May 5, 2016

Mr. Mark Horne
Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583

Subject: **First Quarter 2016 Groundwater Monitoring and Sampling Report**
Chevron Service Station No. 95311
1018 Plum Street
Olympia, Washington

Dear Mr. Horne:

Leidos Inc. (Leidos), on behalf of Chevron Environmental Management Company (CEMC), prepared this letter summarizing the first quarter 2016 groundwater monitoring and sampling event at Chevron Service Station No. 95311 (the site) in Olympia, Washington (Figure 1).

FIELD ACTIVITIES

Gettler-Ryan, Inc. (Gettler-Ryan) conducted the groundwater monitoring and sampling field event on February 23, 2016. Gettler-Ryan collected depth-to-groundwater measurements and checked for the presence of separate-phase hydrocarbons (SPH) in all five monitoring wells on site.

Groundwater samples were collected from the five monitoring wells and submitted to Eurofins Lancaster Laboratories, Inc. in Lancaster, Pennsylvania and analyzed for:

- Total petroleum hydrocarbons (TPH) as gasoline-range organics (TPH-G) by Northwest Method NWTPH-Gx;
- TPH as diesel-range organics (THP-D) and TPH as heavy oil-range organics (TPH-HO) by Northwest Method NWTPH-Dx extended with silica-gel cleanup;
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (USEPA) Method 8021B; and
- Total lead and dissolved lead by USEPA Method 6020.

A laboratory-supplied trip blank (QA) was also submitted to the laboratory and analyzed for TPH-G and BTEX. Field data sheets and sampling procedures are provided in the Gettler-Ryan groundwater monitoring and sampling data package (Attachment A). Historical groundwater

elevation data and laboratory analytical results are summarized in Table 1. The laboratory analysis report is provided as Attachment B.

FINDINGS

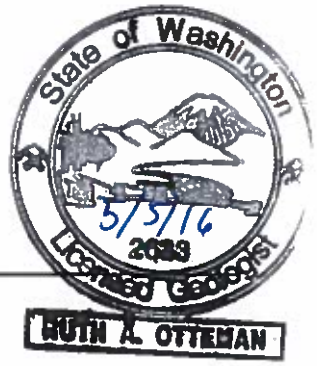
Groundwater elevation and flow direction for this event are consistent with historical data. During this event, groundwater elevations ranged from 96.10 feet in MW-1 to 92.50 feet in MW-4, based on an arbitrary benchmark elevation of 100.00 feet. Groundwater elevation data indicate that groundwater flows toward the north at an approximate gradient of 0.02 to 0.04 feet per foot (Figure 2).

All petroleum constituent concentrations were below their respective Model Toxics Control Act (MTCA) Method A cleanup levels or the laboratory detection limits in all of the monitoring wells sampled. This is the fourth consecutive quarter of all samples being below MTCA Method A cleanup levels.

If you have any questions or comments, please contact the Leidos project manager, Ruth Otteman, at (425) 482-3328 or via email at ottemanr@leidos.com.

Sincerely,

Leidos Inc.



Ruth Otteman
Project Manager

Stuart Brown
Environmental Scientist

Enclosures:
Figure 1 – Vicinity Map
Figure 2 – Potentiometric Map
Table 1 – Groundwater Monitoring Data and Analytical Results
Attachment A – Groundwater Monitoring and Sampling Data Package
Attachment B – Laboratory Analysis Report

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Project File

REPORT LIMITATIONS

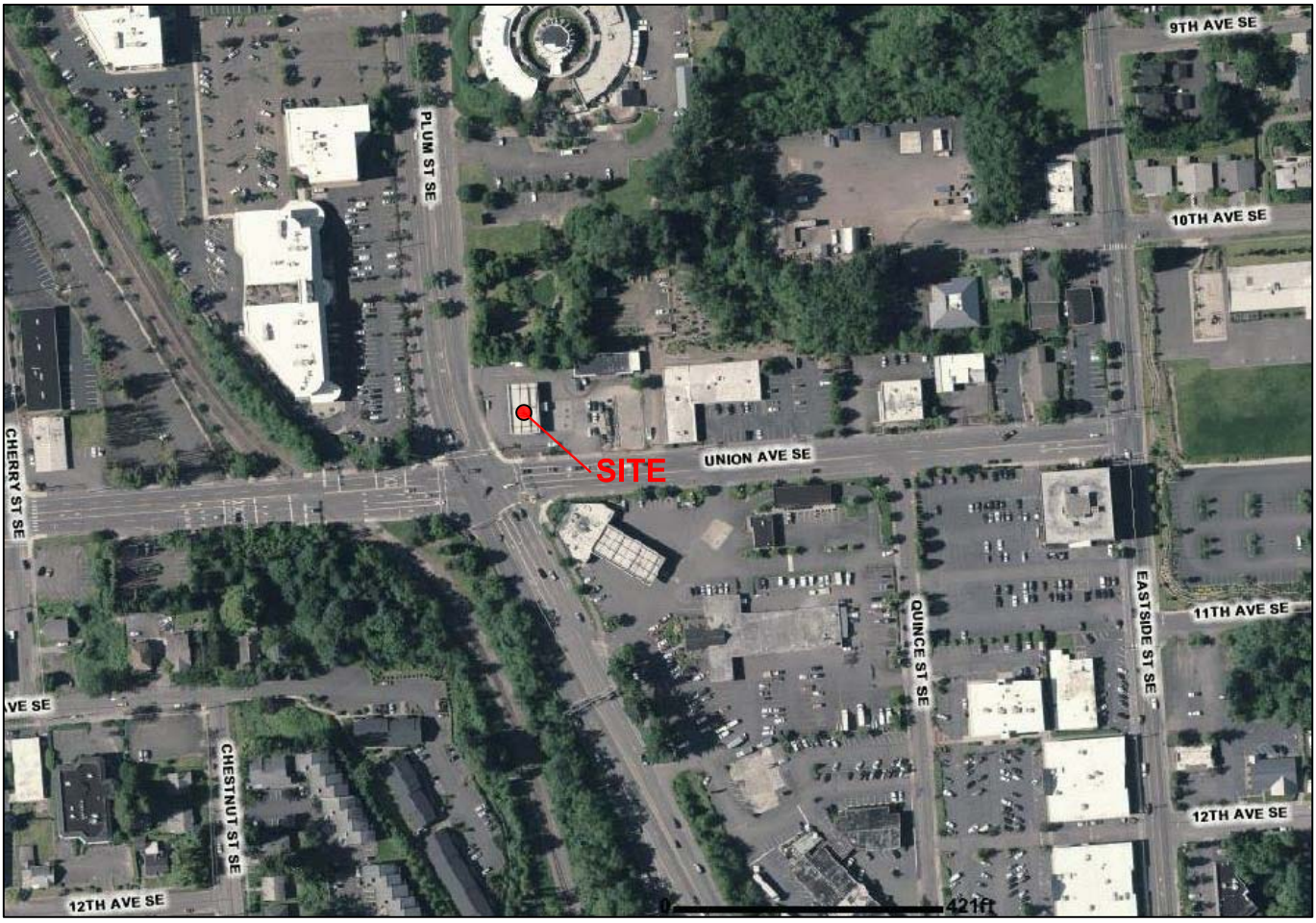
This technical document was prepared on behalf of CEMC and is intended for its sole use and for use by the local, state, or federal regulatory agency that the technical document was sent to by Leidos. Any other person or entity obtaining, using, or relying on this technical document hereby acknowledges that they do so at their own risk, and that 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.



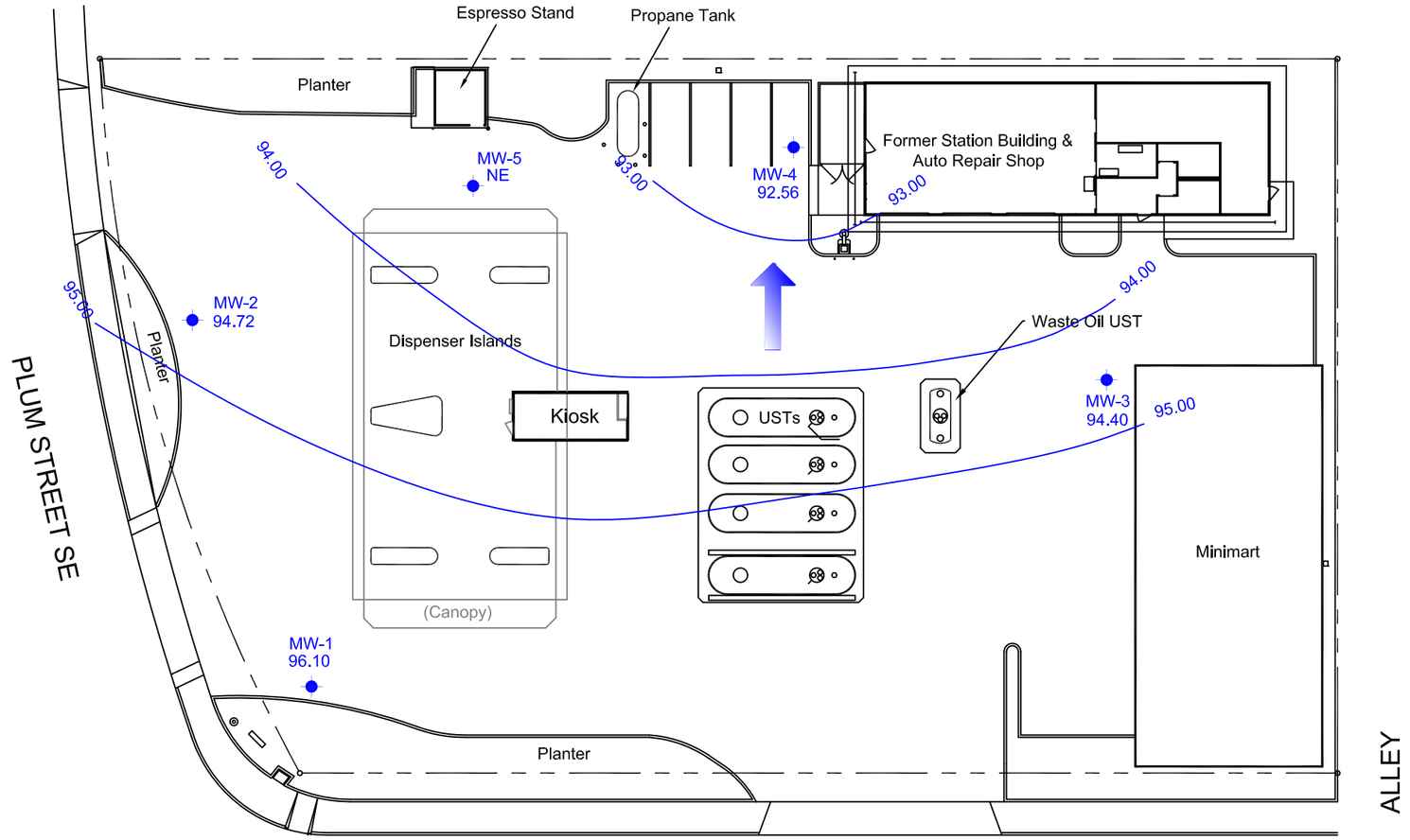
Maps Provided by Thurston County Assessor

leidos

Chevron Service Station No. 95311
1018 Plum Street
Olympia, Washington

FIGURE 1
Vicinity Map

DATE: 3/25/2015 | DRAWING: 95311 Vicinity Map.dwg



N

0 30'

Legend

MW-1	Monitoring Well Location and ID
	Property Boundary
95.04	Groundwater Elevation in Feet
95.00	Groundwater Elevation Contour Line (Dashed Where Inferred)
	Groundwater Flow Direction at an Approximate Gradient of 0.02 to 0.04 Feet per Foot
UTA	Unable to Access Monitoring Well During Sampling Event
NE	Groundwater Elevation Not Established

Chevron Service Station No. 95311
1018 Plum Street
Olympia, Washington

FIGURE 2
Potentiometric Map
February 23, 2016

DATE: 3/17/2016 | DRAWING: 95311 1Q2016.dwg

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]
CHEVRON SERVICE STATION NO. 95311
1018 Plum Street
Olympia, Washington
Concentrations reported in µg/L

Well ID/ Date	TOC[2] *(ft.)*	DTW *(ft.)*	GWE *(ft.)*	TPH-D	TPH-HO	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	D. Lead	T. Lead
MW-1													
03/18/99	98.19	1.45	96.74	ND	ND	ND[5]	ND	ND	ND	ND	<0.50	<1.0	--
03/18/99 (D)	98.19	--	--	ND	ND	ND[5]	ND	ND	ND	ND	<0.50	<1.0	--
05/27/99	98.19	2.32	95.87	<250	<750	<50.0	<0.500	<0.500	<0.500	1.47	--	--	--
08/27/99	98.19	1.90	96.29	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
11/05/99	98.19	2.20	95.99	<750	<250	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
03/28/00	98.19	2.31	95.88	--	--	--	--	--	--	--	--	--	--
06/12/00	98.19	2.14	96.05	--	--	--	--	--	--	--	--	--	--
09/15/00	98.19	3.90	94.29	--	--	--	--	--	--	--	--	--	--
11/08/00	98.19	3.94	94.25	--	--	--	--	--	--	--	--	--	--
01/24/01	98.19	1.92	96.27	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
05/25/05	98.19	4.17	94.02	<80	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
11/29/05	98.19	1.74	96.45	<81	<100	<48	<0.5	<0.5	<0.5	<1.0	<0.5	<0.87	<0.87
01/23/06	98.19	2.01	96.18	<78	<98	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	0.89
04/18/06	98.19	1.83	96.36	<79	<99	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.87
07/28/06	98.19	1.96	96.23	<79	<98	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.51
01/06/09	98.19	--	--	<200	<400	<100	<1	<2	<1	<3	--	--	--
06/05/13	98.19	4.00	94.19	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	1.9
11/27/13	98.19	1.80	96.39	<31	<73	<50	<0.5	<0.5	<0.5	<1.5	--	--	4.4
05/12/14	98.19	2.30	95.89	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	<0.085
11/24/14	98.19	2.01	96.18	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	<0.082
02/12/15	98.19	3.15	95.04	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	10
05/06/15	98.19	4.12	94.07	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	0.51
08/21/15	98.19	4.05	94.14	<46	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	1.2
11/19/15	98.19	3.21	94.98	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	<0.13	1.6
02/23/16	98.19	2.09	96.10	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	0.38	3.2
MW-2													
03/18/99	97.23	1.57	95.66	ND	ND	ND[5]	**5.41**	ND	2.24	2.57	<0.50	<1.0	--
05/27/99	97.23	1.85	95.38	ND	ND	ND	ND	ND	ND	ND	--	--	--
08/27/99	97.23	1.60	95.63	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
11/05/99	97.23	1.59	95.64	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
03/28/00	97.23	1.91	95.32	**3,590**	**819**	<50.0	4.20	<0.500	4.49	1.19	--	--	--
06/12/00[6]	97.23	1.61	95.62	--	--	--	--	--	--	--	--	--	--
09/15/00	97.23	1.88	95.35	<250	<750	--	--	--	--	--	--	--	--
11/08/00	97.23	1.78	95.45	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
01/24/01	97.23	2.05	95.18	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
05/25/05	97.23	1.85	95.38	<79	<99	<48	<0.5	<0.5	<0.5	<1.5	--	--	--

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Olympia, Washington
Concentrations reported in µg/L

Well ID/ Date	TOC[2] *(ft.)*	DTW *(ft.)*	GWE *(ft.)*	TPH-D	TPH-HO	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	D. Lead	T. Lead
MW-2 (cont)													
11/29/05	97.23	1.54	95.69	<81	<100	<48	<0.5	<0.5	<0.5	<1.0	<0.5	<0.87	7.2
01/23/06	97.23	1.97	95.26	<82	<100	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	1.5
04/18/06	97.23	1.98	95.25	<79	100	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.87
07/28/06	97.23	1.72	95.51	<79	<98	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	1.4
01/06/09	97.23	--	--	<200	<400	<100	<1	<2	<1	<3	--	--	--
06/05/13	97.23	2.81	94.42	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	0.72
11/27/13	97.23	1.97	95.26	<29	110	<50	<0.5	<0.5	<0.5	<1.5	--	--	1.2
05/12/14	97.23	1.83	95.40	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	<0.085
11/24/14	97.23	1.81	95.42	<30	<71	<50	<0.5	<0.5	<0.5	<1.5	--	--	0.18
02/12/15	97.23	2.43	94.80	<29	84	53	<0.5	<0.5	<0.5	<1.5	--	--	14.4
05/06/15	97.23	2.73	94.50	<29	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	0.17
08/21/15	97.23	2.53	94.70	<46	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	2.5
11/19/15	97.23	2.22	95.01	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	<0.13	3.6
02/23/16	97.23	2.51	94.72	<29	<67	190	1.1	<0.5	1	<1.5	--	<0.13	9.8
MW-3													
03/18/99	99.98	5.16	94.82	ND	ND	ND[5]	ND	ND	ND	ND	<0.50	<1.0	--
05/27/99	99.98	5.16	94.82	ND	ND	ND	ND	ND	ND	ND	--	--	--
08/27/99	99.98	5.17	94.81	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
11/05/99	99.98	5.19	94.79	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
03/28/00	99.98	5.23	94.75	--	--	--	--	--	--	--	--	--	--
06/12/00	99.98	5.00	94.98	--	--	--	--	--	--	--	--	--	--
09/15/00	99.98	5.36	94.62	--	--	--	--	--	--	--	--	--	--
11/08/00	99.98	5.16	94.82	--	--	--	--	--	--	--	--	--	--
01/24/01	99.98	5.14	94.84	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
05/25/05	99.98	5.33	94.65	<80	<100	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
11/29/05	99.98	4.88	95.10	<81	<100	<48	<0.5	<0.5	<0.5	<1.0	<0.5	<0.87	1.5
01/23/06	99.98	5.09	94.89	<82	<100	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	1.7
04/18/06	99.98	5.12	94.86	<99	<79	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.87
07/28/06	99.98	5.35	94.63	<79	<98	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.51
01/06/09	99.98	--	--	<200	<400	<100	<1	<2	<1	<3	--	--	--
06/05/13	99.98	INACCESSIBLE- CONSTRUCTION ACTIVITIES					--	--	--	--	--	--	--
11/27/13	99.98	INACCESSIBLE- CAR PARKED ON WELL					--	--	--	--	--	--	--
05/12/14	99.98	5.31	94.67	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	**27.8**
11/24/14	99.98	5.14	94.84	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	0.31
02/12/15	99.98	5.37	94.61	<30	93	<50	<0.5	<0.5	<0.5	<1.5	--	--	**108**
05/06/15	99.98	5.78	94.20	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	0.12

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CHEVRON SERVICE STATION NO. 95311
1018 Plum Street
Olympia, Washington
Concentrations reported in µg/L

Well ID/ Date	TOC[2] *(ft.)*	DTW *(ft.)*	GWE *(ft.)*	TPH-D	TPH-HO	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	D. Lead	T. Lead
MW-3 (cont)													
08/21/15	99.98	5.97	94.01	<46	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	0.67
11/19/15	99.98	4.54	95.44	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	<0.13	1.6
02/23/16	99.98	5.58	94.40	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	0.2	10.7
MW-4													
03/18/99	99.31	7.66	91.65	ND	ND	ND[5]	ND	ND	ND	ND	<0.50	<1.0	--
05/27/99	99.31	7.53	91.78	ND	ND	ND	ND	0.694	ND	1.61	--	--	--
08/27/99	99.31	7.62	91.69	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
11/05/99	99.31	7.70	91.61	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
03/28/00	99.31	7.60	91.71	--	--	--	--	--	--	--	--	--	--
06/12/00	99.31	7.53	91.78	--	--	--	--	--	--	--	--	--	--
09/15/00	99.31	7.70	91.61	--	--	--	--	--	--	--	--	--	--
11/08/00	99.31	7.62	91.69	--	--	--	--	--	--	--	--	--	--
01/24/01	99.31	7.63	91.68	<250	<750	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--
05/25/05	99.31	7.43	91.88	<79	<99	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
11/29/05	99.31	7.33	91.98	<81	<100	<48	<0.5	<0.5	<0.5	<1.0	<0.5	<0.87	8.5
01/23/06	99.31	7.33	91.98	<80	<100	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	8.2
04/18/06	99.31	INACCESSIBLE- VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--
07/28/06	99.31	INACCESSIBLE- VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--
01/06/09	99.31	--	--	<200	<400	<100	<1	<2	<1	<3	--	--	--
06/05/13	99.31	INACCESSIBLE- SHED OVER WELL				--	--	--	--	--	--	--	--
11/27/13	99.31	INACCESSIBLE- SHED OVER WELL				--	--	--	--	--	--	--	--
05/12/14	99.31	INACCESSIBLE- SHED OVER WELL				--	--	--	--	--	--	--	--
11/24/14	99.31	INACCESSIBLE- SHED OVER WELL				--	--	--	--	--	--	--	--
02/12/15	99.31	INACCESSIBLE- SHED OVER WELL				--	--	--	--	--	--	--	--
05/06/15	99.31	7.21	92.10	<29	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	0.09
08/21/15	99.31	7.35	91.96	<46	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	6.2
11/19/15	99.31	7.02	92.29	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	0.41	2.8
02/23/16	99.31	6.81	92.50	<31	<73	<50	<0.5	<0.5	<0.5	<1.5	--	<0.13	2.8
MW-5													
01/06/09	NE	--	--	<200	<400	<100	<1	<2	<1	<3	--	--	--
06/05/13	NE	3.98	--	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	4.8
11/27/13	NE	1.79	--	<31	100	<50	<0.5	<0.5	<0.5	<1.5	--	--	4.6
05/12/14	NE	4.77	--	<29	<68	<50	<0.5	0.5	<0.5	<1.5	--	--	**175**
11/24/14	NE	1.98	--	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	0.39
02/12/15	NE	3.94	--	<29	100	<50	<0.5	<0.5	<0.5	<1.5	--	--	2.5
05/06/15	NE	4.07	--	<28	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	0.18
08/21/15	NE	4.10	--	<45	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	2.4

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MW-5 (cont)													
11/19/15	NE	3.88	--	<29	<67	<50	<0.5	<0.5	<0.5	<1.5	--	0.39	4.2
02/23/16	NE	3.98	--	<30	<69	<50	<0.5	<0.5	<0.5	<1.5	--	<0.13	5.4
TRIP BLANK													
03/18/99		--	--	--	--	ND[5]	ND	ND	ND	ND	<0.50	<1.0	--
05/27/99		--	--	--	--	ND	ND	ND	ND	ND	--	--	--
08/27/99		--	--	--	--	ND	ND	ND	ND	ND	--	--	--
11/05/99		--	--	--	--	ND	ND	ND	ND	ND	--	--	--
03/28/00		--	--	--	--	ND	ND	ND	ND	ND	--	--	--
06/12/00		--	--	--	--	ND	ND	ND	ND	ND	--	--	--
09/15/00		--	--	--	--	ND	ND	ND	ND	ND	--	--	--
11/08/00		--	--	--	--	ND	ND	ND	ND	ND	--	--	--
01/24/01		--	--	--	--	ND	ND	ND	ND	ND	--	--	--
QA													
05/25/05		--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	--	--	--
11/29/05		--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	<2.5	--	--
01/23/06		--	--	--	--	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
04/18/06		--	--	--	--	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
04/18/06		--	--	--	--	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
07/28/06		--	--	--	--	<48	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
06/05/13		--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
11/27/13		--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
05/12/14		--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
11/24/14		--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
02/12/15		--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
05/06/15		--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]
CHEVRON SERVICE STATION NO. 95311
1018 Plum Street
Olympia, Washington
Concentrations reported in µg/L

Well ID/ Date	TOC[2] *(ft.)*	DTW *(ft.)*	GWE *(ft.)*	TPH-D	TPH-HO	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	D. Lead	T. Lead
QA (cont)													
08/21/15		--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
11/19/15		--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
02/23/16		--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
Standard Laboratory Reporting Limits:				250	250	50	0.5	0.5	0.5	1.5	2.5	0.001	1
MTCA Method A Cleanup Levels:				500	500	800/1,000	5	1,000	700	1,000	20	--	15
Current Method[3]:				NWTPH-Dx + Extended[4]		NWTPH-Gx	EPA 8021B					EPA 6020	EPA 6020

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to June 5, 2013, were compiled from reports prepared by Cambria Environmental Technology, Inc., EPI and Gettler-Ryan, Inc.

TOC = Top of Casing
DTW = Depth to Water
ft. = Feet
GWE = Groundwater Elevation
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-HO = Total Petroleum Hydrocarbons as Heavy Oil
TPH-G = Total Petroleum Hydrocarbons as Gasoline
MTBE = Methyl Tertiary Butyl Ether
D. Lead = Dissolved Lead
T. Lead = Total Lead
µg/L = Micrograms per liter
(D) = Duplicate
ND = Not Detected
NE = Not Established
QA = Quality Assurance/Trip Blank
-- = Not Measured/Not Analyzed
MTCA = Model Toxics Control Act

1 Analytical results in bold indicate concentrations exceed MTCA Method A cleanup level.
2 TOC elevations are relative to an arbitrary benchmark of 100 ft.
3 Laboratory analytical methods for historical data may not be consistent with list of current methods. When necessary, consult original laboratory reports to verify methods used.
4 Analyzed with silica-gel cleanup.
5 Detection limit raised. Refer to analytical reports.
6 Laboratory report indicates that due to an anomaly during the extraction process the sample was lost in its entirety.

Attachment A:
Groundwater Monitoring and Sampling Data Package

GETTLER-RYAN INC.

TRANSMITTAL

March 4, 2016
G-R #386665

TO: Ms. Ruth A. Otteman
Leidos, Inc.
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

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

RE: Chevron Service Station
#9-5311
1018 Plum Street
Olympia, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **First Quarter Event of February 23, 2016**

COMMENTS:

Pursuant to your request, we are providing you with a copy 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/9-5311

GETTLER-RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	**Chevron #9-5311** Date: 2/23/11
Address:	**1018 Plum Street**
City/St.:	**Olympia, WA**
Status of Site:	Active station / Garage

DRUMS:

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

#	Description	Condition	Labeling	Contents/Capacity	Location
	N/A				

WELLS:

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

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

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 #9-5311 Job Number: 386665
Site Address: 1018 Plum Street Event Date: 2/23/16 (inclusive)
City: Olympia, WA Sampler: JH

Well ID MW-1 Date Monitored: 2/23/16
Well Diameter 2 in.
Total Depth 14.55 ft.
Depth to Water 2.09 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.58

Purge Equipment:

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

Sampling Equipment:

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

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

Start Time (purge): 0700 Weather Conditions: Cloudy
Sample Time/Date: 0755 / 2/23/16 Water Color: Clear Odor: (Y) N Lt HC
Approx. Flow Rate: 200 mlpm Sediment Description:
Did well de-water? NO If yes, Time: Volume: ltrs DTW @ Sampling: 2.13

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0718	3.6	7.20	224	11.7	1.2	-39	2.11
0721	4.2	7.15	222	11.5	1.2	-37	2.12
0724	4.8	7.11	219	11.4	1.1	-32	2.13

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6020)
	1 x 250ml poly	YES	HNO3	LANCASTER	DISSOLVED LEAD(6020)

COMMENTS: Depth Pump Set At: 5.00

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #9-5311 Job Number: 386665
Site Address: 1018 Plum Street Event Date: 2/23/16 (inclusive)
City: Olympia, WA Sampler: SH

Well ID MW- 2 Date Monitored: 2/23/16
Well Diameter 2 in.
Total Depth 14.41 ft.
Depth to Water 2.51 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.89

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

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

Start Time (purge): 0825 Weather Conditions: Cloudy
Sample Time/Date: 0920 / 2/23/16 Water Color: Cloudy Odor: (Y) / N Lt HC
Approx. Flow Rate: 200 mlpm Sediment Description: Lt HC
Did well de-water? No If yes, Time: Volume: ltrs DTW @ Sampling: 2.61

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
0843	3.6	7.89	259	11.6	1.2	-15	2.54
0846	4.2	7.81	263	11.4	1.2	-17	2.59
0849	4.8	7.74	270	11.4	1.1	-20	2.61

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 2	3 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6020)
	1 x 250ml poly	YES	HNO3	LANCASTER	DISSOLVED LEAD(6020)

COMMENTS: Depth Pump Set At: 5.00

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #9-5311 Job Number: 386665
Site Address: 1018 Plum Street Event Date: 2/23/16 (inclusive)
City: Olympia, WA Sampler: JH

Well ID MW-3 Date Monitored: 2/23/16
Well Diameter 2 in.
Total Depth 14.71 ft.
Depth to Water 5.58 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 7.40

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

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

Start Time (purge): 1240 Weather Conditions: Cloudy
Sample Time/Date: 1335 / 2/23/16 Water Color: Cloudy Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: Light
Did well de-water? NO If yes, Time: Volume: ltrs DTW @ Sampling: 5.72

Time (2400 hr.)	Volume (Liters)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1258	3.6	7.42	277	11.6	1.4	87	5.63
1301	4.2	7.39	268	11.5	1.2	84	5.68
1304	4.8	7.33	263	11.5	1.2	81	5.72

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6020)
	1 x 250ml poly	YES	HNO3	LANCASTER	DISSOLVED LEAD(6020)

COMMENTS: Depth Pump Set At: 8.00

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #9-5311 Job Number: 386665
Site Address: 1018 Plum Street Event Date: 2/23/16 (inclusive)
City: Olympia, WA Sampler: JH

Well ID MW-4 Date Monitored: 2/23/16
Well Diameter 2 in.
Total Depth 14.55 ft.
Depth to Water 6.81 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.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.35

Purge Equipment:

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

Sampling Equipment:

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

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

Start Time (purge): 1125 Weather Conditions: Cloudy
Sample Time/Date: 1220 / 2/23/16 Water Color: Cloudy Odor: Y / (N)
Approx. Flow Rate: 200 mlpm Sediment Description: Silty
Did well de-water? NO If yes, Time: ___ Volume: ___ ltrs DTW @ Sampling: 6.97

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
1143	3.6	7.28	249	11.6	1.0	32	6.85
1146	4.2	7.22	246	11.4	1.1	36	6.92
1149	4.8	7.16	237	11.3	1.2	41	6.97

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	3 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6020)
	1 x 250ml poly	YES	HNO3	LANCASTER	DISSOLVED LEAD(6020)

COMMENTS: Depth Pump Set At: 9.00

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
LOW FLOW FIELD DATA SHEET

Client/Facility#: Chevron #9-5311 Job Number: 386665
Site Address: 1018 Plum Street Event Date: 2/23/16 (inclusive)
City: Olympia, WA Sampler: JH

Well ID MW-5 Date Monitored: 2/23/16
Well Diameter 2 in.
Total Depth 18.55 ft.
Depth to Water 3.98 ft.
14.57 xVF — = — x3 case volume = Estimated Purge Volume: — gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.89

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.

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

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

Start Time (purge): 0955 Weather Conditions: Cloudy
Sample Time/Date: 1050 / 2/23/16 Water Color: Cloudy Odor: Y / (N)
Approx. Flow Rate: 200 · mlpm Sediment Description: Lt Brn
Did well de-water? NO If yes, Time: Volume: ltrs DTW @ Sampling: 4.13

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
1013	3.6	7.68	259	11.5	1.2	23	4.02
1016	4.2	7.63	264	11.4	1.2	29	4.07
1019	4.8	7.55	273	11.3	1.3	35	4.13

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	3 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc
	1 x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD(6020)
	1 x 250ml poly	YES	HNO3	LANCASTER	DISSOLVED LEAD(6020)

COMMENTS: Depth Pump Set At: 6.00

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

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

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

SCR #: _____

1 Client Information

Facility # SS#9-5311-OML G-R#386665 WBS
Site Address 1018 Plum Street SE, OLYMPIA, WA
Chevron PM MHO LEIDOSRO Lead Consultant Ruth Otteman
Consultant/Office Gettler-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568
Consultant Project Mgr. Deanna L. Harding, (deanna@grinc.com)
Consultant Phone # (925) 551-7444 x180
Sampler Jim Hocking

4 Matrix

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

5 Analyses Requested

Total Number of Containers | BTEX + MTBE ☐ 8021 ☒ 8260 ☐ Naphth | 8260 full scan | Oxygenates ___ | NWTPH-Gx 8021 | NWTPH-Dx with Silica Gel Cleanup ☒ | NWTPH-Dx without Silica Gel Cleanup ☐ | WA VPH ☐ WA EPH ☐ | Lead Total ☒ Diss. ☐ Method 6020 | 6020 Lead Dissolved

2 Sample Identification	Collected Date	Collected Time	3 Grab	Composite	Soil	Water	Oil	Total Containers	BTEX+MTBE	8260 full scan	Oxygenates	NWTPH-Gx	NWTPH-Dx w/ Silica Gel	NWTPH-Dx without Silica Gel	WA VPH	WA EPH	Lead Total	Lead Diss.	6020 Lead Dissolved
QA	2/24/16		X			X		2	X			X							
MW-1		0755						7					X	X			X		X
MW-2		0920																	
MW-3		1335																	
MW-4		1220																	
MW-5		1050																	

6 Remarks

DISSOLVED LEAD SAMPLES HAVE BEEN FIELD FILTERED

Remove NWTPH-Dx

JLM 2/29/16

☐ 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 | EDF/EDD | 72 hour | 48 hour | 24 hour

8 Data Package (circle if required)

Type I - Full
Type VI (Raw Data)

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

9

Relinquished by	Date	Time	Received by	Date	Time
	2/25/16	1200		2/25/16	12:10
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____			Received by	Date	Time

Temperature Upon Receipt _____ °C

Custody Seals Intact? Yes No

Attachment B:
Laboratory Analysis Report

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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

Report Date: March 10, 2016

Project: 95311

Submittal Date: 02/26/2016
Group Number: 1635229
PO Number: 0015172329
Release Number: HORNE
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
QA Water	8260547
MW-1 Grab Water	8260548
MW-1 Filtered Grab Water	8260549
MW-2 Grab Water	8260550
MW-2 Filtered Grab Water	8260551
MW-3 Grab Water	8260552
MW-3 Filtered Grab Water	8260553
MW-4 Grab Water	8260554
MW-4 Filtered Grab Water	8260555
MW-5 Grab Water	8260556
MW-5 Filtered Grab Water	8260557

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

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

Electronic Copy To	Leidos	Attn: Ruth Otteman
Electronic Copy To	Leidos	Attn: Jamalyn Agyei
Electronic Copy To	Gettler-Ryan Inc.	Attn: Gettler Ryan

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: QA Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260547
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

DSWQA

CAT No.	Analysis Name	CAS Number	Result	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	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. 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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	16060A53A	03/01/2016 14:56	Marie D Beamenderfer	1
02102	Method 8021 Water Master	SW-846 8021B	1	16060A53A	03/01/2016 14:56	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	16060A53A	03/01/2016 14:56	Marie D Beamenderfer	1

Sample Description: MW-1 Grab Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260548
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016 07:55 by JH

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

DSWM1

CAT No.	Analysis Name	CAS Number	Result	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	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	1.5	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 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	3.2	0.13	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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	16060A53A	03/01/2016 21:24	Marie D Beamenderfer	1
02102	Method 8021 Water Master	SW-846 8021B	1	16060A53A	03/01/2016 21:24	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	16060A53A	03/01/2016 21:24	Marie D Beamenderfer	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	160580036A	03/02/2016 12:14	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	160580036A	03/01/2016 10:00	Olivia Arosemena	1
06035	Lead	SW-846 6020	1	160616050003A	03/08/2016 12:57	Deborah A Krady	1
06050	ICPMS-Water, 3020A - U3	SW-846 3010A modified	1	160616050003	03/02/2016 13:20	Barbara A Kane	1

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Analysis Report

Sample Description: MW-1 Filtered Grab Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260549
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016 07:55 by JH

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	**SW-846 6020**		ug/l	ug/l	
06035	Lead	7439-92-1	0.38	0.13	1

General Sample Comments

State of Washington Lab Certification No. C457
This sample was field filtered for dissolved metals.

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
06035	Lead	SW-846 6020	1	160616050003A	03/08/2016 13:08	Deborah A Krady	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	160616050003	03/02/2016 13:20	Barbara A Kane	1

Sample Description: MW-2 Grab Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260550
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016 09:20 by JH

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

DSWM2

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08274	NWTPH-Gx water C7-C12	n.a.	190	50	1
GC Volatiles	**SW-846 8021B**		**ug/l**	**ug/l**	
02102	Benzene	71-43-2	1.1	0.5	1
02102	Ethylbenzene	100-41-4	1.0	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	1.5	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 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	9.8	0.13	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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	16060A94A	03/01/2016 15:00	Marie D Beamenderfer	1
02102	Method 8021 Water Master	SW-846 8021B	1	16060A94A	03/01/2016 15:00	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	16060A94A	03/01/2016 15:00	Marie D Beamenderfer	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	160580036A	03/02/2016 12:36	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	160580036A	03/01/2016 10:00	Olivia Arosemena	1
06035	Lead	SW-846 6020	1	160616050003A	03/08/2016 13:10	Deborah A Krady	1
06050	ICPMS-Water, 3020A - U3	SW-846 3010A modified	1	160616050003	03/02/2016 13:20	Barbara A Kane	1

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Analysis Report

Sample Description: MW-2 Filtered Grab Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260551
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016 09:20 by JH

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	**SW-846 6020**		ug/l	ug/l	
06035	Lead	7439-92-1	N.D.	0.13	1

General Sample Comments

State of Washington Lab Certification No. C457
This sample was field filtered for dissolved metals.

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
06035	Lead	SW-846 6020	1	160616050003A	03/08/2016 13:16	Deborah A Krady	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	160616050003	03/02/2016 13:20	Barbara A Kane	1

Sample Description: MW-3 Grab Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260552
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016 13:35 by JH

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

DSWM3

CAT No.	Analysis Name	CAS Number	Result	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	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	1.5	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 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	10.7	0.13	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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	16060A94A	03/01/2016 15:25	Marie D Beamenderfer	1
02102	Method 8021 Water Master	SW-846 8021B	1	16060A94A	03/01/2016 15:25	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	16060A94A	03/01/2016 15:25	Marie D Beamenderfer	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	160640018A	03/08/2016 10:18	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	160640018A	03/07/2016 02:15	Sherry L Morrow	1
06035	Lead	SW-846 6020	1	160616050003A	03/08/2016 13:17	Deborah A Krady	1
06050	ICPMS-Water, 3020A - U3	SW-846 3010A modified	1	160616050003	03/02/2016 13:20	Barbara A Kane	1

Sample Description: MW-3 Filtered Grab Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260553
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016 13:35 by JH

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	**SW-846 6020**		ug/l	ug/l	
06035	Lead	7439-92-1	0.20	0.13	1

General Sample Comments

State of Washington Lab Certification No. C457
This sample was field filtered for dissolved metals.

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
06035	Lead	SW-846 6020	1	160616050003A	03/08/2016 13:19	Deborah A Krady	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	160616050003	03/02/2016 13:20	Barbara A Kane	1

Sample Description: MW-4 Grab Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260554
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016 12:20 by JH

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

DSWM4

CAT No.	Analysis Name	CAS Number	Result	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	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	1.5	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.	31	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	73	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	2.8	0.13	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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	16060A94A	03/01/2016 15:51	Marie D Beamenderfer	1
02102	Method 8021 Water Master	SW-846 8021B	1	16060A94A	03/01/2016 15:51	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	16060A94A	03/01/2016 15:51	Marie D Beamenderfer	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	160640018A	03/08/2016 10:40	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	160640018A	03/07/2016 02:15	Sherry L Morrow	1
06035	Lead	SW-846 6020	1	160616050003A	03/08/2016 13:21	Deborah A Krady	1
06050	ICPMS-Water, 3020A - U3	SW-846 3010A modified	1	160616050003	03/02/2016 13:20	Barbara A Kane	1

Sample Description: MW-4 Filtered Grab Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260555
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016 12:20 by JH

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	**SW-846 6020**		ug/l	ug/l	
06035	Lead	7439-92-1	N.D.	0.13	1

General Sample Comments

State of Washington Lab Certification No. C457
This sample was field filtered for dissolved metals.

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
06035	Lead	SW-846 6020	1	160616050003A	03/08/2016 13:23	Deborah A Krady	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	160616050003	03/02/2016 13:20	Barbara A Kane	1

Sample Description: MW-5 Grab Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260556
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016 10:50 by JH

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

DSWM5

CAT No.	Analysis Name	CAS Number	Result	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	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	1.5	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.	30	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	69	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	5.4	0.13	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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	16060A94A	03/01/2016 16:16	Marie D Beamenderfer	1
02102	Method 8021 Water Master	SW-846 8021B	1	16060A94A	03/01/2016 16:16	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	16060A94A	03/01/2016 16:16	Marie D Beamenderfer	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	160640018A	03/08/2016 11:02	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	160640018A	03/07/2016 02:15	Sherry L Morrow	1
06035	Lead	SW-846 6020	1	160616050003A	03/08/2016 13:25	Deborah A Krady	1
06050	ICPMS-Water, 3020A - U3	SW-846 3010A modified	1	160616050003	03/02/2016 13:20	Barbara A Kane	1

Sample Description: MW-5 Filtered Grab Water
Facility# 95311 Job# 386665
1018 Plum St SE - Olympia, WA

LL Sample # WW 8260557
LL Group # 1635229
Account # 11260

Project Name: 95311

Collected: 02/23/2016 10:50 by JH

Submitted: 02/26/2016 09:20
Reported: 03/10/2016 15:48

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	**SW-846 6020**		ug/l	ug/l	
06035	Lead	7439-92-1	N.D.	0.13	1

General Sample Comments

State of Washington Lab Certification No. C457
This sample was field filtered for dissolved metals.

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
06035	Lead	SW-846 6020	1	160616050003A	03/08/2016 13:26	Deborah A Krady	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	160616050003	03/02/2016 13:20	Barbara A Kane	1

Quality Control Summary

Client Name: Chevron
Reported: 03/10/2016 15:48

Group Number: 1635229

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.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 16060A53A	Sample number(s): 8260547-8260548	
Benzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
NWTPH-Gx water C7-C12	N.D.	50
Toluene	N.D.	0.2
Total Xylenes	N.D.	0.2
Batch number: 16060A94A	Sample number(s): 8260550,8260552,8260554,8260556	
Benzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
NWTPH-Gx water C7-C12	N.D.	50
Toluene	N.D.	0.2
Total Xylenes	N.D.	0.2
Batch number: 160580036A	Sample number(s): 8260548,8260550	
DRO C12-C24 w/Si Gel	N.D.	30
HRO C24-C40 w/Si Gel	N.D.	70
Batch number: 160640018A	Sample number(s): 8260552,8260554,8260556	
DRO C12-C24 w/Si Gel	N.D.	30
HRO C24-C40 w/Si Gel	N.D.	70
Batch number: 160616050003A	Sample number(s): 8260548-8260557	
Lead	N.D.	0.13

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 16060A53A	Sample number(s): 8260547-8260548								
Benzene	20	19.66	20	20.76	98	104	80-120	5	30
Ethylbenzene	20.1	19.12	20.1	20.2	95	101	80-120	5	30
NWTPH-Gx water C7-C12	1100	1056.89	1100	1034.02	96	94	79-120	2	30
Toluene	20.2	19.39	20.2	20.46	96	101	80-120	5	30
Total Xylenes	60.2	59.61	60.2	63.14	99	105	80-120	6	30
Batch number: 16060A94A	Sample number(s): 8260550,8260552,8260554,8260556								
Benzene	20	21.39	20	21.05	107	105	80-120	2	30
Ethylbenzene	20.1	21.69	20.1	21.7	108	108	80-120	0	30
NWTPH-Gx water C7-C12	1100	951.54	1100	959.08	87	87	79-120	1	30
Toluene	20.2	21.64	20.2	21.55	107	107	80-120	0	30
Total Xylenes	60.2	67.04	60.2	66.63	111	111	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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Chevron
Reported: 03/10/2016 15:48

Group Number: 1635229

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: 160580036A	Sample number(s): 8260548,8260550								
DRO C12-C24 w/Si Gel	1600	952.14	1600	877.78	60	55	32-117	8	20
Batch number: 160640018A	Sample number(s): 8260552,8260554,8260556								
DRO C12-C24 w/Si Gel	1600	767.36	1600	787.8	48	49	32-117	3	20
	ug/l	ug/l	ug/l	ug/l					
Batch number: 160616050003A	Sample number(s): 8260548-8260557								
Lead	15	15.97			106		80-120		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc	MS Spike Added	MS Conc	MSD Spike Added	MSD Conc	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: 160616050003A	Sample number(s): 8260548-8260557 UNSPK: 8260548									
Lead	3.22	15	19.34	15	19.3	108	107	75-125	0	20

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
	ug/l	ug/l		
Batch number: 160616050003A	Sample number(s): 8260548-8260557 BKG: 8260548			
Lead	3.22	3.47	8 (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: Method 8021 Water Master
Batch number: 16060A53A

	Trifluorotoluene-P	Trifluorotoluene-F
8260547	100	118
8260548	100	97
Blank	101	130
LCS	101	110
LCSD	100	110
Limits:	51-120	63-135

Analysis Name: Method 8021 Water Master
Batch number: 16060A94A

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Chevron
Reported: 03/10/2016 15:48

Group Number: 1635229

	Trifluorotoluene-P	Trifluorotoluene-F
8260550	84	96
8260552	86	75
8260554	86	74
8260556	92	75
Blank	86	74
LCS	84	89
LCSD	84	91
Limits:	51-120	63-135

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 160580036A

	Orthoterphenyl
8260548	86
8260550	78
Blank	80
LCS	86
LCSD	79
Limits:	50-150

Analysis Name: NWTPH-Dx water w/ 10g Si Gel
Batch number: 160640018A

	Orthoterphenyl
8260552	81
8260554	77
8260556	63
Blank	71
LCS	72
LCSD	70
Limits:	50-150

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 11260 For Eurofins Lancaster Laboratories use only Group # 1635229 Sample # 8260547-57

Instructions on reverse side correspond with circled numbers.

1 Client Information

Facility # SS#9-5311-OML G-R#366665 WBS

Site Address 1018 Plum Street SE, OLYMPIA, WA

Chevron PM MHO LEIDOSRO Lead Consultant Ruth Ottemann

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

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

Consultant Phone # (925) 551-7444 x180

Sampler Jim Hearn

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	Oxygenates ___	NWTPH-Gx	NWTPH-Dx with Silica Gel Cleanup ☒	NWTPH-Dx without Silica Gel Cleanup ☐	WA VPH ☐	WA EPH ☐	Lead Total ☒ Diss. ☐ Method 6020	Lead Dissolved 6020
QA	2/25/16		X			X		2	X			X						
MW-1	1	0755	1			1		7	1			1	X	X			X	X
MW-2	1	0920	1			1		7	1			1	1	1			1	1
MW-3	1	1335	1			1		7	1			1	1	1			1	1
MW-4	1	1220	1			1		7	1			1	1	1			1	1
MW-5	1	1050	1			1		7	1			1	1	1			1	1

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

DISSOLVED LEAD SAMPLES HAVE BEEN FIELD FILTERED

Remove NWTPH-Dx

JM 2/29/16

7 Turnaround Time Requested (TAT) (please circle)

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

Relinquished by	Date	Time	Received by	Date	Time
	2/25/16	1200		2/25/16	1210
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other ____			Received by	Date	Time

8 Data Package (circle if required)

Type I - Full

Type VI (Raw Data)

EDD (circle if required)

CVX-RTBU-FI_05 (default)

Other: _____

Temperature Upon Receipt _____ °C

Custody Seals Intact? Yes No

9

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 11260 For Eurofins Lancaster Laboratories use only Group # 1635229 Sample # 8360547-57

Instructions on reverse side correspond with circled numbers.

SCR #: _____

(1) Client Information

Facility # SS#9-5311-OML G-R#386665 WBS

Site Address 1018 Plum Street SE, OLYMPIA, WA

Chevron PM MHO LEIDOSRO Lead Consultant Ruth Otteman

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 x160

Sampler Jim Hassler

(2) Sample Identification

Sample Identification	Collected Date	Collected Time	(3) Grab	Composite	(4) Matrix: Soil	Sediment	Potable	Ground	NPDES	Surface	Water	Air	Oil	Total Number of Containers	(5) Analyses Requested: BTEX +	Naphth	8260	8021	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	6020	6020 Dissolved
QA	2/23/16		X								X			2	X						X									
MW-1		0755												7								X	X			X	X			
MW-2		0920																												
MW-3		1335																												
MW-4		1220																												
MW-5		1050																												

(6) Remarks

DISSOLVED LEAD SAMPLES HAVE BEEN FIELD FILTERED

- ☐ 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

Relinquished by	Date	Time	Received by	Date	Time (9)
	2/25/16	1800		2/25/16	12:10
Relinquished by	Date	Time	Received by	Date	Time

(8) Data Package (circle if required)

Type I - Full

Type VI (Raw Data)

EDD (circle if required)

CVX-RTBU-FI_05 (default)

Other: _____

Relinquished by Commercial Carrier: UPS _____ FedEx X Other _____

Received by _____ Date 2-26-16 Time 920 ~~0730~~ (3) tc 2.26.16

Temperature Upon Receipt 0.5-2.8 °C

Custody Seals Intact? Yes No

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 137596

Group Number(s): 1635229

Client: Chevron

1018 Plum Street

Delivery and Receipt Information

Delivery Method:	SeaTac	Arrival Timestamp:	02/26/2016 9:20
Number of Packages:	10	Number of Projects:	6
State/Province of Origin:	WA		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCL
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Timothy Cubberley (6520) at 12:34 on 02/26/2016

Samples Chilled Details: 1018 Plum Street

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	2.8	DT	Wet	Y	Bagged	N
2	DT131	0.7	DT	Wet	Y	Bagged	N
3	DT131	1.1	DT	Wet	Y	Bagged	N
4	DT131	1.3	DT	Wet	Y	Bagged	N
5	DT131	0.7	DT	Wet	Y	Bagged	N
6	DT131	2.6	DT	Wet	Y	Bagged	N
7	DT131	1.0	DT	Wet	Y	Bagged	N
8	DT131	0.5	DT	Wet	Y	Bagged	N
9	DT131	2.4	DT	Wet	Y	Bagged	N
10	DT131	1.5	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

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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
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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