.

Results of the groundwater assessment activities at the Site indicate that no evidence of petroleum impact to groundwater was observed during four consecutive quarterly groundwater

[2] 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.

sampling events. Results of these events indicate that TPH-GRO, TPH-DRO, TPH-HRO, and BTEX compounds were all determined to be at non-detect levels during each of the four sampling events. Total naphthalenes were detected in each monitoring well; however, at concentrations that are several orders of magnitude less than the Method A cleanup level. The results of soil sampling conducted indicate that residual gasoline and diesel range petroleum impacts remain present in soil in the vicinity of former UST basins at the Site. Based on the results of groundwater sampling, these residual impacts do not appear to degrade groundwater quality at the Site, which is currently in compliance with drinking water standards.

In consideration of this empirical demonstration that groundwater quality is not impacted by residual petroleum range contamination remaining in soil, MTCA Method B tools were used to assess the protectiveness of current soil conditions under a direct contact exposure scenario. Results of this evaluation indicate that current conditions at the Site are protective of human health for direct contact, 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. Based on land use and zoning in the vicinity of the Site (City of Yakima, 2012), use of the property is expected to remain as parking or as the future location for construction of additional slab-on-grade commercial structures. Therefore, future redevelopment of the Site is not likely to result in an increased risk to human or ecological receptors.

Based on the results of these assessment activities, Leidos believes that current and future anticipated conditions at this site are in compliance with MTCA standards for protection of human health and the environment. Therefore, on behalf of CEMC, we respectfully request that Ecology issue an opinion for No Further Action at this Site.

6. REFERENCES

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REPORT LIMITATIONS

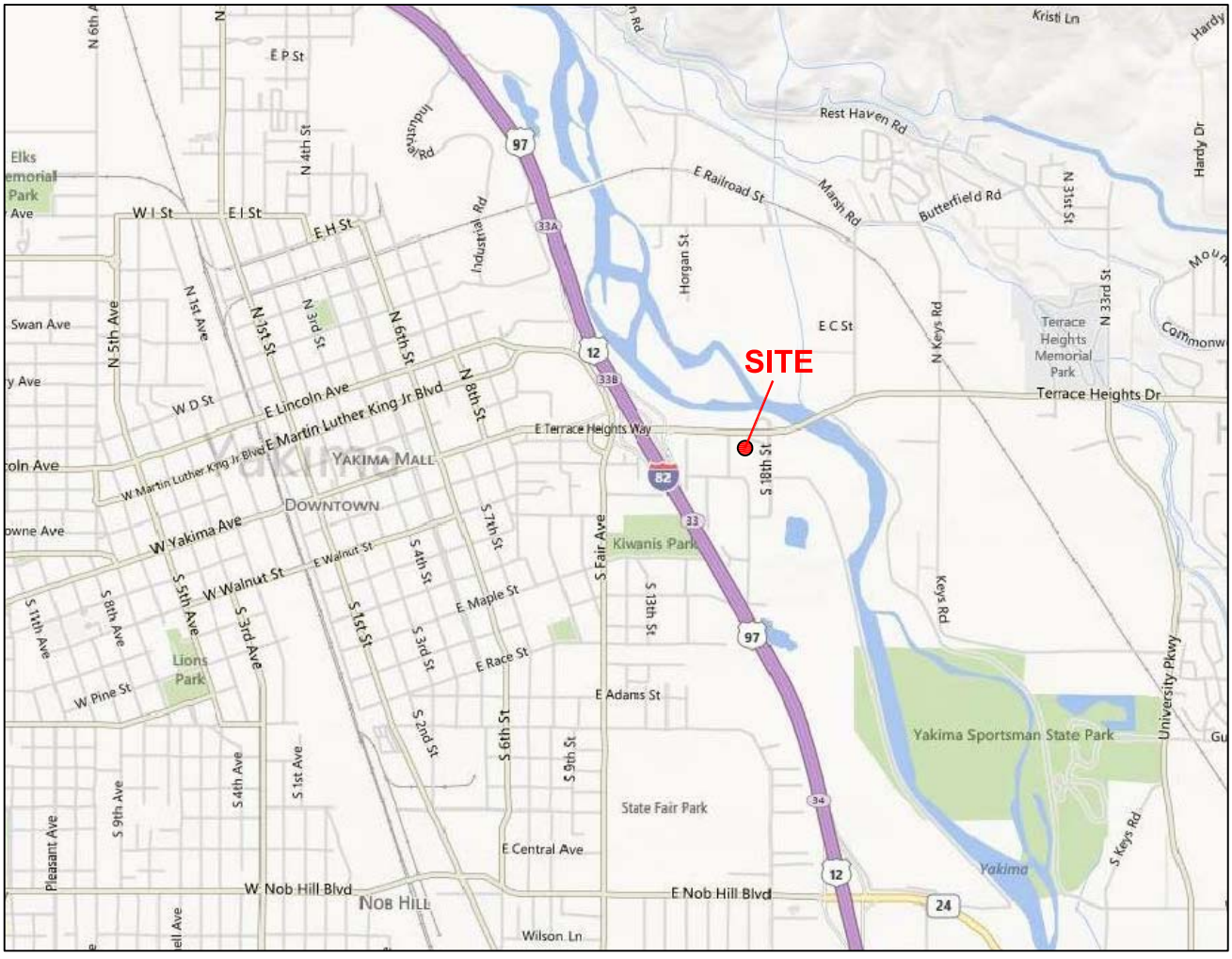
This technical document was prepared on behalf of CEMC and is intended for its sole use and for use by the local, state, or federal regulatory agency that the technical document was sent to by Leidos. Any other person or entity obtaining, using, or relying on this technical document hereby acknowledges 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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Alders Chevron /
Former Chevron Service Station No. 93883
1702 E Yakima Ave
Yakima, Washington

FIGURE 1
Vicinity Map

DATE: 3/31/2015

DRAWING: 93883 Vicinity Map.dwg

EAST YAKIMA AVENUE

SIDEWALK

SOUTH 17TH STREET

MW-1

PUMP ISLANDS

FORMER LOCATION
OF GASOLINE USTs
(REMOVED DECEMBER 1992)

10,000 GALLON

10,000 GALLON

5,000
GALLON

MW-2

MW-6

FORMER SERVICE STATION
BUILDING

MW-3

MW-4

MW-5

550 GALLON HEATING OIL UST
(REMOVED MARCH 1992)

1,000 GALLON USED OIL UST
(REMOVED MARCH 1992)

CURRENT BUILDING
(BOB HALL'S MAZDA)

VEHICLE DISPLAY PARKING - BOB HALL'S MAZDA

MW-7

N

0 30'

LEGEND:

- MW-6 — GROUNDWATER MONITORING WELL LOCATION (SAIC 2013)
- MW-2 — FORMER MONITORING WELL LOCATION (ABANDONED OR DESTROYED)
- CURRENTLY EXISTING SITE FEATURES
- FORMER SITE FEATURES
- APPROXIMATE BOUNDARY OF FORMER SERVICE STATION PROPERTY
- LANDSCAPED AREA

FORMER SERVICE STATION PROPERTY BOUNDARY AND FORMER SITE FEATURES ARE BASED ON THE SITE AND EXPLORATION PLAN (FIGURE 1) OF RZA-AGRA'S "FUEL OIL UST, USED OIL UST AND DRY WELL REMOVAL REPORT", DATED APRIL 24, 1992.

CURRENT SITE FEATURES ARE BASED ON INTERPRETATION OF A 2013 AERIAL PHOTOGRAPH FROM GOOGLE MAPS AND THE SEPTEMBER 2013 SITE SURVEY BY GEODIMENSIONS.

LOCATIONS OF FORMER SITE FEATURES RELATIVE TO EXISTING SITE FEATURES ARE BASED ON INTERPRETATION OF HISTORICAL AERIAL PHOTOGRAPHS OF THE SITE AND USE OF EXISTING LANDMARKS. LOCATIONS OF ALL FEATURES ARE APPROXIMATE.

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Alders Chevron /
Former Chevron Service Station No. 93883
1702 E Yakima Ave
Yakima, Washington

FIGURE 2
Site Map

DATE: 3/9/2015

DRAWING: 93883 SiteMap.dwg

EAST YAKIMA AVENUE

SIDEWALK

SOUTH 17TH STREET

MW-1

PUMP ISLANDS

FORMER LOCATION
OF GASOLINE USTs
(REMOVED DECEMBER 1992)

10,000 GALLON

10,000 GALLON

5,000
GALLON

MW-2

MW-6
1019.28

1019.25

FORMER SERVICE STATION
BUILDING

MW-3

MW-4

MW-5
1019.47

550 GALLON HEATING OIL UST
(REMOVED MARCH 1992)

1,000 GALLON USED OIL UST
(REMOVED MARCH 1992)

1019.25

1019.50

CURRENT BUILDING
(BOB HALL'S MAZDA)

VEHICLE DISPLAY PARKING - BOB HALL'S MAZDA

1019.50

MW-7
1018.79

N

0 30'

LEGEND:

MW-6	GROUNDWATER MONITORING WELL LOCATION (SAIC 2013)
MW-2	FORMER MONITORING WELL LOCATION (ABANDONED OR DESTROYED)
1019.28	GROUNDWATER ELEVATION IN FEET
	APPROXIMATE GROUNDWATER FLOW DIRECTION AT A GRADIENT OF 0.004 FEET PER FOOT.
	CURRENTLY EXISTING SITE FEATURES
	FORMER SITE FEATURES
	APPROXIMATE BOUNDARY OF FORMER SERVICE STATION PROPERTY
	LANDSCAPED AREA

FORMER SERVICE STATION PROPERTY BOUNDARY AND FORMER SITE FEATURES ARE BASED ON THE SITE AND EXPLORATION PLAN (FIGURE 1) OF RZA-AGRA'S "FUEL OIL UST, USED OIL UST AND DRY WELL REMOVAL REPORT", DATED APRIL 24, 1992.

CURRENT SITE FEATURES ARE BASED ON INTERPRETATION OF A 2013 AERIAL PHOTOGRAPH FROM GOOGLE MAPS AND THE SEPTEMBER 2013 SITE SURVEY BY GEODIMENSIONS.

LOCATIONS OF FORMER SITE FEATURES RELATIVE TO EXISTING SITE FEATURES ARE BASED ON INTERPRETATION OF HISTORICAL AERIAL PHOTOGRAPHS OF THE SITE AND USE OF EXISTING LANDMARKS. LOCATIONS OF ALL FEATURES ARE APPROXIMATE.

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Alders Chevron /
Former Chevron Service Station No. 93883
1702 E Yakima Ave
Yakima, Washington

FIGURE 3
Potentiometric Map
September 21, 2013

DATE: 3/9/2015

DRAWING: 93883 SiteMap.dwg

EAST YAKIMA AVENUE

SIDEWALK

SOUTH 17TH STREET

N

0 30'

MW-1

FORMER LOCATION
OF GASOLINE USTs
(REMOVED DECEMBER 1992)

10,000 GALLON

10,000 GALLON

5,000
GALLON

PUMP ISLANDS

MW-2

MW-6
1018.57

1018.50

FORMER SERVICE STATION
BUILDING

MW-3

MW-4

MW-5
1018.69

550 GALLON HEATING OIL UST
(REMOVED MARCH 1992)

1,000 GALLON USED OIL UST
(REMOVED MARCH 1992)

1018.50

1018.25

CURRENT BUILDING
(BOB HALL'S MAZDA)

VEHICLE DISPLAY PARKING - BOB HALL'S MAZDA

1018.25

1018.00

1018.00

MW-7
1017.94

LEGEND:

MW-6	GROUNDWATER MONITORING WELL LOCATION (SAIC 2013)
MW-2	FORMER MONITORING WELL LOCATION (ABANDONED OR DESTROYED)
1018.69	GROUNDWATER ELEVATION IN FEET
	APPROXIMATE GROUNDWATER FLOW DIRECTION AT A GRADIENT OF 0.004 FEET PER FOOT.
	CURRENTLY EXISTING SITE FEATURES
	FORMER SITE FEATURES
	APPROXIMATE BOUNDARY OF FORMER SERVICE STATION PROPERTY
	LANDSCAPED AREA

FORMER SERVICE STATION PROPERTY BOUNDARY AND FORMER SITE FEATURES ARE BASED ON THE SITE AND EXPLORATION PLAN (FIGURE 1) OF RZA-AGRA'S "FUEL OIL UST, USED OIL UST AND DRY WELL REMOVAL REPORT", DATED APRIL 24, 1992.

CURRENT SITE FEATURES ARE BASED ON INTERPRETATION OF A 2013 AERIAL PHOTOGRAPH FROM GOOGLE MAPS AND THE SEPTEMBER 2013 SITE SURVEY BY GEODIMENSIONS.

LOCATIONS OF FORMER SITE FEATURES RELATIVE TO EXISTING SITE FEATURES ARE BASED ON INTERPRETATION OF HISTORICAL AERIAL PHOTOGRAPHS OF THE SITE AND USE OF EXISTING LANDMARKS. LOCATIONS OF ALL FEATURES ARE APPROXIMATE.

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Alders Chevron /
Former Chevron Service Station No. 93883
1702 E Yakima Ave
Yakima, Washington

FIGURE 4
Potentiometric Map
December 23, 2013

DATE: 3/9/2015 | DRAWING: 93883 SiteMap.dwg

EAST YAKIMA AVENUE

SIDEWALK

SOUTH 17TH STREET

MW-1

FORMER LOCATION
OF GASOLINE USTs
(REMOVED DECEMBER 1992)

10,000 GALLON

10,000 GALLON

5,000
GALLON

PUMP ISLANDS

MW-2

MW-6
1019.70

1019.75

FORMER SERVICE STATION
BUILDING

MW-3

MW-4

MW-5
1019.89

550 GALLON HEATING OIL UST
(REMOVED MARCH 1992)

1,000 GALLON USED OIL UST
(REMOVED MARCH 1992)

1019.75

1019.50

1019.50

CURRENT BUILDING
(BOB HALL'S MAZDA)

VEHICLE DISPLAY PARKING - BOB HALL'S MAZDA

MW-7
1019.29

N

0 30'

LEGEND:

MW-6	GROUNDWATER MONITORING WELL LOCATION (SAIC 2013)
MW-2	FORMER MONITORING WELL LOCATION (ABANDONED OR DESTROYED)
1019.70	GROUNDWATER ELEVATION IN FEET
	APPROXIMATE GROUNDWATER FLOW DIRECTION AT A GRADIENT OF 0.003 FEET PER FOOT.
	CURRENTLY EXISTING SITE FEATURES
	FORMER SITE FEATURES
	APPROXIMATE BOUNDARY OF FORMER SERVICE STATION PROPERTY
	LANDSCAPED AREA

FORMER SERVICE STATION PROPERTY BOUNDARY AND FORMER SITE FEATURES ARE BASED ON THE SITE AND EXPLORATION PLAN (FIGURE 1) OF RZA-AGRA'S "FUEL OIL UST, USED OIL UST AND DRY WELL REMOVAL REPORT", DATED APRIL 24, 1992.

CURRENT SITE FEATURES ARE BASED ON INTERPRETATION OF A 2013 AERIAL PHOTOGRAPH FROM GOOGLE MAPS AND THE SEPTEMBER 2013 SITE SURVEY BY GEODIMENSIONS.

LOCATIONS OF FORMER SITE FEATURES RELATIVE TO EXISTING SITE FEATURES ARE BASED ON INTERPRETATION OF HISTORICAL AERIAL PHOTOGRAPHS OF THE SITE AND USE OF EXISTING LANDMARKS. LOCATIONS OF ALL FEATURES ARE APPROXIMATE.

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Alders Chevron /
Former Chevron Service Station No. 93883
1702 E Yakima Ave
Yakima, Washington

FIGURE 5
Potentiometric Map
March 26, 2014

DATE: 3/9/2015 | DRAWING: 93883 SiteMap.dwg

EAST YAKIMA AVENUE

SIDEWALK

SOUTH 17TH STREET

MW-1

FORMER LOCATION
OF GASOLINE USTs
(REMOVED DECEMBER 1992)

10,000 GALLON

10,000 GALLON

5,000
GALLON

PUMP ISLANDS

MW-2

1019.50

MW-6
1019.47

FORMER SERVICE STATION
BUILDING

MW-3

MW-4

MW-5
1019.64

550 GALLON HEATING OIL UST
(REMOVED MARCH 1992)

1,000 GALLON USED OIL UST
(REMOVED MARCH 1992)

1019.50

1019.25

CURRENT BUILDING
(BOB HALL'S MAZDA)

VEHICLE DISPLAY PARKING - BOB HALL'S MAZDA

1019.25

MW-7
1019.07

N

0 30'

LEGEND:

MW-6	GROUNDWATER MONITORING WELL LOCATION (SAIC 2013)
MW-2	FORMER MONITORING WELL LOCATION (ABANDONED OR DESTROYED)
1019.64	GROUNDWATER ELEVATION IN FEET
	APPROXIMATE GROUNDWATER FLOW DIRECTION AT A GRADIENT OF 0.003 FEET PER FOOT.
	CURRENTLY EXISTING SITE FEATURES
	FORMER SITE FEATURES
	APPROXIMATE BOUNDARY OF FORMER SERVICE STATION PROPERTY
	LANDSCAPED AREA

FORMER SERVICE STATION PROPERTY BOUNDARY AND FORMER SITE FEATURES ARE BASED ON THE SITE AND EXPLORATION PLAN (FIGURE 1) OF RZA-AGRA'S "FUEL OIL UST, USED OIL UST AND DRY WELL REMOVAL REPORT", DATED APRIL 24, 1992.

CURRENT SITE FEATURES ARE BASED ON INTERPRETATION OF A 2013 AERIAL PHOTOGRAPH FROM GOOGLE MAPS AND THE SEPTEMBER 2013 SITE SURVEY BY GEODIMENSIONS.

LOCATIONS OF FORMER SITE FEATURES RELATIVE TO EXISTING SITE FEATURES ARE BASED ON INTERPRETATION OF HISTORICAL AERIAL PHOTOGRAPHS OF THE SITE AND USE OF EXISTING LANDMARKS. LOCATIONS OF ALL FEATURES ARE APPROXIMATE.

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Alders Chevron /
Former Chevron Service Station No. 93883
1702 E Yakima Ave
Yakima, Washington

FIGURE 6
Potentiometric Map
June 27, 2014

DATE: 3/9/2015 | DRAWING: 93883 SiteMap.dwg

Table 1
Summary of Groundwater Sampling Analytical Results
Alders Chevron / Former Chevron Station No. 93883[1]
1702 East Yakima Avenue
Yakima, Washington

				Total Petroleum Hydrocarbons					Volatile Petroleum Hydrocarbons				Fuel Additives		
Well ID/Date	**TOC[2] (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**
MW-5															
9/21/2013	1,030.28	10.81	1,019.47	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0094	<0.5
12/23/2013	1,030.28	11.59	1,018.69	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5
3/26/2014	1,030.28	10.39	1,019.89	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5
6/27/2014	1,030.28	10.64	1,019.64	<50	<29	<29	<68	<68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5
MW-6															
9/21/2013	1,030.64	11.36	1,019.28	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5
12/23/2013	1,030.64	12.07	1,018.57	<50	<29	<29	<68	<68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5
3/26/2014	1,030.64	10.94	1,019.70	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0095	<0.5
6/27/2014	1,030.64	11.17	1,019.47	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5
MW-7															
9/21/2013	1,029.01	10.22	1,018.79	<50	<28	<28	<66	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0095	<0.5
12/23/2013	1,029.01	11.07	1,017.94	<50	<29	<29	<68	<68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5
3/26/2014	1,029.01	9.72	1,019.29	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0096	<0.5
6/27/2014	1,029.01	9.94	1,019.07	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.0097	<0.5
QA															
9/21/2013	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
12/23/2013	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
3/26/2014	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
6/27/2014	--	--	--	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
MTCA Method A Cleanup Levels:				**800/1,000[3]**	**500**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**0.01**	**5**
Current Method:				NWTPH-Gx	NWTPH-Dx Extended				USEPA 8260B				USEPA 8260B		

All data reported in units of µg/L

Table 1
Summary of Groundwater Sampling Analytical Results
Alders Chevron / Former Chevron Station No. 93883[1]
1702 East Yakima Avenue
Yakima, Washington

				Naphthalenes				Carcinogenic PAHs							
Well ID/Date	**TOC[2] (ft.)**	**DTW (ft.)**	**GWE (ft.)**	**1-Methyl-naphthalene**	**2-Methyl-naphthalene**	**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[4]**
MW-5															
9/21/2013	1,030.28	10.81	1,019.47	<0.010	<0.010	<0.031	<0.031	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/23/2013	1,030.28	11.59	1,018.69	<0.010	<0.010	0.033	0.033	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/26/2014	1,030.28	10.39	1,019.89	<0.010	<0.010	<0.030	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/27/2014	1,030.28	10.64	1,019.64	<0.010	0.013	<0.030	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-6															
9/21/2013	1,030.64	11.36	1,019.28	<0.010	<0.010	0.036	0.036	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/23/2013	1,030.64	12.07	1,018.57	<0.010	<0.010	<0.030	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/26/2014	1,030.64	10.94	1,019.70	<0.010	<0.010	<0.030	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/27/2014	1,030.64	11.17	1,019.47	<0.010	0.012	<0.030	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-7															
9/21/2013	1,029.01	10.22	1,018.79	<0.010	<0.010	0.11	0.11	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/23/2013	1,029.01	11.07	1,017.94	<0.010	<0.010	0.047	0.047	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/26/2014	1,029.01	9.72	1,019.29	<0.010	<0.010	<0.031	<0.031	<0.010	<0.010	<0.010	<0.010	<0.010	0.015	0.016	0.010
6/27/2014	1,029.01	9.94	1,019.07	<0.010	0.011	<0.030	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
QA															
9/21/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/23/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels:				**--**	**--**	**--**	**160**	**See Total Carcinogenic PAHs (Total cPAHs)**							**0.1**
Current Method:				USEPA 8270C SIM											

All data reported in units of µg/L

Table 1
Summary of Groundwater Sampling Analytical Results
Alders Chevron / Former Chevron Station No. 93883[1]
1702 East Yakima Avenue
Yakima, Washington

				Metals					Halogenated VOCs				
Well ID/Date	**TOC[2] (ft.)**	**DTW (ft.)**	**GWE (ft.)**	**Cadmium**	**Chromium**	**Lead**	**Nickel**	**Zinc**	**Methylene Chloride**	**PCE**	**1,1,1 - TCA**	**TCE**	**Vinyl Chloride**
MW-5													
9/21/2013	1,030.28	10.81	1,019.47	<0.76	<1.6	<4.7	<1.5	3.5	<2	<0.8	<0.8	<1	<1
12/23/2013	1,030.28	11.59	1,018.69	<0.76	<1.6	<4.7	<1.5	5.0	<2	<0.8	<0.8	<1	<1
3/26/2014	1,030.28	10.39	1,019.89	<0.76	<1.6	5.5	2.6	10.1	<2	<0.5	<0.5	<0.5	<0.5
6/27/2014	1,030.28	10.64	1,019.64	<0.33	5.2	10.6	2.6	19.8	<2	<0.5	<0.5	<0.5	<0.5
MW-6													
9/21/2013	1,030.64	11.36	1,019.28	<0.76	<1.6	<4.7	<1.5	<2.0	<2	<0.8	<0.8	<1	<1
12/23/2013	1,030.64	12.07	1,018.57	<0.76	2.30	<4.7	<1.5	5.10	<2	<0.8	<0.8	<1	<1
3/26/2014	1,030.64	10.94	1,019.70	<0.76	<1.6	<4.7	<1.5	7.2	<2	<0.5	<0.5	<0.5	<0.5
6/27/2014	1,030.64	11.17	1,019.47	<0.33	<1.3	<4.7	<1.6	<2.0	<2	<0.5	<0.5	<0.5	<0.5
MW-7													
9/21/2013	1,029.01	10.22	1,018.79	<0.76	<1.6	<4.7	<1.5	<2.0	<2	<0.8	<0.8	<1	<1
12/23/2013	1,029.01	11.07	1,017.94	<0.76	<1.6	<4.7	<1.5	3.60	<2	<0.8	<0.8	<1	<1
3/26/2014	1,029.01	9.72	1,019.29	0.77	<1.6	<4.7	<1.5	6.0	<2	<0.5	<0.5	<0.5	<0.5
6/27/2014	1,029.01	9.94	1,019.07	<0.33	<1.3	<4.7	<1.6	7.6	<2	<0.5	<0.5	<0.5	<0.5
QA													
9/21/2013	--	--	--	--	--	--	--	--	--	--	--	--	--
12/23/2013	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2014	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2014	--	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels:				**5**	**50**	**15**	**--**	**--**	**5**	**5**	**200**	**5**	**0.2**
Current Method:				USEPA 6010B					USEPA 8260B				

All data reported in units of µg/L

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Table 1
Summary of Groundwater Sampling Analytical Results
Alders Chevron / Former Chevron Station No. 93883[1]
1702 East Yakima Avenue
Yakima, Washington

				PCBs							
Well ID/Date	**TOC[2] (ft.)**	**DTW (ft.)**	**GWE (ft.)**	**1016**	**1221**	**1232**	**1242**	**1248**	**1254**	**1260**	**Total PCBs**
MW-5											
9/21/2013	1,030.28	10.81	1,019.47	<0.082	<0.082	<0.16	<0.082	<0.082	<0.082	<0.12	<0.16
12/23/2013	1,030.28	11.59	1,018.69	<0.081	<0.081	<0.16	<0.081	<0.081	<0.081	<0.12	<0.16
3/26/2014	1,030.28	10.39	1,019.89	<0.081	<0.081	<0.16	<0.081	<0.081	<0.081	<0.12	<0.16
6/27/2014	1,030.28	10.64	1,019.64	<0.081	<0.081	<0.16	<0.081	<0.081	<0.081	<0.12	<0.16
MW-6											
9/21/2013	1,030.64	11.36	1,019.28	<0.082	<0.082	<0.16	<0.082	<0.082	<0.082	<0.12	<0.16
12/23/2013	1,030.64	12.07	1,018.57	<0.082	<0.082	<0.16	<0.082	<0.082	<0.082	<0.12	<0.16
3/26/2014	1,030.64	10.94	1,019.70	<0.080	<0.080	<0.16	<0.080	<0.080	<0.080	<0.12	<0.16
6/27/2014	1,030.64	11.17	1,019.47	<0.081	<0.081	<0.16	<0.081	<0.081	<0.081	<0.12	<0.16
MW-7											
9/21/2013	1,029.01	10.22	1,018.79	<0.082	<0.082	<0.16	<0.082	<0.082	<0.082	<0.12	<0.16
12/23/2013	1,029.01	11.07	1,017.94	<0.081	<0.081	<0.16	<0.081	<0.081	<0.081	<0.12	<0.16
3/26/2014	1,029.01	9.72	1,019.29	<0.080	<0.080	<0.16	<0.080	<0.080	<0.080	<0.12	<0.16
6/27/2014	1,029.01	9.94	1,019.07	<0.080	<0.080	<0.16	<0.080	<0.080	<0.080	<0.12	<0.16
QA											
9/21/2013	--	--	--	--	--	--	--	--	--	--	--
12/23/2013	--	--	--	--	--	--	--	--	--	--	--
3/26/2014	--	--	--	--	--	--	--	--	--	--	--
6/27/2014	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels:				**See Total PCBs**							**0.1**
Current Method:				USEPA 8082							

All data reported in units of µg/L

Table 1
Summary of Groundwater Sampling Analytical Results
Alders Chevron / Former Chevron Station No. 93883[1]
1702 East Yakima Avenue
Yakima, Washington

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
PAHs = Polycyclic Aromatic Hydrocarbons
PCBs = Polychlorinated biphenyls
PCE = Tetrachloroethylene
QA = Quality Assurance/Trip Blank
TCA = Trichloroethane
TCE = Trichloroethylene
TOC = Top of Casing
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
VOCs = Volatile Organic Compounds
-- = Not Measured/Not Analyzed
µg/L = Micrograms per liter

Notes:

1. Analytical results in bold font indicate concentrations exceed MTCA Method A cleanup levels.
2. TOC elevations have been surveyed in feet relative to the 1988 North American Vertical Datum.
3. 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.
4. Total cPAHs toxic equivalency calculated using the toxic equivalency factors listed in MTCA, Table 708-2.

Table 2
Summary of Soil Sampling Analytical Results
Alders Chevron / Former Chevron Station No. 93883[1]
1702 East Yakima Avenue
Yakima, Washington

			Total Petroleum Hydrocarbons					Volatile Petroleum Hydrocarbons				Fuel Additives		
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**	**MTBE**	**EDB**	**EDC**
MW-5-10	10	8/29/2013	**480**	**2,100**	2,000	1,600	1,100	<0.022	<0.044	<0.044	0.11	<0.022	<0.044	<0.044
MW-5-13	13	8/29/2013	11	56	46	130	92	0.002	<0.001	<0.001	<0.001	<0.0006	<0.001	<0.001
MW-5-19	19	8/29/2013	<1.3	<3.3	<3.3	<11	<11	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.0009	<0.0009
MW-6-8	8	8/29/2013	**50**	410	320	400	250	<0.029	<0.059	<0.059	<0.059	<0.029	<0.059	<0.059
DUP-082913	8	8/29/2013	17	240	200	270	230	0.003	0.002	<0.001	0.001	<0.0005	<0.001	<0.001
MW-6-13	13	8/29/2013	<1	<3.4	<3.4	<11	<11	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001
MW-6-19	19	8/29/2013	<1	<3.3	<3.3	<11	<11	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001
MW-7-11	11	8/29/2013	<1	<3.2	<3.2	<11	<11	0.0008	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001
MW-7-19	19	8/29/2013	<1.2	<3.3	<3.3	<11	<11	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.0009	<0.0009
MTCA Method A Cleanup Levels:			**30/100[2]**	**2,000**	**2,000**	**2,000**	**2,000**	**0.03**	**7**	**6**	**9**	**0.1**	**0.005**	**--**
Analytical Method:			NWTPH-Gx	NWTPH-Dx Extended				USEPA 8260B						

All data reported in units of mg/kg

Table 2
Summary of Soil Sampling Analytical Results
Alders Chevron / Former Chevron Station No. 93883[1]
1702 East Yakima Avenue
Yakima, Washington

			Naphthalenes				Carcinogenic PAHs							
Sample ID	**Depth (ft.)**	**Date Sampled**	**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[3]**
MW-5-10	10	8/29/2013	0.51	1.20	2.0	3.71	0.021	0.023	0.042	0.0088	0.093	0.010	0.013	0.033
MW-5-13	13	8/29/2013	0.0094	0.015	0.022	0.0464	0.0038	0.0049	0.0085	0.0033	0.0088	0.0011	0.0029	0.0069
MW-5-19	19	8/29/2013	<0.00073	<0.00073	<0.00073	<0.00073	<0.00073	<0.00073	<0.00073	<0.00073	<0.00037	<0.00073	<0.00073	<0.00073
MW-6-8	8	8/29/2013	0.043	0.093	0.15	0.286	<0.0079	<0.0079	0.016	<0.0079	0.019	<0.0079	<0.0079	0.0073
DUP-082913	8	8/29/2013	0.024	0.055	0.089	0.168	<0.0067	0.0078	0.015	<0.0067	0.018	<0.0067	<0.0067	0.011
MW-6-13	13	8/29/2013	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00038	<0.00076	<0.00076	<0.00076
MW-6-19	19	8/29/2013	<0.00072	<0.00072	<0.00072	<0.00072	<0.00072	<0.00072	<0.00072	<0.00072	<0.00036	<0.00072	<0.00072	<0.00072
MW-7-11	11	8/29/2013	0.00096	0.00080	0.0013	0.00306	<0.00071	<0.00071	0.00097	<0.00071	0.00095	<0.00071	<0.00071	0.00060
MW-7-19	19	8/29/2013	0.0013	<0.00071	0.0014	0.0027	<0.00071	<0.00071	<0.00071	<0.00071	<0.00036	<0.00071	<0.00071	<0.00071
MTCA Method A Cleanup Levels:			**See Total Naphthalenes**			**5**	**See Total Carcinogenic PAHs (Total cPAHs)**							**0.1**
Analytical Method:			USEPA 8270C SIM											

All data reported in units of mg/kg

Table 2
Summary of Soil Sampling Analytical Results
Alders Chevron / Former Chevron Station No. 93883[1]
1702 East Yakima Avenue
Yakima, Washington

			Metals					Halogenated VOCs			
Sample ID	**Depth (ft.)**	**Date Sampled**	**Cadmium**	**Chromium**	**Lead**	**Nickel**	**Zinc**	**Methylene Chloride**	**PCE**	**1,1,1 - TCA**	**TCE**
MW-5-10	10	8/29/2013	0.674	290	123	45.0	154	<0.087	<0.044	<0.044	<0.044
MW-5-13	13	8/29/2013	1.36	86.7	661	52.0	639	<0.002	<0.001	<0.001	<0.001
MW-5-19	19	8/29/2013	0.583	18.2	3.85	14.4	58.2	<0.002	<0.0009	<0.0009	<0.0009
MW-6-8	8	8/29/2013	0.700	52.0	39.4	27.3	99.2	<0.12	<0.059	<0.059	<0.059
DUP-082913	8	8/29/2013	0.637	56.4	61.3	30.1	132	<0.002	<0.001	<0.001	<0.001
MW-6-13	13	8/29/2013	0.457	8.62	1.46	11.4	37.1	<0.002	<0.001	<0.001	<0.001
MW-6-19	19	8/29/2013	0.609	19.5	3.11	18.3	57.3	<0.002	<0.001	<0.001	<0.001
MW-7-11	11	8/29/2013	0.338	63.3	6.40	87.2	50.5	<0.002	<0.001	<0.001	<0.001
MW-7-19	19	8/29/2013	0.402	17.6	4.79	12.0	56.3	<0.002	<0.0009	<0.0009	<0.0009
MTCA Method A Cleanup Levels:			**2**	--	**250**	--	--	**0.02**	**0.05**	**2**	**0.03**
Analytical Method:			USEPA 6010B					USEPA 8260B			

All data reported in units of mg/kg

Table 2
Summary of Soil Sampling Analytical Results
Alders Chevron / Former Chevron Station No. 93883[1]
1702 East Yakima Avenue
Yakima, Washington

			PCBs							
Sample ID	**Depth (ft.)**	**Date Sampled**	**1016**	**1221**	**1232**	**1242**	**1248**	**1254**	**1260**	**Total PCBs**
MW-5-10	10	8/29/2013	<0.0037	<0.0047	<0.0082	<0.0034	<0.0034	<0.0034	<0.0050	<0.0082
MW-5-13	13	8/29/2013	<0.0038	<0.0049	<0.0085	<0.0035	<0.0035	<0.0035	<0.0052	<0.0085
MW-5-19	19	8/29/2013	<0.0039	<0.0050	<0.0087	<0.0036	<0.0036	<0.0036	<0.0053	<0.0087
MW-6-8	8	8/29/2013	<0.0043	<0.0055	<0.0095	<0.0039	<0.0039	<0.0039	<0.0058	<0.0095
DUP-082913	8	8/29/2013	<0.0036	<0.0046	<0.0080	<0.0033	<0.0033	<0.0033	<0.0049	<0.0080
MW-6-13	13	8/29/2013	<0.0041	<0.0052	<0.0090	<0.0037	<0.0037	<0.0037	<0.0055	<0.0090
MW-6-19	19	8/29/2013	<0.0039	<0.0049	<0.0086	<0.0035	<0.0035	<0.0035	<0.0053	<0.0086
MW-7-11	11	8/29/2013	<0.0038	<0.0049	<0.0085	<0.0035	<0.0035	<0.0035	<0.0052	<0.0085
MW-7-19	19	8/29/2013	<0.0039	<0.0050	<0.0086	<0.0036	<0.0036	<0.0036	<0.0053	<0.0086
MTCA Method A Cleanup Levels:			**See Total PCBs**							**1**
Analytical Method:			USEPA 8082							

All data reported in units of mg/kg

Table 2
Summary of Soil Sampling Analytical Results
Alders Chevron / Former Chevron Station No. 93883[1]
1702 East Yakima Avenue
Yakima, Washington

Abbreviations:

DUP = Duplicate
EDB = Ethylene dibromide
EDC = Ethylene dichloride
(ft.) = Feet
mg/kg = Milligrams per kilogram
MTBE = Methyl tertiary-butyl ether
MTCA = Model Toxics Control Act
NW = Northwest
PAHs = Polycyclic Aromatic Hydrocarbons
PCBs = Polychlorinated biphenyls
PCE = Tetrachloroethylene
TCA = Trichloroethane
TCE = Trichloroethylene
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
VOCs = Volatile Organic Compounds

Notes:

1. Analytical results in bold font indicate concentrations exceed MTCA Method A cleanup levels.
2. GRO MTCA Method A cleanup level is 30 mg/kg if benzene is present and 100 mg/kg if benzene is not present.
3. Total cPAHs toxic equivalency calculated using the toxic equivalency factors listed in MTCA, Table 708-2.

Appendix A:
Boring Logs and Well Construction Diagrams

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18912 N Creek Pkwy, Ste 101
Bothell, WA 98011

Monitoring Well: MW-5

Project: Former Chevron Station No. 93883
Client: Chevron EMC
Location: 1702 E. Yakima Ave, Yakima, WA
Logged By: G. Cisneros

Date Started: 8/27/2013
Date Completed: 8/29/2013
Driller: Cascade
Drill Method: Sonic Drill

Total Boring Depth: 20 ft
Hole Diameter: 8/5.75 in
Well Depth: 20 ft
TOC Elevation: 1030.28 ft

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

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
	FID / PID							0	4-inches of asphalt.	Concrete Steel Monument
									Brown, sandy cobbles (FILL).	
								1	Air vacuumed down to 8 ft bgs.	
Moist	0/0							2	Brown to dark brown, loose, gravelly, medium to coarse SAND with metal debris; no odor; no sheen. (FILL)	
						GP		3	(GP) Brown, loose to medium dense, sandy, gravelly COBBLES up to 16 inches in diameter; no odor; no sheen.	
								4	Hole is caving in from 4-5 ft. No sample collected.	Hydrated Bentonite Chips
								5		
Moist	0/0							6	Brown, medium dense, gravelly COBBLES with 10% fine to coarse sand; no odor; no sheen.	Ecology Unique Well ID BIC 744
								7	Cobbles increase in size with depth.	
						GP		8	(GP) No recovery (8-10 ft).	
								9		
Moist	18/ 195			MW-5-10	G **480** D **2,100** HO = 1,600 B <0.022			10	Brown, dense, sandy, gravelly COBBLES with 15% fine to medium sand; slight odor; no sheen.	
								11	Brown, dense, sandy, cobbly GRAVEL with 10% fine to medium sand; no odor; no sheen.	
								12		
Moist	9/90							13	Same as above; no odor; no sheen.	
	4/14			MW-5-13	G = 11 D = 56 HO = 130 B = 0.002					
	2/2							14	Brown, dense, sandy GRAVEL with 10% fine to medium sand and cobbles up to 16 inches in diameter; no odor; no sheen.	2/12 Monterey Sand
	7/2					GP		15	(GP) Same as above; no odor; no sheen.	0.020 Inch Slot
	6/3							16	Gray, medium dense, silty, sandy GRAVEL with 15% silt, 15% fine to medium sand, and cobbles; no odor; no sheen.	
	7/4							17	Same as above; no odor; no sheen.	
	2/5					GM		18	(GM) Same as above; no odor; no sheen.	
Wet	2/4			MW-5-19	G <1.3 D <3.3 HO <11 B <0.0005			19	Same as above; no odor; no sheen.	
								20	Bottom of borehole at 20.0 feet.	

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18912 N Creek Pkwy, Ste 101
Bothell, WA 98011

Monitoring Well: MW-6

Project: Former Chevron Station No. 93883
Client: Chevron EMC
Location: 1702 E. Yakima Ave, Yakima, WA
Logged By: G. Cisneros

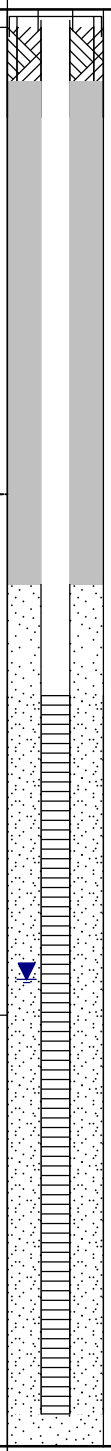
Date Started: 8/27/2013
Date Completed: 8/29/2013
Driller: Cascade
Drill Method: Sonic Drill

Total Boring Depth: 20 ft
Hole Diameter: 8/5.75 in
Well Depth: 19.55 ft
TOC Elevation: 1030.64 ft

Well Diameter: 2 in
Well Screen: 20-slot, 9.55-19.55 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch.40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
								0	4 inches of asphalt.
	FID / PID					GP		1	(GP) Air vacuumed down to 8 ft bgs.
Moist	0/0							2	Brown, medium dense, large GRAVEL and COBBLES with 15% fine to coarse sand; no odor; no sheen. Same as above; no odor; no sheen.
								3	
								4	Brown, loose to medium dense, gravelly COBBLES with 10% fine to coarse sand; no odor; no sheen. Unable to collect samples with a hand auger due to lithology.
								5	
						GP		6	(GP) Brown, medium dense, sandy, gravelly COBBLES with 10% fine to coarse sand and cobbles up to 16 inches in diameter.
								7	
Dry	37/ 286			MW-6-8	G **50** D = 410 HO = 400 B = 0.003			8	Light gray to light brown, medium dense, silty, sandy GRAVEL with cobbles, 20% silt, and 15% fine sand; slight odor; no sheen.
	0/15							9	Same as above; no odor; no sheen.
	5/38					GM		10	(GM) Same as above; no odor; no sheen.
	2/17							11	Same as above; no odor; no sheen.
Dry	0/7							12	Same as above; no odor; no sheen.
Moist	1/2			MW-6-13	G <1 D <3.4 HO <11 B <0.0005			13	Same as above; no odor; no sheen.
Wet	2/5					GP		14	
	1/3							15	(GP) Brown, dense, sandy GRAVEL with 25% cobbles, 15% fine to coarse sand, and 10% silt; no odor; no sheen. Same as above; no odor; no sheen.
	1/3							16	Same as above; no odor; no sheen.
	25/4							17	Same as above; no odor; no sheen.
	10/2							18	Same as above; no odor; no sheen.
Wet	10/3			MW-6-19	G <1 D <3.3 HO <11 B <0.0005	GP		19	(GP) Same as above; no odor; no sheen.
								20	Bottom of borehole at 20.0 feet.

WELL DIAGRAM



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18912 N Creek Pkwy, Ste 101
Bothell, WA 98011

Monitoring Well: MW-7

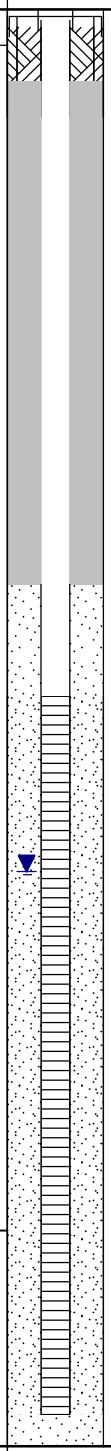
Project: Former Chevron Station No. 93883
Client: Chevron EMC
Location: 1702 E. Yakima Ave, Yakima, WA
Logged By: G. Cisneros

Date Started: 8/28/2013
Date Completed: 8/29/2013
Driller: Cascade
Drill Method: Sonic Drill

Total Boring Depth: 20 ft
Hole Diameter: 8/5.75 in
Well Depth: 19.56 ft
TOC Elevation: 1029.01 ft

Well Diameter: 2 in
Well Screen: 20-slot, 9.56-19.56 ft
Filter Pack: 2/12 Monterey Sand
Well Casing: Sch.40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	ANALYTICAL RESULTS (mg/kg)	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION
									6 inches of grass and topsoil.
	FID / PID					GP		0	(GP) Brown, loose, sandy, gravelly COBBLES with 10% fine to coarse sand; no odor; no sheen. Air vacuumed down to 8 ft bgs.
Moist	0/0							1	
								2	Same as above; no odor; no sheen.
								3	
								4	Unable to collect samples with hand auger due to lithology.
								5	
						GP		6	(GP) Brown, medium dense, sandy, gravelly COBBLES with 10% fine to coarse sand and cobbles up to 16 inches in diameter; no odor; no sheen.
								7	
Dry	2/11							8	Light brown, medium dense, sandy GRAVEL with 30% cobbles, 15% fine to coarse sand, and 10% silt; no odor; no sheen.
	0/4							9	Same as above; no odor; no sheen.
	0/5							10	Same as above; no odor; no sheen.
Dry	0/3			MW-7-11	G <1 D <3.2 HO <11 B = 0.0008			11	Same as above; no odor; no sheen.
Moist	0/8							12	Brown, medium dense, sandy, cobbly GRAVEL with 15% fine to coarse sand and <5% silt; no odor; no sheen.
	1/9							13	Same as above; no odor; no sheen.
Moist	5/11							14	Same as above; no odor; no sheen.
	0/4					GP		15	(GP) Brown, medium dense, sandy, cobbly GRAVEL with <5% coarse sand and <5% silt; no odor; no sheen.
Moist	1/4							16	Same as above; no odor; no sheen.
	3/9					GM		17	(GM) Brown, medium dense, silty, sandy GRAVEL with 30% cobbles, 15% fine to coarse sand, and 15% silt; no odor; no sheen.
	1/12							18	Same as above; no odor; no sheen.
Moist	1/12			MW-7-19	G <1.2 D <3.3 HO <11 B <0.0005			19	Same as above; no odor; no sheen.
								20	Bottom of borehole at 20.0 feet.



Appendix B:
Groundwater Monitoring and Sampling Data Packages

GETTLER-RYAN INC.

TRANSMITTAL

September 27, 2013
G-R #386763

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

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

RE: Former Chevron SS #9-3883
1702 East Yakima Avenue
Yakima, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Third Quarter Event of September 21, 2013**

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/9-3883

GETTLER-RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	**Chevron #9-3883**	Date:	9.21.13
Address:	**1702 East Yakima Avenue**		
City/St.:	**Yakima, WA**		
Status of Site:	Bob Hall		

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

#	Description	Condition	Labeling	Contents	Amount @ Start	Amount @ End
	No Drums					

Location: _____

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-5	Good			→	8" Morris x 3	
MW-6	Good			→	8" Morris x 3	
MW-7	Good			→	8" Morris x 3	

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 #9-3883** Job Number: **385894**

Site Address: **1702 East Yakima Avenue** Event Date: 9.21.13 (inclusive)

City: **Yakima, WA** Sampler: J.P

Well ID **MW-5** Date Monitored: 9.21.13

Well Diameter **2** in.

Total Depth 20.05 ft.

Depth to Water 10.81 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.65

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Suction Pump		Peristaltic Pump	x
Grundfos		QED Bladder Pump	
Peristaltic Pump	x	Other:	
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: gal
Amt Removed from Well: gal
Water Removed: gal
Product Transferred to:

Start Time (purge): 0855 Weather Conditions: SUN

Sample Time/Date: 0930 / 9.21.13 Water Color: CLEAR Odor: Y / (N)

Approx. Flow Rate: 100 mlpm Sediment Description: NONE

Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 11.48

Time (2400 hr.)	Volume (Liters)	pH	Conductivity ~~(µmhos/cm - µS)~~ mS	Temperature (C) / F	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0913	1.8	6.71	.151	15.6	.26	22.1	10.96
0916	2.1	6.69	.152	15.7	.26	24.5	11.18
0919	2.4	6.68	.153	15.8	.28	26.5	11.33
0922	2.7	6.68	.154	15.8	.26	27.9	11.48

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	3 x voa vial	YES	NP ~~Na2S2O3~~	LANCASTER	EDB (8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS (6010)

COMMENTS: Depth Pump Set At: 17-18

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 #9-3883** Job Number: **385894**
Site Address: **1702 East Yakima Avenue** Event Date: 9.21.13 (inclusive)
City: **Yakima, WA** Sampler: J.P

Well ID MW-6 Date Monitored: 9.21.13
Well Diameter 2 in.
Total Depth 19.55 ft.
Depth to Water 11.36 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.99

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Suction Pump		Peristaltic Pump	✓
Grundfos		QED Bladder Pump	
Peristaltic Pump	✓	Other:	
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: gal
Amt Removed from Well: gal
Water Removed: gal
Product Transferred to:

Start Time (purge): 0750 Weather Conditions: SUN
Sample Time/Date: 0816 9.21.13 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 100 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 12.26

Time (2400 hr.)	Volume (Liters)	pH	Conductivity ~~(µmhos/cm - µS)~~ mS	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0800	1.8	6.96	.148	15.7	.62	55.7	11.44
0811	2.1	6.88	.144	15.9	1.16	55.3	11.56
0814	2.4	6.88	.143	16.0	1.24	55.8	12.12
0817	2.7	6.88	.143	16.1	1.22	55.9	12.26

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2D2O3	LANCASTER	EDB (8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS (6010)

COMMENTS: Depth Pump Set At: 16-17 MINOR AIR BUBBLES IN TUBING

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 #9-3883** Job Number: **385894**
Site Address: **1702 East Yakima Avenue** Event Date: 9.21.13 (inclusive)
City: **Yakima, WA** Sampler: J.P

Well ID **MW-7** Date Monitored: 9.21.13
Well Diameter 2 in.
Total Depth 19.60 ft.
Depth to Water 10.22 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.08

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Suction Pump		Peristaltic Pump	x
Grundfos		QED Bladder Pump	
Peristaltic Pump	x	Other:	
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: gal
Amt Removed from Well: gal
Water Removed: gal
Product Transferred to:

Start Time (purge): 0958 Weather Conditions: SUN
Sample Time/Date: 1031 / 9.21.13 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 100 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 10.72

Time (2400 hr.)	Volume (Liters)	pH	~~Conductivity (µmhos/cm · µS)~~ MS	Temperature (C) / F	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1016	1.8	6.72	.133	17.3	2.53	16.8	10.32
1019	2.1	6.71	.133	17.4	2.57	20.5	10.47
1022	2.4	6.70	.133	17.4	2.59	24.2	10.66
1025	2.7	6.70	.133	17.5	2.57	24.7	10.72

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	~~Na2S2O3~~ NP	LANCASTER	EDB (8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS (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.

SCR #: ______

① Client Information

Facility # SS#9-3885-OML G-R#385894 WBS

Site Address 1702 East Yakima Avenue, YAKIMA, WA

Chevron PM MHO SAICRS Lead Consultant Russell Shropshire

Consultant/Office Gettler-Ryan, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568

Consultant Project Mgr. Deanna L. Harding, (deanna@grinc.com), (925) 551-7444 x180

Consultant Phone # (425) 482-3323 x

Sampler J. PAYNE

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

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; EDC/HVOC's (8260); EDB (8011); cPAH's/Naph's 8270; PCB's 8082; Total Metals 6010

② Sample Identification	Date	Time	③ Grab	Composite	Soil	Water	Oil	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	EDC/HVOC's (8260)	EDB (8011)	cPAH's/Naph's 8270	PCB's 8082 / Total Metals 6010
QA	9.21.13		X			X		2	X			X								
MW-5	↓	0930	X			X		14	X			X	X	X			X	X	X	X
MW-6	↓	0826	X			X		14	X			X	X	X			X	X	X	X
MW-7	↓	1031	X			X		14	X			X	X	X			X	X	X	X

☐ 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

Total Metals include: Pb, Cd, Cr, Ni & Zn

AMEND COC: ADD Gx TO QA SAMPLES. HVOC'S NEED TO BE ADDED TO SAMPLE POINTS MW-5, MW-6 & MW-7

MWC 09-24-13

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: ______

⑨

Relinquished by	Date	Time	Received by	Date	Time
[signature]	9.23.13	1600			

Relinquished by Commercial Carrier:
UPS X FedEx ______ Other ______

Received by ______ Date ______ Time ______

Temperature Upon Receipt ______ °C

Custody Seals Intact? Yes No

GETTLER-RYAN INC.

TRANSMITTAL

January 6, 2014
G-R #386763

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 Chevron SS #9-3883
1702 East Yakima Avenue
Yakima, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Fourth Quarter Event of December 23, 2013**

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/9-3883

GETTLER-RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	**Chevron #9-3883**	Date:	12.23.13
Address:	**1702 East Yakima Avenue**		
City/St.:	**Yakima, WA**		
Status of Site:	BOB HALL VEHICLES		

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

#	Description	Condition	Labeling	Contents	Amount @ Start	Amount @ End
	No Drums					

Location: _____

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-5	GOOD			→	8" MORRIS x 3	
MW-6	GOOD			→	↓	
MW-7	GOOD			→	↓	

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 #9-3883** Job Number: **385894**

Site Address: **1702 East Yakima Avenue** Event Date: 12.23.13 (inclusive)

City: **Yakima, WA** Sampler: J.P

Well ID **MW-5** Date Monitored: 12.23.13

Well Diameter **2** in.

Total Depth ~~20.05~~ ft.

Depth to Water 11.59 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.28

Purge Equipment:

Disposable Bailer	
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
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: gal
Amt Removed from Well: gal
Water Removed: gal
Product Transferred to:

Start Time (purge): 1031 Weather Conditions: FOG

Sample Time/Date: 1105 / 12.23.13 Water Color: CLEAR Odor: Y / (N)

Approx. Flow Rate: 100 mlpm Sediment Description: NONE

Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 12.08

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (~~µmhos/cm~~ mS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1049	1.8	6.96	.0806	5.49	2.26	131.5	11.79
1052	2.1	6.96	.0806	5.40	2.28	132.1	11.86
1055	2.4	6.95	.0800	5.36	2.37	133.3	11.97
1058	2.7	6.94	.0800	5.31	2.39	134.1	12.08

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB (8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS (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 #9-3883** Job Number: **385894**
Site Address: **1702 East Yakima Avenue** Event Date: 12.23.13 (inclusive)
City: **Yakima, WA** Sampler: J.P

Well ID MW-6 Date Monitored: 12.23.13
Well Diameter 2 in.
Total Depth 19.55 ft.
Depth to Water 12.07 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.56

Purge Equipment:

Disposable Bailer	
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
Peristaltic Pump	x
QED Bladder Pump	
Other: YSI MPS 5566	

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: gal
Amt Removed from Well: gal
Water Removed: gal
Product Transferred to:

Start Time (purge): 0918 Weather Conditions: FOG
Sample Time/Date: 0950 / 12.23.13 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 100 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 12.46

Time (2400 hr.)	Volume (Liters)	pH	Conductivity MS ~~(µmhos/cm - µS)~~	Temperature (C) F	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0936	1.8	7.03	.093	8.41	3.04	126.8	12.13
0939	2.1	7.01	.094	8.30	3.10	127.1	12.24
0942	2.4	7.01	.094	8.22	3.16	127.8	12.35
0945	2.7	6.99	.096	8.16	3.21	128.6	12.46

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB (8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS (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 #9-3883** Job Number: **385894**

Site Address: **1702 East Yakima Avenue** Event Date: 12.23.13 (inclusive)

City: **Yakima, WA** Sampler: J.P

Well ID **MW-7** Date Monitored: 12.23.13

Well Diameter **2** in.

Total Depth 19.66 ft.

Depth to Water 11.07 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.76

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Suction Pump		Peristaltic Pump	x
Grundfos		QED Bladder Pump	
Peristaltic Pump	x	Other:	
QED Bladder Pump			
Other: YSI MP3 556			

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: gal
Amt Removed from Well: gal
Water Removed: gal
Product Transferred to:

Start Time (purge): 1129 Weather Conditions: SUN / FOG

Sample Time/Date: 1200 / 12.23.13 Water Color: CLEAR Odor: Y / (N)

Approx. Flow Rate: 100 mlpm Sediment Description: NONE

Did well de-water? No If yes, Time: — Volume: — gal. DTW @ Sampling: 11.50

Time (2400 hr.)	Volume (Liters)	pH	Conductivity ~~(µmhos/cm µS)~~	Temperature (C) / F	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1147	1.8	7.01	.089	10.66	3.65	135.7	11.21
1150	2.1	6.99	.088	10.56	3.62	136.6	11.30
1153	2.4	6.99	.088	10.48	3.59	137.3	11.41
1156	2.7	6.98	.086	10.30	3.60	137.3	11.50

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB (8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS (6010)

COMMENTS: Depth Pump Set At: 15 - 16

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#5-3883-OML G-R#385894 WBS
Site Address: 1702 East Yakima Avenue, Y
Chevron PM: MHO LEIDOSR Lead Consultant
Consultant/Office: Gettler-Ryan, Inc., 6805 Sier
Consultant Project Mgr.: [illegible]
Consultant Phone #: (925) 551-7444 x180
Sampler: J. PAYNE

② Sample Identification / ③ / ④ Matrix / ⑤ Analyses Requested

Matrix options: Sediment ☐ / Soil ☐; Ground ☑ / Potable ☐ / Water; Surface ☐ / NPDES ☐; Air ☐ / Oil ☐

Analysis options: 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 ___; EDC/HVOC's 8260; EOB 8011; cPAH's - NAPH's 8270SIM TBS 8082; TOTAL METALS 6010

Sample Identification	Date	Time	Grab	Composite	Soil/Sediment	Water	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	EDC/HVOC's 8260	EOB 8011	cPAH's - NAPH's 8270SIM TBS 8082	TOTAL METALS 6010
QA	12-23-13		X			X			2	X			X								
MW-5	↓	1103	X			X			14	X			X	X	X			X	X	X	X
MW-6	↓	0950	X			X			14	X			X	X	X			X	X	X	X
MW-7	↓	1201	X			X			14	X			X	X	X			X	X	X	X

☐ 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
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: ______

⑨

Relinquished by	Date	Time	Received by	Date	Time
[signature]	12-23-13	1300			

Relinquished by Commercial Carrier:
UPS X FedEx ____ Other ______

Received by ____ Date ____ Time ____

Temperature Upon Receipt ______ °C

Custody Seals Intact? Yes No

GETTLER-RYAN INC.

TRANSMITTAL

April 4, 2014
G-R #386763

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 Chevron SS #9-3883
1702 East Yakima Avenue
Yakima, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **First Quarter Event of March 26, 2014**

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/9-3883

GETTLER-RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	**Chevron #9-3883** Date: 3.26.14
Address:	**1702 East Yakima Avenue**
City/St.:	**Yakima, WA**
Status of Site:	BOB HALL CAR DEALERSHIP

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

#	Description	Condition	Labeling	Contents	Amount @ Start	Amount @ End
	No Drums					
	OBSERVED					

Location: _____

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-5	OOOO			Y	Ø Morris x 2	
MW-6	OOOO			Y	↓	
MW-7	OOOO			Y		

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 #9-3883** Job Number: **385894**
Site Address: **1702 East Yakima Avenue** Event Date: 3.26.14 (inclusive)
City: **Yakima, WA** Sampler: J.F

Well ID MW-5 Date Monitored: 3.26.14
Well Diameter 2 in.
Total Depth 19.91 ft.
Depth to Water 10.39 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.29

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
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: gal
Amt Removed from Well: gal
Water Removed: gal
Product Transferred to:

Start Time (purge): 0903 Weather Conditions: OVERCAST
Sample Time/Date: 0934 / 3.26.14 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 300 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 10.46

Time (2400 hr.)	Volume (Liters)	pH	~~Conductivity~~ NS (~~µmhos/cm - µS~~)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0921	3.6	6.86	.126	7.81	3.03	102.0	10.46
0924	4.2	6.88	.124	7.84	3.00	101.4	10.46
0927	4.8	6.91	.122	7.90	2.94	100.3	10.46

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB (8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS (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 #9-3883** Job Number: **385894**
Site Address: **1702 East Yakima Avenue** Event Date: 3.26.14 (inclusive)
City: **Yakima, WA** Sampler: V.F

Well ID **MW-6** Date Monitored: 3.26.14
Well Diameter 2 in.
Total Depth 19.40 ft.
Depth to Water 10.94 ft. ☐ Check if water column is less then 0.50 ft.
0.46 xVF — = — x3 case volume = Estimated Purge Volume: — gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.63

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

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Peristaltic Pump x
QED Bladder Pump
Other: YSI MP0 5056

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: gal
Amt Removed from Well: gal
Water Removed: gal
Product Transferred to:

Start Time (purge): 0803 Weather Conditions: OVERCAST
Sample Time/Date: 0831 / 3.26.14 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 11.02

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (~~umhos/cm~~ mS)	Temperature (C) / F	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
~~0821~~	3.6	7.23	~~.126~~	9.98	3.53	93.0	11.02
0824	4.2	7.20	.124	10.01	0.72	91.5	11.02
~~0827~~ 0831	4.8	7.18	.122	10.08	3.79	91.0	11.02

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB (8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS (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 #9-3883** Job Number: **385894**
Site Address: **1702 East Yakima Avenue** Event Date: 3.26.14 (inclusive)
City: **Yakima, WA** Sampler: V.P

Well ID MW-7 Date Monitored: 3.26.14
Well Diameter 2 in.
Total Depth 19.40 ft.
Depth to Water 9.72 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.65

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Suction Pump		Peristaltic Pump	X
Grundfos		QED Bladder Pump	
Peristaltic Pump	X	Other: TUBING	
QED Bladder Pump			
Other: YSI MP0 556			

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: gal
Amt Removed from Well: gal
Water Removed: gal
Product Transferred to:

Start Time (purge): 1000 Weather Conditions: OVERCAST
Sample Time/Date: 1030 / 3.26.14 Water Color: CLEAR Odor: Y (N)
Approx. Flow Rate: 200 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: ~ Volume: ~ gal. DTW @ Sampling: 9.84

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (~~umhos/cm~~ uS)	Temperature (C) / F	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1018	3.6	6.91	.103	9.70	3.72	98.6	9.84
1021	4.2	6.94	.101	9.77	3.69	98.8	9.84
1024	4.8	6.96	.101	9.83	3.57	99.3	9.84

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	3 x voa vial	YES	Na2S2O3	LANCASTER	EDB (8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS (6010)

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

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#9-3883-OML G-R#385894 WBS

Site Address 1702 East Yakima Avenue, YAKIMA, WA

Chevron PM MHO 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 J. Payne

④ Matrix

Sediment ☐ Ground ☑ Surface ☐ — Water: Potable ☐ NPDES ☐; Soil ☐; Oil ☐ Air ☐

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 ___; EDC & HVOC'S 8260; EDB 8011; cPAH'S/NAPH'S/PCB'S 8270/8082; TOTAL METALS 6010

② Sample Identification

Sample Identification	Date	Time	Grab ③	Composite	Soil	Water	Oil	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	EDC & HVOC'S 8260	EDB 8011	cPAH'S/NAPH'S/PCB'S 8270/8082	TOTAL METALS 6010
QA	3.26.14		X			X		2	X			X								
MW-5	↓	0934	X			X		14	X			X	X	X			X	X	X	X
MW-6	↓	0831	X			X		14	X			X	X	X			X	X	X	X
MW-7	↓	1030	X			X		14	X			X	X	X			X	X	X	X

☐ 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

Total Metals Include: Pb, Cd, Cr, Ni & Zn

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 ⑨
[signature]	3.26.14	1700			
Relinquished by			Received by		
Relinquished by Commercial Carrier: UPS ✓ FedEx ____ Other ____			Received by		

Temperature Upon Receipt ________ °C | Custody Seals Intact? Yes No

GETTLER-RYAN INC.

TRANSMITTAL

July 7, 2014
G-R #386763

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 Chevron SS #9-3883
1702 East Yakima Avenue
Yakima, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Second Quarter Event of June 27, 2014**

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/9-3883

GETTLER-RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	**Chevron #9-3883**	Date:	6.27.14
Address:	**1702 East Yakima Avenue**		
City/St.:	**Yakima, WA**		
Status of Site:	Bob Hall CARS		

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

#	Description	Condition	Labeling	Contents	Amount @ Start	Amount @ End
	No Drums onsite					

Location: _____

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-5	good			Y	8" Morris x 3	
MW-6	good			Y	↓	
MW-7	good			Y	↓	

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 #9-3883** Job Number: **385894**
Site Address: **1702 East Yakima Avenue** Event Date: 6.27.14 (inclusive)
City: **Yakima, WA** Sampler: J.P

Well ID **MW-5** Date Monitored: 6.27.14
Well Diameter **2** in.
Total Depth 19.91 ft.
Depth to Water 10.64 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

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.49

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 MP5 5526		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): 1041 Weather Conditions: Sun
Sample Time/Date: 1110 / 6.27.14 Water Color: CLEAR Odor: Y (N)
Approx. Flow Rate: 300 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — ltrs DTW @ Sampling: 10.93

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
1059	5.4	6.98	.128	16.52	2.42	30.0	10.73
1102	6.3	6.96	.130	16.60	2.00	32.8	10.81
1105	7.2	6.95	.132	16.68	1.98	33.6	10.93

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	1 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS(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 #9-3883** Job Number: **385894**
Site Address: **1702 East Yakima Avenue** Event Date: 6.27.14 (inclusive)
City: **Yakima, WA** Sampler: J.P

Well ID **MW-6** Date Monitored: 6.27.14
Well Diameter 2 in.
Total Depth 19.40 ft.
Depth to Water 11.17 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.81

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: VSI MPS 556		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): 0946 Weather Conditions: SUN
Sample Time/Date: 1015 / 6.27.14 Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: 300 mlpm Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — ltrs DTW @ Sampling: 11.26

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
1004	5.4	6.96	.163	14.67	2.26	~~82~~.5	11.26
1007	6.3	6.94	.166	14.73	2.30	84.1	11.26
1010	7.2	6.92	.168	14.79	2.33	86.6	11.26

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	1 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS(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 #9-3883** Job Number: **385894**

Site Address: **1702 East Yakima Avenue** Event Date: 6.27.14 (inclusive)

City: **Yakima, WA** Sampler: DF

Well ID **MW-7** Date Monitored: 6.27.14

Well Diameter **2** in.

Total Depth 19.40 ft.

Depth to Water 9.94 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.83

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 MP5 556		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): 1139 Weather Conditions: SUN

Sample Time/Date: 1208 / 6-27-14 Water Color: CLEAR Odor: Y / (N)

Approx. Flow Rate: 300 mlpm Sediment Description: NONE

Did well de-water? NO If yes, Time: — Volume: — ltrs DTW @ Sampling: 10.00

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
1153	5.4	6.91	.093	14.18	2.52	83.3	10.00
1200	6.3	6.93	.096	14.27	2.56	85.0	10.00
1203	7.2	6.96	.099	14.34	2.60	87.3	10.00

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)/EDC/HVOC's(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc/NWTPH-Dx
	2 x voa vial	YES	Na2S2O3	LANCASTER	EDB(8011)
	3 x 250ml ambers	YES	NP	LANCASTER	cPAH's/NAPHS(8270 SIM)/PCB's(8082)
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL METALS(6010)

COMMENTS: Depth Pump Set At: 15-16

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#9-3883-OML G-R#385894 — WBS:

Site Address: 1702 East Yakima Avenue, YAKIMA, WA

Chevron PM: MHO — 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: J. Payne

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

⑤ Analyses Requested: BTEX + MTBE (8021 ☐ 8260 ☑ Naphth ☐); 8260 full scan; Oxygenates; EDC, HVOC's 8260; NWTPH-Gx; NWTPH-Dx with Silica Gel Cleanup ☐; NWTPH-Dx without Silica Gel Cleanup ☐; WA VPH ☐ / WA EPH ☐; Lead Total ☐ Diss. ☐ Method; TOTAL METALS; EDB 8011; cPAH'S: NAPHS: PCBs (8270 SIM) (8082)

② Sample Identification	Date	Time	③ Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX + MTBE	8260 full scan	Oxygenates	EDC, HVOC's 8260	NWTPH-Gx	NWTPH-Dx with Silica Gel Cleanup	NWTPH-Dx without Silica Gel Cleanup	WA VPH / WA EPH	Lead	TOTAL METALS	EDB 8011	cPAH'S: NAPHS: PCBs	(8270 SIM) (8082)
QA	6.27.14		X			X		2	X				X								
MW-5	↓	1110	X			X		14	X				X	X	X			X	X	X	X
MW-6	↓	1015	X			X		14	X				X	X	X			X	X	X	X
MW-7	↓	1200	X			X		14	X				X	X	X			X	X	X	X

Optional: ☐ 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

Total Metals Include: Pb, Cd, Cr, Ni & Zn

The QA sample analyses: NWTPH-Gx & BTEX+MTBE 8260 JLM 7/2/14

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]	6.27.14	1700			

Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other ________ — Received by — Date — Time ⑨

Temperature Upon Receipt ________ °C — Custody Seals Intact? Yes No

Appendix C:
Laboratory Analytical Reports

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

REVISED

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

February 03, 2014

Project: 93883

Submittal Date: 08/31/2013
Group Number: 1415667
PO Number: 0015119898
Release Number: SHRILL HOPKINS
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
Trip Blank-082713 Water	7182489
Rinsate-082713 Grab Water	7182490
MW-5-10 Grab Soil	7182491
MW-5-13 Grab Soil	7182492
MW-5-19 Grab Soil	7182493
MW-6-8 Grab Soil	7182494
MW-6-13 Grab Soil	7182495
DUP-082913 Grab Soil	7182496
MW-6-19 Grab Soil	7182497
Rinsate-082913 Grab Water	7182498
MW-7-11 Grab Soil	7182499
MW-7-19 Grab Soil	7182500

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

ELECTRONIC COPY TO SAIC Attn: Russ Shropshire

REVISED

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

REVISED

Sample Description: Trip Blank-082713 Water
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # WW 7182489
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/27/2013 16:50

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EYTRB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08274	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Volatiles	**SW-846 8021B**		**ug/l**	**ug/l**	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	1
02102	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	1.5	1

General Sample Comments

State of Washington Lab Certification No. C259

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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13246B53A	09/04/2013 16:32	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	13246B53A	09/04/2013 16:32	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13246B53A	09/04/2013 16:32	Catherine J Schwarz	1

REVISED

Sample Description: Rinsate-082713 Grab Water
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # WW 7182490
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/27/2013 17:00 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EYR27

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**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.013	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.013	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.013	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.013	1
08357	Chrysene	218-01-9	N.D.	0.013	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.013	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.013	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.013	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.013	1
08357	Naphthalene	91-20-3	N.D.	0.040	1

REVISED

Sample Description: Rinsate-082713 Grab Water
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # WW 7182490
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/27/2013 17:00 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EYR27

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
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 8082**		**ug/l**	**ug/l**	
10227	PCB-1016	12674-11-2	N.D.	0.083	1
10227	PCB-1221	11104-28-2	N.D.	0.083	1
10227	PCB-1232	11141-16-5	N.D.	0.17	1
10227	PCB-1242	53469-21-9	N.D.	0.083	1
10227	PCB-1248	12672-29-6	N.D.	0.083	1
10227	PCB-1254	11097-69-1	N.D.	0.083	1
10227	PCB-1260	11096-82-5	N.D.	0.12	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	N.D.	33	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	76	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.	33	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	76	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	N.D.	1.6	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.5	1
07072	Zinc	7440-66-6	N.D.	2.0	1

General Sample Comments

State of Washington Lab Certification No. C259
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
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W132482AA	09/05/2013 16:25	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132482AA	09/05/2013 16:25	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13246WAC026	09/04/2013 07:49	Brian K Graham	1

REVISED

Sample Description: Rinsate-082713 Grab Water
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # WW 7182490
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/27/2013 17:00 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EYR27

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13246WAC026	09/03/2013 17:10	JoElla L Rice	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13246B20A	09/04/2013 11:34	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13246B20A	09/04/2013 11:34	Catherine J Schwarz	1
10227	PCBs in Water 8082	SW-846 8082	1	132460003A	09/04/2013 08:56	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	132460003A	09/03/2013 15:00	Seth A Farrier	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	132490033A	09/10/2013 10:16	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490032A	09/11/2013 13:43	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132490032A	09/09/2013 11:15	Denise L Trimby	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132490033A	09/09/2013 11:15	Denise L Trimby	1
07049	Cadmium	SW-846 6010B	1	132481848006	09/07/2013 01:38	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132481848006	09/07/2013 01:38	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132481848006	09/07/2013 01:38	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132481848006	09/07/2013 01:38	John W Yanzuk II	1
07072	Zinc	SW-846 6010B	1	132481848006	09/07/2013 01:38	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132481848006	09/06/2013 07:19	James L Mertz	1

REVISED

Sample Description: MW-5-10 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182491
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 10:00 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY510

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	42.55
10237	Bromodichloromethane	75-27-4	N.D.	0.044	42.55
10237	Bromoform	75-25-2	N.D.	0.044	42.55
10237	Bromomethane	74-83-9	N.D.	0.087	42.55
10237	Carbon Tetrachloride	56-23-5	N.D.	0.044	42.55
10237	Chlorobenzene	108-90-7	N.D.	0.044	42.55
10237	Chloroethane	75-00-3	N.D.	0.087	42.55
10237	Chloroform	67-66-3	N.D.	0.044	42.55
10237	Chloromethane	74-87-3	N.D.	0.087	42.55
10237	Dibromochloromethane	124-48-1	N.D.	0.044	42.55
10237	1,2-Dibromoethane	106-93-4	N.D.	0.044	42.55
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.044	42.55
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.044	42.55
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.044	42.55
10237	1,1-Dichloroethane	75-34-3	N.D.	0.044	42.55
10237	1,2-Dichloroethane	107-06-2	N.D.	0.044	42.55
10237	1,1-Dichloroethene	75-35-4	N.D.	0.044	42.55
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.044	42.55
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.044	42.55
10237	1,2-Dichloropropane	78-87-5	N.D.	0.044	42.55
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.044	42.55
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.044	42.55
10237	Ethylbenzene	100-41-4	N.D.	0.044	42.55
10237	Freon 113	76-13-1	N.D.	0.087	42.55
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.022	42.55
10237	Methylene Chloride	75-09-2	N.D.	0.087	42.55
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.044	42.55
10237	Tetrachloroethene	127-18-4	N.D.	0.044	42.55
10237	Toluene	108-88-3	N.D.	0.044	42.55
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.044	42.55
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.044	42.55
10237	Trichloroethene	79-01-6	N.D.	0.044	42.55
10237	Trichlorofluoromethane	75-69-4	N.D.	0.087	42.55
10237	Vinyl Chloride	75-01-4	N.D.	0.044	42.55
10237	Xylene (Total)	1330-20-7	0.11	0.044	42.55
	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	0.021	0.0068	10
10725	Benzo(a)pyrene	50-32-8	0.023	0.0068	10
10725	Benzo(b)fluoranthene	205-99-2	0.042	0.0068	10
10725	Benzo(k)fluoranthene	207-08-9	0.0088	0.0068	10
10725	Chrysene	218-01-9	0.093	0.0034	10
10725	Dibenz(a,h)anthracene	53-70-3	0.010	0.0068	10
10725	Indeno(1,2,3-cd)pyrene	193-39-5	0.013	0.0068	10
10725	1-Methylnaphthalene	90-12-0	1.2	0.0068	10
10725	2-Methylnaphthalene	91-57-6	2.0	0.0068	10
10725	Naphthalene	91-20-3	0.51	0.0068	10
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	

REVISED

Sample Description: MW-5-10 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182491
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 10:00 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY510

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	TPH by NWTPH-Gx soils	n.a.	480	19	466.61
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.	2,100	31	10
08272	Heavy Range Organics C24-C40	n.a.	1,600	100	10
GC Petroleum Hydrocarbons	**ECY 97-602 WA EPH**		**mg/kg**	**mg/kg**	
05970	>C10-C12 Aliphatic	n.a.	98	5.1	5
05970	>C10-C12 Aromatic	n.a.	6.0	2.0	2
05970	>C12-C16 Aliphatic	n.a.	590	5.1	5
05970	>C12-C16 Aromatic	n.a.	53	2.0	2
05970	>C16-C21 Aliphatic	n.a.	560	15	5
05970	>C16-C21 Aromatic	n.a.	110	4.1	2
05970	>C21-C34 Aliphatic	n.a.	320	30	5
05970	>C21-C34 Aromatic	n.a.	91	4.1	2

The holding time was not met. The analysis was added to the sample outside of the holding time.

GC Petroleum Hydrocarbons	**ECY 97-602 WA VPH**		**mg/kg**	**mg/kg**	
05666	Benzene	71-43-2	N.D.	0.0480	46.75
05666	C5-C6 Aliphatic Hydrocarbons	n.a.	N.D.	2.40	46.75
05666	C6-C8 Aliphatic Hydrocarbons	n.a.	N.D.	2.40	46.75
05666	C8-C10 Aliphatic Hydrocarbons	n.a.	12.3	2.40	46.75
05666	C8-C10 Aromatic Hydrocarbons	n.a.	10.4	2.40	46.75
05666	Ethylbenzene	100-41-4	N.D.	0.0480	46.75
05666	Methyl t-butyl ether	1634-04-4	N.D.	0.0480	46.75
05666	Toluene	108-88-3	N.D.	0.0480	46.75
05666	o-Xylene	95-47-6	N.D.	0.0480	46.75
05666	m,p-Xylenes	179601-23-1	N.D.	0.0960	46.75
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	2,000	31	10
12006	HRO C24-C40 w/Si Gel	n.a.	1,100	100	10

The reverse surrogate, capric acid, is present at <1%.

REVISED

Sample Description: MW-5-10 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182491
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 10:00 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY510

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
	Due to the dilution of the sample extract, capric acid recovery can not be determined.				
Metals		**SW-846 6010B**	**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.674	0.152	2
06951	Chromium	7440-47-3	290	0.319	2
06955	Lead	7439-92-1	123	0.997	2
06961	Nickel	7440-02-0	45.0	0.259	2
06972	Zinc	7440-66-6	154	0.399	2
Wet Chemistry		**SM 2540 G-1997**	**%**	**%**	
00111	Moisture	n.a.	2.6	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. C259
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	EPA SW-846/8260 (Soil)	SW-846 8260B	1	Q132461AA	09/03/2013 19:41	Sarah A Guill	42.55
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201324332242	08/29/2013 10:00	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201324332242	08/29/2013 10:00	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201324332242	08/29/2013 10:00	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13249SLD026	09/13/2013 07:28	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLD026	09/09/2013 11:45	Kelli M Barto	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13249A31A	09/06/2013 20:11	Laura M Krieger	466.61
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201324332242	08/29/2013 10:00	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	132460012A	09/04/2013 19:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132460012A	09/04/2013 06:00	Roman Kuropatkin	1
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	132520012A	09/11/2013 23:15	Glorines Suarez-Rivera	10
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	132670018A	09/26/2013 23:33	Heather E Williams	2

REVISED

Sample Description: MW-5-10 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182491
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 10:00 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY510

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	132670018A	09/27/2013 00:13	Heather E Williams	5
05666	WA- VPH soils	ECY 97-602 WA VPH	1	13268A54A	09/25/2013 17:45	Nicholas R Rossi	46.75
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132520013A	09/12/2013 07:51	Glorines Suarez-Rivera	10
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132520013A	09/09/2013 19:30	Sally L Appleyard	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132520012A	09/09/2013 19:30	Sally L Appleyard	1
11213	WA EPH Soils Extraction	ECY 97-602 WA EPH	1	132670018A	09/25/2013 02:30	Sherry L Morrow	1
06170	GC - Bulk Soil Prep (VPH)	MA DEP VPH 5/04	1	201326132447	09/18/2013 11:24	Larry E Bevins	n.a.
00497	Silica Gel Fractionation	SW-846 3630C modified	1	132670018A	09/25/2013 14:30	Edwin Ortiz	1
06949	Cadmium	SW-846 6010B	1	132475708003	09/06/2013 13:54	Eric L Eby	2
06951	Chromium	SW-846 6010B	1	132475708003	09/06/2013 13:54	Eric L Eby	2
06955	Lead	SW-846 6010B	1	132475708003	09/06/2013 13:54	Eric L Eby	2
06961	Nickel	SW-846 6010B	1	132475708003	09/06/2013 13:54	Eric L Eby	2
06972	Zinc	SW-846 6010B	1	132475708003	09/06/2013 13:54	Eric L Eby	2
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132475708003	09/05/2013 10:00	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	2	13249820001A	09/06/2013 07:47	William C Schwebel	1

REVISED

Sample Description: MW-5-13 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182492
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 10:05 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY513

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	0.002	0.0006	1.05
10237	Bromodichloromethane	75-27-4	N.D.	0.001	1.05
10237	Bromoform	75-25-2	N.D.	0.001	1.05
10237	Bromomethane	74-83-9	N.D.	0.002	1.05
10237	Carbon Tetrachloride	56-23-5	N.D.	0.001	1.05
10237	Chlorobenzene	108-90-7	N.D.	0.001	1.05
10237	Chloroethane	75-00-3	N.D.	0.002	1.05
10237	Chloroform	67-66-3	N.D.	0.001	1.05
10237	Chloromethane	74-87-3	N.D.	0.002	1.05
10237	Dibromochloromethane	124-48-1	N.D.	0.001	1.05
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	1.05
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	1.05
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	1.05
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	1.05
10237	1,1-Dichloroethane	75-34-3	N.D.	0.001	1.05
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	1.05
10237	1,1-Dichloroethene	75-35-4	N.D.	0.001	1.05
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	1.05
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	1.05
10237	1,2-Dichloropropane	78-87-5	N.D.	0.001	1.05
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	1.05
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	1.05
10237	Ethylbenzene	100-41-4	N.D.	0.001	1.05
10237	Freon 113	76-13-1	N.D.	0.002	1.05
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0006	1.05
10237	Methylene Chloride	75-09-2	N.D.	0.002	1.05
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	1.05
10237	Tetrachloroethene	127-18-4	N.D.	0.001	1.05
10237	Toluene	108-88-3	N.D.	0.001	1.05
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	1.05
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	1.05
10237	Trichloroethene	79-01-6	N.D.	0.001	1.05
10237	Trichlorofluoromethane	75-69-4	N.D.	0.002	1.05
10237	Vinyl Chloride	75-01-4	N.D.	0.001	1.05
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1.05
GC/MS Semivolatiles	**SW-846 8270C SIM**		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	0.0038	0.00072	1
10725	Benzo(a)pyrene	50-32-8	0.0049	0.00072	1
10725	Benzo(b)fluoranthene	205-99-2	0.0085	0.00072	1
10725	Benzo(k)fluoranthene	207-08-9	0.0033	0.00072	1
10725	Chrysene	218-01-9	0.0088	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	0.0011	0.00072	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	0.0029	0.00072	1
10725	1-Methylnaphthalene	90-12-0	0.015	0.00072	1
10725	2-Methylnaphthalene	91-57-6	0.022	0.00072	1
10725	Naphthalene	91-20-3	0.0094	0.00072	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		mg/kg	mg/kg	

REVISED

Sample Description: MW-5-13 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182492
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 10:05 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY513

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	TPH by NWTPH-Gx soils	n.a.	11	1.3	29.31
Pesticides/PCBs	**SW-846 8082**		**mg/kg**	**mg/kg**	
10736	PCB-1016	12674-11-2	N.D.	0.0038	1
10736	PCB-1221	11104-28-2	N.D.	0.0049	1
10736	PCB-1232	11141-16-5	N.D.	0.0085	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.	56	3.2	1
08272	Heavy Range Organics C24-C40	n.a.	130	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.	46	3.2	1
12006	HRO C24-C40 w/Si Gel	n.a.	92	11	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	1.36	0.0793	1
06951	Chromium	7440-47-3	86.7	0.167	1
06955	Lead	7439-92-1	661	2.61	5
06961	Nickel	7440-02-0	52.0	0.136	1
06972	Zinc	7440-66-6	639	0.209	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	7.0	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. C259
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.

REVISED

Sample Description: MW-5-13 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182492
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 10:05 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY513

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	EPA SW-846/8260 (Soil)	SW-846 8260B	1	X132461AA	09/04/2013 10:47	Stephanie A Selis	1.05
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201324332242	08/29/2013 10:05	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201324332242	08/29/2013 10:05	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201324332242	08/29/2013 10:05	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13249SLD026	09/13/2013 09:02	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLD026	09/09/2013 11:45	Kelli M Barto	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13235A31C	09/03/2013 20:04	Laura M Krieger	29.31
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201324332242	08/29/2013 10:05	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	132460012A	09/04/2013 19:56	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132460012A	09/04/2013 06:00	Roman Kuropatkin	1
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	132520012A	09/11/2013 20:57	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132520013A	09/12/2013 06:30	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132520013A	09/09/2013 19:30	Sally L Appleyard	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132520012A	09/09/2013 19:30	Sally L Appleyard	1
06949	Cadmium	SW-846 6010B	1	132475708003	09/06/2013 00:46	John W Yanzuk II	1
06951	Chromium	SW-846 6010B	1	132475708003	09/06/2013 00:46	John W Yanzuk II	1
06955	Lead	SW-846 6010B	1	132475708003	09/08/2013 10:41	Tara L Snyder	5
06961	Nickel	SW-846 6010B	1	132475708003	09/06/2013 00:46	John W Yanzuk II	1
06972	Zinc	SW-846 6010B	1	132475708003	09/06/2013 00:46	John W Yanzuk II	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132475708003	09/05/2013 10:00	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	2	13249820001A	09/06/2013 07:47	William C Schwebel	1

REVISED

Sample Description: MW-5-19 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182493
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 10:55 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY519

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	Bromodichloromethane	75-27-4	N.D.	0.0009	0.85
10237	Bromoform	75-25-2	N.D.	0.0009	0.85
10237	Bromomethane	74-83-9	N.D.	0.002	0.85
10237	Carbon Tetrachloride	56-23-5	N.D.	0.0009	0.85
10237	Chlorobenzene	108-90-7	N.D.	0.0009	0.85
10237	Chloroethane	75-00-3	N.D.	0.002	0.85
10237	Chloroform	67-66-3	N.D.	0.0009	0.85
10237	Chloromethane	74-87-3	N.D.	0.002	0.85
10237	Dibromochloromethane	124-48-1	N.D.	0.0009	0.85
10237	1,2-Dibromoethane	106-93-4	N.D.	0.0009	0.85
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.0009	0.85
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.0009	0.85
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.0009	0.85
10237	1,1-Dichloroethane	75-34-3	N.D.	0.0009	0.85
10237	1,2-Dichloroethane	107-06-2	N.D.	0.0009	0.85
10237	1,1-Dichloroethene	75-35-4	N.D.	0.0009	0.85
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.0009	0.85
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.0009	0.85
10237	1,2-Dichloropropane	78-87-5	N.D.	0.0009	0.85
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.0009	0.85
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.0009	0.85
10237	Ethylbenzene	100-41-4	N.D.	0.0009	0.85
10237	Freon 113	76-13-1	N.D.	0.002	0.85
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.85
10237	Methylene Chloride	75-09-2	N.D.	0.002	0.85
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.0009	0.85
10237	Tetrachloroethene	127-18-4	N.D.	0.0009	0.85
10237	Toluene	108-88-3	N.D.	0.0009	0.85
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.0009	0.85
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.0009	0.85
10237	Trichloroethene	79-01-6	N.D.	0.0009	0.85
10237	Trichlorofluoromethane	75-69-4	N.D.	0.002	0.85
10237	Vinyl Chloride	75-01-4	N.D.	0.0009	0.85
10237	Xylene (Total)	1330-20-7	N.D.	0.0009	0.85
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	N.D.	0.00073	1
10725	2-Methylnaphthalene	91-57-6	N.D.	0.00073	1
10725	Naphthalene	91-20-3	N.D.	0.00073	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	

REVISED

Sample Description: MW-5-19 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182493
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 10:55 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY519

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	TPH by NWTPH-Gx soils	n.a.	N.D.	1.3	29.04
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 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**	
06949	Cadmium	7440-43-9	0.583	0.0800	1
06951	Chromium	7440-47-3	18.2	0.169	1
06955	Lead	7439-92-1	3.85	0.527	1
06961	Nickel	7440-02-0	14.4	0.137	1
06972	Zinc	7440-66-6	58.2	0.211	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	8.7	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. C259
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.

REVISED

Sample Description: MW-5-19 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182493
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 10:55 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY519

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	EPA SW-846/8260 (Soil)	SW-846 8260B	1	X132481AA	09/05/2013 19:31	Chelsea B Stong	0.85
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201324332242	08/29/2013 10:55	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201324332242	08/29/2013 10:55	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201324332242	08/29/2013 10:55	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13249SLD026	09/13/2013 09:33	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLD026	09/09/2013 11:45	Kelli M Barto	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13235A31C	09/03/2013 20:40	Laura M Krieger	29.04
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201324332242	08/29/2013 10:55	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	132460012A	09/04/2013 20:07	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132460012A	09/04/2013 06:00	Roman Kuropatkin	1
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	132520012A	09/10/2013 15:00	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132520013A	09/12/2013 04:52	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132520013A	09/09/2013 19:30	Sally L Appleyard	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132520012A	09/09/2013 19:30	Sally L Appleyard	1
06949	Cadmium	SW-846 6010B	1	132475708003	09/06/2013 00:51	John W Yanzuk II	1
06951	Chromium	SW-846 6010B	1	132475708003	09/06/2013 00:51	John W Yanzuk II	1
06955	Lead	SW-846 6010B	1	132475708003	09/06/2013 14:14	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	132475708003	09/06/2013 00:51	John W Yanzuk II	1
06972	Zinc	SW-846 6010B	1	132475708003	09/06/2013 00:51	John W Yanzuk II	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132475708003	09/05/2013 10:00	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	2	13249820001A	09/06/2013 07:47	William C Schwebel	1

REVISED

Sample Description: MW-6-8 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182494
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 14:30 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY608

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.	0.029	49.4
10237	Bromodichloromethane	75-27-4	N.D.	0.059	49.4
10237	Bromoform	75-25-2	N.D.	0.059	49.4
10237	Bromomethane	74-83-9	N.D.	0.12	49.4
10237	Carbon Tetrachloride	56-23-5	N.D.	0.059	49.4
10237	Chlorobenzene	108-90-7	N.D.	0.059	49.4
10237	Chloroethane	75-00-3	N.D.	0.12	49.4
10237	Chloroform	67-66-3	N.D.	0.059	49.4
10237	Chloromethane	74-87-3	N.D.	0.12	49.4
10237	Dibromochloromethane	124-48-1	N.D.	0.059	49.4
10237	1,2-Dibromoethane	106-93-4	N.D.	0.059	49.4
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.059	49.4
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.059	49.4
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.059	49.4
10237	1,1-Dichloroethane	75-34-3	N.D.	0.059	49.4
10237	1,2-Dichloroethane	107-06-2	N.D.	0.059	49.4
10237	1,1-Dichloroethene	75-35-4	N.D.	0.059	49.4
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.059	49.4
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.059	49.4
10237	1,2-Dichloropropane	78-87-5	N.D.	0.059	49.4
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.059	49.4
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.059	49.4
10237	Ethylbenzene	100-41-4	N.D.	0.059	49.4
10237	Freon 113	76-13-1	N.D.	0.12	49.4
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.029	49.4
10237	Methylene Chloride	75-09-2	N.D.	0.12	49.4
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.059	49.4
10237	Tetrachloroethene	127-18-4	N.D.	0.059	49.4
10237	Toluene	108-88-3	N.D.	0.059	49.4
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.059	49.4
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.059	49.4
10237	Trichloroethene	79-01-6	N.D.	0.059	49.4
10237	Trichlorofluoromethane	75-69-4	N.D.	0.12	49.4
10237	Vinyl Chloride	75-01-4	N.D.	0.059	49.4
10237	Xylene (Total)	1330-20-7	N.D.	0.059	49.4
	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	N.D.	0.0079	10
10725	Benzo(a)pyrene	50-32-8	N.D.	0.0079	10
10725	Benzo(b)fluoranthene	205-99-2	0.016	0.0079	10
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.0079	10
10725	Chrysene	218-01-9	0.019	0.0040	10
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0079	10
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0079	10
10725	1-Methylnaphthalene	90-12-0	0.093	0.0079	10
10725	2-Methylnaphthalene	91-57-6	0.15	0.0079	10
10725	Naphthalene	91-20-3	0.043	0.0079	10
GC Volatiles	**ECY 97-602 NWTPH-Gx**		mg/kg	mg/kg	

REVISED

Sample Description: MW-6-8 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182494
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 14:30 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY608

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	TPH by NWTPH-Gx soils	n.a.	50	4.4	92.6
Pesticides/PCBs	**SW-846 8082**		**mg/kg**	**mg/kg**	
10736	PCB-1016	12674-11-2	N.D.	0.0043	1
10736	PCB-1221	11104-28-2	N.D.	0.0055	1
10736	PCB-1232	11141-16-5	N.D.	0.0095	1
10736	PCB-1242	53469-21-9	N.D.	0.0039	1
10736	PCB-1248	12672-29-6	N.D.	0.0039	1
10736	PCB-1254	11097-69-1	N.D.	0.0039	1
10736	PCB-1260	11096-82-5	N.D.	0.0058	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	410	3.6	1
08272	Heavy Range Organics C24-C40	n.a.	400	12	1
GC Petroleum Hydrocarbons	**ECY 97-602 WA EPH**		**mg/kg**	**mg/kg**	
05970	>C10-C12 Aliphatic	n.a.	10	1.2	1
05970	>C10-C12 Aromatic	n.a.	N.D.	1.2	1
05970	>C12-C16 Aliphatic	n.a.	110	1.2	1
05970	>C12-C16 Aromatic	n.a.	9.7	1.2	1
05970	>C16-C21 Aliphatic	n.a.	140	3.5	1
05970	>C16-C21 Aromatic	n.a.	23	2.4	1
05970	>C21-C34 Aliphatic	n.a.	110	7.1	1
05970	>C21-C34 Aromatic	n.a.	35	2.4	1

The holding time was not met. The analysis was added to the sample outside of the holding time.

GC Petroleum Hydrocarbons	**ECY 97-602 WA VPH**		**mg/kg**	**mg/kg**	
05666	Benzene	71-43-2	N.D.	0.0560	47.07
05666	C5-C6 Aliphatic Hydrocarbons	n.a.	N.D.	2.80	47.07
05666	C6-C8 Aliphatic Hydrocarbons	n.a.	N.D.	2.80	47.07
05666	C8-C10 Aliphatic Hydrocarbons	n.a.	N.D.	2.80	47.07
05666	C8-C10 Aromatic Hydrocarbons	n.a.	N.D.	2.80	47.07
05666	Ethylbenzene	100-41-4	N.D.	0.0560	47.07
05666	Methyl t-butyl ether	1634-04-4	N.D.	0.0560	47.07
05666	Toluene	108-88-3	N.D.	0.0560	47.07
05666	o-Xylene	95-47-6	N.D.	0.0560	47.07
05666	m,p-Xylenes	179601-23-1	N.D.	0.112	47.07
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
12006	DRO C12-C24 w/Si Gel	n.a.	320	3.6	1
12006	HRO C24-C40 w/Si Gel	n.a.	250	12	1

The reverse surrogate, capric acid, is present at <1%.

REVISED

Sample Description: MW-6-8 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182494
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 14:30 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY608

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	0.700	0.0869	1
06951	Chromium	7440-47-3	52.0	0.183	1
06955	Lead	7439-92-1	39.4	0.572	1
06961	Nickel	7440-02-0	27.3	0.149	1
06972	Zinc	7440-66-6	99.2	0.229	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	15.9	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. C259
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	EPA SW-846/8260 (Soil)	SW-846 8260B	1	Q132461AA	09/03/2013 20:04	Sarah A Guill	49.4
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201324332242	08/29/2013 14:30	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201324332242	08/29/2013 14:30	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201324332242	08/29/2013 14:30	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13249SLD026	09/13/2013 10:04	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLD026	09/09/2013 11:45	Kelli M Barto	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13235A31C	09/03/2013 23:41	Laura M Krieger	92.6
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201324332242	08/29/2013 14:30	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	132460012A	09/04/2013 20:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132460012A	09/04/2013 06:00	Roman Kuropatkin	1
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	132520012A	09/11/2013 22:16	Glorines Suarez-Rivera	1
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	132670018A	09/27/2013 03:34	Heather E Williams	1
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	132670018A	09/27/2013 04:14	Heather E Williams	1
05666	WA- VPH soils	ECY 97-602 WA VPH	1	13268A54A	09/26/2013 08:47	Nicholas R Rossi	47.07

REVISED

Sample Description: MW-6-8 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182494
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 14:30 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY608

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132520013A	09/12/2013 06:50	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132520013A	09/09/2013 19:30	Sally L Appleyard	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132520012A	09/09/2013 19:30	Sally L Appleyard	1
11213	WA EPH Soils Extraction	ECY 97-602 WA EPH	1	132670018A	09/25/2013 02:30	Sherry L Morrow	1
06170	GC - Bulk Soil Prep (VPH)	MA DEP VPH 5/04	1	201326132447	09/18/2013 11:23	Larry E Bevins	n.a.
00497	Silica Gel Fractionation	SW-846 3630C modified	1	132670018A	09/25/2013 14:30	Edwin Ortiz	1
06949	Cadmium	SW-846 6010B	1	132475708003	09/06/2013 00:55	John W Yanzuk II	1
06951	Chromium	SW-846 6010B	1	132475708003	09/06/2013 00:55	John W Yanzuk II	1
06955	Lead	SW-846 6010B	1	132475708003	09/06/2013 14:18	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	132475708003	09/06/2013 00:55	John W Yanzuk II	1
06972	Zinc	SW-846 6010B	1	132475708003	09/06/2013 00:55	John W Yanzuk II	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132475708003	09/05/2013 10:00	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	2	13249820001A	09/06/2013 07:47	William C Schwebel	1

REVISED

Sample Description: MW-6-13 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182495
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 14:50 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY613

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	Bromodichloromethane	75-27-4	N.D.	0.001	0.91
10237	Bromoform	75-25-2	N.D.	0.001	0.91
10237	Bromomethane	74-83-9	N.D.	0.002	0.91
10237	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.91
10237	Chlorobenzene	108-90-7	N.D.	0.001	0.91
10237	Chloroethane	75-00-3	N.D.	0.002	0.91
10237	Chloroform	67-66-3	N.D.	0.001	0.91
10237	Chloromethane	74-87-3	N.D.	0.002	0.91
10237	Dibromochloromethane	124-48-1	N.D.	0.001	0.91
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.91
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.91
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.91
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.91
10237	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.91
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.91
10237	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.91
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.91
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.91
10237	1,2-Dichloropropane	78-87-5	N.D.	0.001	0.91
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	0.91
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	0.91
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.91
10237	Freon 113	76-13-1	N.D.	0.002	0.91
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.91
10237	Methylene Chloride	75-09-2	N.D.	0.002	0.91
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	0.91
10237	Tetrachloroethene	127-18-4	N.D.	0.001	0.91
10237	Toluene	108-88-3	N.D.	0.001	0.91
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.91
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	0.91
10237	Trichloroethene	79-01-6	N.D.	0.001	0.91
10237	Trichlorofluoromethane	75-69-4	N.D.	0.002	0.91
10237	Vinyl Chloride	75-01-4	N.D.	0.001	0.91
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.91
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00076	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00076	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00076	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00076	1
10725	Chrysene	218-01-9	N.D.	0.00038	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00076	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00076	1
10725	1-Methylnaphthalene	90-12-0	N.D.	0.00076	1
10725	2-Methylnaphthalene	91-57-6	N.D.	0.00076	1
10725	Naphthalene	91-20-3	N.D.	0.00076	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	

REVISED

Sample Description: MW-6-13 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182495
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 14:50 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY613

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	TPH by NWTPH-Gx soils	n.a.	N.D.	1	21.61
Pesticides/PCBs	**SW-846 8082**		**mg/kg**	**mg/kg**	
10736	PCB-1016	12674-11-2	N.D.	0.0041	1
10736	PCB-1221	11104-28-2	N.D.	0.0052	1
10736	PCB-1232	11141-16-5	N.D.	0.0090	1
10736	PCB-1242	53469-21-9	N.D.	0.0037	1
10736	PCB-1248	12672-29-6	N.D.	0.0037	1
10736	PCB-1254	11097-69-1	N.D.	0.0037	1
10736	PCB-1260	11096-82-5	N.D.	0.0055	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	N.D.	3.4	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**	
06949	Cadmium	7440-43-9	0.457	0.0852	1
06951	Chromium	7440-47-3	8.62	0.179	1
06955	Lead	7439-92-1	1.46	0.560	1
06961	Nickel	7440-02-0	11.4	0.146	1
06972	Zinc	7440-66-6	37.1	0.224	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	12.5	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. C259
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.

REVISED

Sample Description: MW-6-13 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182495
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 14:50 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY613

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	EPA SW-846/8260 (Soil)	SW-846 8260B	1	X132481AA	09/05/2013 19:54	Chelsea B Stong	0.91
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201324332242	08/29/2013 14:50	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201324332242	08/29/2013 14:50	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201324332242	08/29/2013 14:50	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13249SLD026	09/13/2013 10:35	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLD026	09/09/2013 11:45	Kelli M Barto	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13235A31C	09/03/2013 21:17	Laura M Krieger	21.61
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201324332242	08/29/2013 14:50	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	132460012A	09/04/2013 20:53	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132460012A	09/04/2013 06:00	Roman Kuropatkin	1
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	132520012A	09/10/2013 15:21	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132520013A	09/12/2013 05:11	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132520013A	09/09/2013 19:30	Sally L Appleyard	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132520012A	09/09/2013 19:30	Sally L Appleyard	1
06949	Cadmium	SW-846 6010B	1	132475708003	09/06/2013 00:59	John W Yanzuk II	1
06951	Chromium	SW-846 6010B	1	132475708003	09/06/2013 00:59	John W Yanzuk II	1
06955	Lead	SW-846 6010B	1	132475708003	09/06/2013 14:22	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	132475708003	09/06/2013 00:59	John W Yanzuk II	1
06972	Zinc	SW-846 6010B	1	132475708003	09/06/2013 00:59	John W Yanzuk II	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132475708003	09/05/2013 10:00	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	2	13249820001A	09/06/2013 07:47	William C Schwebel	1

REVISED

Sample Description: DUP-082913 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182496
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 15:20 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY-FD

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	0.003	0.0005	0.95
10237	Bromodichloromethane	75-27-4	N.D.	0.001	0.95
10237	Bromoform	75-25-2	N.D.	0.001	0.95
10237	Bromomethane	74-83-9	N.D.	0.002	0.95
10237	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.95
10237	Chlorobenzene	108-90-7	N.D.	0.001	0.95
10237	Chloroethane	75-00-3	N.D.	0.002	0.95
10237	Chloroform	67-66-3	N.D.	0.001	0.95
10237	Chloromethane	74-87-3	N.D.	0.002	0.95
10237	Dibromochloromethane	124-48-1	N.D.	0.001	0.95
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.95
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.95
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.95
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.95
10237	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.95
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.95
10237	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.95
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.95
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.95
10237	1,2-Dichloropropane	78-87-5	N.D.	0.001	0.95
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	0.95
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	0.95
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.95
10237	Freon 113	76-13-1	N.D.	0.002	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.95
10237	Methylene Chloride	75-09-2	N.D.	0.002	0.95
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	0.95
10237	Tetrachloroethene	127-18-4	N.D.	0.001	0.95
10237	Toluene	108-88-3	0.002	0.001	0.95
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.95
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	0.95
10237	Trichloroethene	79-01-6	N.D.	0.001	0.95
10237	Trichlorofluoromethane	75-69-4	N.D.	0.002	0.95
10237	Vinyl Chloride	75-01-4	N.D.	0.001	0.95
10237	Xylene (Total)	1330-20-7	0.001	0.001	0.95
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.0067	10
10725	Benzo(a)pyrene	50-32-8	0.0078	0.0067	10
10725	Benzo(b)fluoranthene	205-99-2	0.015	0.0067	10
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.0067	10
10725	Chrysene	218-01-9	0.018	0.0034	10
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0067	10
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0067	10
10725	1-Methylnaphthalene	90-12-0	0.055	0.0067	10
10725	2-Methylnaphthalene	91-57-6	0.089	0.0067	10
10725	Naphthalene	91-20-3	0.024	0.0067	10
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	

REVISED

Sample Description: DUP-082913 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182496
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 15:20 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY-FD

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	TPH by NWTPH-Gx soils	n.a.	17	1.9	46.3
Pesticides/PCBs	**SW-846 8082**		**mg/kg**	**mg/kg**	
10736	PCB-1016	12674-11-2	N.D.	0.0036	1
10736	PCB-1221	11104-28-2	N.D.	0.0046	1
10736	PCB-1232	11141-16-5	N.D.	0.0080	1
10736	PCB-1242	53469-21-9	N.D.	0.0033	1
10736	PCB-1248	12672-29-6	N.D.	0.0033	1
10736	PCB-1254	11097-69-1	N.D.	0.0033	1
10736	PCB-1260	11096-82-5	N.D.	0.0049	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**mg/kg**	**mg/kg**	
08272	Diesel Range Organics C12-C24	n.a.	240	3.0	1
08272	Heavy Range Organics C24-C40	n.a.	270	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.	200	3.0	1
12006	HRO C24-C40 w/Si Gel	n.a.	230	10	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.637	0.0764	1
06951	Chromium	7440-47-3	56.4	0.161	1
06955	Lead	7439-92-1	61.3	0.503	1
06961	Nickel	7440-02-0	30.1	0.131	1
06972	Zinc	7440-66-6	132	0.201	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	1.5	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. C259
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.

REVISED

Sample Description: DUP-082913 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182496
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 15:20 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY-FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	EPA SW-846/8260 (Soil)	SW-846 8260B	1	X132481AA	09/05/2013 21:48	Chelsea B Stong	0.95
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201324332242	08/29/2013 15:20	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201324332242	08/29/2013 15:20	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201324332242	08/29/2013 15:20	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13249SLD026	09/13/2013 11:07	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLD026	09/09/2013 11:45	Kelli M Barto	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13235A31C	09/04/2013 00:18	Laura M Krieger	46.3
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201324332242	08/29/2013 15:20	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	132460012A	09/04/2013 21:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132460012A	09/04/2013 06:00	Roman Kuropatkin	1
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	132520012A	09/11/2013 21:17	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132520013A	09/12/2013 07:10	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132520013A	09/09/2013 19:30	Sally L Appleyard	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132520012A	09/09/2013 19:30	Sally L Appleyard	1
06949	Cadmium	SW-846 6010B	1	132475708003	09/06/2013 01:03	John W Yanzuk II	1
06951	Chromium	SW-846 6010B	1	132475708003	09/06/2013 01:03	John W Yanzuk II	1
06955	Lead	SW-846 6010B	1	132475708003	09/06/2013 14:26	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	132475708003	09/06/2013 01:03	John W Yanzuk II	1
06972	Zinc	SW-846 6010B	1	132475708003	09/06/2013 01:03	John W Yanzuk II	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132475708003	09/05/2013 10:00	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	2	13249820001A	09/06/2013 07:47	William C Schwebel	1

REVISED

Sample Description: MW-6-19 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182497
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 15:30 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY619

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	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.	0.00072	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00072	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00072	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00072	1
10725	Chrysene	218-01-9	N.D.	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	N.D.	0.00072	1
10725	2-Methylnaphthalene	91-57-6	N.D.	0.00072	1
10725	Naphthalene	91-20-3	N.D.	0.00072	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**mg/kg**	**mg/kg**	

REVISED

Sample Description: MW-6-19 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182497
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 15:30 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY619

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	TPH by NWTPH-Gx soils	n.a.	N.D.	1	21.99
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.	0.0053	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 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**	
06949	Cadmium	7440-43-9	0.609	0.0793	1
06951	Chromium	7440-47-3	19.5	0.167	1
06955	Lead	7439-92-1	3.11	0.521	1
06961	Nickel	7440-02-0	18.3	0.136	1
06972	Zinc	7440-66-6	57.3	0.209	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	7.8	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. C259
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.

REVISED

Sample Description: MW-6-19 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182497
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 15:30 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY619

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	EPA SW-846/8260 (Soil)	SW-846 8260B	1	X132481AA	09/05/2013 20:17	Chelsea B Stong	0.92
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201324332242	08/29/2013 15:30	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201324332242	08/29/2013 15:30	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201324332242	08/29/2013 15:30	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13249SLD026	09/13/2013 11:38	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLD026	09/09/2013 11:45	Kelli M Barto	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13235A31C	09/03/2013 21:53	Laura M Krieger	21.99
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201324332242	08/29/2013 15:30	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	132460012A	09/04/2013 21:15	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132460012A	09/04/2013 06:00	Roman Kuropatkin	1
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	132520012A	09/10/2013 15:41	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132520013A	09/12/2013 05:31	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132520013A	09/09/2013 19:30	Sally L Appleyard	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132520012A	09/09/2013 19:30	Sally L Appleyard	1
06949	Cadmium	SW-846 6010B	1	132475708003	09/06/2013 01:07	John W Yanzuk II	1
06951	Chromium	SW-846 6010B	1	132475708003	09/06/2013 01:07	John W Yanzuk II	1
06955	Lead	SW-846 6010B	1	132475708003	09/06/2013 14:30	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	132475708003	09/06/2013 01:07	John W Yanzuk II	1
06972	Zinc	SW-846 6010B	1	132475708003	09/06/2013 01:07	John W Yanzuk II	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132475708003	09/05/2013 10:00	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	2	13249820001A	09/06/2013 07:47	William C Schwebel	1

REVISED

Sample Description: Rinsate-082913 Grab Water
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # WW 7182498
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 16:45 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EYR29

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**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.011	0.010	1
08357	Naphthalene	91-20-3	0.097	0.030	1

REVISED

Sample Description: Rinsate-082913 Grab Water
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # WW 7182498
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 16:45 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EYR29

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
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 8082**		**ug/l**	**ug/l**	
10227	PCB-1016	12674-11-2	N.D.	0.082	1
10227	PCB-1221	11104-28-2	N.D.	0.082	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.082	1
10227	PCB-1248	12672-29-6	N.D.	0.082	1
10227	PCB-1254	11097-69-1	N.D.	0.082	1
10227	PCB-1260	11096-82-5	N.D.	0.12	1
GC Petroleum Hydrocarbons	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
08271	Diesel Range Organics C12-C24	n.a.	100	41	1
08271	Heavy Range Organics C24-C40	n.a.	590	95	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.	59	41	1
12005	HRO C24-C40 w/Si Gel	n.a.	380	95	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	N.D.	1.6	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.5	1
07072	Zinc	7440-66-6	2.2	2.0	1

General Sample Comments

State of Washington Lab Certification No. C259
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
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W132482AA	09/05/2013 16:49	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132482AA	09/05/2013 16:49	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13246WAC026	09/04/2013 08:18	Brian K Graham	1

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Analysis Report

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Sample Description: Rinsate-082913 Grab Water
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # WW 7182498
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 16:45 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EYR29

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13246WAC026	09/03/2013 17:10	JoElla L Rice	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13246B20A	09/04/2013 11:56	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13246B20A	09/04/2013 11:56	Catherine J Schwarz	1
10227	PCBs in Water 8082	SW-846 8082	1	132460003A	09/04/2013 09:07	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	132460003A	09/03/2013 15:00	Seth A Farrier	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	132490033A	09/10/2013 10:35	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490032A	09/11/2013 14:03	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132490032A	09/09/2013 11:15	Denise L Trimby	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132490033A	09/09/2013 11:15	Denise L Trimby	1
07049	Cadmium	SW-846 6010B	1	132481848006	09/07/2013 01:42	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132481848006	09/07/2013 01:42	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132481848006	09/07/2013 01:42	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132481848006	09/07/2013 01:42	John W Yanzuk II	1
07072	Zinc	SW-846 6010B	1	132481848006	09/07/2013 01:42	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132481848006	09/06/2013 07:19	James L Mertz	1

REVISED

Sample Description: MW-7-11 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182499
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 18:20 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY711

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	0.95
10237	Bromodichloromethane	75-27-4	N.D.	0.001	0.95
10237	Bromoform	75-25-2	N.D.	0.001	0.95
10237	Bromomethane	74-83-9	N.D.	0.002	0.95
10237	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.95
10237	Chlorobenzene	108-90-7	N.D.	0.001	0.95
10237	Chloroethane	75-00-3	N.D.	0.002	0.95
10237	Chloroform	67-66-3	N.D.	0.001	0.95
10237	Chloromethane	74-87-3	N.D.	0.002	0.95
10237	Dibromochloromethane	124-48-1	N.D.	0.001	0.95
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.95
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.95
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.95
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.95
10237	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.95
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.95
10237	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.95
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.95
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.95
10237	1,2-Dichloropropane	78-87-5	N.D.	0.001	0.95
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	0.95
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	0.95
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.95
10237	Freon 113	76-13-1	N.D.	0.002	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.95
10237	Methylene Chloride	75-09-2	N.D.	0.002	0.95
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	0.95
10237	Tetrachloroethene	127-18-4	N.D.	0.001	0.95
10237	Toluene	108-88-3	N.D.	0.001	0.95
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.95
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	0.95
10237	Trichloroethene	79-01-6	N.D.	0.001	0.95
10237	Trichlorofluoromethane	75-69-4	N.D.	0.002	0.95
10237	Vinyl Chloride	75-01-4	N.D.	0.001	0.95
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.95
GC/MS Semivolatiles	**SW-846 8270C SIM**		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00071	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00071	1
10725	Benzo(b)fluoranthene	205-99-2	0.00097	0.00071	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00071	1
10725	Chrysene	218-01-9	0.00095	0.00035	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00071	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00071	1
10725	1-Methylnaphthalene	90-12-0	0.00080	0.00071	1
10725	2-Methylnaphthalene	91-57-6	0.0013	0.00071	1
10725	Naphthalene	91-20-3	0.00096	0.00071	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		mg/kg	mg/kg	

REVISED

Sample Description: MW-7-11 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182499
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 18:20 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY711

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	TPH by NWTPH-Gx soils	n.a.	N.D.	1	22.93
Pesticides/PCBs	**SW-846 8082**		**mg/kg**	**mg/kg**	
10736	PCB-1016	12674-11-2	N.D.	0.0038	1
10736	PCB-1221	11104-28-2	N.D.	0.0049	1
10736	PCB-1232	11141-16-5	N.D.	0.0085	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.	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**	
06949	Cadmium	7440-43-9	0.338	0.0795	1
06951	Chromium	7440-47-3	63.3	0.167	1
06955	Lead	7439-92-1	6.40	0.523	1
06961	Nickel	7440-02-0	87.2	0.136	1
06972	Zinc	7440-66-6	50.5	0.209	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	6.3	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. C259
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.

REVISED

Sample Description: MW-7-11 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182499
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 18:20 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY711

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	EPA SW-846/8260 (Soil)	SW-846 8260B	1	X132481AA	09/05/2013 20:40	Chelsea B Stong	0.95
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201324332242	08/29/2013 18:20	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201324332242	08/29/2013 18:20	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201324332242	08/29/2013 18:20	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13249SLD026	09/13/2013 12:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLD026	09/09/2013 11:45	Kelli M Barto	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13235A31C	09/03/2013 22:29	Laura M Krieger	22.93
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201324332242	08/29/2013 18:20	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	132460012A	09/04/2013 21:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132460012A	09/04/2013 06:00	Roman Kuropatkin	1
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	132520012A	09/10/2013 16:21	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132520013A	09/12/2013 05:51	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132520013A	09/09/2013 19:30	Sally L Appleyard	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132520012A	09/09/2013 19:30	Sally L Appleyard	1
06949	Cadmium	SW-846 6010B	1	132465708003	09/05/2013 00:45	John W Yanzuk II	1
06951	Chromium	SW-846 6010B	1	132465708003	09/05/2013 00:45	John W Yanzuk II	1
06955	Lead	SW-846 6010B	1	132465708003	09/05/2013 00:45	John W Yanzuk II	1
06961	Nickel	SW-846 6010B	1	132465708003	09/05/2013 00:45	John W Yanzuk II	1
06972	Zinc	SW-846 6010B	1	132465708003	09/05/2013 00:45	John W Yanzuk II	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132465708003	09/04/2013 09:35	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	2	13249820001A	09/06/2013 07:47	William C Schwebel	1

REVISED

Sample Description: MW-7-19 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182500
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 18:45 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY719

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	0.86
10237	Bromodichloromethane	75-27-4	N.D.	0.0009	0.86
10237	Bromoform	75-25-2	N.D.	0.0009	0.86
10237	Bromomethane	74-83-9	N.D.	0.002	0.86
10237	Carbon Tetrachloride	56-23-5	N.D.	0.0009	0.86
10237	Chlorobenzene	108-90-7	N.D.	0.0009	0.86
10237	Chloroethane	75-00-3	N.D.	0.002	0.86
10237	Chloroform	67-66-3	N.D.	0.0009	0.86
10237	Chloromethane	74-87-3	N.D.	0.002	0.86
10237	Dibromochloromethane	124-48-1	N.D.	0.0009	0.86
10237	1,2-Dibromoethane	106-93-4	N.D.	0.0009	0.86
10237	1,2-Dichlorobenzene	95-50-1	N.D.	0.0009	0.86
10237	1,3-Dichlorobenzene	541-73-1	N.D.	0.0009	0.86
10237	1,4-Dichlorobenzene	106-46-7	N.D.	0.0009	0.86
10237	1,1-Dichloroethane	75-34-3	N.D.	0.0009	0.86
10237	1,2-Dichloroethane	107-06-2	N.D.	0.0009	0.86
10237	1,1-Dichloroethene	75-35-4	N.D.	0.0009	0.86
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	0.0009	0.86
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	0.0009	0.86
10237	1,2-Dichloropropane	78-87-5	N.D.	0.0009	0.86
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.0009	0.86
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.0009	0.86
10237	Ethylbenzene	100-41-4	N.D.	0.0009	0.86
10237	Freon 113	76-13-1	N.D.	0.002	0.86
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.86
10237	Methylene Chloride	75-09-2	N.D.	0.002	0.86
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.0009	0.86
10237	Tetrachloroethene	127-18-4	N.D.	0.0009	0.86
10237	Toluene	108-88-3	N.D.	0.0009	0.86
10237	1,1,1-Trichloroethane	71-55-6	N.D.	0.0009	0.86
10237	1,1,2-Trichloroethane	79-00-5	N.D.	0.0009	0.86
10237	Trichloroethene	79-01-6	N.D.	0.0009	0.86
10237	Trichlorofluoromethane	75-69-4	N.D.	0.002	0.86
10237	Vinyl Chloride	75-01-4	N.D.	0.0009	0.86
10237	Xylene (Total)	1330-20-7	N.D.	0.0009	0.86
GC/MS Semivolatiles	**SW-846 8270C SIM**		mg/kg	mg/kg	
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00071	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00071	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00071	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00071	1
10725	Chrysene	218-01-9	N.D.	0.00036	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00071	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00071	1
10725	1-Methylnaphthalene	90-12-0	N.D.	0.00071	1
10725	2-Methylnaphthalene	91-57-6	0.0014	0.00071	1
10725	Naphthalene	91-20-3	0.0013	0.00071	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		mg/kg	mg/kg	

REVISED

Sample Description: MW-7-19 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182500
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 18:45 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY719

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	TPH by NWTPH-Gx soils	n.a.	N.D.	1.2	27.16
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.	0.0086	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 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**	
06949	Cadmium	7440-43-9	0.402	0.0825	1
06951	Chromium	7440-47-3	17.6	0.174	1
06955	Lead	7439-92-1	4.79	0.543	1
06961	Nickel	7440-02-0	12.0	0.141	1
06972	Zinc	7440-66-6	56.3	0.217	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. C259
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.

REVISED

Sample Description: MW-7-19 Grab Soil
Facility# 93883
1702 E. Yakima Ave - Yakima, WA

LL Sample # SW 7182500
LL Group # 1415667
Account # 11255

Project Name: 93883

Collected: 08/29/2013 18:45 by KL

Submitted: 08/31/2013 08:50
Reported: 02/03/2014 08:48

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

EY719

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	EPA SW-846/8260 (Soil)	SW-846 8260B	1	X132481AA	09/05/2013 21:02	Chelsea B Stong	0.86
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	1	201324332242	08/29/2013 18:45	Client Supplied	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035A	2	201324332242	08/29/2013 18:45	Client Supplied	1
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201324332242	08/29/2013 18:45	Client Supplied	1
10725	SIM SVOA (microwave)	SW-846 8270C SIM	1	13249SLD026	09/13/2013 12:41	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLD026	09/09/2013 11:45	Kelli M Barto	1
02005	NWTPH-Gx soil C7-C12	ECY 97-602 NWTPH-Gx	1	13249A31A	09/06/2013 19:35	Laura M Krieger	27.16
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201324332242	08/29/2013 18:45	Client Supplied	n.a.
10736	PCBs Soil 8082 Microwave	SW-846 8082	1	132460012A	09/04/2013 21:38	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132460012A	09/04/2013 06:00	Roman Kuropatkin	1
08272	NWTPH-Dx soil	ECY 97-602 NWTPH-Dx modified	1	132520012A	09/10/2013 16:01	Christine E Dolman	1
12006	NWTPH-Dx soil w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132520013A	09/12/2013 06:11	Glorines Suarez-Rivera	1
12008	NW Dx soil w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132520013A	09/09/2013 19:30	Sally L Appleyard	1
11234	WA DRO NW DX Soils (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132520012A	09/09/2013 19:30	Sally L Appleyard	1
06949	Cadmium	SW-846 6010B	1	132465708003	09/05/2013 00:49	John W Yanzuk II	1
06951	Chromium	SW-846 6010B	1	132465708003	09/05/2013 00:49	John W Yanzuk II	1
06955	Lead	SW-846 6010B	1	132465708003	09/05/2013 00:49	John W Yanzuk II	1
06961	Nickel	SW-846 6010B	1	132465708003	09/05/2013 00:49	John W Yanzuk II	1
06972	Zinc	SW-846 6010B	1	132465708003	09/05/2013 00:49	John W Yanzuk II	1
05708	SW SW846 ICP/ICP MS Digest	SW-846 3050B	1	132465708003	09/04/2013 09:35	Denise K Conners	1
00111	Moisture	SM 2540 G-1997	2	13249820001A	09/06/2013 07:47	William C Schwebel	1

Quality Control Summary

Client Name: Chevron Group Number: 1415667
Reported: 02/03/14 at 08:48 AM

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: Q132461AA	Sample number(s): 7182491,7182494							
Benzene	N.D.	0.025	mg/kg	92	91	80-120	0	30
Bromodichloromethane	N.D.	0.050	mg/kg	82	82	75-120	1	30
Bromoform	N.D.	0.050	mg/kg	93	93	70-120	0	30
Bromomethane	N.D.	0.10	mg/kg	179*	189*	32-162	5	30
Carbon Tetrachloride	N.D.	0.050	mg/kg	86	86	69-122	0	30
Chlorobenzene	N.D.	0.050	mg/kg	92	93	80-120	1	30
Chloroethane	N.D.	0.10	mg/kg	166	175*	17-171	6	30
Chloroform	N.D.	0.050	mg/kg	87	87	80-120	0	30
Chloromethane	N.D.	0.10	mg/kg	86	85	56-120	1	30
Dibromochloromethane	N.D.	0.050	mg/kg	87	87	77-120	1	30
1,2-Dibromoethane	N.D.	0.050	mg/kg	92	91	80-120	1	30
1,2-Dichlorobenzene	N.D.	0.050	mg/kg	89	91	80-120	1	30
1,3-Dichlorobenzene	N.D.	0.050	mg/kg	93	95	80-120	2	30
1,4-Dichlorobenzene	N.D.	0.050	mg/kg	94	95	80-120	0	30
1,1-Dichloroethane	N.D.	0.050	mg/kg	84	87	80-120	4	30
1,2-Dichloroethane	N.D.	0.050	mg/kg	79	80	72-126	1	30
1,1-Dichloroethene	N.D.	0.050	mg/kg	90	91	73-129	1	30
cis-1,2-Dichloroethene	N.D.	0.050	mg/kg	91	90	80-120	1	30
trans-1,2-Dichloroethene	N.D.	0.050	mg/kg	94	93	79-120	1	30
1,2-Dichloropropane	N.D.	0.050	mg/kg	92	92	77-120	0	30
cis-1,3-Dichloropropene	N.D.	0.050	mg/kg	90	90	74-120	1	30
trans-1,3-Dichloropropene	N.D.	0.050	mg/kg	84	85	77-120	0	30
Ethylbenzene	N.D.	0.050	mg/kg	88	89	80-120	1	30
Freon 113	N.D.	0.10	mg/kg	91	87	64-137	5	30
Methyl Tertiary Butyl Ether	N.D.	0.025	mg/kg	96	96	69-126	0	30
Methylene Chloride	N.D.	0.10	mg/kg	93	93	80-124	0	30
1,1,2,2-Tetrachloroethane	N.D.	0.050	mg/kg	87	86	71-123	1	30
Tetrachloroethene	N.D.	0.050	mg/kg	97	98	78-126	1	30
Toluene	N.D.	0.050	mg/kg	92	92	80-120	1	30
1,1,1-Trichloroethane	N.D.	0.050	mg/kg	86	86	71-125	0	30
1,1,2-Trichloroethane	N.D.	0.050	mg/kg	90	91	80-120	1	30
Trichloroethene	N.D.	0.050	mg/kg	91	92	80-120	1	30
Trichlorofluoromethane	N.D.	0.10	mg/kg	84	82	58-133	1	30
Vinyl Chloride	N.D.	0.050	mg/kg	83	83	53-120	0	30
Xylene (Total)	N.D.	0.050	mg/kg	90	91	80-120	1	30
Batch number: W132482AA	Sample number(s): 7182490,7182498							
Benzene	N.D.	0.5	ug/l	99	98	78-120	1	30
Bromodichloromethane	N.D.	1.	ug/l	95	95	73-120	0	30
Bromoform	N.D.	1.	ug/l	93	95	61-120	3	30
Bromomethane	N.D.	1.	ug/l	74	73	51-120	1	30
Carbon Tetrachloride	N.D.	1.	ug/l	98	97	74-130	0	30
Chlorobenzene	N.D.	0.8	ug/l	106	108	80-120	1	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: 1415667
Reported: 02/03/14 at 08:48 AM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chloroethane	N.D.	1.	ug/l	76	76	45-120	0	30
Chloroform	N.D.	0.8	ug/l	100	100	77-122	0	30
Chloromethane	N.D.	1.	ug/l	91	92	55-120	1	30
Dibromochloromethane	N.D.	1.	ug/l	97	99	72-120	2	30
1,2-Dibromoethane	N.D.	0.5	ug/l	104	106	76-120	1	30
1,2-Dichlorobenzene	N.D.	1.	ug/l	109	110	80-120	1	30
1,3-Dichlorobenzene	N.D.	1.	ug/l	106	106	80-120	0	30
1,4-Dichlorobenzene	N.D.	1.	ug/l	107	108	80-120	1	30
1,1-Dichloroethane	N.D.	1.	ug/l	98	98	80-120	1	30
1,2-Dichloroethane	N.D.	0.5	ug/l	101	101	71-130	0	30
1,1-Dichloroethene	N.D.	0.8	ug/l	96	97	76-124	2	30
cis-1,2-Dichloroethene	N.D.	0.8	ug/l	98	99	80-120	1	30
trans-1,2-Dichloroethene	N.D.	0.8	ug/l	99	101	80-120	2	30
1,2-Dichloropropane	N.D.	1.	ug/l	102	101	80-120	0	30
cis-1,3-Dichloropropene	N.D.	1.	ug/l	100	98	80-120	2	30
trans-1,3-Dichloropropene	N.D.	1.	ug/l	100	99	69-120	1	30
Ethylbenzene	N.D.	0.5	ug/l	103	104	79-120	1	30
Freon 113	N.D.	2.	ug/l	86	88	63-133	3	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	97	98	75-120	1	30
Methylene Chloride	N.D.	2.	ug/l	99	100	80-120	1	30
1,1,2,2-Tetrachloroethane	N.D.	1.	ug/l	104	104	70-120	0	30
Tetrachloroethene	N.D.	0.8	ug/l	105	107	80-120	2	30
Toluene	N.D.	0.5	ug/l	104	106	80-120	2	30
1,1,1-Trichloroethane	N.D.	0.8	ug/l	98	99	66-126	1	30
1,1,2-Trichloroethane	N.D.	0.8	ug/l	101	101	80-120	0	30
Trichloroethene	N.D.	1.	ug/l	102	103	80-120	1	30
Trichlorofluoromethane	N.D.	2.	ug/l	84	83	65-130	1	30
Vinyl Chloride	N.D.	1.	ug/l	91	91	63-120	0	30
m+p-Xylene	N.D.	0.5	ug/l	104	105	80-120	1	30
o-Xylene	N.D.	0.5	ug/l	103	107	80-120	4	30
Batch number: X132461AA	Sample number(s): 7182492							
Benzene	N.D.	0.0005	mg/kg	94	95	80-120	1	30
Bromodichloromethane	N.D.	0.001	mg/kg	93	92	75-120	0	30
Bromoform	N.D.	0.001	mg/kg	105	101	70-120	4	30
Bromomethane	N.D.	0.002	mg/kg	93	92	32-162	1	30
Carbon Tetrachloride	N.D.	0.001	mg/kg	99	99	69-122	1	30
Chlorobenzene	N.D.	0.001	mg/kg	95	95	80-120	0	30
Chloroethane	N.D.	0.002	mg/kg	95	94	17-171	2	30
Chloroform	N.D.	0.001	mg/kg	96	96	80-120	0	30
Chloromethane	N.D.	0.002	mg/kg	89	89	56-120	0	30
Dibromochloromethane	N.D.	0.001	mg/kg	94	93	77-120	2	30
1,2-Dibromoethane	N.D.	0.001	mg/kg	96	94	80-120	3	30
1,2-Dichlorobenzene	N.D.	0.001	mg/kg	93	93	80-120	0	30
1,3-Dichlorobenzene	N.D.	0.001	mg/kg	92	94	80-120	2	30
1,4-Dichlorobenzene	N.D.	0.001	mg/kg	93	94	80-120	1	30
1,1-Dichloroethane	N.D.	0.001	mg/kg	91	92	80-120	1	30
1,2-Dichloroethane	N.D.	0.001	mg/kg	93	93	72-126	1	30
1,1-Dichloroethene	N.D.	0.001	mg/kg	98	98	73-129	0	30
cis-1,2-Dichloroethene	N.D.	0.001	mg/kg	97	97	80-120	0	30
trans-1,2-Dichloroethene	N.D.	0.001	mg/kg	101	102	79-120	2	30
1,2-Dichloropropane	N.D.	0.001	mg/kg	92	92	77-120	0	30
cis-1,3-Dichloropropene	N.D.	0.001	mg/kg	92	92	74-120	0	30
trans-1,3-Dichloropropene	N.D.	0.001	mg/kg	88	88	77-120	1	30
Ethylbenzene	N.D.	0.001	mg/kg	91	93	80-120	1	30
Freon 113	N.D.	0.002	mg/kg	86	87	64-137	1	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: 1415667
Reported: 02/03/14 at 08:48 AM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	N.D.	0.0005	mg/kg	91	90	69-126	2	30
Methylene Chloride	N.D.	0.002	mg/kg	94	93	80-124	1	30
1,1,2,2-Tetrachloroethane	N.D.	0.001	mg/kg	90	89	71-123	2	30
Tetrachloroethene	N.D.	0.001	mg/kg	100	103	78-126	3	30
Toluene	N.D.	0.001	mg/kg	93	94	80-120	1	30
1,1,1-Trichloroethane	N.D.	0.001	mg/kg	98	98	71-125	0	30
1,1,2-Trichloroethane	N.D.	0.001	mg/kg	94	93	80-120	2	30
Trichloroethene	N.D.	0.001	mg/kg	100	100	80-120	0	30
Trichlorofluoromethane	N.D.	0.002	mg/kg	92	91	58-133	1	30
Vinyl Chloride	N.D.	0.001	mg/kg	92	93	53-120	0	30
Xylene (Total)	N.D.	0.001	mg/kg	93	93	80-120	1	30
Batch number: X132481AA	Sample number(s): 7182493,7182495-7182497,7182499-7182500							
Benzene	N.D.	0.0005	mg/kg	97	93	80-120	5	30
Bromodichloromethane	N.D.	0.001	mg/kg	98	97	75-120	1	30
Bromoform	N.D.	0.001	mg/kg	105	102	70-120	2	30
Bromomethane	N.D.	0.002	mg/kg	100	94	32-162	6	30
Carbon Tetrachloride	N.D.	0.001	mg/kg	108	102	69-122	6	30
Chlorobenzene	N.D.	0.001	mg/kg	97	93	80-120	4	30
Chloroethane	N.D.	0.002	mg/kg	98	93	17-171	6	30
Chloroform	N.D.	0.001	mg/kg	102	99	80-120	4	30
Chloromethane	N.D.	0.002	mg/kg	92	87	56-120	6	30
Dibromochloromethane	N.D.	0.001	mg/kg	97	94	77-120	3	30
1,2-Dibromoethane	N.D.	0.001	mg/kg	92	92	80-120	0	30
1,2-Dichlorobenzene	N.D.	0.001	mg/kg	94	94	80-120	0	30
1,3-Dichlorobenzene	N.D.	0.001	mg/kg	95	93	80-120	3	30
1,4-Dichlorobenzene	N.D.	0.001	mg/kg	96	93	80-120	3	30
1,1-Dichloroethane	N.D.	0.001	mg/kg	93	91	80-120	2	30
1,2-Dichloroethane	N.D.	0.001	mg/kg	97	96	72-126	2	30
1,1-Dichloroethene	N.D.	0.001	mg/kg	104	97	73-129	6	30
cis-1,2-Dichloroethene	N.D.	0.001	mg/kg	101	98	80-120	3	30
trans-1,2-Dichloroethene	N.D.	0.001	mg/kg	105	100	79-120	5	30
1,2-Dichloropropane	N.D.	0.001	mg/kg	95	92	77-120	3	30
cis-1,3-Dichloropropene	N.D.	0.001	mg/kg	94	94	74-120	1	30
trans-1,3-Dichloropropene	N.D.	0.001	mg/kg	88	86	77-120	2	30
Ethylbenzene	N.D.	0.001	mg/kg	93	90	80-120	4	30
Freon 113	N.D.	0.002	mg/kg	105	97	64-137	8	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	mg/kg	90	91	69-126	1	30
Methylene Chloride	N.D.	0.002	mg/kg	96	94	80-124	3	30
1,1,2,2-Tetrachloroethane	N.D.	0.001	mg/kg	83	85	71-123	3	30
Tetrachloroethene	N.D.	0.001	mg/kg	103	96	78-126	7	30
Toluene	N.D.	0.001	mg/kg	94	90	80-120	5	30
1,1,1-Trichloroethane	N.D.	0.001	mg/kg	97	92	71-125	5	30
1,1,2-Trichloroethane	N.D.	0.001	mg/kg	90	91	80-120	0	30
Trichloroethene	N.D.	0.001	mg/kg	102	99	80-120	3	30
Trichlorofluoromethane	N.D.	0.002	mg/kg	105	98	58-133	7	30
Vinyl Chloride	N.D.	0.001	mg/kg	96	90	53-120	6	30
Xylene (Total)	N.D.	0.001	mg/kg	94	91	80-120	4	30
Batch number: 13246WAC026	Sample number(s): 7182490,7182498							
Benzo(a)anthracene	N.D.	0.010	ug/l	90	89	73-127	1	30
Benzo(a)pyrene	N.D.	0.010	ug/l	93	96	72-120	3	30
Benzo(b)fluoranthene	N.D.	0.010	ug/l	100	106	79-136	6	30
Benzo(k)fluoranthene	N.D.	0.010	ug/l	104	112	73-131	7	30
Chrysene	N.D.	0.010	ug/l	96	99	76-125	3	30
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	99	101	58-131	2	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: 1415667
Reported: 02/03/14 at 08:48 AM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	108	110	62-130	2	30
1-Methylnaphthalene	N.D.	0.010	ug/l	102	106	80-126	4	30
2-Methylnaphthalene	N.D.	0.010	ug/l	102	104	81-124	3	30
Naphthalene	N.D.	0.030	ug/l	97	101	75-120	4	30
Batch number: 13249SLD026	Sample number(s): 7182491-7182497,7182499-7182500							
Benzo(a)anthracene	N.D.	0.00067	mg/kg	103		83-119		
Benzo(a)pyrene	N.D.	0.00067	mg/kg	99		80-122		
Benzo(b)fluoranthene	N.D.	0.00067	mg/kg	111		82-135		
Benzo(k)fluoranthene	N.D.	0.00067	mg/kg	94		79-123		
Chrysene	N.D.	0.00033	mg/kg	98		84-113		
Dibenz(a,h)anthracene	N.D.	0.00067	mg/kg	106		78-124		
Indeno(1,2,3-cd)pyrene	N.D.	0.00067	mg/kg	103		77-124		
1-Methylnaphthalene	N.D.	0.00067	mg/kg	118		78-119		
2-Methylnaphthalene	N.D.	0.00067	mg/kg	113		78-121		
Naphthalene	N.D.	0.00067	mg/kg	107		79-113		
Batch number: 13235A31C	Sample number(s): 7182492-7182497,7182499							
TPH by NWTPH-Gx soils	N.D.	1.0	mg/kg	96	93	80-120	3	30
Batch number: 13246B20A	Sample number(s): 7182490,7182498							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	93		75-135		
Batch number: 13246B53A	Sample number(s): 7182489							
Benzene	N.D.	0.2	ug/l	96	95	80-120	1	30
Ethylbenzene	N.D.	0.2	ug/l	100	100	80-120	1	30
Methyl tert-Butyl Ether	N.D.	0.3	ug/l	93	94	76-131	1	30
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	115	111	75-135	3	30
Toluene	N.D.	0.2	ug/l	98	99	80-120	0	30
Total Xylenes	N.D.	0.6	ug/l	103	104	80-120	1	30
Batch number: 13249A31A	Sample number(s): 7182491,7182500							
TPH by NWTPH-Gx soils	N.D.	1.0	mg/kg	92	96	80-120	4	30
Batch number: 132460003A	Sample number(s): 7182490,7182498							
PCB-1016	N.D.	0.080	ug/l	86	86	69-120	0	30
PCB-1221	N.D.	0.080	ug/l					
PCB-1232	N.D.	0.16	ug/l					
PCB-1242	N.D.	0.080	ug/l					
PCB-1248	N.D.	0.080	ug/l					
PCB-1254	N.D.	0.080	ug/l					
PCB-1260	N.D.	0.12	ug/l	98	96	69-128	3	30
Batch number: 132460012A	Sample number(s): 7182491-7182497,7182499-7182500							
PCB-1016	N.D.	0.0036	mg/kg	92		77-121		
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	102		77-127		
Batch number: 132490033A	Sample number(s): 7182490,7182498							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	79	78	50-113	2	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					

*- 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: 1415667
Reported: 02/03/14 at 08:48 AM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132520012A	Sample number(s): 7182491-7182497,7182499-7182500							
Diesel Range Organics C12-C24	N.D.	3.0	mg/kg	83		60-120		
Heavy Range Organics C24-C40	N.D.	10.	mg/kg					
Batch number: 132670018A	Sample number(s): 7182491,7182494							
>C10-C12 Aliphatic	N.D.	1.0	mg/kg	96		31-137		
>C10-C12 Aromatic	N.D.	1.0	mg/kg	93		22-119		
>C12-C16 Aliphatic	N.D.	1.0	mg/kg	100		42-146		
>C12-C16 Aromatic	N.D.	1.0	mg/kg	89		24-136		
>C16-C21 Aliphatic	N.D.	3.0	mg/kg	98		57-111		
>C16-C21 Aromatic	N.D.	2.0	mg/kg	93		34-143		
>C21-C34 Aliphatic	N.D.	6.0	mg/kg	97		50-124		
>C21-C34 Aromatic	N.D.	2.0	mg/kg	93		44-134		
Batch number: 13268A54A	Sample number(s): 7182491,7182494							
Benzene	N.D.	0.0500	mg/kg	88	87	70-130	1	50
C5-C6 Aliphatic Hydrocarbons	N.D.	2.50	mg/kg	81	84	70-130	5	50
C6-C8 Aliphatic Hydrocarbons	N.D.	2.50	mg/kg	80	84	70-130	5	50
C8-C10 Aliphatic Hydrocarbons	N.D.	2.50	mg/kg	81	77	70-130	4	50
C8-C10 Aromatic Hydrocarbons	N.D.	2.50	mg/kg	96	96	70-130	0	50
Ethylbenzene	N.D.	0.0500	mg/kg	91	90	70-130	1	50
Methyl t-butyl ether	N.D.	0.0500	mg/kg	85	86	70-130	1	50
Toluene	N.D.	0.0500	mg/kg	91	91	70-130	0	50
o-Xylene	N.D.	0.0500	mg/kg	97	96	70-130	1	50
m,p-Xylenes	N.D.	0.100	mg/kg	100	99	70-130	1	50
Batch number: 132490032A	Sample number(s): 7182490,7182498							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	69	68	32-117	2	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 132520013A	Sample number(s): 7182491-7182497,7182499-7182500							
DRO C12-C24 w/Si Gel	N.D.	3.0	mg/kg	76		50-133		
HRO C24-C40 w/Si Gel	N.D.	10.	mg/kg					
Batch number: 132465708003	Sample number(s): 7182499-7182500							
Cadmium	N.D.	0.0760	mg/kg	105		80-120		
Chromium	N.D.	0.160	mg/kg	104		80-120		
Lead	N.D.	0.500	mg/kg	105		80-120		
Nickel	N.D.	0.130	mg/kg	106		80-120		
Zinc	0.207	0.200	mg/kg	104		80-120		
Batch number: 132475708003	Sample number(s): 7182491-7182497							
Cadmium	N.D.	0.0760	mg/kg	108		80-120		
Chromium	N.D.	0.160	mg/kg	109		80-120		
Lead	N.D.	0.500	mg/kg	110		80-120		
Nickel	N.D.	0.130	mg/kg	110		80-120		
Zinc	0.202	0.200	mg/kg	108		80-120		
Batch number: 132481848006	Sample number(s): 7182490,7182498							
Cadmium	N.D.	0.76	ug/l	104		90-112		
Chromium	N.D.	1.6	ug/l	101		90-110		
Lead	N.D.	4.7	ug/l	102		88-110		
Nickel	N.D.	1.5	ug/l	106		90-111		
Zinc	N.D.	2.0	ug/l	104		90-110		
Batch number: 13249820001A	Sample number(s): 7182491-7182497,7182499-7182500							

*- 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: 1415667
Reported: 02/03/14 at 08:48 AM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
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: X132481AA	Sample number(s): 7182493,7182495-7182497,7182499-7182500 UNSPK: P185153								
Benzene	95		55-143						
Bromodichloromethane	87		53-136						
Bromoform	98		38-124						
Bromomethane	78		42-168						
Carbon Tetrachloride	86		45-153						
Chlorobenzene	88		49-135						
Chloroethane	76		39-152						
Chloroform	86		61-142						
Chloromethane	103		36-143						
Dibromochloromethane	90		51-128						
1,2-Dibromoethane	95		54-129						
1,2-Dichlorobenzene	76		36-133						
1,3-Dichlorobenzene	81		34-134						
1,4-Dichlorobenzene	80		35-136						
1,1-Dichloroethane	78		63-142						
1,2-Dichloroethane	87		54-143						
1,1-Dichloroethene	81		61-149						
cis-1,2-Dichloroethene	84		53-146						
trans-1,2-Dichloroethene	85		51-153						
1,2-Dichloropropane	88		54-144						
cis-1,3-Dichloropropene	88		45-137						
trans-1,3-Dichloropropene	85		41-129						
Ethylbenzene	92		44-141						
Freon 113	82		56-156						
Methyl Tertiary Butyl Ether	73		55-129						
Methylene Chloride	71		60-149						
1,1,2,2-Tetrachloroethane	94		40-152						
Tetrachloroethene	98		42-149						
Toluene	110		50-146						
1,1,1-Trichloroethane	77		52-146						
1,1,2-Trichloroethane	101		47-161						
Trichloroethene	95		53-144						
Trichlorofluoromethane	94		47-163						
Vinyl Chloride	92		50-154						
Xylene (Total)	88		44-136						
Batch number: 13249SLD026	Sample number(s): 7182491-7182497,7182499-7182500 UNSPK: 7182491								
Benzo(a)anthracene	81	90	44-143	6	30				
Benzo(a)pyrene	77	81	44-140	3	30				
Benzo(b)fluoranthene	74	89	26-142	8	30				
Benzo(k)fluoranthene	107	115	54-142	6	30				
Chrysene	39	58	29-148	6	30				
Dibenz(a,h)anthracene	60	54	20-137	8	30				

*- Outside of specification
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Quality Control Summary

Client Name: Chevron Group Number: 1415667
Reported: 02/03/14 at 08:48 AM

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
Indeno(1,2,3-cd)pyrene	63	48	17-136	16	30				
1-Methylnaphthalene	-771 (2)	-479 (2)	50-131	10	30				
2-Methylnaphthalene	-1423 (2)	-1089 (2)	35-152	7	30				
Naphthalene	-237 (2)	-133 (2)	31-148	8	30				
Batch number: 13246B20A	Sample number(s): 7182490,7182498 UNSPK: P182472								
NWTPH-Gx water C7-C12	107	117	75-135	7	30				
Batch number: 132460012A	Sample number(s): 7182491-7182497,7182499-7182500 UNSPK: 7182491								
PCB-1016	74	75	19-146	3	50				
PCB-1260	80	80	29-141	2	50				
Batch number: 132520012A	Sample number(s): 7182491-7182497,7182499-7182500 BKG: 7182491								
Diesel Range Organics C12-C24						2,000	2,300	14	20
Heavy Range Organics C24-C40						1,500	1,600	2	20
Batch number: 132670018A	Sample number(s): 7182491,7182494 UNSPK: 7182491 BKG: 7182491								
>C10-C12 Aliphatic	747 (2)		31-137			95	150	45* (1)	25
>C10-C12 Aromatic	306*		22-119			5.8	12	66* (1)	25
>C12-C16 Aliphatic	3186 (2)		42-146			580	970	51*	25
>C12-C16 Aromatic	609 (2)		42-122			52	100	66*	25
>C16-C21 Aliphatic	2129 (2)		57-111			540	900	50*	25
>C16-C21 Aromatic	799 (2)		53-132			110	190	56*	25
>C21-C34 Aliphatic	1020 (2)		38-120			310	560	58*	25
>C21-C34 Aromatic	340*		55-126			88	170	62*	25
Batch number: 132520013A	Sample number(s): 7182491-7182497,7182499-7182500 BKG: 7182491								
DRO C12-C24 w/Si Gel						1,900	2,100	7	20
HRO C24-C40 w/Si Gel						1,100	1,300	13 (1)	20
Batch number: 132465708003	Sample number(s): 7182499-7182500 UNSPK: P182459 BKG: P182459								
Cadmium	102	103	75-125	2	20	N.D.	N.D.	0 (1)	20
Chromium	108	109	75-125	2	20	2.36	2.47	5 (1)	20
Lead	99	102	75-125	0	20	1.52	1.53	0 (1)	20
Nickel	103	103	75-125	2	20	1.86	1.87	0 (1)	20
Zinc	102	103	75-125	2	20	4.27	4.63	8 (1)	20
Batch number: 132475708003	Sample number(s): 7182491-7182497 UNSPK: P185142 BKG: P185142								
Cadmium	103	100	75-125	2	20	0.118	0.111	6 (1)	20
Chromium	115	109	75-125	5	20	3.79	3.07	21* (1)	20
Lead	104	103	75-125	1	20	1.31	1.19	10 (1)	20
Nickel	104	104	75-125	0	20	2.74	2.28	18 (1)	20
Zinc	107	104	75-125	2	20	8.22	6.89	18 (1)	20
Batch number: 132481848006	Sample number(s): 7182490,7182498 UNSPK: P184423 BKG: P184423								
Cadmium	102	103	83-116	1	20	N.D.	N.D.	0 (1)	20

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Quality Control Summary

Client Name: Chevron Group Number: 1415667
Reported: 02/03/14 at 08:48 AM

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
Chromium	100	101	81-120	0	20	N.D.	N.D.	0 (1)	20
Lead	100	100	75-125	0	20	N.D.	N.D.	0 (1)	20
Nickel	103	104	86-115	1	20	N.D.	N.D.	0 (1)	20
Zinc	105	106	85-117	1	20	N.D.	2.0	200* (1)	20
Batch number: 13249820001A	Sample number(s): 7182491-7182497,7182499-7182500					BKG: P181357			
Moisture						17.0	17.9	5	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: 8260 Ext. Soil Master w/GRO
Batch number: Q132461AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7182491	90	98	92	88
7182494	89	94	89	84
Blank	84	90	84	74
LCS	99	106	101	89
LCSD	101	103	101	91
Limits:	50-141	54-135	52-141	50-131

Analysis Name: 8260 Ext. Water Master w/GRO
Batch number: W132482AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7182490	96	100	102	97
7182498	97	100	102	97
Blank	97	100	103	96
LCS	99	103	102	97
LCSD	98	100	102	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Ext. Soil Master w/GRO
Batch number: X132461AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7182492	105	104	98	94
Blank	101	101	96	96
LCS	101	100	97	98
LCSD	100	102	97	98
Limits:	50-141	54-135	52-141	50-131

Analysis Name: 8260 Ext. Soil Master w/GRO

*- 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: 1415667
Reported: 02/03/14 at 08:48 AM

Surrogate Quality Control

Batch number: X132481AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7182493	101	105	97	97
7182495	102	106	97	95
7182496	103	107	99	95
7182497	103	106	97	96
7182499	101	105	98	97
7182500	101	104	98	96
Blank	103	100	94	97
LCS	103	99	95	97
LCSD	102	98	95	98
MS	97	105	101	94
Limits:	50-141	54-135	52-141	50-131

Analysis Name: PAHs in waters by SIM
Batch number: 13246WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7182490	93	94	107
7182498	71	93	108
Blank	76	87	87
LCS	82	93	99
LCSD	87	94	101
Limits:	44-137	62-141	51-136

Analysis Name: SIM SVOA (microwave)
Batch number: 13249SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7182491	112	98	146*
7182492	104	88	113
7182493	101	97	103
7182494	94	85	110
7182495	91	85	88
7182496	111	99	127*
7182497	67	65	67
7182499	103	97	103
7182500	100	95	98
Blank	106	103	111
LCS	100	100	107
MS	113	105	118
MSD	115	104	113
Limits:	54-129	59-125	61-125

Analysis Name: NWTPH-GX Soil C7-C12
Batch number: 13235A31C

	Trifluorotoluene-F
7182492	88
7182493	89

*- 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: 1415667
Reported: 02/03/14 at 08:48 AM

Surrogate Quality Control

7182494	98
7182495	78
7182496	100
7182497	79
7182499	91
Blank	106
LCS	102
LCSD	101
Limits:	50-142

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 13246B20A

	Trifluorotoluene-F
7182490	86
7182498	85
Blank	84
LCS	116
MS	131
MSD	132
Limits:	63-135

Analysis Name: Method 8021 Water Master
Batch number: 13246B53A

	Trifluorotoluene-P	Trifluorotoluene-F
7182489	80	88
Blank	79	88
LCS	80	96
LCSD	79	95
Limits:	51-120	63-135

Analysis Name: NWTPH-GX Soil C7-C12
Batch number: 13249A31A

	Trifluorotoluene-F
7182491	113
7182500	90
Blank	100
LCS	96
LCSD	101
Limits:	50-142

Analysis Name: PCBs in Water 8082
Batch number: 132460003A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7182490	94	90
7182498	82	37
Blank	83	78
LCS	93	91
LCSD	92	83

*- Outside of specification
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Quality Control Summary

Client Name: Chevron Group Number: 1415667
Reported: 02/03/14 at 08:48 AM

Surrogate Quality Control

Limits: 58-140 36-153

Analysis Name: PCBs in Soil (microwave)
Batch number: 132460012A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7182491	84	91
7182492	90	81
7182493	98	86
7182494	80	86
7182495	98	86
7182496	80	85
7182497	100	87
7182499	93	86
7182500	98	88
Blank	94	102
LCS	96	100
MS	82	85
MSD	80	78

Limits: 41-146 39-151

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 132490032A

	Orthoterphenyl
7182490	70
7182498	69
Blank	82
LCS	97
LCSD	93

Limits: 50-150

Analysis Name: NWTPH-Dx water
Batch number: 132490033A

	Orthoterphenyl
7182490	102
7182498	98
Blank	104
LCS	108
LCSD	105

Limits: 50-150

Analysis Name: NWTPH-Dx soil
Batch number: 132520012A

	Orthoterphenyl
7182491	118
7182492	104
7182493	104
7182494	112
7182495	110

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Quality Control Summary

Client Name: Chevron
Group Number: 1415667
Reported: 02/03/14 at 08:48 AM

Surrogate Quality Control

7182496	112
7182497	105
7182499	103
7182500	107
Blank	107
DUP	133
LCS	105
Limits:	50-150

Analysis Name: NWTPH-Dx soil w/ 10g Si Gel
Batch number: 132520013A

	Orthoterphenyl
7182491	120
7182492	94
7182493	94
7182494	95
7182495	104
7182496	102
7182497	97
7182499	94
7182500	94
Blank	98
DUP	120
LCS	101
Limits:	50-150

Analysis Name: WA EPH in Soil
Batch number: 132670018A

	Orthoterphenyl	1-chlorooctadecane
7182491	68	67
7182494	91	75
Blank	87	86
DUP	97	110
LCS	86	86
MS	86	88
Limits:	50-142	33-122

Analysis Name: WA- VPH soils
Batch number: 13268A54A

	Trifluorotoluene-P	Trifluorotoluene-F
7182491	66	78
7182494	72	79
Blank	68	83
LCS	79	87
LCSD	83	85
Limits:	60-140	60-140

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Quality Control Summary

Client Name: Chevron Group Number: 1415667
Reported: 02/03/14 at 08:48 AM

*- 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 # 1415607 Sample # 718249-500

For Lancaster Laboratories use only

Instructions on reverse side correspond with circled numbers.

1 Client Information

Facility # 93883 WBS NWENV-093883-0804

Site Address 1702 E. Yakima Ave, Yakima, WA

Chevron PM Mark Horne Lead Consultant

Consultant/Office Bothell, WA 18912 N. Creek Pkway, Ste. 10

Consultant Project Mgr. R. Shropshire

Consultant Phone # 425-482-3323

Sampler K. Lawson, G. Cisneros

4 Matrix

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

3 Grab ☐ Composite ☐

5 Analyses Requested

2 Sample Identification	Collected Date	Collected Time	Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX + MTBE 8021 ☐ 8260 ☐ Naphth ☐	8260 full scan BTEX, MTBE, EDB, HVOCs	Oxygenates ____	NWTPH GX	NWTPH DX ☐ Silica Gel Cleanup ☐	Lead Total ☐ Diss. ☐ Method ____	WAVPH ☐	WAEPH ☐	NWTPH Dx with and without Silica Gel	cPAHs (WAPH 8270 SIM)	PCBs 8082	Metals (CAM 17 Pb, Cd, Cr, Ni, Zn)	Moisture
Trip Blank - 082713	8/27	1650				✓		2	✓			✓									
Rinsate - 082713	8/27	1700	✓			✓		12		✓		✓	✓				✓	✓	✓	✓	
MW-5-10	8/29	1000	✓		✓			7		✓		✓	✓				✓	✓	✓	✓	✓
MW-5-13	8/29	1005	✓		✓			7		✓		✓	✓				✓	✓	✓	✓	✓
MW-5-19	8/29	1055	✓		✓			7		✓		✓	✓				✓	✓	✓	✓	✓
MW-6-8	8/29	1430	✓		✓			7		✓		✓	✓				✓	✓	✓	✓	✓
MW-6-13	8/29	1450	✓		✓			7		✓		✓	✓				✓	✓	✓	✓	✓
DUP-082913	8/29	1520	✓		✓			7		✓		✓	✓				✓	✓	✓	✓	✓
MW-6-19	8/29	1530	✓		✓			7		✓		✓	✓				✓	✓	✓	✓	✓
Rinsate - 082913	8/29	1645	✓			✓		12		✓		✓	✓				✓	✓	✓	✓	
MW-7-11	8/29	1820	✓		✓			7		✓		✓	✓				✓	✓	✓	✓	✓
MW-7-19	8/29	1845	✓		✓			7		✓		✓	✓				✓	✓	✓	✓	✓

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

Please Run Soil/H2O samples with & without silica gel.

WA-VPH & WA-EPH added to MW-5-10 & MW-6-8 per R. Shropshire. SMP 8/16/13

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
	8/30	1130			
Relinquished by	Date	Time	Received by	Date	Time

Relinquished by Commerical Carrier: UPS ✓ FedEx ____ Other ____

Received by: Date 8/31/13 Time 850

Temperature Upon Receipt 0.7-3.0 °C

Custody Seals Intact? Yes No

9

eurofins | Lancaster Laboratories Environmental

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

October 07, 2013

Project: 93883

Submittal Date: 09/24/2013
Group Number: 1421149
PO Number: 0015119898
Release Number: SHRILL HOPKINS
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
QA Water	7209719
MW-5 Grab Groundwater	7209720
MW-6 Grab Groundwater	7209721
MW-7 Grab Groundwater	7209722

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

ELECTRONIC COPY TO	Gettler-Ryan Inc.	Attn: Gettler Ryan
ELECTRONIC COPY TO	SAIC	Attn: Jamalyn Green
ELECTRONIC COPY TO	SAIC	Attn: Russ Shropshire

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: QA Water
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7209719
LL Group # 1421149
Account # 11260

Project Name: 93883

Collected: 09/21/2013

Submitted: 09/24/2013 09:15
Reported: 10/07/2013 10:33

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYYQA

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**	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	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. C259

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
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	F132734AA	09/30/2013 17:59	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132734AA	09/30/2013 17:59	Brett W Kenyon	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13273B20A	10/01/2013 12:14	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13273B20A	10/01/2013 12:14	Marie D Beamenderfer	1

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7209720
LL Group # 1421149
Account # 11260

Project Name: 93883

Collected: 09/21/2013 09:30 by JP

Submitted: 09/24/2013 09:15
Reported: 10/07/2013 10:33

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY05

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	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.031	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		ug/l	ug/l	

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7209720
LL Group # 1421149
Account # 11260

Project Name: 93883

Collected: 09/21/2013 09:30 by JP

Submitted: 09/24/2013 09:15
Reported: 10/07/2013 10:33

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0094	1
Pesticides/PCBs	**SW-846 8082**		**ug/l**	**ug/l**	
10227	PCB-1016	12674-11-2	N.D.	0.082	1
10227	PCB-1221	11104-28-2	N.D.	0.082	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.082	1
10227	PCB-1248	12672-29-6	N.D.	0.082	1
10227	PCB-1254	11097-69-1	N.D.	0.082	1
10227	PCB-1260	11096-82-5	N.D.	0.12	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(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.				
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**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	N.D.	1.6	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.5	1
07072	Zinc	7440-66-6	3.5	2.0	1

General Sample Comments

State of Washington Lab Certification No. C259
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-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7209720
LL Group # 1421149
Account # 11260

Project Name: 93883

Collected: 09/21/2013 09:30 by JP

Submitted: 09/24/2013 09:15
Reported: 10/07/2013 10:33

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W132701AA	09/27/2013 08:49	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132701AA	09/27/2013 08:49	Christopher G Torres	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13268WAJ026	10/01/2013 04:48	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13268WAJ026	09/26/2013 09:10	Anna E Stager	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13268B20A	09/26/2013 19:37	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13268B20A	09/26/2013 19:37	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	132710014A	10/01/2013 17:36	Clinton M Wilson	1
10227	PCBs in Water 8082	SW-846 8082	1	132690007A	09/27/2013 14:38	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	132690007A	09/26/2013 16:00	Seth A Farrier	1
07786	EDB Extraction	SW-846 8011	1	132710014A	09/30/2013 15:00	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	132730021A	10/01/2013 18:11	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132730020A	10/01/2013 23:05	Glorines Suarez-Rivera	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132730020A	10/01/2013 03:00	Sherry L Morrow	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132730021A	10/01/2013 03:00	Sherry L Morrow	1
07049	Cadmium	SW-846 6010B	1	132681848009	10/01/2013 07:45	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132681848009	10/01/2013 07:45	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132681848009	10/01/2013 07:45	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132681848009	10/01/2013 07:45	Tara L Snyder	1
07072	Zinc	SW-846 6010B	1	132681848009	10/01/2013 07:45	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132681848009	09/26/2013 10:11	James L Mertz	1

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7209721
LL Group # 1421149
Account # 11260

Project Name: 93883

Collected: 09/21/2013 08:26 by JP

Submitted: 09/24/2013 09:15
Reported: 10/07/2013 10:33

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY06

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	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	0.036	0.031	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		ug/l	ug/l	

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7209721
LL Group # 1421149
Account # 11260

Project Name: 93883

Collected: 09/21/2013 08:26 by JP

Submitted: 09/24/2013 09:15
Reported: 10/07/2013 10:33

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
Pesticides/PCBs	**SW-846 8082**		**ug/l**	**ug/l**	
10227	PCB-1016	12674-11-2	N.D.	0.082	1
10227	PCB-1221	11104-28-2	N.D.	0.082	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.082	1
10227	PCB-1248	12672-29-6	N.D.	0.082	1
10227	PCB-1254	11097-69-1	N.D.	0.082	1
10227	PCB-1260	11096-82-5	N.D.	0.12	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(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.				
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**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	N.D.	1.6	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.5	1
07072	Zinc	7440-66-6	N.D.	2.0	1

General Sample Comments

State of Washington Lab Certification No. C259
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 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7209721
LL Group # 1421149
Account # 11260

Project Name: 93883

Collected: 09/21/2013 08:26 by JP

Submitted: 09/24/2013 09:15
Reported: 10/07/2013 10:33

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W132701AA	09/27/2013 09:13	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132701AA	09/27/2013 09:13	Christopher G Torres	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13268WAJ026	10/01/2013 05:17	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13268WAJ026	09/26/2013 09:10	Anna E Stager	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13268B20A	09/26/2013 20:03	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13268B20A	09/26/2013 20:03	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	132710014A	10/01/2013 17:52	Clinton M Wilson	1
10227	PCBs in Water 8082	SW-846 8082	1	132690007A	09/27/2013 14:56	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	132690007A	09/26/2013 16:00	Seth A Farrier	1
07786	EDB Extraction	SW-846 8011	1	132710014A	09/30/2013 15:00	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	132730021A	10/01/2013 19:02	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132730020A	10/01/2013 23:27	Glorines Suarez-Rivera	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132730020A	10/01/2013 03:00	Sherry L Morrow	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132730021A	10/01/2013 03:00	Sherry L Morrow	1
07049	Cadmium	SW-846 6010B	1	132681848009	10/01/2013 07:48	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132681848009	10/01/2013 07:48	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132681848009	10/01/2013 07:48	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132681848009	10/01/2013 07:48	Tara L Snyder	1
07072	Zinc	SW-846 6010B	1	132681848009	10/01/2013 07:48	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132681848009	09/26/2013 10:11	James L Mertz	1

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7209722
LL Group # 1421149
Account # 11260

Project Name: 93883

Collected: 09/21/2013 10:31 by JP

Submitted: 09/24/2013 09:15
Reported: 10/07/2013 10:33

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY07

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**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	0.11	0.030	1

The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and internal standard areas are again

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7209722
LL Group # 1421149
Account # 11260

Project Name: 93883

Collected: 09/21/2013 10:31 by JP

Submitted: 09/24/2013 09:15
Reported: 10/07/2013 10:33

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	outside of the QC acceptance limits, indicating a matrix effect. The reported data is from the initial analysis of the sample.				
	The recovery for the sample 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
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0095	1
Pesticides/PCBs	**SW-846 8082**		**ug/l**	**ug/l**	
10227	PCB-1016	12674-11-2	N.D.	0.082	1
10227	PCB-1221	11104-28-2	N.D.	0.082	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.082	1
10227	PCB-1248	12672-29-6	N.D.	0.082	1
10227	PCB-1254	11097-69-1	N.D.	0.082	1
10227	PCB-1260	11096-82-5	N.D.	0.12	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(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.				
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**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	N.D.	1.6	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.5	1
07072	Zinc	7440-66-6	N.D.	2.0	1

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7209722
LL Group # 1421149
Account # 11260

Project Name: 93883

Collected: 09/21/2013 10:31 by JP

Submitted: 09/24/2013 09:15
Reported: 10/07/2013 10:33

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY07

General Sample Comments

State of Washington Lab Certification No. C259
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
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W132701AA	09/27/2013 09:37	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132701AA	09/27/2013 09:37	Christopher G Torres	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13268WAJ026	10/01/2013 05:47	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13268WAJ026	09/26/2013 09:10	Anna E Stager	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13268B20A	09/26/2013 20:28	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13268B20A	09/26/2013 20:28	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	132710014A	10/01/2013 18:08	Clinton M Wilson	1
10227	PCBs in Water 8082	SW-846 8082	1	132690007A	09/27/2013 15:15	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	132690007A	09/26/2013 16:00	Seth A Farrier	1
07786	EDB Extraction	SW-846 8011	1	132710014A	09/30/2013 15:00	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	132730021A	10/01/2013 19:23	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	132730020A	10/01/2013 23:49	Glorines Suarez-Rivera	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	132730020A	10/01/2013 03:00	Sherry L Morrow	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	132730021A	10/01/2013 03:00	Sherry L Morrow	1
07049	Cadmium	SW-846 6010B	1	132681848009	10/01/2013 07:52	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132681848009	10/01/2013 07:52	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132681848009	10/01/2013 07:52	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132681848009	10/01/2013 07:52	Tara L Snyder	1
07072	Zinc	SW-846 6010B	1	132681848009	10/01/2013 07:52	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132681848009	09/26/2013 10:11	James L Mertz	1

Quality Control Summary

Client Name: Chevron Group Number: 1421149
Reported: 10/07/13 at 10:33 AM

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: F132734AA	Sample number(s): 7209719							
Benzene	N.D.	0.5	ug/l	90		78-120		
Ethylbenzene	N.D.	0.5	ug/l	90		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	95		75-120		
Toluene	N.D.	0.5	ug/l	90		80-120		
Xylene (Total)	N.D.	0.5	ug/l	89		80-120		
Batch number: W132701AA	Sample number(s): 7209720-7209722							
Benzene	N.D.	0.5	ug/l	94		78-120		
Bromodichloromethane	N.D.	1.	ug/l	87		73-120		
Bromoform	N.D.	1.	ug/l	81		61-120		
Bromomethane	N.D.	1.	ug/l	67		51-120		
Carbon Tetrachloride	N.D.	1.	ug/l	92		74-130		
Chlorobenzene	N.D.	0.8	ug/l	106		80-120		
Chloroethane	N.D.	1.	ug/l	77		45-120		
Chloroform	N.D.	0.8	ug/l	100		77-122		
Chloromethane	N.D.	1.	ug/l	81		55-120		
Dibromochloromethane	N.D.	1.	ug/l	90		72-120		
1,2-Dichlorobenzene	N.D.	1.	ug/l	105		80-120		
1,3-Dichlorobenzene	N.D.	1.	ug/l	104		80-120		
1,4-Dichlorobenzene	N.D.	1.	ug/l	105		80-120		
1,1-Dichloroethane	N.D.	1.	ug/l	93		80-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	105		71-130		
1,1-Dichloroethene	N.D.	0.8	ug/l	89		76-124		
cis-1,2-Dichloroethene	N.D.	0.8	ug/l	92		80-120		
trans-1,2-Dichloroethene	N.D.	0.8	ug/l	95		80-120		
1,2-Dichloropropane	N.D.	1.	ug/l	98		80-120		
cis-1,3-Dichloropropene	N.D.	1.	ug/l	89		80-120		
trans-1,3-Dichloropropene	N.D.	1.	ug/l	91		69-120		
Ethylbenzene	N.D.	0.5	ug/l	100		79-120		
Freon 113	N.D.	2.	ug/l	87		63-133		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	94		75-120		
Methylene Chloride	N.D.	2.	ug/l	94		80-120		
1,1,2,2-Tetrachloroethane	N.D.	1.	ug/l	99		70-120		
Tetrachloroethene	N.D.	0.8	ug/l	105		80-120		
Toluene	N.D.	0.5	ug/l	101		80-120		
1,1,1-Trichloroethane	N.D.	0.8	ug/l	89		66-126		
1,1,2-Trichloroethane	N.D.	0.8	ug/l	96		80-120		
Trichloroethene	N.D.	1.	ug/l	101		80-120		
Trichlorofluoromethane	N.D.	2.	ug/l	91		65-130		
Vinyl Chloride	N.D.	1.	ug/l	86		63-120		
m+p-Xylene	N.D.	0.5	ug/l	100		80-120		
o-Xylene	N.D.	0.5	ug/l	100		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: 1421149
Reported: 10/07/13 at 10:33 AM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13268WAJ026	Sample number(s): 7209720-7209722							
Benzo(a)anthracene	N.D.	0.010	ug/l	97	91	73-127	6	30
Benzo(a)pyrene	N.D.	0.010	ug/l	102	85	72-120	18	30
Benzo(b)fluoranthene	N.D.	0.010	ug/l	103	93	79-136	10	30
Benzo(k)fluoranthene	N.D.	0.010	ug/l	110	88	73-131	23	30
Chrysene	N.D.	0.010	ug/l	102	89	76-125	14	30
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	92	72	58-131	25	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	91	70	62-130	25	30
1-Methylnaphthalene	N.D.	0.010	ug/l	108	102	80-126	6	30
2-Methylnaphthalene	N.D.	0.010	ug/l	106	99	81-124	7	30
Naphthalene	N.D.	0.030	ug/l	104	98	75-120	6	30
Batch number: 13268B20A	Sample number(s): 7209720-7209722							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	103	105	75-135	2	30
Batch number: 13273B20A	Sample number(s): 7209719							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	102	101	75-135	1	30
Batch number: 132710014A	Sample number(s): 7209720-7209722							
Ethylene dibromide	N.D.	0.010	ug/l	99	102	60-140	3	20
Batch number: 132690007A	Sample number(s): 7209720-7209722							
PCB-1016	N.D.	0.080	ug/l	56*	81	67-117	36*	30
PCB-1221	N.D.	0.080	ug/l					
PCB-1232	N.D.	0.16	ug/l					
PCB-1242	N.D.	0.080	ug/l					
PCB-1248	N.D.	0.080	ug/l					
PCB-1254	N.D.	0.080	ug/l					
PCB-1260	N.D.	0.12	ug/l	74	86	67-128	15	30
Batch number: 132730021A	Sample number(s): 7209720-7209722							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	87	88	50-113	1	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					
Batch number: 132730020A	Sample number(s): 7209720-7209722							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	62	64	32-117	4	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 132681848009	Sample number(s): 7209720-7209722							
Cadmium	N.D.	0.76	ug/l	105		90-112		
Chromium	N.D.	1.6	ug/l	103		90-110		
Lead	N.D.	4.7	ug/l	109		88-110		
Nickel	N.D.	1.5	ug/l	106		90-111		
Zinc	N.D.	2.0	ug/l	102		90-110		

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: F132734AA	Sample number(s): 7209719 UNSPK: P209871								

*- 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: 1421149
Reported: 10/07/13 at 10:33 AM

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
Benzene	93	94	72-134	1	30				
Ethylbenzene	93	94	71-134	1	30				
Methyl Tertiary Butyl Ether	93	96	72-126	2	30				
Toluene	94	96	80-125	2	30				
Xylene (Total)	92	94	79-125	2	30				
Batch number: W132701AA	Sample number(s): 7209720-7209722 UNSPK: P206991								
Benzene	95	99	72-134	4	30				
Bromodichloromethane	86	91	38-137	5	30				
Bromoform	75	78	48-118	4	30				
Bromomethane	72	74	47-129	3	30				
Carbon Tetrachloride	98	105	72-135	7	30				
Chlorobenzene	104	108	87-124	4	30				
Chloroethane	83	85	51-145	2	30				
Chloroform	99	104	81-134	5	30				
Chloromethane	86	88	50-131	2	30				
Dibromochloromethane	88	92	74-116	4	30				
1,2-Dichlorobenzene	102	107	84-119	4	30				
1,3-Dichlorobenzene	102	106	86-121	5	30				
1,4-Dichlorobenzene	101	105	85-121	4	30				
1,1-Dichloroethane	94	96	84-129	2	30				
1,2-Dichloroethane	101	104	68-131	3	30				
1,1-Dichloroethene	93	95	75-155	1	30				
cis-1,2-Dichloroethene	94	97	80-141	3	30				
trans-1,2-Dichloroethene	97	100	81-142	4	30				
1,2-Dichloropropane	95	100	83-124	5	30				
cis-1,3-Dichloropropene	87	92	70-116	5	30				
trans-1,3-Dichloropropene	86	89	74-119	4	30				
Ethylbenzene	103	106	71-134	3	30				
Freon 113	100	105	89-148	4	30				
Methyl Tertiary Butyl Ether	88	93	72-126	5	30				
Methylene Chloride	95	98	78-133	4	30				
1,1,2,2-Tetrachloroethane	92	94	72-128	3	30				
Tetrachloroethene	110	110	80-128	1	30				
Toluene	103	106	80-125	3	30				
1,1,1-Trichloroethane	95	98	69-140	4	30				
1,1,2-Trichloroethane	94	96	71-141	1	30				
Trichloroethene	104	106	88-133	2	30				
Trichlorofluoromethane	106	111	64-146	5	30				
Vinyl Chloride	95	95	66-133	0	30				
m+p-Xylene	102	106	79-125	3	30				
o-Xylene	100	103	79-125	3	30				
Batch number: 132710014A	Sample number(s): 7209720-7209722 UNSPK: P211676 BKG: P211677								
Ethylene dibromide	93		60-140			N.D.	N.D.	0 (1)	30
Batch number: 132681848009	Sample number(s): 7209720-7209722 UNSPK: P206792 BKG: P206792								
Cadmium	103	104	83-116	0	20	N.D.	N.D.	0 (1)	20
Chromium	104	104	76-120	0	20	2.6	2.7	3 (1)	20
Lead	105	106	75-125	1	20	N.D.	N.D.	0 (1)	20
Nickel	103	103	86-115	0	20	N.D.	N.D.	0 (1)	20
Zinc	103	103	85-117	0	20	N.D.	2.2	200* (1)	20

*- 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: 1421149
Reported: 10/07/13 at 10:33 AM

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

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: UST VOCs by 8260B - Water
Batch number: F132734AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7209719	100	97	95	93
Blank	99	98	96	93
LCS	98	99	96	96
MS	98	99	95	97
MSD	100	94	97	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Ext. Water Master w/GRO
Batch number: W132701AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7209720	96	98	101	93
7209721	96	101	102	93
7209722	95	100	101	92
Blank	96	100	102	93
LCS	98	100	103	96
MS	97	98	103	96
MSD	99	100	103	96
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs in waters by SIM
Batch number: 13268WAJ026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7209720	101	95	101
7209721	98	97	99
7209722	180*	172*	186*
Blank	95	93	101
LCS	95	98	103
LCSD	90	80	97
Limits:	44-137	62-141	51-136

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 13268B20A

*- 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: 1421149
Reported: 10/07/13 at 10:33 AM

Surrogate Quality Control

	Trifluorotoluene-F
7209720	91
7209721	92
7209722	90
Blank	90
LCS	96
LCSD	96
Limits:	63-135

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 13273B20A

	Trifluorotoluene-F
7209719	90
Blank	90
LCS	95
LCSD	94
Limits:	63-135

Analysis Name: PCBs in Water 8082
Batch number: 132690007A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7209720	84	68
7209721	87	65
7209722	88	56
Blank	89	65
LCS	69	66
LCSD	100	40
Limits:	49-141	36-153

Analysis Name: EDB, DBCP, 1,2,3-TCP 8011
Batch number: 132710014A

	1,1,2,2-Tetrachloroethane
7209720	96
7209721	90
7209722	99
Blank	106
DUP	97
LCS	107
LCSD	106
MS	94
Limits:	46-136

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 132730020A

	Orthoterphenyl
7209720	84

*- 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: 1421149
Reported: 10/07/13 at 10:33 AM

Surrogate Quality Control

7209721	86
7209722	96
Blank	90
LCS	86
LCSD	91
Limits:	50-150

Analysis Name: NWTPH-Dx water
Batch number: 132730021A

	Orthoterphenyl
7209720	112
7209721	114
7209722	112
Blank	111
LCS	121
LCSD	121
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 # 421149 Sample # 7209719-22
Instructions on reverse side correspond with circled numbers.

SCR #: _____

1 Client Information

Facility # ~~SS#9-3883-OML G-R#385894~~ WBS
Site Address ~~1702 East Yakima Avenue, YAKIMA, WA~~
Chevron PM ~~MHO~~ ~~SAICRS~~ Lead Consultant ~~Russell Shropshire~~
Consultant Office Geotler-Ryan, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568
Consultant Project Mgr Deanna L. Harding, (deanna@grinc.com), (925) 551-7444 x180
Consultant Phone # ~~(425)~~ 482-3323 x
Sampler J. Payne

2 Sample Identification

Sample Identification	Collected Date	Collected Time	3 Grab	Composite	4 Matrix: Soil	Water	Oil	Sediment	Ground	Potable	NPDES	Surface	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	EDC/VOC's (8260)	EDB (8011)	cPAH's/Naph's 8270	PCB's 8082 Total Metals (6010)
Q.A	9.21.13		X			X								2	X																	
MW-5	↓	0930	X			X								14	X					X	X	X							X	X	X	X
MW-6		1020	X			X								14	X					X	X	X							X	X	X	X
MW-7		1031	X			X								14	X					X	X	X							X	X	X	X

6 Remarks

Total Metals include: Pb, Cd, Cr, Ni & Zn

- ☐ 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 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
	9.23.13	1600			
Relinquished by	Date	Time	Received by	Date	Time

Relinquished by Commercial Carrier: UPS X FedEx _____ Other _____

Received by _____ Date 9/24/13 Time 915

Temperature Upon Receipt 1.1-3.0 °C

Custody Seals Intact? (Yes) No

9

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 11260 — For Eurofins Lancaster Laboratories use only — Group # 1421149 — Sample # 7209719-22

Instructions on reverse side correspond with circled numbers.

① Client Information

- Facility #: ~~BC#9-3885-CML G-R#385894~~ WBS
- Site Address: ~~1702 East Yakima Avenue, YAKIMA, WA~~
- Chevron PM: ~~MHO~~ ~~SAICRS~~ Lead Consultant: ~~Russell Shropshire~~
- Consultant/Office: ~~Gettler-Ryan, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568~~
- Consultant Project Mgr.: ~~Deanna L. Harding, (deanna@grinc.com), (925) 551-7444 x180~~
- Consultant Phone #: (425) 482-3323 x
- Sampler: J. Payne

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

⑤ Analyses Requested

② Sample Identification	Collected Date	Collected Time	③ Grab	Composite	Soil	Water	Oil	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	EDC/HVOC'S (8260)	EDB (8011)	cPAH'S/NAPH'S 8270	PCB'S 8082 / TOTAL METALS 6010
QA	9.21.13		X			X		2	X			X								
MW-5	↓	0930	X			X		14	X			X	X	X			X	X	X	X
MW-6	↓	0026	X			X		14	X			X	X	X			X	X	X	X
MW-7	↓	1031	X			X		14	X			X	X	X			X	X	X	X

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

Total Metals include: Pb, Cd, Cr, Ni & Zn

AMEND COC: ADD Gx TO QA SAMPLES. HVOC'S NEED TO BE ADDED TO SAMPLE POINTS MW-5, MW-6 & MW-7

MWC 09-24-13

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]	9.23.13	1600			

⑨ Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____ — Received by: ____ Date ____ Time ____

Temperature Upon Receipt ______ °C — Custody Seals Intact? Yes No

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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

January 09, 2014

Project: 93883

Submittal Date: 12/24/2013
Group Number: 1442941
PO Number: 0015119898
Release Number: SHRILL HOPKINS
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
QA Water	7322740
MW-5 Grab Groundwater	7322741
MW-6 Grab Groundwater	7322742
MW-7 Grab Groundwater	7322743

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

ELECTRONIC COPY TO	Gettler-Ryan Inc.	Attn: Gettler Ryan
ELECTRONIC COPY TO	SAIC	Attn: Jamalyn Green
ELECTRONIC COPY TO	SAIC	Attn: Russ Shropshire

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: QA Water
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7322740
LL Group # 1442941
Account # 11260

Project Name: 93883

Collected: 12/23/2013

Submitted: 12/24/2013 10:30
Reported: 01/09/2014 09:02

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

YAYQA

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**	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	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
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	Z140021AA	01/02/2014 18:33	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z140021AA	01/02/2014 18:33	Brett W Kenyon	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13361A07A	12/30/2013 15:39	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13361A07A	12/30/2013 15:39	Catherine J Schwarz	1

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7322741
LL Group # 1442941
Account # 11260

Project Name: 93883

Collected: 12/23/2013 11:03 by JP

Submitted: 12/24/2013 10:30
Reported: 01/09/2014 09:02

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

YAYM5

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	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	0.033	0.030	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		ug/l	ug/l	

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7322741
LL Group # 1442941
Account # 11260

Project Name: 93883

Collected: 12/23/2013 11:03 by JP

Submitted: 12/24/2013 10:30
Reported: 01/09/2014 09:02

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

YAYM5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
Pesticides/PCBs	**SW-846 8082**		**ug/l**	**ug/l**	
10227	PCB-1016	12674-11-2	N.D.	0.081	1
10227	PCB-1221	11104-28-2	N.D.	0.081	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.081	1
10227	PCB-1248	12672-29-6	N.D.	0.081	1
10227	PCB-1254	11097-69-1	N.D.	0.081	1
10227	PCB-1260	11096-82-5	N.D.	0.12	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%.

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	N.D.	1.6	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.5	1
07072	Zinc	7440-66-6	5.0	2.0	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
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W140031AA	01/03/2014 14:41	Chelsea B Stong	1

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7322741
LL Group # 1442941
Account # 11260

Project Name: 93883

Collected: 12/23/2013 11:03 by JP

Submitted: 12/24/2013 10:30
Reported: 01/09/2014 09:02

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

YAYM5

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W140031AA	01/03/2014 14:41	Chelsea B Stong	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13359WAE026	01/07/2014 08:39	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13359WAE026	12/26/2013 19:30	Nicholas W Shroyer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13358B07A	12/27/2013 18:10	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13358B07A	12/27/2013 18:10	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	133650014A	01/03/2014 23:38	Jamie L Brillhart	1
10227	PCBs in Water 8082	SW-846 8082	1	133590011A	12/31/2013 04:29	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	133590011A	12/27/2013 02:30	Sherry L Morrow	1
07786	EDB Extraction	SW-846 8011	1	133650014A	01/02/2014 12:30	William H Saadeh	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	140020011A	01/04/2014 11:42	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	140020010A	01/07/2014 09:53	Glorines Suarez-Rivera	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	140020010A	01/03/2014 10:00	Anna E Stager	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	140020011A	01/03/2014 10:00	Anna E Stager	1
07049	Cadmium	SW-846 6010B	1	140021848001	01/07/2014 19:58	Maria A Orrs	1
07051	Chromium	SW-846 6010B	1	140021848001	01/07/2014 19:58	Maria A Orrs	1
07055	Lead	SW-846 6010B	1	140021848001	01/07/2014 19:58	Maria A Orrs	1
07061	Nickel	SW-846 6010B	1	140021848001	01/07/2014 19:58	Maria A Orrs	1
07072	Zinc	SW-846 6010B	1	140021848001	01/07/2014 19:58	Maria A Orrs	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	140021848001	01/07/2014 10:10	James L Mertz	1

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7322742
LL Group # 1442941
Account # 11260

Project Name: 93883

Collected: 12/23/2013 09:50 by JP

Submitted: 12/24/2013 10:30
Reported: 01/09/2014 09:02

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

YAYM6

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**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7322742
LL Group # 1442941
Account # 11260

Project Name: 93883

Collected: 12/23/2013 09:50 by JP

Submitted: 12/24/2013 10:30
Reported: 01/09/2014 09:02

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

YAYM6

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
Pesticides/PCBs	**SW-846 8082**		**ug/l**	**ug/l**	
10227	PCB-1016	12674-11-2	N.D.	0.082	1
10227	PCB-1221	11104-28-2	N.D.	0.082	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.082	1
10227	PCB-1248	12672-29-6	N.D.	0.082	1
10227	PCB-1254	11097-69-1	N.D.	0.082	1
10227	PCB-1260	11096-82-5	N.D.	0.12	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.	68	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.	68	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	2.3	1.6	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.5	1
07072	Zinc	7440-66-6	5.1	2.0	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
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W140031AA	01/03/2014 15:52	Chelsea B Stong	1

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7322742
LL Group # 1442941
Account # 11260

Project Name: 93883

Collected: 12/23/2013 09:50 by JP

Submitted: 12/24/2013 10:30
Reported: 01/09/2014 09:02

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

YAYM6

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W140031AA	01/03/2014 15:52	Chelsea B Stong	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13359WAE026	01/07/2014 09:07	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13359WAE026	12/26/2013 19:30	Nicholas W Shroyer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13358B07A	12/27/2013 18:36	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13358B07A	12/27/2013 18:36	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	133650014A	01/03/2014 23:54	Jamie L Brillhart	1
10227	PCBs in Water 8082	SW-846 8082	1	133590011A	12/31/2013 04:40	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	133590011A	12/27/2013 02:30	Sherry L Morrow	1
07786	EDB Extraction	SW-846 8011	1	133650014A	01/02/2014 12:30	William H Saadeh	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	140020011A	01/04/2014 12:04	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	140020010A	01/07/2014 10:15	Glorines Suarez-Rivera	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	140020010A	01/03/2014 10:00	Anna E Stager	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	140020011A	01/03/2014 10:00	Anna E Stager	1
07049	Cadmium	SW-846 6010B	1	140021848002	01/06/2014 19:21	Maria A Orrs	1
07051	Chromium	SW-846 6010B	1	140021848002	01/06/2014 19:21	Maria A Orrs	1
07055	Lead	SW-846 6010B	1	140021848002	01/06/2014 19:21	Maria A Orrs	1
07061	Nickel	SW-846 6010B	1	140021848002	01/06/2014 19:21	Maria A Orrs	1
07072	Zinc	SW-846 6010B	1	140021848002	01/06/2014 19:21	Maria A Orrs	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	140021848002	01/06/2014 01:30	Annamaria Kuhns	1

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7322743
LL Group # 1442941
Account # 11260

Project Name: 93883

Collected: 12/23/2013 12:01 by JP

Submitted: 12/24/2013 10:30
Reported: 01/09/2014 09:02

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

YAYM7

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	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	1
10335	Dibromochloromethane	124-48-1	N.D.	1	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	0.047	0.030	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7322743
LL Group # 1442941
Account # 11260

Project Name: 93883

Collected: 12/23/2013 12:01 by JP

Submitted: 12/24/2013 10:30
Reported: 01/09/2014 09:02

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

YAYM7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	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 with the exception of: target compounds were not detected in the re-extraction.				
GC Volatiles	**ECY 97-602 NWTPH-Gx**		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		ug/l	ug/l	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
Pesticides/PCBs	**SW-846 8082**		ug/l	ug/l	
10227	PCB-1016	12674-11-2	N.D.	0.081	1
10227	PCB-1221	11104-28-2	N.D.	0.081	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.081	1
10227	PCB-1248	12672-29-6	N.D.	0.081	1
10227	PCB-1254	11097-69-1	N.D.	0.081	1
10227	PCB-1260	11096-82-5	N.D.	0.12	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.	68	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.	68	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		ug/l	ug/l	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	N.D.	1.6	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.5	1
07072	Zinc	7440-66-6	3.6	2.0	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.

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7322743
LL Group # 1442941
Account # 11260

Project Name: 93883

Collected: 12/23/2013 12:01 by JP

Submitted: 12/24/2013 10:30
Reported: 01/09/2014 09:02

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

YAYM7

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W140031AA	01/03/2014 16:16	Chelsea B Stong	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W140031AA	01/03/2014 16:16	Chelsea B Stong	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13359WAE026	01/07/2014 09:35	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13359WAE026	12/26/2013 19:30	Nicholas W Shroyer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13358B07A	12/27/2013 19:26	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13358B07A	12/27/2013 19:26	Marie D Beamenderfer	1
10398	EDB by 8011	SW-846 8011	1	133650014A	01/04/2014 00:40	Jamie L Brillhart	1
10227	PCBs in Water 8082	SW-846 8082	1	133590011A	12/31/2013 04:52	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	133590011A	12/27/2013 02:30	Sherry L Morrow	1
07786	EDB Extraction	SW-846 8011	1	133650014A	01/02/2014 12:30	William H Saadeh	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	140020011A	01/04/2014 12:27	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	140020010A	01/07/2014 10:38	Glorines Suarez-Rivera	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	140020010A	01/03/2014 10:00	Anna E Stager	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	140020011A	01/03/2014 10:00	Anna E Stager	1
07049	Cadmium	SW-846 6010B	1	140021848002	01/06/2014 19:24	Maria A Orrs	1
07051	Chromium	SW-846 6010B	1	140021848002	01/06/2014 19:24	Maria A Orrs	1
07055	Lead	SW-846 6010B	1	140021848002	01/06/2014 19:24	Maria A Orrs	1
07061	Nickel	SW-846 6010B	1	140021848002	01/06/2014 19:24	Maria A Orrs	1
07072	Zinc	SW-846 6010B	1	140021848002	01/06/2014 19:24	Maria A Orrs	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	140021848002	01/06/2014 01:30	Annamaria Kuhns	1

Quality Control Summary

Client Name: Chevron Group Number: 1442941
Reported: 01/09/14 at 09:02 AM

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: W140031AA	Sample number(s): 7322741-7322743							
Benzene	N.D.	0.5	ug/l	111		78-120		
Bromodichloromethane	N.D.	1.	ug/l	103		73-120		
Bromoform	N.D.	1.	ug/l	91		61-120		
Bromomethane	N.D.	1.	ug/l	90		51-120		
Carbon Tetrachloride	N.D.	1.	ug/l	110		74-130		
Chlorobenzene	N.D.	0.8	ug/l	114		80-120		
Chloroethane	N.D.	1.	ug/l	98		45-120		
Chloroform	N.D.	0.8	ug/l	113		77-122		
Chloromethane	N.D.	1.	ug/l	106		55-120		
Dibromochloromethane	N.D.	1.	ug/l	95		72-120		
1,2-Dichlorobenzene	N.D.	1.	ug/l	111		80-120		
1,3-Dichlorobenzene	N.D.	1.	ug/l	109		80-120		
1,4-Dichlorobenzene	N.D.	1.	ug/l	109		80-120		
1,1-Dichloroethane	N.D.	1.	ug/l	112		80-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	116		71-130		
1,1-Dichloroethene	N.D.	0.8	ug/l	108		76-124		
cis-1,2-Dichloroethene	N.D.	0.8	ug/l	111		80-120		
trans-1,2-Dichloroethene	N.D.	0.8	ug/l	114		80-120		
1,2-Dichloropropane	N.D.	1.	ug/l	112		80-120		
cis-1,3-Dichloropropene	N.D.	1.	ug/l	103		80-120		
trans-1,3-Dichloropropene	N.D.	1.	ug/l	96		69-120		
Ethylbenzene	N.D.	0.5	ug/l	111		79-120		
Freon 113	N.D.	2.	ug/l	113		63-133		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	109		75-120		
Methylene Chloride	N.D.	2.	ug/l	113		80-120		
1,1,2,2-Tetrachloroethane	N.D.	1.	ug/l	103		70-120		
Tetrachloroethene	N.D.	0.8	ug/l	109		80-120		
Toluene	N.D.	0.5	ug/l	113		80-120		
1,1,1-Trichloroethane	N.D.	0.8	ug/l	103		66-126		
1,1,2-Trichloroethane	N.D.	0.8	ug/l	109		80-120		
Trichloroethene	N.D.	1.	ug/l	111		80-120		
Trichlorofluoromethane	N.D.	2.	ug/l	111		65-130		
Vinyl Chloride	N.D.	1.	ug/l	110		63-120		
m+p-Xylene	N.D.	0.5	ug/l	110		80-120		
o-Xylene	N.D.	0.5	ug/l	109		80-120		
Batch number: Z140021AA	Sample number(s): 7322740							
Benzene	N.D.	0.5	ug/l	98		78-120		
Ethylbenzene	N.D.	0.5	ug/l	96		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	97		75-120		
Toluene	N.D.	0.5	ug/l	103		80-120		
Xylene (Total)	N.D.	0.5	ug/l	100		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: 1442941
Reported: 01/09/14 at 09:02 AM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13359WAE026	Sample number(s): 7322741-7322743							
Benzo(a)anthracene	N.D.	0.010	ug/l	97		73-127		
Benzo(a)pyrene	N.D.	0.010	ug/l	97		72-120		
Benzo(b)fluoranthene	N.D.	0.010	ug/l	104		79-136		
Benzo(k)fluoranthene	N.D.	0.010	ug/l	97		73-131		
Chrysene	N.D.	0.010	ug/l	96		76-125		
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	78		58-131		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	86		62-130		
1-Methylnaphthalene	N.D.	0.010	ug/l	105		80-126		
2-Methylnaphthalene	N.D.	0.010	ug/l	103		81-124		
Naphthalene	N.D.	0.030	ug/l	102		75-120		
Batch number: 13358B07A	Sample number(s): 7322741-7322743							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	102	106	75-135	4	30
Batch number: 13361A07A	Sample number(s): 7322740							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	114	104	75-135	9	30
Batch number: 133650014A	Sample number(s): 7322741-7322743							
Ethylene dibromide	N.D.	0.010	ug/l	113	105	60-140	7	20
Batch number: 133590011A	Sample number(s): 7322741-7322743							
PCB-1016	N.D.	0.080	ug/l	90		67-117		
PCB-1221	N.D.	0.080	ug/l					
PCB-1232	N.D.	0.16	ug/l					
PCB-1242	N.D.	0.080	ug/l					
PCB-1248	N.D.	0.080	ug/l					
PCB-1254	N.D.	0.080	ug/l					
PCB-1260	N.D.	0.12	ug/l	94		67-128		
Batch number: 140020011A	Sample number(s): 7322741-7322743							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	82	85	50-113	3	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					
Batch number: 140020010A	Sample number(s): 7322741-7322743							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	71	70	32-117	1	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 140021848001	Sample number(s): 7322741							
Cadmium	N.D.	0.76	ug/l	101		90-112		
Chromium	N.D.	1.6	ug/l	103		90-110		
Lead	N.D.	4.7	ug/l	105		88-110		
Nickel	N.D.	1.5	ug/l	105		90-111		
Zinc	N.D.	2.0	ug/l	99		90-110		
Batch number: 140021848002	Sample number(s): 7322742-7322743							
Cadmium	N.D.	0.76	ug/l	105		90-112		
Chromium	N.D.	1.6	ug/l	104		90-110		
Lead	N.D.	4.7	ug/l	110		88-110		
Nickel	N.D.	1.5	ug/l	110		90-111		
Zinc	N.D.	2.0	ug/l	105		90-110		

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.

Quality Control Summary

Client Name: Chevron Group Number: 1442941
Reported: 01/09/14 at 09:02 AM
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: W140031AA	Sample number(s): 7322741-7322743 UNSPK: 7322741								
Benzene	117	117	72-134	0	30				
Bromodichloromethane	102	104	38-137	2	30				
Bromoform	89	90	48-118	1	30				
Bromomethane	98	96	47-129	2	30				
Carbon Tetrachloride	120	120	72-135	0	30				
Chlorobenzene	117	118	87-124	1	30				
Chloroethane	109	102	51-145	7	30				
Chloroform	117	117	81-134	1	30				
Chloromethane	118	113	50-131	5	30				
Dibromochloromethane	95	94	74-116	1	30				
1,2-Dichlorobenzene	111	113	84-119	1	30				
1,3-Dichlorobenzene	115	115	86-121	0	30				
1,4-Dichlorobenzene	114	114	85-121	0	30				
1,1-Dichloroethane	117	116	84-129	1	30				
1,2-Dichloroethane	117	116	68-131	0	30				
1,1-Dichloroethene	117	118	75-155	1	30				
cis-1,2-Dichloroethene	115	116	80-141	0	30				
trans-1,2-Dichloroethene	121	121	81-142	0	30				
1,2-Dichloropropane	116	116	83-124	0	30				
cis-1,3-Dichloropropene	104	106	70-116	2	30				
trans-1,3-Dichloropropene	97	100	74-119	2	30				
Ethylbenzene	116	116	71-134	0	30				
Freon 113	128	127	89-148	1	30				
Methyl Tertiary Butyl Ether	108	109	72-126	1	30				
Methylene Chloride	117	115	78-133	2	30				
1,1,2,2-Tetrachloroethane	100	100	72-128	1	30				
Tetrachloroethene	116	118	80-128	1	30				
Toluene	119	118	80-125	1	30				
1,1,1-Trichloroethane	110	111	69-140	1	30				
1,1,2-Trichloroethane	107	108	71-141	1	30				
Trichloroethene	120	122	88-133	1	30				
Trichlorofluoromethane	130	124	64-146	4	30				
Vinyl Chloride	125	118	66-133	6	30				
m+p-Xylene	116	116	79-125	0	30				
o-Xylene	114	113	79-125	1	30				
Batch number: Z140021AA	Sample number(s): 7322740 UNSPK: P324553								
Benzene	103	100	72-134	2	30				
Ethylbenzene	101	99	71-134	2	30				
Methyl Tertiary Butyl Ether	96	94	72-126	2	30				
Toluene	108	106	80-125	2	30				
Xylene (Total)	106	104	79-125	2	30				
Batch number: 13359WAE026	Sample number(s): 7322741-7322743 UNSPK: P322052								
Benzo(a)anthracene	104	104	37-150	1	30				
Benzo(a)pyrene	96	93	64-123	4	30				
Benzo(b)fluoranthene	104	101	33-152	4	30				
Benzo(k)fluoranthene	96	93	31-142	4	30				
Chrysene	96	94	34-135	3	30				
Dibenz(a,h)anthracene	86	78	17-134	10	30				
Indeno(1,2,3-cd)pyrene	90	83	29-143	9	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: 1442941
Reported: 01/09/14 at 09:02 AM

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
1-Methylnaphthalene	107	107	49-152	1	30				
2-Methylnaphthalene	104	104	51-146	1	30				
Naphthalene	105	105	58-131	1	30				
Batch number: 133650014A	Sample number(s): 7322741-7322743 UNSPK: P324598 BKG: P324599								
Ethylene dibromide	118		60-140			N.D.	N.D.	0 (1)	30
Batch number: 133590011A	Sample number(s): 7322741-7322743 UNSPK: P322662								
PCB-1016	83	71	58-119	14	30				
PCB-1260	75	46	44-131	47*	30				
Batch number: 140021848001	Sample number(s): 7322741 UNSPK: P322135 BKG: P322135								
Cadmium	94	94	83-116	0	20	N.D.	N.D.	0 (1)	20
Chromium	100	99	76-120	1	20	N.D.	N.D.	0 (1)	20
Lead	95	94	75-125	0	20	N.D.	N.D.	0 (1)	20
Nickel	98	97	86-115	0	20	1.8	1.9	7 (1)	20
Zinc	104	103	85-117	0	20	3.4	4.1	21* (1)	20
Batch number: 140021848002	Sample number(s): 7322742-7322743 UNSPK: P324204 BKG: P324204								
Cadmium	104	104	83-116	0	20	N.D.	N.D.	0 (1)	20
Chromium	106	106	76-120	0	20	2.7	3.1	14 (1)	20
Lead	108	109	75-125	1	20	N.D.	N.D.	0 (1)	20
Nickel	109	109	86-115	1	20	1.8	1.8	3 (1)	20
Zinc	104	104	85-117	0	20	9.1	9.0	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 Ext. Water Master w/GRO
Batch number: W140031AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7322741	96	99	99	98
7322742	95	97	100	99
7322743	97	100	99	98
Blank	95	97	101	99
LCS	97	97	101	101
MS	98	99	100	99
MSD	97	99	101	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water
Batch number: Z140021AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7322740	103	100	100	91

*- 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: 1442941
Reported: 01/09/14 at 09:02 AM

Surrogate Quality Control

Blank	102	100	100	92
LCS	101	100	101	100
MS	101	99	101	99
MSD	101	99	100	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs in waters by SIM
Batch number: 13359WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7322741	99	82	103
7322742	93	63	98
7322743	78	48*	86
Blank	95	91	97
LCS	103	96	106
MS	97	95	108
MSD	97	92	106
Limits:	44-137	62-141	51-136

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 13358B07A

	Trifluorotoluene-F
7322741	94
7322742	93
7322743	103
Blank	99
LCS	109
LCSD	107
Limits:	63-135

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 13361A07A

	Trifluorotoluene-F
7322740	89
Blank	102
LCS	112
LCSD	108
Limits:	63-135

Analysis Name: PCBs in Water 8082
Batch number: 133590011A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7322741	101	76
7322742	102	68
7322743	111	79
Blank	105	98
LCS	98	80
MS	95	72

*- 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: 1442941
Reported: 01/09/14 at 09:02 AM

Surrogate Quality Control

MSD	81	35*
Limits:	49-141	36-153

Analysis Name: EDB, DBCP, 1,2,3-TCP 8011
Batch number: 133650014A

	1,1,2,2-Tetrachloroethane
7322741	121
7322742	128
7322743	130
Blank	120
DUP	128
LCS	124
LCSD	121
MS	123
Limits:	46-136

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 140020010A

	Orthoterphenyl
7322741	98
7322742	91
7322743	100
Blank	95
LCS	100
LCSD	97
Limits:	50-150

Analysis Name: NWTPH-Dx water
Batch number: 140020011A

	Orthoterphenyl
7322741	111
7322742	104
7322743	110
Blank	103
LCS	111
LCSD	114
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

For Eurofins Lancaster Laboratories use only
Acct. # 11260 Group # 1442941 Sample # 7322740-43
Instructions on reverse side correspond with circled numbers.

SCR #: _____

(1) Client Information

Facility # SS#9-3883-OML G-R#385894 WBS

Site Address: 1702 East Yakima Avenue, YAKIMA, WA

Chevron PM: MHO 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: J. Payne

(4) Matrix

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

(3) Grab / Composite

(2) Sample Identification

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total Number of Containers
QA	12.23.13		X		2
MW-5		1103	X		14
MW-6		0950	X		14
MW-7	↓	1201	X		14

(5) Analyses Requested

Sample Identification	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 ____	EDC/HVOC's 8260	EDB 8011	cPAH's - NAPHS 8270SIM PAHS 8082	TOTAL METALS 6010
QA	X			X								
MW-5	X			X	X	X			X	X	X	X
MW-6	X			X	X	X			X	X	X	X
MW-7	X			X	X	X			X	X	X	X

(6) Remarks

Total Metals include: Pb, Cd, Cr, Ni & Zn

Dx w/ silica & Dx without silica

☐ 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 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: _____

(9)

	Relinquished by	Date	Time	Received by	Date	Time
		12.23.13	1300			
	Relinquished by	Date	Time	Received by	Date	Time
	Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____			Received by	Date 12/24/13	Time 1030

Temperature Upon Receipt 1.0-2.7 °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 - 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 08, 2014

Project: 93883

Submittal Date: 03/27/2014
Group Number: 1462605
PO Number: 0015119898
Release Number: HOPKINS/HORNE
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
QA Water	7409269
MW-5 Grab Groundwater	7409270
MW-6 Grab Groundwater	7409271
MW-7 Grab Groundwater	7409272

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

ELECTRONIC COPY TO	Gettler-Ryan Inc.	Attn: Gettler Ryan
ELECTRONIC COPY TO	SAIC	Attn: Jamalyn Green
ELECTRONIC COPY TO	SAIC	Attn: Russ Shropshire

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: QA Water
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7409269
LL Group # 1462605
Account # 11260

Project Name: 93883

Collected: 03/26/2014

Submitted: 03/27/2014 09:40
Reported: 04/08/2014 21:41

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYYQA

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**	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	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
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	D140924AA	04/02/2014 22:56	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D140924AA	04/02/2014 22:56	Brett W Kenyon	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14090B53A	03/31/2014 22:05	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14090B53A	03/31/2014 22:05	Marie D Beamenderfer	1

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7409270
LL Group # 1462605
Account # 11260

Project Name: 93883

Collected: 03/26/2014 09:34 by JP

Submitted: 03/27/2014 09:40
Reported: 04/08/2014 21:41

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY05

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	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		ug/l	ug/l	

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7409270
LL Group # 1462605
Account # 11260

Project Name: 93883

Collected: 03/26/2014 09:34 by JP

Submitted: 03/27/2014 09:40
Reported: 04/08/2014 21:41

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		ug/l	ug/l	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
Pesticides/PCBs	**SW-846 8082**		ug/l	ug/l	
10227	PCB-1016	12674-11-2	N.D.	0.081	1
10227	PCB-1221	11104-28-2	N.D.	0.081	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.081	1
10227	PCB-1248	12672-29-6	N.D.	0.081	1
10227	PCB-1254	11097-69-1	N.D.	0.081	1
10227	PCB-1260	11096-82-5	N.D.	0.12	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	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	N.D.	1.6	1
07055	Lead	7439-92-1	5.5	4.7	1
07061	Nickel	7440-02-0	2.6	1.5	1
07072	Zinc	7440-66-6	10.1	2.0	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
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W140921AA	04/02/2014 21:05	Kevin A Sposito	1

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7409270
LL Group # 1462605
Account # 11260

Project Name: 93883

Collected: 03/26/2014 09:34 by JP

Submitted: 03/27/2014 09:40
Reported: 04/08/2014 21:41

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W140921AA	04/02/2014 21:05	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14090WAK026	04/03/2014 19:33	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14090WAK026	04/01/2014 10:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14087A53A	03/31/2014 17:06	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	14087A53A	03/31/2014 17:06	Laura M Krieger	1
10398	EDB by 8011	SW-846 8011	1	140870017A	04/02/2014 00:43	Matthew S Listner	1
10227	PCBs in Water 8082	SW-846 8082	1	140870013A	03/31/2014 00:13	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	140870013A	03/29/2014 23:45	Karen L Beyer	1
07786	EDB Extraction	SW-846 8011	1	140870017A	03/30/2014 16:45	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	140910004A	04/02/2014 20:24	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	140910003A	04/02/2014 23:27	Glorines Suarez-Rivera	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	140910003A	04/01/2014 15:00	Kelli M Barto	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	140910004A	04/01/2014 15:00	Kelli M Barto	1
07049	Cadmium	SW-846 6010B	1	140871848002	04/02/2014 17:12	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	140871848002	04/02/2014 17:12	Eric L Eby	1
07055	Lead	SW-846 6010B	1	140871848002	04/02/2014 17:12	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	140871848002	04/02/2014 17:12	Eric L Eby	1
07072	Zinc	SW-846 6010B	1	140871848002	04/02/2014 17:12	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	140871848002	03/31/2014 09:23	Micaela L Dishong	1

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7409271
LL Group # 1462605
Account # 11260

Project Name: 93883

Collected: 03/26/2014 08:31 by JP

Submitted: 03/27/2014 09:40
Reported: 04/08/2014 21:41

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY06

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**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7409271
LL Group # 1462605
Account # 11260

Project Name: 93883

Collected: 03/26/2014 08:31 by JP

Submitted: 03/27/2014 09:40
Reported: 04/08/2014 21:41

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0095	1
Pesticides/PCBs	**SW-846 8082**		**ug/l**	**ug/l**	
10227	PCB-1016	12674-11-2	N.D.	0.080	1
10227	PCB-1221	11104-28-2	N.D.	0.080	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.080	1
10227	PCB-1248	12672-29-6	N.D.	0.080	1
10227	PCB-1254	11097-69-1	N.D.	0.080	1
10227	PCB-1260	11096-82-5	N.D.	0.12	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%.

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07049	Cadmium	7440-43-9	N.D.	0.76	1
07051	Chromium	7440-47-3	N.D.	1.6	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.5	1
07072	Zinc	7440-66-6	7.2	2.0	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
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W140921AA	04/02/2014 21:29	Kevin A Sposito	1

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7409271
LL Group # 1462605
Account # 11260

Project Name: 93883

Collected: 03/26/2014 08:31 by JP

Submitted: 03/27/2014 09:40
Reported: 04/08/2014 21:41

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W140921AA	04/02/2014 21:29	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14090WAK026	04/03/2014 20:02	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14090WAK026	04/01/2014 10:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14087A53A	03/31/2014 17:33	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	14087A53A	03/31/2014 17:33	Laura M Krieger	1
10398	EDB by 8011	SW-846 8011	1	140870017A	04/02/2014 01:30	Matthew S Listner	1
10227	PCBs in Water 8082	SW-846 8082	1	140870013A	03/31/2014 00:25	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	140870013A	03/29/2014 23:45	Karen L Beyer	1
07786	EDB Extraction	SW-846 8011	1	140870017A	03/30/2014 16:45	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	140910004A	04/02/2014 19:40	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	140910003A	04/02/2014 23:49	Glorines Suarez-Rivera	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	140910003A	04/01/2014 15:00	Kelli M Barto	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	140910004A	04/01/2014 15:00	Kelli M Barto	1
07049	Cadmium	SW-846 6010B	1	140871848004	04/04/2014 20:03	Maria A Orrs	1
07051	Chromium	SW-846 6010B	1	140871848004	04/04/2014 20:03	Maria A Orrs	1
07055	Lead	SW-846 6010B	1	140871848004	04/04/2014 20:03	Maria A Orrs	1
07061	Nickel	SW-846 6010B	1	140871848004	04/04/2014 20:03	Maria A Orrs	1
07072	Zinc	SW-846 6010B	1	140871848004	04/04/2014 20:03	Maria A Orrs	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	140871848004	03/31/2014 09:23	Micaela L Dishong	1

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7409272
LL Group # 1462605
Account # 11260

Project Name: 93883

Collected: 03/26/2014 10:30 by JP

Submitted: 03/27/2014 09:40
Reported: 04/08/2014 21:41

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY07

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**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	0.015	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.016	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.031	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7409272
LL Group # 1462605
Account # 11260

Project Name: 93883

Collected: 03/26/2014 10:30 by JP

Submitted: 03/27/2014 09:40
Reported: 04/08/2014 21:41

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		ug/l	ug/l	
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	1
Pesticides/PCBs	**SW-846 8082**		ug/l	ug/l	
10227	PCB-1016	12674-11-2	N.D.	0.080	1
10227	PCB-1221	11104-28-2	N.D.	0.080	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.080	1
10227	PCB-1248	12672-29-6	N.D.	0.080	1
10227	PCB-1254	11097-69-1	N.D.	0.080	1
10227	PCB-1260	11096-82-5	N.D.	0.12	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	
07049	Cadmium	7440-43-9	0.77	0.76	1
07051	Chromium	7440-47-3	N.D.	1.6	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.5	1
07072	Zinc	7440-66-6	6.0	2.0	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
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W140921AA	04/02/2014 21:52	Kevin A Sposito	1

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7409272
LL Group # 1462605
Account # 11260

Project Name: 93883

Collected: 03/26/2014 10:30 by JP

Submitted: 03/27/2014 09:40
Reported: 04/08/2014 21:41

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W140921AA	04/02/2014 21:52	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14090WAK026	04/03/2014 20:32	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14090WAK026	04/01/2014 10:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14087A53A	03/31/2014 18:00	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	14087A53A	03/31/2014 18:00	Laura M Krieger	1
10398	EDB by 8011	SW-846 8011	1	140870017A	04/02/2014 01:46	Matthew S Listner	1
10227	PCBs in Water 8082	SW-846 8082	1	140870013A	03/31/2014 00:36	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	140870013A	03/29/2014 23:45	Karen L Beyer	1
07786	EDB Extraction	SW-846 8011	1	140870017A	03/30/2014 16:45	Edwin Ortiz	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	140910004A	04/02/2014 20:02	Glorines Suarez-Rivera	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	140910003A	04/03/2014 00:11	Glorines Suarez-Rivera	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	140910003A	04/01/2014 15:00	Kelli M Barto	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	140910004A	04/01/2014 15:00	Kelli M Barto	1
07049	Cadmium	SW-846 6010B	1	140871848004	04/04/2014 20:07	Maria A Orrs	1
07051	Chromium	SW-846 6010B	1	140871848004	04/04/2014 20:07	Maria A Orrs	1
07055	Lead	SW-846 6010B	1	140871848004	04/04/2014 20:07	Maria A Orrs	1
07061	Nickel	SW-846 6010B	1	140871848004	04/04/2014 20:07	Maria A Orrs	1
07072	Zinc	SW-846 6010B	1	140871848004	04/04/2014 20:07	Maria A Orrs	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	140871848004	03/31/2014 09:23	Micaela L Dishong	1

Quality Control Summary

Client Name: Chevron Group Number: 1462605
Reported: 04/08/14 at 09:41 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: D140924AA	Sample number(s): 7409269							
Benzene	N.D.	0.5	ug/l	109		78-120		
Ethylbenzene	N.D.	0.5	ug/l	109		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	105		75-120		
Toluene	N.D.	0.5	ug/l	115		80-120		
Xylene (Total)	N.D.	0.5	ug/l	115		80-120		
Batch number: W140921AA	Sample number(s): 7409270-7409272							
Benzene	N.D.	0.5	ug/l	97	98	78-120	1	30
Bromodichloromethane	N.D.	0.5	ug/l	95	97	73-120	2	30
Bromoform	N.D.	0.5	ug/l	92	91	61-120	1	30
Bromomethane	N.D.	0.5	ug/l	111	114	58-120	3	30
Carbon Tetrachloride	N.D.	0.5	ug/l	102	102	74-130	0	30
Chlorobenzene	N.D.	0.5	ug/l	105	103	80-120	2	30
Chloroethane	N.D.	0.5	ug/l	100	100	56-120	0	30
Chloroform	N.D.	0.5	ug/l	105	104	80-122	0	30
Chloromethane	N.D.	0.5	ug/l	87	88	63-120	1	30
Dibromochloromethane	N.D.	0.5	ug/l	99	98	72-120	1	30
1,2-Dichlorobenzene	N.D.	1.	ug/l	105	103	80-120	3	30
1,3-Dichlorobenzene	N.D.	1.	ug/l	102	99	80-120	2	30
1,4-Dichlorobenzene	N.D.	1.	ug/l	100	100	80-120	1	30
1,1-Dichloroethane	N.D.	0.5	ug/l	94	94	80-120	0	30
1,2-Dichloroethane	N.D.	0.5	ug/l	103	104	65-135	1	30
1,1-Dichloroethene	N.D.	0.5	ug/l	110	108	76-124	1	30
cis-1,2-Dichloroethene	N.D.	0.5	ug/l	102	100	80-120	2	30
trans-1,2-Dichloroethene	N.D.	0.5	ug/l	107	106	80-120	1	30
1,2-Dichloropropane	N.D.	0.5	ug/l	93	94	80-120	1	30
cis-1,3-Dichloropropene	N.D.	0.5	ug/l	96	98	80-120	2	30
trans-1,3-Dichloropropene	N.D.	0.5	ug/l	94	93	76-120	1	30
Ethylbenzene	N.D.	0.5	ug/l	97	96	79-120	1	30
Freon 113	N.D.	2.	ug/l	102	103	67-127	1	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	100	100	75-120	0	30
Methylene Chloride	N.D.	2.	ug/l	102	101	80-120	1	30
1,1,2,2-Tetrachloroethane	N.D.	0.5	ug/l	96	97	70-120	2	30
Tetrachloroethene	N.D.	0.5	ug/l	105	105	80-120	0	30
Toluene	N.D.	0.5	ug/l	98	96	80-120	2	30
1,1,1-Trichloroethane	N.D.	0.5	ug/l	90	89	66-126	2	30
1,1,2-Trichloroethane	N.D.	0.5	ug/l	104	103	80-120	1	30
Trichloroethene	N.D.	0.5	ug/l	103	102	80-120	1	30
Trichlorofluoromethane	N.D.	0.5	ug/l	106	106	65-130	0	30
Vinyl Chloride	N.D.	0.5	ug/l	98	98	63-120	0	30
m+p-Xylene	N.D.	0.5	ug/l	103	102	80-120	1	30
o-Xylene	N.D.	0.5	ug/l	102	102	80-120	1	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: 1462605
Reported: 04/08/14 at 09:41 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 14090WAK026	Sample number(s): 7409270-7409272							
Benzo(a)anthracene	N.D.	0.010	ug/l	104	114	79-122	9	30
Benzo(a)pyrene	N.D.	0.010	ug/l	104	106	80-121	2	30
Benzo(b)fluoranthene	N.D.	0.010	ug/l	117	115	79-136	2	30
Benzo(k)fluoranthene	N.D.	0.010	ug/l	100	97	81-131	3	30
Chrysene	N.D.	0.010	ug/l	99	102	84-118	3	30
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	99	102	66-133	4	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	103	105	68-132	2	30
1-Methylnaphthalene	N.D.	0.010	ug/l	95	98	86-130	3	30
2-Methylnaphthalene	N.D.	0.010	ug/l	93	97	81-131	4	30
Naphthalene	N.D.	0.030	ug/l	96	98	82-122	2	30
Batch number: 14087A53A	Sample number(s): 7409270-7409272							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	107	100	75-135	7	30
Batch number: 14090B53A	Sample number(s): 7409269							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	110	112	75-135	2	30
Batch number: 140870017A	Sample number(s): 7409270-7409272							
Ethylene dibromide	N.D.	0.010	ug/l	96	101	60-140	6	20
Batch number: 140870013A	Sample number(s): 7409270-7409272							
PCB-1016	N.D.	0.080	ug/l	60	95	60-117	45*	30
PCB-1221	N.D.	0.080	ug/l					
PCB-1232	N.D.	0.16	ug/l					
PCB-1242	N.D.	0.080	ug/l					
PCB-1248	N.D.	0.080	ug/l					
PCB-1254	N.D.	0.080	ug/l					
PCB-1260	N.D.	0.12	ug/l	69	101	67-128	38*	30
Batch number: 140910004A	Sample number(s): 7409270-7409272							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	71	71	50-113	0	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					
Batch number: 140910003A	Sample number(s): 7409270-7409272							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	82	75	32-117	9	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 140871848002	Sample number(s): 7409270							
Cadmium	N.D.	0.76	ug/l	103		90-112		
Chromium	N.D.	1.6	ug/l	100		90-110		
Lead	N.D.	4.7	ug/l	103		88-116		
Nickel	1.5	1.5	ug/l	105		90-111		
Zinc	5.8	2.0	ug/l	103		90-110		
Batch number: 140871848004	Sample number(s): 7409271-7409272							
Cadmium	N.D.	0.76	ug/l	106		90-112		
Chromium	N.D.	1.6	ug/l	101		90-110		
Lead	N.D.	4.7	ug/l	107		88-116		
Nickel	N.D.	1.5	ug/l	108		90-111		
Zinc	4.9	2.0	ug/l	103		90-110		

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.

Quality Control Summary

Client Name: Chevron Group Number: 1462605
Reported: 04/08/14 at 09:41 PM
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: D140924AA	Sample number(s): 7409269 UNSPK: P409131								
Benzene	111	106	72-134	5	30				
Ethylbenzene	109	109	71-134	0	30				
Methyl Tertiary Butyl Ether	98	96	72-126	1	30				
Toluene	114	115	80-125	0	30				
Xylene (Total)	111	112	79-125	1	30				
Batch number: 140870017A	Sample number(s): 7409270-7409272 UNSPK: P407926 BKG: P407927								
Ethylene dibromide	102		60-140			N.D.	N.D.	0 (1)	30
Batch number: 140871848002	Sample number(s): 7409270 UNSPK: P410141 BKG: P410141								
Cadmium	101	102	75-122	1	20	1.3	1.2	9 (1)	20
Chromium	98	98	76-120	0	20	N.D.	N.D.	0 (1)	20
Lead	107	105	75-125	2	20	N.D.	N.D.	0 (1)	20
Nickel	104	105	79-123	0	20	8.9	9.2	3 (1)	20
Zinc	102	103	85-117	1	20	19.0	19.8	4 (1)	20
Batch number: 140871848004	Sample number(s): 7409271-7409272 UNSPK: P408378 BKG: P408378								
Cadmium	98	98	75-122	0	20	0.86	0.92	7 (1)	20
Chromium	100	101	76-120	1	20	2.2	2.6	16 (1)	20
Lead	96	96	75-125	0	20	N.D.	N.D.	0 (1)	20
Nickel	98	98	79-123	1	20	64.7	63.8	1	20
Zinc	105	106	85-117	1	20	35.4	34.6	2 (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: UST VOCs by 8260B - Water
Batch number: D140924AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7409269	90	97	104	96
Blank	91	95	102	95
LCS	89	97	104	97
MS	91	100	103	98
MSD	89	97	105	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Ext. Water Master w/GRO
Batch number: W140921AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7409270	102	107	96	93
7409271	102	104	96	90
7409272	102	101	96	92
Blank	101	107	96	91

*- 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: 1462605
Reported: 04/08/14 at 09:41 PM

Surrogate Quality Control

LCS	102	100	98	96
LCSD	101	102	98	96
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs in waters by SIM
Batch number: 14090WAK026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7409270	93	95	91
7409271	96	102	93
7409272	94	102	91
Blank	95	106	94
LCS	94	109	97
LCSD	98	113	98
Limits:	59-128	62-141	70-134

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 14087A53A

	Trifluorotoluene-F
7409270	68
7409271	77
7409272	68
Blank	70
LCS	74
LCSD	73
Limits:	63-135

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 14090B53A

	Trifluorotoluene-F
7409269	68
Blank	71
LCS	75
LCSD	75
Limits:	63-135

Analysis Name: PCBs in Water 8082
Batch number: 140870013A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7409270	107	82
7409271	95	70
7409272	110	80
Blank	77	45
LCS	65	44
LCSD	108	89
Limits:	49-141	36-153

*- 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: 1462605
Reported: 04/08/14 at 09:41 PM

Surrogate Quality Control

Analysis Name: EDB, DBCP, 1,2,3-TCP 8011
Batch number: 140870017A

	1,1,2,2-Tetrachloroethane
7409270	108
7409271	127
7409272	109
Blank	110
DUP	112
LCS	108
LCSD	107
MS	109
Limits:	46-136

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 140910003A

	Orthoterphenyl
7409270	86
7409271	83
7409272	96
Blank	88
LCS	102
LCSD	94
Limits:	50-150

Analysis Name: NWTPH-Dx water
Batch number: 140910004A

	Orthoterphenyl
7409270	113
7409271	104
7409272	104
Blank	103
LCS	106
LCSD	104
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

For Eurofins Lancaster Laboratories use only
Acct. # 11260 Group # 1462605 Sample # 7409269-72
Instructions on reverse side correspond with circled numbers.

SCR #: ______

① Client Information

Facility # SS#9-3883-OML G-R#385894 WBS

Site Address 1702 East Yakima Avenue, YAKIMA, WA

Chevron PM MHO 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 J. Payne

④ Matrix: ☐ Sediment ☑ Ground ☐ Surface; ☐ Potable ☐ NPDES; ☐ Air

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); EOC & HVOC's 8260; EDB 8011; cPAH's/NAPH/PCBs 8270/8082; TOTAL METALS 6010

② Sample Identification	Collected Date	Collected Time	③ Grab	Composite	Soil	Water	Oil	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	Lead	EOC & HVOC's 8260	EDB 8011	cPAH's/NAPH/PCBs 8270/8082	TOTAL METALS 6010
QA	3.26.14		X			X		2	X			X								
MW-5	↓	0934	X			X		14	X			X	X	X			X	X	X	X
MW-6	↓	0831	X			X		14	X			X	X	X			X	X	X	X
MW-7	↓	1030	X			X		14	X			X	X	X			X	X	X	X

☐ 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

Total Metals Include: Pb, Cd, Cr, Ni & Zn

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]	3.26.14	1700			
Relinquished by			Received by		
Relinquished by Commercial Carrier: UPS ✓ FedEx ____ Other ____			[signature]	3/27/14	0946

Temperature Upon Receipt 0.6-1.1 °C

Custody Seals Intact? (Yes) No

Eurofins Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300
The white copy should accompany samples to Eurofins Lancaster Laboratories. The yellow copy should be retained by the client.

Issued by Dept. 40 Management
7051.03

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

August 18, 2014

Project: 93883

Submittal Date: 06/28/2014
Group Number: 1485336
PO Number: 0015155135
Release Number: HORNE
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
QA Water	7515452
MW-5 Grab Groundwater	7515453
MW-6 Grab Groundwater	7515454
MW-7 Grab Groundwater	7515455

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

ELECTRONIC COPY TO	Gettler-Ryan Inc.	Attn: Gettler Ryan
ELECTRONIC COPY TO	SAIC	Attn: Jamalyn Green
ELECTRONIC COPY TO	SAIC	Attn: Russ Shropshire

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: QA Water
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7515452
LL Group # 1485336
Account # 11260

Project Name: 93883

Collected: 06/27/2014

Submitted: 06/28/2014 09:50
Reported: 08/18/2014 15:00

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYYQA

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**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	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
10335	BTEX/MTBE	SW-846 8260B	1	W141821AA	07/01/2014 12:22	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W141821AA	07/01/2014 12:22	Sarah A Guill	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14181A20A	07/01/2014 12:31	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14181A20A	07/01/2014 12:31	Miranda P Tillinghast	1

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7515453
LL Group # 1485336
Account # 11260

Project Name: 93883

Collected: 06/27/2014 11:10 by JP

Submitted: 06/28/2014 09:50
Reported: 08/18/2014 15:00

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY05

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**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.013	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1

2-Methylnaphthalene was detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7515453
LL Group # 1485336
Account # 11260

Project Name: 93883

Collected: 06/27/2014 11:10 by JP

Submitted: 06/28/2014 09:50
Reported: 08/18/2014 15:00

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	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 with the exception of: 2-methylnaphthalene was not detected in the re-extraction.				
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
Pesticides/PCBs	**SW-846 8082**		**ug/l**	**ug/l**	
10227	PCB-1016	12674-11-2	N.D.	0.081	1
10227	PCB-1221	11104-28-2	N.D.	0.081	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.081	1
10227	PCB-1248	12672-29-6	N.D.	0.081	1
10227	PCB-1254	11097-69-1	N.D.	0.081	1
10227	PCB-1260	11096-82-5	N.D.	0.12	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.	68	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.	68	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
07049	Cadmium	7440-43-9	N.D.	0.33	1
07051	Chromium	7440-47-3	5.2	1.3	1
07055	Lead	7439-92-1	10.6	4.7	1
07061	Nickel	7440-02-0	2.6	1.6	1
07072	Zinc	7440-66-6	19.8	2.0	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.

Sample Description: MW-5 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7515453
LL Group # 1485336
Account # 11260

Project Name: 93883

Collected: 06/27/2014 11:10 by JP

Submitted: 06/28/2014 09:50
Reported: 08/18/2014 15:00

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W141821AA	07/01/2014 18:58	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W141821AA	07/01/2014 18:58	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14181WAA026	07/07/2014 06:05	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14181WAA026	06/30/2014 15:00	Seth A Farrier	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14181A20A	07/01/2014 19:13	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14181A20A	07/01/2014 19:13	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	141830009A	07/08/2014 00:29	Matthew S Listner	1
10227	PCBs in Water 8082	SW-846 8082	1	141810010A	07/01/2014 01:11	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	141810010A	06/30/2014 14:30	Seth A Farrier	1
07786	EDB Extraction	SW-846 8011	1	141830009A	07/02/2014 15:00	Kelli M Barto	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	141820018A	07/04/2014 05:34	Christine E Dolman	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	141820019A	07/07/2014 21:02	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	141820019A	07/02/2014 09:00	David S Schrum	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	141820018A	07/02/2014 09:00	David S Schrum	1
07049	Cadmium	SW-846 6010B	1	141881848001	07/11/2014 15:06	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	141881848001	07/11/2014 15:06	Eric L Eby	1
07055	Lead	SW-846 6010B	1	141881848001	07/11/2014 15:06	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	141881848001	07/11/2014 15:06	Eric L Eby	1
07072	Zinc	SW-846 6010B	1	141881848001	07/11/2014 15:06	Eric L Eby	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	141881848001	07/09/2014 11:11	Micaela L Dishong	1

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7515454
LL Group # 1485336
Account # 11260

Project Name: 93883

Collected: 06/27/2014 10:15 by JP

Submitted: 06/28/2014 09:50
Reported: 08/18/2014 15:00

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY06

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**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.012	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1

2-Methylnaphthalene was detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7515454
LL Group # 1485336
Account # 11260

Project Name: 93883

Collected: 06/27/2014 10:15 by JP

Submitted: 06/28/2014 09:50
Reported: 08/18/2014 15:00

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	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 with the exception of: 2-methylnaphthalene was not detected in the re-extraction.				
GC Volatiles	**ECY 97-602 NWTPH-Gx**		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		ug/l	ug/l	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
Pesticides/PCBs	**SW-846 8082**		ug/l	ug/l	
10227	PCB-1016	12674-11-2	N.D.	0.081	1
10227	PCB-1221	11104-28-2	N.D.	0.081	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.081	1
10227	PCB-1248	12672-29-6	N.D.	0.081	1
10227	PCB-1254	11097-69-1	N.D.	0.081	1
10227	PCB-1260	11096-82-5	N.D.	0.12	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	
07049	Cadmium	7440-43-9	N.D.	0.33	1
07051	Chromium	7440-47-3	N.D.	1.3	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.6	1
07072	Zinc	7440-66-6	N.D.	2.0	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.

Sample Description: MW-6 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7515454
LL Group # 1485336
Account # 11260

Project Name: 93883

Collected: 06/27/2014 10:15 by JP

Submitted: 06/28/2014 09:50
Reported: 08/18/2014 15:00

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W141821AA	07/01/2014 19:21	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W141821AA	07/01/2014 19:21	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14181WAA026	07/07/2014 06:33	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14181WAA026	06/30/2014 15:00	Seth A Farrier	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14181A20A	07/01/2014 19:41	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14181A20A	07/01/2014 19:41	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	141830009A	07/08/2014 00:44	Matthew S Listner	1
10227	PCBs in Water 8082	SW-846 8082	1	141810010A	07/01/2014 01:23	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	141810010A	06/30/2014 14:30	Seth A Farrier	1
07786	EDB Extraction	SW-846 8011	1	141830009A	07/02/2014 15:00	Kelli M Barto	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	141820018A	07/04/2014 04:29	Christine E Dolman	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	141820019A	07/07/2014 21:23	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	141820019A	07/02/2014 09:00	David S Schrum	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	141820018A	07/02/2014 09:00	David S Schrum	1
07049	Cadmium	SW-846 6010B	1	141891848005	07/11/2014 03:43	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	141891848005	07/11/2014 03:43	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	141891848005	07/11/2014 03:43	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	141891848005	07/11/2014 03:43	Tara L Snyder	1
07072	Zinc	SW-846 6010B	1	141891848005	07/11/2014 03:43	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	141891848005	07/09/2014 11:17	Micaela L Dishong	1

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7515455
LL Group # 1485336
Account # 11260

Project Name: 93883

Collected: 06/27/2014 12:08 by JP

Submitted: 06/28/2014 09:50
Reported: 08/18/2014 15:00

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY07

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**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Freon 113	76-13-1	N.D.	2	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.011	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1

2-Methylnaphthalene was detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7515455
LL Group # 1485336
Account # 11260

Project Name: 93883

Collected: 06/27/2014 12:08 by JP

Submitted: 06/28/2014 09:50
Reported: 08/18/2014 15:00

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	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 with the exception of: 2-methylnaphthalene was not detected in the re-extraction.				
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
Pesticides/PCBs	**SW-846 8082**		**ug/l**	**ug/l**	
10227	PCB-1016	12674-11-2	N.D.	0.080	1
10227	PCB-1221	11104-28-2	N.D.	0.080	1
10227	PCB-1232	11141-16-5	N.D.	0.16	1
10227	PCB-1242	53469-21-9	N.D.	0.080	1
10227	PCB-1248	12672-29-6	N.D.	0.080	1
10227	PCB-1254	11097-69-1	N.D.	0.080	1
10227	PCB-1260	11096-82-5	N.D.	0.12	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**	
07049	Cadmium	7440-43-9	N.D.	0.33	1
07051	Chromium	7440-47-3	N.D.	1.3	1
07055	Lead	7439-92-1	N.D.	4.7	1
07061	Nickel	7440-02-0	N.D.	1.6	1
07072	Zinc	7440-66-6	7.6	2.0	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.

Sample Description: MW-7 Grab Groundwater
Facility# 93883 Job# 385894
1702 East Yakima Avenue - Yakima, WA

LL Sample # WW 7515455
LL Group # 1485336
Account # 11260

Project Name: 93883

Collected: 06/27/2014 12:08 by JP

Submitted: 06/28/2014 09:50
Reported: 08/18/2014 15:00

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

EYY07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W141821AA	07/01/2014 19:45	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W141821AA	07/01/2014 19:45	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14181WAA026	07/07/2014 07:01	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14181WAA026	06/30/2014 15:00	Seth A Farrier	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14181A20A	07/01/2014 20:10	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14181A20A	07/01/2014 20:10	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	141830009A	07/08/2014 01:00	Matthew S Listner	1
10227	PCBs in Water 8082	SW-846 8082	1	141810010A	07/01/2014 01:35	Monica M Souders	1
11117	PCB Waters Extraction	SW-846 3510C	1	141810010A	06/30/2014 14:30	Seth A Farrier	1
07786	EDB Extraction	SW-846 8011	1	141830009A	07/02/2014 15:00	Kelli M Barto	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	141820018A	07/04/2014 04:51	Christine E Dolman	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	141820019A	07/07/2014 21:45	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	141820019A	07/02/2014 09:00	David S Schrum	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	141820018A	07/02/2014 09:00	David S Schrum	1
07049	Cadmium	SW-846 6010B	1	141891848005	07/11/2014 03:47	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	141891848005	07/11/2014 03:47	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	141891848005	07/11/2014 03:47	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	141891848005	07/11/2014 03:47	Tara L Snyder	1
07072	Zinc	SW-846 6010B	1	141891848005	07/11/2014 03:47	Tara L Snyder	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	141891848005	07/09/2014 11:17	Micaela L Dishong	1

Quality Control Summary

Client Name: Chevron Group Number: 1485336
Reported: 08/18/14 at 03:00 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: W141821AA	Sample number(s): 7515452-7515455							
Benzene	N.D.	0.5	ug/l	99	98	78-120	1	30
Bromodichloromethane	N.D.	0.5	ug/l	90	91	73-120	1	30
Bromoform	N.D.	0.5	ug/l	78	79	61-120	1	30
Bromomethane	N.D.	0.5	ug/l	110	110	58-120	0	30
Carbon Tetrachloride	N.D.	0.5	ug/l	97	97	74-130	0	30
Chlorobenzene	N.D.	0.5	ug/l	100	101	80-120	1	30
Chloroethane	N.D.	0.5	ug/l	105	101	56-120	4	30
Chloroform	N.D.	0.5	ug/l	96	96	80-122	1	30
Chloromethane	N.D.	0.5	ug/l	106	114	63-120	7	30
Dibromochloromethane	N.D.	0.5	ug/l	92	90	72-120	2	30
1,2-Dichlorobenzene	N.D.	1.	ug/l	97	98	80-120	1	30
1,3-Dichlorobenzene	N.D.	1.	ug/l	96	96	80-120	1	30
1,4-Dichlorobenzene	N.D.	1.	ug/l	98	98	80-120	1	30
1,1-Dichloroethane	N.D.	0.5	ug/l	96	94	80-120	2	30
1,2-Dichloroethane	N.D.	0.5	ug/l	99	97	65-135	2	30
1,1-Dichloroethene	N.D.	0.5	ug/l	98	97	76-124	1	30
cis-1,2-Dichloroethene	N.D.	0.5	ug/l	99	99	80-120	0	30
trans-1,2-Dichloroethene	N.D.	0.5	ug/l	100	101	80-120	1	30
1,2-Dichloropropane	N.D.	0.5	ug/l	97	95	80-120	2	30
cis-1,3-Dichloropropene	N.D.	0.5	ug/l	92	92	80-120	0	30
trans-1,3-Dichloropropene	N.D.	0.5	ug/l	90	91	76-120	1	30
Ethylbenzene	N.D.	0.5	ug/l	96	96	79-120	0	30
Freon 113	N.D.	2.	ug/l	93	93	67-127	0	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	93	93	75-120	0	30
Methylene Chloride	N.D.	2.	ug/l	99	98	80-120	1	30
1,1,2,2-Tetrachloroethane	N.D.	0.5	ug/l	91	91	70-120	1	30
Tetrachloroethene	N.D.	0.5	ug/l	97	107	80-120	10	30
Toluene	N.D.	0.5	ug/l	100	101	80-120	1	30
1,1,1-Trichloroethane	N.D.	0.5	ug/l	95	96	66-126	1	30
1,1,2-Trichloroethane	N.D.	0.5	ug/l	95	96	80-120	2	30
Trichloroethene	N.D.	0.5	ug/l	99	100	80-120	1	30
Trichlorofluoromethane	N.D.	0.5	ug/l	112	115	65-130	2	30
Vinyl Chloride	N.D.	0.5	ug/l	106	106	63-120	0	30
m+p-Xylene	N.D.	0.5	ug/l	96	96	80-120	0	30
o-Xylene	N.D.	0.5	ug/l	94	96	80-120	2	30
Xylene (Total)	N.D.	0.5	ug/l	95	96	80-120	1	30
Batch number: 14181WAA026	Sample number(s): 7515453-7515455							
Benzo(a)anthracene	N.D.	0.010	ug/l	91	92	79-122	1	30
Benzo(a)pyrene	N.D.	0.010	ug/l	93	93	80-121	0	30
Benzo(b)fluoranthene	N.D.	0.010	ug/l	98	101	79-136	3	30
Benzo(k)fluoranthene	N.D.	0.010	ug/l	96	95	81-131	1	30
Chrysene	N.D.	0.010	ug/l	98	101	84-118	2	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: 1485336
Reported: 08/18/14 at 03:00 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	90	93	66-133	4	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	95	94	68-132	1	30
1-Methylnaphthalene	N.D.	0.010	ug/l	96	91	86-130	5	30
2-Methylnaphthalene	0.010	0.010	ug/l	96	93	81-131	3	30
Naphthalene	N.D.	0.030	ug/l	93	88	82-122	6	30
Batch number: 14181A20A	Sample number(s): 7515452-7515455							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	104	106	75-135	2	30
Batch number: 141830009A	Sample number(s): 7515453-7515455							
Ethylene dibromide	N.D.	0.010	ug/l	67	109	60-140	48*	20
Batch number: 141810010A	Sample number(s): 7515453-7515455							
PCB-1016	N.D.	0.080	ug/l	97	105	60-117	7	30
PCB-1221	N.D.	0.080	ug/l					
PCB-1232	N.D.	0.16	ug/l					
PCB-1242	N.D.	0.080	ug/l					
PCB-1248	N.D.	0.080	ug/l					
PCB-1254	N.D.	0.080	ug/l					
PCB-1260	N.D.	0.12	ug/l	100	109	67-128	8	30
Batch number: 141820018A	Sample number(s): 7515453-7515455							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	67	73	50-113	8	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					
Batch number: 141820019A	Sample number(s): 7515453-7515455							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	71	87	32-117	21*	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 141881848001	Sample number(s): 7515453							
Cadmium	N.D.	0.33	ug/l	107		90-112		
Chromium	N.D.	1.3	ug/l	106		90-110		
Lead	N.D.	4.7	ug/l	107		88-116		
Nickel	N.D.	1.6	ug/l	110		90-117		
Zinc	N.D.	2.0	ug/l	105		90-110		
Batch number: 141891848005	Sample number(s): 7515454-7515455							
Cadmium	N.D.	0.33	ug/l	102		90-112		
Chromium	N.D.	1.3	ug/l	102		90-110		
Lead	N.D.	4.7	ug/l	103		88-116		
Nickel	N.D.	1.6	ug/l	105		90-117		
Zinc	N.D.	2.0	ug/l	100		90-110		

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: 141830009A	Sample number(s): 7515453-7515455 UNSPK: P517349 BKG: P517350								
Ethylene dibromide	355 (2)		60-140			N.D.	N.D.	0 (1)	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: 1485336
Reported: 08/18/14 at 03:00 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
Batch number: 141881848001	Sample number(s): 7515453 UNSPK: P515348 BKG: P515348								
Cadmium	93	87	75-122	6	20	N.D.	N.D.	0 (1)	20
Chromium	93	86	76-120	8	20	3.8	3.6	7 (1)	20
Lead	98	102	75-125	4	20	N.D.	N.D.	0 (1)	20
Nickel	94	86	79-123	8	20	N.D.	N.D.	0 (1)	20
Zinc	127*	116	85-117	9	20	5.9	6.0	3 (1)	20
Batch number: 141891848005	Sample number(s): 7515454-7515455 UNSPK: P518017 BKG: P518017								
Cadmium	99	100	75-122	1	20	N.D.	N.D.	0 (1)	20
Chromium	99	101	76-120	1	20	N.D.	N.D.	0 (1)	20
Lead	99	98	75-125	1	20	N.D.	N.D.	0 (1)	20
Nickel	102	103	79-123	1	20	N.D.	N.D.	0 (1)	20
Zinc	98	99	85-117	1	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: VOCs- 5ml Water by 8260B
Batch number: W141821AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7515452	100	102	101	98
7515453	100	102	99	96
7515454	99	101	99	95
7515455	99	101	98	96
Blank	99	98	100	97
LCS	100	97	101	99
LCSD	99	103	101	101
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs in waters by SIM
Batch number: 14181WAA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7515453	74	74	78
7515454	90	94	81
7515455	86	88	77
Blank	90	99	88
LCS	97	110	97
LCSD	93	107	93
Limits:	59-128	62-141	70-134

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 14181A20A

*- 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: 1485336
Reported: 08/18/14 at 03:00 PM

Surrogate Quality Control

	Trifluorotoluene-F
7515452	92
7515453	92
7515454	92
7515455	94
Blank	88
LCS	93
LCSD	98
Limits:	63-135

Analysis Name: PCBs in Water 8082
Batch number: 141810010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7515453	96	46
7515454	98	68
7515455	99	53
Blank	81	70
LCS	90	69
LCSD	97	75
Limits:	49-141	36-153

Analysis Name: EDB, DBCP, 1,2,3-TCP 8011
Batch number: 141830009A

	1,1,2,2-Tetrachloroethane
7515453	103
7515454	100
7515455	103
Blank	108
DUP	111
LCS	86
LCSD	102
MS	84
Limits:	46-136

Analysis Name: NWTPH-Dx water
Batch number: 141820018A

	Orthoterphenyl
7515453	80
7515454	83
7515455	81
Blank	78
LCS	87
LCSD	93
Limits:	50-150

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 141820019A

*- 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: 1485336
Reported: 08/18/14 at 03:00 PM

Surrogate Quality Control

	Orthoterphenyl
7515453	90
7515454	96
7515455	100
Blank	84
LCS	97
LCSD	122
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 # 1485336 Sample # 7515452-55
Instructions on reverse side correspond with circled numbers.

SCR #: _____

(1) Client Information

Facility # SS#9-3883-OML G-R#385894 — WBS

Site Address: 1702 East Yakima Avenue, YAKIMA, WA

Chevron PM: MHO — 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

(4) Matrix

Sediment ☐ — Soil ☐ — Groundwater ☒ — Potable ☐ — Surface ☐ — NPDES ☐ — Oil ☐ — Air ☐

(5) Analyses Requested

(2) Sample Identification	Collected Date	Collected Time	(3) Grab	Composite	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 EPH ☐	WA VPH ☐	Lead Total ☐ Diss. ☐ Method ___	Total Metals	EDB 8011	cPAH's - NAPHS - PCBs (8270 SIM)	(8082)
RA	6.27.14		X		2	X			X									
MW-5		1140	X		14	X			X	X	X				X	X	X	X
MW-12		1015	X		14	X			X	X	X				X	X	X	X
MW-7	↓	1700	X		14	X			X	X	X				X	X	X	X

(6) Remarks

Total Metals Include: Pb, Cd, Cr, Ni & Zn

- ☐ 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: _____

Relinquished by	Date	Time	Received by	Date	Time (9)
	6.27.14	1700			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commercial Carrier: UPS X FedEx ___ Other ___			Received by	Date 6/28/14	Time 950
Temperature Upon Receipt 0.8-2.5 °C			Custody Seals Intact? (Yes) No		

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 11260 For Eurofins Lancaster Laboratories use only Group # 1485336 Sample # 7515452-55

Instructions on reverse side correspond with circled numbers.

(1) Client Information

Facility # SS#9-3883-OML G-R#385894 WBS

Site Address 1702 East Yakima Avenue, YAKIMA, WA

Chevron PM MHO 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. Pringle

(2) Sample Identification | Collected Date | Collected Time | **(3)** Grab | Composite

(4) Matrix: Soil ☐ | Sediment ☐ | Potable ☐ | Groundwater ☒ | NPDES ☐ | Surface Water ☐ | 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 ____ | Total Metals | EDB EDB | cPAHs · NAPHS · PCBs (8270 SIM) (8082)

Sample Identification	Collected Date	Collected Time	Grab	Composite	Soil	Sediment	Potable	Groundwater	NPDES	Surface Water	Oil	Air	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	Total Metals	EDB EDB	cPAHs · NAPHS · PCBs (8270 SIM) (8082)
QA	6.27.14		X				X						2	X						X											
MW-5		1140	X				X						14	X						X	X	X							X	X	X	X
MW-6		1015	X				X						14	X						X	X	X							X	X	X	X
MW-7		1200	X				X						14	X						X	X	X							X	X	X	X

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

Total Metals Include: Pb, Cd, Cr, Ni & Zn

The QA Sample analyses: NWTPH-Gx & BTEX + MTBE 8260

June 7/2/14

(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
	6.27.14	1700			
Relinquished by	Date	Time	Received by	Date	Time

(9)

(8) Data Package (circle if required)

Type I - Full

Type VI (Raw Data)

EDD (circle if required)

CVX-RTBU-FL_05 (default)

Other: _____

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____

Received by | Date | Time

Temperature Upon Receipt _____ °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 - 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.

Appendix D:
MTCA Method B Calculations Using MTCATPH11.1

March 12, 2015

Technical Memorandum

To: Project File
From: Russ Shropshire

Re: Evaluation of Soil Sampling Results Under Method B Using MTCATPH 11.1
Alders Chevron / Former Chevron Service Station No. 93883
1702 East Yakima Avenue, Yakima, Washington (VCP #CE0391)

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 two soil samples (MW-5-10 and MW-6-8) 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 two samples selected for this analysis contained the highest concentrations of petroleum-range hydrocarbon contamination detected in soil during the August 2013 monitoring well installation event at the site.

Results of four consecutive quarters of groundwater monitoring provide empirical evidence that residual petroleum impacts in soil at the site do not impact groundwater quality. Therefore, evaluation of the leaching pathway for protection of groundwater was not included as part of this analysis. Instead, 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 for the specific petroleum composition found in each 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.
  - **Overlapping Higher Values –** Volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) can have overlapping values. The higher value was used for the fraction if there is an overlap between these two methods.
  - **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 only to evaluate the soil direct contact exposure pathway. Therefore, the values entered for these parameters have bearing on the results of the analysis. Default values were assigned for each of these 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 Soil Organic Carbon (FOC) –** The default value of "0.001" was used.
  - **Dilution Factor** – This parameter has two default values: "20" for soil within the unsaturated zone and "1" for soil within the saturated zone. A default value of "1" 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 the two samples tested, the Measured TPH Soil Concentration for

samples MW-5-10 and MW-6-8 were significantly lower than the Protective TPH Soil Concentrations that were determined to be protective of human health for a direct contact exposure scenario. Therefore, both samples pass the RISK and Hazard Index criteria established by MTCA for the direct contact exposure pathway.

Sample ID	Measured TPH Soil Conc. (mg/kg)	Protective TPH Soil Conc. (mg/kg)	RISK @ Measured TPH Soil Conc.	HI @ Measured TPH Soil Conc.	Measured TPH Soil Conc. Pass or Fail?
MW-5-10	1,850.755	3,372.59	3.229E-07	5.488E-01	Pass
MW-6-8	441.143	4,104.53	7.141E-08	1.075E-01	Pass

Attachments

- A1 Soil Cleanup Levels: Worksheet for Soil Data Entry – Sample MW-5-10
- A2.1B Worksheet for Calculating Soil Cleanup Levels for Protection of Human Health: (Soil Direct Contact Pathway) – Sample MW-5-10
- A1 Soil Cleanup Levels: Worksheet for Soil Data Entry – Sample MW-6-8
- A2.1B Worksheet for Calculating Soil Cleanup Levels for Protection of Human Health: (Soil Direct Contact Pathway) – Sample MW-6-8

A1 Soil Cleanup Levels: Worksheet for Soil Data Entry: Refer to WAC 173-340-720, 740,745, 747, 750

1. Enter Site Information

Date: 03/12/15
Site Name: Former Chevron Service Station No. 93883
Sample Name: MW-5-10

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	0	0.00%
AL_EC >8-10	12.3	0.66%
AL_EC >10-12	98	5.30%
AL_EC >12-16	590	31.88%
AL_EC >16-21	560	30.26%
AL_EC >21-34	320	17.29%
AR_EC >8-10	10.29	0.56%
AR_EC >10-12	5.49	0.30%
AR_EC >12-16	49.8	2.69%
AR_EC >16-21	110	5.94%
AR_EC >21-34	90.7892	4.91%
Benzene	0.011	0.00%
Toluene	0.022	0.00%
Ethylbenzene	0.022	0.00%
Total Xylenes	0.11	0.01%
Naphthalene	0.51	0.03%
1-Methyl Naphthalene	1.2	0.06%
2-Methyl Naphthalene	2	0.11%
n-Hexane	0	0.00%
MTBE	0	0.00%
Ethylene Dibromide (EDB)	0	0.00%
1,2 Dichloroethane (EDC)	0	0.00%
Benzo(a)anthracene	0.021	0.00%
Benzo(b)fluoranthene	0.042	0.00%
Benzo(k)fluoranthene	0.0088	0.00%
Benzo(a)pyrene	0.023	0.00%
Chrysene	0.093	0.01%
Dibenz(a,h)anthracene	0.01	0.00%
Indeno(1,2,3-cd)pyrene	0.013	0.00%
Sum	1850.755	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) Half detection limits used for benzene, ethylbenzene, and toluene.

2) AL_EC>5-6, AL_EC>6-8, n-hexane, MTBE, EDB, and EDC have never been detected on the site so a value of zero was entered.

3) Double counting was avoided for E-C fractions.

4) Default values were used for total porosity, fractional organic carbon, soil bulk density, and dilution factor.

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:	0.001	Unitless
Dilution Factor:	1	Unitless

4. Target TPH Ground Water Concentation (if adjusted)

If you adjusted the target TPH ground water concentration, enter adjusted value here: ug/L

A2. 1B Worksheet for Calculating Soil Cleanup Levels for Protection of Human Health: (Soil Direct Contact Pathway)

Method B: Unrestricted Land Use (WAC 173-340-740)

Date: 3/12/2015
Site Name: Former Chevron Service Station No. 93883
Sample Name: MW-5-10

Chemical of Concern or EC group	Current Condition				Adjusted Condition			
	Measured Soil Conc @dry basis	HQ	RISK	Pass or Fail?	Soil Conc being tested	HQ	RISK	Pass or Fail?
	mg/kg	unitless	unitless		mg/kg	unitless	unitless	
Petroleum EC Fraction								
AL_EC >5-6	0				0.00E+00			
AL_EC >6-8	0				0.00E+00			
AL_EC >8-10	12.3	5.55E-03			2.24E+01	1.01E-02		
AL_EC >10-12	98	4.42E-02			1.79E+02	8.05E-02		
AL_EC >12-16	590	3.54E-01			1.08E+03	6.45E-01		
AL_EC >16-21	560	5.04E-03			1.02E+03	9.18E-03		
AL_EC >21-34	320	2.88E-03			5.83E+02	5.25E-03		
AR_EC >8-10	10.29	1.39E-03			1.88E+01	2.54E-03		
AR_EC >10-12	5.49	3.71E-03			1.00E+01	6.77E-03		
AR_EC >12-16	49.8	1.79E-02			9.07E+01	3.27E-02		
AR_EC >16-21	110	6.60E-02			2.00E+02	1.20E-01		
AR_EC >21-34	90.7892	4.09E-02			1.65E+02	7.44E-02		
Benzene	0.011	3.44E-05	6.06E-10		2.00E-02	6.27E-05	1.10E-09	
Toluene	0.022	3.66E-06			4.01E-02	6.68E-06		
Ethylbenzene	0.022	2.95E-06			4.01E-02	5.37E-06		
Total Xylenes	0.11	7.38E-06			2.00E-01	1.34E-05		
Naphthalene	0.51	4.21E-04			9.29E-01	7.68E-04		
1-Methyl Naphthalene	1.2	3.08E-04			2.19E+00	5.62E-04		
2-Methyl Naphthalene	2	6.42E-03			3.64E+00	1.17E-02		
n-Hexane	0				0.00E+00	0.00E+00		
MTBE	0				0.00E+00			
Ethylene Dibromide (EDB)	0		0.00E+00		0.00E+00	0.00E+00	0.00E+00	
1,2 Dichloroethane (EDC)	0		0.00E+00		0.00E+00	0.00E+00	0.00E+00	
Benzo(a)anthracene	0.021		2.03E-08	*For*	3.83E-02		3.69E-08	*For*
Benzo(b)fluoranthene	0.042		4.05E-08	*all*	7.65E-02		7.38E-08	*all*
Benzo(k)fluoranthene	0.0088		8.49E-09	*cPAHs*	1.60E-02		1.55E-08	*cPAHs*
Benzo(a)pyrene	0.023		2.22E-07		4.19E-02		4.04E-07	
Chrysene	0.093		8.97E-09		1.69E-01		1.63E-08	
Dibenz(a,h)anthracene	0.01		9.65E-09	Σ Risk=	1.82E-02		1.76E-08	Σ Risk=
Indeno(1,2,3-cd)pyrene	0.013		1.25E-08	3.22E-07	2.37E-02		2.29E-08	5.87E-07
Sum	**1850.755**	5.49E-01	3.23E-07		3.37E+03	1.00E+00	5.88E-07	

TEST CURRENT CONDITION

Measured TPH Soil Conc, mg/kg= 1850.755
HI= 5.488E-01
RISK= 3.229E-07
Pass or Fail? Pass
Check Residual Saturation (WAC340-747(10))

CALCULATE PROTECTIVE CONDITION

This tool allows the user to calculate protective TPH soil concentration based on various soil quality criteria. The Workbook uses the same composition ratio as for the measured data.

Calculate Protective TPH Soil Conc

Selected Criterion: @HI=1
Most Stringent? YES
Protctive TPH Soil Conc, mg/kg = 3372.59
HI = 1.00E+00
RISK = 5.88E-07

TEST ADJUSTED CONDITION

This tool allows the user to test whether a particular TPH soil concentration is protective of human health. The Workbook uses the same composition ratio as for the measured data.

Test Adjusted TPH Soil Conc

Tested TPH Soil Conc, mg/kg =
HI =
RISK =
Pass or Fail?

A1 Soil Cleanup Levels: Worksheet for Soil Data Entry: Refer to WAC 173-340-720, 740,745, 747, 750

1. Enter Site Information

Date: 03/12/15
Site Name: Former Chevron Service Station No. 93883
Sample Name: MW-6-8

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	0	0.00%
AL_EC >8-10	1.4	0.32%
AL_EC >10-12	10	2.27%
AL_EC >12-16	110	24.94%
AL_EC >16-21	140	31.74%
AL_EC >21-34	110	24.94%
AR_EC >8-10	1.3425	0.30%
AR_EC >10-12	0.557	0.13%
AR_EC >12-16	9.457	2.14%
AR_EC >16-21	23	5.21%
AR_EC >21-34	34.94525	7.92%
Benzene	0.0145	0.00%
Toluene	0.028	0.01%
Ethylbenzene	0.028	0.01%
Total Xylenes	0.0295	0.01%
Naphthalene	0.043	0.01%
1-Methyl Naphthalene	0.093	0.02%
2-Methyl Naphthalene	0.15	0.03%
n-Hexane	0	0.00%
MTBE	0	0.00%
Ethylene Dibromide (EDB)	0	0.00%
1,2 Dichloroethane (EDC)	0	0.00%
Benzo(a)anthracene	0.00395	0.00%
Benzo(b)fluoranthene	0.016	0.00%
Benzo(k)fluoranthene	0.00395	0.00%
Benzo(a)pyrene	0.00395	0.00%
Chrysene	0.019	0.00%
Dibenz(a,h)anthracene	0.00395	0.00%
Indeno(1,2,3-cd)pyrene	0.00395	0.00%
Sum	441.1425	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) Half detection limits used for benzene, ethylbenzene, toluene, total xylenes, AL_EC>6-8, AR_EC>8-10, AR_EC>10-12, benzo(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, Dibenz(a,h)anthracene, and Indeno(1,2,3-cd)pyrene.

2) AL_EC>5-6, AL_EC>6-8, n-hexane, MTBE, EDB, and EDC have never been detected on the site so a value of zero was entered.

3) Double counting was avoided for E-C fractions.

4) Default values were used for total porosity, fractional organic carbon, soil bulk density, and dilution factor.

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:	0.001	Unitless
Dilution Factor:	1	Unitless

4. Target TPH Ground Water Concentration (if adjusted)

If you adjusted the target TPH ground water concentration, enter adjusted value here: ug/L

A2. 1B Worksheet for Calculating Soil Cleanup Levels for Protection of Human Health: (Soil Direct Contact Pathway)

Method B: Unrestricted Land Use (WAC 173-340-740)

Date: 3/12/2015
Site Name: Former Chevron Service Station No. 93883
Sample Name: MW-6-8

Chemical of Concern or EC group	Current Condition				Adjusted Condition			
	Measured Soil Conc @dry basis	HQ	RISK	Pass or Fail?	Soil Conc being tested	HQ	RISK	Pass or Fail?
	mg/kg	unitless	unitless		mg/kg	unitless	unitless	
Petroleum EC Fraction								
AL_EC >5-6	0				0.00E+00			
AL_EC >6-8	0				0.00E+00			
AL_EC >8-10	1.4	6.31E-04			1.30E+01	5.88E-03		
AL_EC >10-12	10	4.51E-03			9.30E+01	4.20E-02		
AL_EC >12-16	110	6.60E-02			1.02E+03	6.14E-01		
AL_EC >16-21	140	1.26E-03			1.30E+03	1.17E-02		
AL_EC >21-34	110	9.90E-04			1.02E+03	9.21E-03		
AR_EC >8-10	1.3425	1.82E-04			1.25E+01	1.69E-03		
AR_EC >10-12	0.557	3.77E-04			5.18E+00	3.51E-03		
AR_EC >12-16	9.457	3.40E-03			8.80E+01	3.17E-02		
AR_EC >16-21	23	1.38E-02			2.14E+02	1.28E-01		
AR_EC >21-34	34.94525	1.57E-02			3.25E+02	1.46E-01		
Benzene	0.0145	4.54E-05	7.98E-10		1.35E-01	4.22E-04	7.43E-09	
Toluene	0.028	4.66E-06			2.61E-01	4.34E-05		
Ethylbenzene	0.028	3.75E-06			2.61E-01	3.49E-05		
Total Xylenes	0.0295	1.98E-06			2.74E-01	1.84E-05		
Naphthalene	0.043	3.55E-05			4.00E-01	3.30E-04		
1-Methyl Naphthalene	0.093	2.39E-05			8.65E-01	2.22E-04		
2-Methyl Naphthalene	0.15	4.82E-04			1.40E+00	4.48E-03		
n-Hexane	0				0.00E+00	0.00E+00		
MTBE	0				0.00E+00			
Ethylene Dibromide (EDB)	0		0.00E+00		0.00E+00	0.00E+00	0.00E+00	
1,2 Dichloroethane (EDC)	0		0.00E+00		0.00E+00	0.00E+00	0.00E+00	
Benzo(a)anthracene	0.00395		3.81E-09	*For*	3.68E-02		3.55E-08	*For*
Benzo(b)fluoranthene	0.016		1.54E-08	*all*	1.49E-01		1.44E-07	*all*
Benzo(k)fluoranthene	0.00395		3.81E-09	*cPAHs*	3.68E-02		3.55E-08	*cPAHs*
Benzo(a)pyrene	0.00395		3.81E-08		3.68E-02		3.55E-07	
Chrysene	0.019		1.83E-09		1.77E-01		1.71E-08	
Dibenz(a,h)anthracene	0.00395		3.81E-09	Σ Risk=	3.68E-02		3.55E-08	Σ Risk=
Indeno(1,2,3-cd)pyrene	0.00395		3.81E-09	7.06E-08	3.68E-02		3.55E-08	6.57E-07
Sum	**441.1425**	1.07E-01	7.14E-08		4.10E+03	1.00E+00	6.64E-07	

TEST CURRENT CONDITION

Measured TPH Soil Conc, mg/kg= 441.143
HI= 1.075E-01
RISK= 7.141E-08
Pass or Fail? Pass

CALCULATE PROTECTIVE CONDITION

This tool allows the user to calculate protective TPH soil concentration based on various soil quality criteria. The Workbook uses the same composition ratio as for the measured data.

Calculate Protective TPH Soil Conc

Selected Criterion: @HI=1
Most Stringent? YES

Protctive TPH Soil Conc, mg/kg = 4104.53
HI = 1.00E+00
RISK = 6.64E-07

TEST ADJUSTED CONDITION

This tool allows the user to test whether a particular TPH soil concentration is protective of human health. The Workbook uses the same composition ratio as for the measured data.

Test Adjusted TPH Soil Conc

Tested TPH Soil Conc, mg/kg =
HI =
RISK =
Pass or Fail?