SEMI-ANNUAL STATUS REPORT
Second Half 2023
December 22, 2023

Facility No:	Former Standard Oil Bulk Plant 302095	Address:	149 and 167 Main Street, Morton, Washington

Arcadis Contact Person / Phone No.:	Carl Donovan / 503-785-9470
Arcadis Project No.:	30063832
Primary Agency/Regulatory ID No.:	Washington State Department of Ecology Southwest Regional Office, Toxics Cleanup Program Andrew Smith / Agreed Order No. DE 03TCPSR-5715 / Facility/Site ID 7937547

WORK CONDUCTED THIS PERIOD [Second Half 2023]:

1. Met with the Washington Department of Ecology on April 12, 2023 to discuss site 5-year review.
2. Conducted semi-annual groundwater monitoring and sampling on July 25, 2023.
3. Prepared the *Semi-Annual Status Report, Second Half 2023*.

WORK PROPOSED NEXT PERIOD [third quarter 2023 – first quarter 2026]:

1. Conduct groundwater monitoring and sampling in the first quarter of 2026.
2. Prepare the *2026 Groundwater Status Report*.

Current Phase of Project:	Monitoring	
Frequency of Monitoring / Sampling:	Every 2.5 years	
Is Light Non-Aqueous Phase Liquid (LNAPL) Present On-site:	None	
Approximate Depth to Groundwater:	4.30 to 6.79	(feet below top of casing)
Approximate Groundwater Elevation:	943.89 to 944.89	(feet above NAVD 88)
Predominant Groundwater Flow Direction	Southeast	
Groundwater Gradient	0.007	(feet per foot)

Current Remediation Techniques:	None
Permits for Discharge:	Not Applicable
Summary of Unusual Activity:	Monitoring well MW-11 was covered in gravel and was unable to be located for gauging and sampling.
Agency Directive Requirements:	Agreed Order No. DE 03TCPSR-5715 (Attachment A)

DISCUSSION

On behalf of Chevron Environmental Management Company (CEMC), Arcadis U.S. Inc (Arcadis) subcontractor Blaine Tech Services conducted groundwater monitoring activities on July 25, 2023. Groundwater monitoring activities were conducted in general accordance with the regulatory directive dated April 24, 2017 (Attachment A). The groundwater monitoring program includes gauging and sampling monitoring wells MW-7, MW-11, MW-13, MW-15, MW-16 and MW-17. During the July 2023 sampling event, monitoring well MW-11 was covered in gravel and unable to be located for gauging and sampling.

Accessible wells were low flow purged using a peristaltic pump and dedicated disposable tubing prior to collection of samples. Field parameters including pH, temperature, electrical conductivity, turbidity, dissolved oxygen, and oxidation reduction potential were collected during the purging process with a multiparameter water quality meter and flow-through cell. Field parameters were allowed to stabilize prior to collecting samples. The groundwater monitoring field data sheets are included as Attachment B.

Following stabilization, samples were collected in pre-preserved laboratory-provided bottles and placed in a cooler with ice. Groundwater samples were submitted to Pace Analytical, located in Mount Juliet, Tennessee, an Ecology-accredited laboratory, under standard chain-of-custody protocols. Groundwater samples were analyzed for the following:

- Total petroleum hydrocarbons as gasoline range organics (TPH-GRO) by Northwest Method NWTPH-Gx
- Total petroleum hydrocarbons as diesel range organics (TPH-DRO) and total petroleum hydrocarbons as heavy oil range (TPH-RRO) by Northwest NWTPH-Dx.
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency Method 8260 D

A blind duplicate groundwater sample was collected from MW-7 for data quality assurance.

A site location map and a site plan are shown on Figures 1 and 2, respectively. Current and historic groundwater gauging data and analytical results are presented in Table 1 and 2, respectively. The

calculated groundwater flow direction is to the southeast with a hydraulic gradient of 0.007 feet/foot. Historically, groundwater flow direction at the site has been predominately to the south-southeast. Groundwater elevation contours summarizing the July 2023 event and a rose diagram of historical flow direction are presented on Figure 3.

Groundwater analytical results for samples collected from monitoring wells were either less than the Model Toxics Control Act (MTCA) Method A Cleanup Level (CULs) or were not detected at concentrations greater than the laboratory reporting limit, except for the following locations:

- Monitoring well MW-7 and its duplicate sample exceeded the MTCA Method A CUL of 500 micrograms per liter [µg/L] for TPH-DRO at detected concentrations of 1,060 and 1,110 µg/L, respectively.
- Monitoring well MW-7 and its duplicate sample exceeded the MTCA Method A CUL of 500 µg/L for TPH-HRO at detected concentrations of 530 and 588 µg/L respectively.

Groundwater analytical results are shown on Figure 4. The analytical laboratory report and chain-of-custody documentation are provided in Attachment C.

On April 12, 2023, Arcadis, on behalf of CEMC, met with Ecology staff to discuss site status prior to the completion of the Ecology's Five-Year Review of the site. In the meeting, Ecology and Arcadis concluded that the cleanup actions conducted at the site continue to be protective of human health and the environment and the sampling scope can be reduced to once every 2.5 years (Attachment D). The next sampling event will be conducted in the third quarter 2025.

LIMITATIONS

This report was prepared in accordance with the scope of work outlined in Arcadis' contract and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of Chevron Environmental Management Company for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Arcadis. To the extent that this report is based on information provided to Arcadis by third parties, Arcadis may have made efforts to verify this third-party information, but Arcadis cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigation. No other warranties expressed or implied are made by Arcadis.

Carl Donovan

Date: December 22, 2023

Carl Donovan
Project Manager

Date: December 22, 2023

Rebecca Andresen, LG
Senior Vice President
Licensed Geologist 2588

ATTACHMENTS:

Table 1	Current Groundwater Gauging and Analytical Results
Table 2	Groundwater Gauging and Analytical Results Fourth Quarter 2004 to Current
Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Groundwater Elevation Contour Map, July 25, 2023
Figure 4	Groundwater Analytical Results Map, July 25, 2023
Attachment A	Regulatory Directive, April 24, 2017
Attachment B	Field Data Sheets
Attachment C	Laboratory Report and Chain-of-Custody Documentation
Attachment D	Ecology Correspondence

TABLES

Table 1
Current Groundwater Gauging Data and Analytical Results- Second Half 2023
Former Standard Oil Bulk Plant 302095
149 and 167 Main Street
Morton, Washington

Well	Date	Screen Interval	Top of Casing	Depth to Water	Groundwater Elevation	TPH-GRO	TPH-DRO	TPH-DRO w/ SGC	TPH-HRO	TPH-HRO w/ SGC	Benzene	Toluene	Ethylbenzene	Total Xylenes	Comments
MTCA Method A CULs						**800/1,000**	**500**	**500**	**500**	**500**	**5**	**1000**	**700**	**1000**	
MW-7	7/25/2023	5-19	951.11	6.79	944.32	<100	**1,060**	--	**530**	--	<1.00	<1.00	<1.00	0.181 J	
MW-7	7/25/2023	--	--	--	--	<100	**1,110**	--	**588**	--	<1.00	<1.00	<1.00	<3.00	Duplicate
MW-11	7/25/2023	--	950.22	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-13	7/25/2023	3-18	951.32	6.43	944.89	<100	126 J	--	153 J	--	<1.00	<1.00	<1.00	<3.00	
MW-15	7/25/2023	3-18	949.09	4.30	944.79	233	320	--	116 J	--	<1.00	<1.00	<1.00	<3.00	
MW-16	7/25/2023	3-18	949.89	6.00	943.89	40.5 J	292	--	174 J	--	<1.00	<1.00	<1.00	<3.00	
MW-17	7/25/2023	3-18	949.85	5.96	943.89	<100	145 J	--	175 J	--	<1.00	<1.00	<1.00	<3.00	

Notes:
1. Bold and grey highlighted concentrations are greater thsn their respective MTCA Method A CUL
2. Analytical results are presented in µg/L.
3. TPH-GRO MTCA Method A CUL with benzene present is 800 µg/L and without is 1,000 µg/L.
4. TOC elevations were resurveyed relative to NAVD 88 in July 2023.
5. Depth to Water Measured in feet below TOC.

Abbreviations:
-- = Not applicable, not available, or not analyzed
< = Not detected at or above the laboratory reporting limit
µg/L = micrograms per liter
BTEX = benzene, toluene, ethylbenzene, and xylenes
CUL = Cleanup Level
NAVD 88 = North American Vertical Datum of 1988
MTCA = Model Toxics Control Act
SGC= Silica gel Cleanup
TOC = Top of casing
TPH-DRO = Total Petroleum Hydrocarbon as Diesel Range Organics
TPH-GRO = Total Petroleum Hydrocarbons as Gasoline-Range Organics
TPH-HRO = Total Pretoleum Hydrocarbons as Heavy Oil Range Organics
USEPA = United States Environmental Protection Agency

Laboratory Qualifiers
J = The associated numerical value is an estimated concentration only
B = The same analyte is found in the associated blank

Current Analytical Methods:
TPH-GRO by Northwest Method NWTPH-Gx
TPH-DRO and TPH-HRO by Northwest Method NWTPH-Dx
BTEX by United States Environmental Protection Agency Method 8260B

Table 2
Groundwater Gauging Data and Analytical Results Fourth Quarter 2004 to Current
Former Standard Oil Bulk Plant 302095
149 and 167 Main Street
Morton, Washington

Well	Date	Screen Interval	Top of Casing	Depth to Water	Groundwater Elevation	TPH-GRO	TPH-DRO	TPH-DRO w/ SGC	TPH-HRO	TPH-HRO w/ SGC	Benzene	Toluene	Ethylbenzene	Total Xylenes	Methyl tert-butyl ether	Dissolved Lead	Total Lead	Naphthalene	n-Hexane	Comments
MTCA Method A CULs						**800/1,000**	**500**	**500**	**500**	**500**	**5**	**1000**	**700**	**1000**	**20**	**15**	**15**	**160**	**NE**	
MW-1	7/9/2004	5-15	97.62	3.92	93.7	<50	**630**	--	210	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.99	--	<1	<2	
MW-1	10/11/2004	5-15	97.62	1.79	95.83	<50	120	--	<100	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-1	1/25/2005	5-15	97.62	2.01	95.61	<48	<79	--	<99	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-1	4/13/2005	5-15	97.62	1.19	96.43	<48	450	--	<99	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-1	7/11/2005	5-15	97.62	2.38	95.24	48	380	--	<110	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-1	8/13/2007	5-15	97.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-1	12/2/2008	5-15	97.55	2.17	95.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Included in Monitoring Program
MW-2	7/9/2004	5-15	99.18	5.06	94.12	**2,500**	**1,800**	--	320	--	**1,100**	35	160	59	<0.5	<0.99	--	19	130	
MW-2	10/11/2004	5-15	99.18	2.68	96.50	**2,500**	**560**	--	<99	--	**1,100**	37	170	44	--	--	--	--	--	
MW-2	1/25/2005	5-15	99.18	2.82	96.36	**2,200**	**1,700**	--	180	--	**880**	33	150	35	--	--	--	--	--	
MW-2	4/13/2005	5-15	99.18	2.31	96.87	**2,800**	**960**	--	110	--	**1,100**	45	380	80	--	--	--	--	--	
MW-2 DUP	4/13/2005	5-15	99.18	2.31	96.87	**2,700**	**960**	--	120	--	**1,100**	48	380	84	--	--	--	--	--	
MW-2	7/11/2005	5-15	99.18	3.16	96.02	**2,300**	**1,400**	--	180	--	**760**	26	170	41	--	--	--	--	--	
MW-2 DUP	7/11/2005	5-15	99.18	3.16	96.02	**2,100**	**1,500**	--	170	--	**810**	25	150	36	--	--	--	--	--	
MW-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Abandoned October 2006
MW-3	7/9/2004	5-15	100.00	6.03	93.97	80	290	--	150	--	**22**	0.600	6	5	<0.5	<0.99	--	<1	2	
MW-3 DUP	7/9/2004	5-15	100.00	6.03	93.97	100	300	--	190	--	**23**	0.600	6	5	<0.5	<0.99	--	<1	2	
MW-3	10/11/2004	5-15	100.00	4.27	95.73	<50	<79	--	<98	--	2	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-3	1/25/2005	5-15	100.00	4.13	95.87	<48	**670**	--	120	--	2	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-3	4/13/2005	5-15	100.00	3.78	96.22	<48	89	--	<97	--	2	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-3	7/11/2005	5-15	100.00	4.69	95.31	<48	<87	--	<110	--	2	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Abandoned October 2006
MW-4	7/9/2004	5-15	97.88	5.30	92.58	**1,600**	**1,700**	--	240	--	**160**	13	67	6	<0.5	<0.99	--	4	75	
MW-4	10/11/2004	5-15	97.88	1.66	96.22	**1,800**	**520**	--	<97	--	**140**	16	76	10	--	--	--	--	--	
MW-4	1/25/2005	5-15	97.88	1.79	96.09	**2,000**	410	--	<98	--	**140**	16	79	9	--	--	--	--	--	
MW-4	4/13/2005	5-15	97.88	1.40	96.48	**2,100**	**1,300**	--	110	--	**120**	16	81	15	--	--	--	--	--	
MW-4	7/11/2005	5-15	97.88	2.18	95.70	**1,800**	**1,200**	--	170	--	**54**	8	43	7	--	--	--	--	--	
MW-4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Abandoned October 2006
MW-5	10/11/2004	5-15	98.31	2.79	95.52	90	130	--	<99	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-5	1/25/2005	5-15	98.31	2.79	95.52	100	**860**	--	130	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-5	4/13/2005	5-15	98.31	2.23	96.08	110	**530**	--	<97	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-5	7/11/2005	5-15	98.31	3.38	94.93	64	**590**	--	140	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-5	8/13/2007	5-15	98.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Abandoned
MW-6	10/11/2004	5-20	98.3	2.26	96.04	**1,000**	**600**	--	<97	--	1	0.700	<0.5	1	--	--	--	--	--	
MW-6	1/25/2005	5-20	98.3	2.46	95.84	**1,100**	**1,600**	--	260	--	1	0.700	<0.5	1	--	--	--	--	--	
MW-6 DUP	1/25/2005	5-20	98.3	2.46	95.84	**1,100**	**1,700**	--	270	--	1	0.700	0.600	1	--	--	--	--	--	
MW-6	4/13/2005	5-20	98.3	1.78	96.52	860	**900**	--	120	--	<2.0	1	0.900	<5.0	--	--	--	--	--	
MW-6	7/11/2005	5-20	98.3	3.16	95.14	**1,000**	**1,200**	--	150	--	2	1	1	2	--	--	--	--	--	
MW-6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Abandoned March 2007
MW-7	10/11/2004	5-20	99.89	3.79	96.10	200	**570**	--	<98	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-7	1/25/2005	5-20	99.89	3.27	96.62	190	**1,500**	--	220	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-7	4/13/2005	5-20	99.89	4.28	95.61	73	**880**	--	99	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	7/11/2005	5-20	99.89	4.02	95.87	140	**1,100**	--	120	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	8/13/2007	5-20	99.89	7.85	92.04	<50	**570**	--	210	--	<0.5	<0.5	<0.5	<1.5	--	<0.047	--	--	--	
MW-7	5/27/2008	5-20	99.89	3.42	96.47	<50	**750**	--	<97	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-7	12/2/2008	5-20	99.90	3.59	96.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	3/18/2009	5-20	99.90	3.29	96.61	71	360	--	<67	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-7	5/26-27/2009	5-20	99.90	4.13	95.77	73	**940**	--	69	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-7	8/3-4/2009	5-20	99.90	8.08	91.82	<50	**1,500**	--	**530**	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-7	12/29/2009	5-20	99.90	3.96	95.94	<50	**990**	--	77	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	2/4/2010	5-20	99.90	4.17	95.73	<50	**890**	--	110	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	6/1/2010	5-20	99.90	3.23	96.67	91	**780**	--	78	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	8/10/2010	5-20	99.90	7.22	92.68	<50	**830**	--	260	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	11/18/2010	5-20	99.90	2.43	97.47	58	480	--	400	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	3/15/2011	5-20	99.90	3.84	96.06	<50	**810**	--	250	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	6/2/2011	5-20	99.90	4.08	95.82	83	**10,000**	--	**870**	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	8/25/2011	5-20	99.90	7.92	91.98	<50	**650**	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	11/10/2011	5-20	99.90	4.90	95.00	<50	380	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	2/9/2012	5-20	99.90	4.25	95.65	<50	130	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	5/31/2012	5-20	99.90	4.90	95.00	<50	430	--	<75	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	8/28/2012	5-20	99.90	7.83	92.07	<50	83	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	11/21/2012	5-20	99.90	1.84	98.06	<50	160	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	2/8/2013	5-20	99.90	3.29	96.61	89	310	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	5/10/2013	5-20	99.90	4.46	95.44	60	97	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	8/8/2013	5-20	99.90	7.23	92.67	<50	51	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	10/23/2013	5-20	99.90	4.72	95.18	65	100	--	<66	--	<0.3	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	2/25/2014	5-20	99.90	3.23	96.67	83	140	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	5/28/2014	5-20	99.90	4.08	95.82	100	210	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	8/26/2014	5-20	99.90	7.23	92.67	<50	110	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	11/4/2014	5-20	99.90	1.89	98.01	<50	190	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	3/23-24/2015	5-20	99.90	4.18	95.72	<50	85	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	5/26-27/2015	5-20	99.90	5.68	94.22	<50	70	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	8/13/2015	5-20	99.90	8.78	91.12	<50	**760**	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	11/16-17/2015	5-20	99.90	3.21	96.69	110	**1,200**	--	190	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	2/21-22/2016	5-20	99.90	4.22	95.68	<50	**1,800**	--	380	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	5/15-16/2016	5-20	99.90	5.20	94.70	110	**1,500**	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	8/15-16/2016	5-20	99.90	7.08	92.82	55	**730**	--	120	--	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--	
MW-7	11/15/2016	5-20	99.90	2.77	97.13	<50	**930**	--	120	--	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--	
MW-7	1/10/2019	5-20	99.90	2.82	97.08	<19	**710**	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-7	7/21/2019	5-20	99.90	5.03	94.87	<19[1]	**940**	--	<100	--	<0.2	<0.2	<0.4	<1.0	--	--	--	--	--	
MW-7	2/12/2020	5-20	951.11	3.11	948.00	<100	**761**	--	277	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	Well Resurveyed
MW-7	8/2/2020	5-20	951.11	6.02	945.09	<100	**1,310**	--	341	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-7	2/9/2021	5-20	951.11	2.61	948.50	58.6 B J	**904**	--	318 B	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-7 DUP	2/9/2021	--	951.11	--	--	64.9 B J	**934**	--	301 B	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-7	7/13/2021	5-20	951.11	4.89	946.22	63.6 B J	**1,080**	--	487	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-7	1/10/2022	5-20	951.11	1.60	949.51	<100	**813**	<200 J3	512	<250	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-7 DUP	1/10/2022	--	--	--	--	<100	**859**	<200 J3	**566**	<250	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-7	7/20/2022	5-20	951.11	5.18	945.93	<100	**1,440**	--	**513**	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-7	1/10/2023	5-20	951.11	3.13	947.98	<100	**856**	<200	418	<250	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	
MW-7	7/25/2023	5-19	951.11	6.79	944.32	<100	**1,060**	--	**530**	--	<1.00	<1.00	<1.00	0.181 J	--	--	--	--	--	

Table 2
Groundwater Gauging Data and Analytical Results Fourth Quarter 2004 to Current
Former Standard Oil Bulk Plant 302095
149 and 167 Main Street
Morton, Washington

Well	Date	Screen Interval	Top of Casing	Depth to Water	Groundwater Elevation	TPH-GRO	TPH-DRO	TPH-DRO w/ SGC	TPH-HRO	TPH-HRO w/ SGC	Benzene	Toluene	Ethylbenzene	Total Xylenes	Methyl tert-butyl ether	Dissolved Lead	Total Lead	Naphthalene	n-Hexane	Comments
MTCA Method A CULs						**800/1,000**	**500**	**500**	**500**	**500**	**5**	**1000**	**700**	**1000**	**20**	**15**	**15**	**160**	**NE**	
MW-7 DUP	7/25/2023	--	--	--	--	<100	**1,110**	--	**588**	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	Duplicate
MW-8	10/11/2004	5-20	99.21	2.81	96.40	**1,200**	330	--	<98	--	**6**	<0.5	2	1	--	--	--	--	--	
MW-8	1/25/2005	5-20	99.21	2.63	96.58	**1,300**	**740**	--	170	--	5	<0.5	1	1	--	--	--	--	--	
MW-8	4/13/2005	5-20	99.21	2.44	96.77	**1,000**	470	--	<100	--	**6**	0.700	2	<5.0	--	--	--	--	--	
MW-8	7/11/2005	5-20	99.21	3.23	95.98	**1,400**	**670**	--	<110	--	**6**	0.900	3	4	--	--	--	--	--	
MW-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Abandoned March 2007
MW-9	10/11/2004	5-20	97.52	1.9	95.62	<0.5	<80	--	<50	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	
MW-9	1/25/2005	5-20	97.52	1.68	95.84	<0.5	<78	--	<48	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	
MW-9	4/13/2005	5-20	97.52	1.57	95.95	<0.5	<81	--	<48	--	<0.5	<0 5	<1.5	--	--	--	--	--	--	
MW-9	7/11/2005	5-20	97.52	2.25	95.27	<0.5	<83	--	<48	--	<0.5	<0.5	<1.5	--	--	--	--	--	--	
MW-9	8/13/2007	5-21	98.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Locate
MW-9	12/29-30/2009	5-20	97.52	3.15	94.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Included in Monitoring Program
MW-9	2/12/2020	5-20	949.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Well Resurveyed; Not Included in Monitoring Program
MW-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Not Included in Monitoring Program
MW-10	10/11/2004	5-20	98.78	2.09	96.69	**1,800**	**560**	--	<95	--	**51**	7	25	7	--	--	--	--	--	
MW-10 DUP	10/11/2004	5-20	98.78	2.09	96.69	**1,900**	**500**	--	<98	--	**51**	7	25	6	--	--	--	--	--	
MW-10	1/25/2005	5-20	98.78	2.08	96.70	**1,700**	**540**	--	<110	--	**37**	6	23	5	--	--	--	--	--	
MW-10	4/13/2005	5-20	98.78	1.64	97.14	**1,700**	**760**	--	<100	--	**24**	4	19	7	--	--	--	--	--	
MW-10	7/11/2005	5-20	98.78	2.54	96.24	**1,500**	**910**	--	<110	--	**31**	4	17	5	--	--	--	--	--	
MW-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Included in Monitoring Program
MW-11	10/11/2004	5-20	97.92	2.92	95.00	<50	<80	--	<100	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-11	1/25/2005	5-20	97.92	2.95	94.97	<48	<79	--	<99	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-11	4/13/2005	5-20	97.92	2.21	95.71	<48	<79	--	<98	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	7/11/2005	5-20	97.92	3.20	94.72	<48	<93	--	<120	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	8/13/2007	5-20	97.92	6.56	91.36	<50	<79	--	<99	--	<0.5	<0.5	<0.5	<1.5	--	0.07	--	--	--	
MW-11 DUP	8/13/2007	5-20	97.92	6.56	91.36	<50	<80	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	0.091	--	--	--	
MW-11	5/27/2008	5-20	97.92	3.98	93.94	<50	<76	--	<95	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-11	12/2/2008	5-20	97.92	3.31	94.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-11	3/18/2009	5-20	97.92	2.70	95.22	<50	85	--	480	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-11	5/26-27/2009	5-20	97.92	3.69	94.23	<50	170	--	<69	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-11	8/3-4/2009	5-20	97.92	6.59	91.33	<50	<30	--	<69	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-11	12/29-30/2009	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-11	2/4-5/2010	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-11	6/1/2010	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-11	8/10/2010	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-11	11/18/2010	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-11	3/15/2011	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-11	6/2/2011	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-11	8/25/2011	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-11	11/10/2011	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-11	2/10/2012	5-20	97.92	3.00	94.92	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	5/30/2012	5-20	97.92	3.50	94.42	<50	<31	--	<72	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	8/27/2012	5-20	97.92	6.47	91.45	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	11/20/2012	5-20	97.92	2.92	95.00	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	2/7/2013	5-20	97.92	2.66	95.26	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	5/10/2013	5-20	97.92	3.95	93.97	<50	<28	--	<66	--	<0.5	<0.5	<05	<1.5	--	--	--	--	--	
MW-11	8/8/2013	5-20	97.92	6.46	91.46	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	10/22/2013	5-20	97.92	3.81	94.11	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	2/24/2014	5-20	97.92	1.88	96.04	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	5/28/2014	5-20	97.92	4.13	93.79	<50	200	--	**520**	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	8/25/2014	5-20	97.92	5.67	92.25	<50	29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	11/3/2014	5-20	97.92	2.93	94.99	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	3/23-24/2015	5-20	97.92	2.96	94.96	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	5/26-27/2015	5-20	97.92	6.96	90.96	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<13	--	--	--	--	--	
MW-11	8/13/2015	5-20	97.92	6.42	91.50	<50	81	--	**540**	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	11/16-17/2015	5-20	97.92	2.34	95.58	<50	<46	--	170	--	<0.5	<0 5	<0.5	<1.5	--	--	--	--	--	
MW-11	2/21-22/2016	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Access
MW-11	5/15-16/2016	5-20	97.92	4.19	93.73	<50	<47	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	8/15-16/2016	5-20	97.92	5.43	92.49	<50	<46	--	<100	--	<0 2	<0 2	<0 2	<0.2	--	--	--	--	--	
MW-11	11/15/2016	5-20	97.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Access
MW-11	1/10/2019	5-20	97.92	1.69	92.49	<19	220	--	**890**	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-11	7/21/2019	5-20	97.92	3.71	94.21	<19	<46	--	<100	--	<0.2[1]	<0.2[1]	<0.4[1]	<1.0[1]	--	--	--	--	--	
MW-11	2/12/2020	5-20	949.22	1.61	947.61	<100	85.1 J	--	164 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	Well Resurveyed
MW-11	8/2/2020	5-20	949.22	4.55	944.67	<100	118 J	--	184 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-11	2/9/2021	5-20	949.22	1.94	947.28	42.4 B J	116 J	--	489	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-11	7/13/2021	5-20	949.22	4.24	944.98	78.0 B J	<200	--	147 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-11	1/10/2022	5-20	950.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Locate
MW-11	7/20/2022	5-20	950.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Locate
MW-11	1/10/2023	--	950.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-11	7/25/2023	--	950.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
MW-12	10/11/2004	5-20	98.25	2.64	95.61	<50	<79	--	<99	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-12	1/25/2005	5-20	98.25	2.70	95.55	<48	<79	--	<98	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-12	4/13/2005	5-20	98.25	2.34	95.91	<48	<84	--	<110	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	7/11/2005	5-20	98.25	3.25	95.00	<48	<81	--	110	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	8/13/2007	5-20	98.25	6.06	92.19	<50	<89	--	<110	--	<0.5	<0.5	<0.5	<1.5	--	0.047	--	--	--	
MW-12	5/27/2008	5-20	98.25	4.22	94.03	<50	<82	--	<100	--	<0.5	<0.5	<0.5	1	<0.5	--	--	--	--	
MW-12	12/2/2008	5-20	98.25	2.84	95.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-12	3/18/2009	5-20	98.25	2.15	96.10	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-12	5/26-27/2009	5-20	98.25	3.50	94.75	<50	<30	--	<71	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-12	8/3-4/2009	5-20	98.25	6.40	91.85	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-12	12/29-30/2009	5-20	98.25	3.00	95.25	<50	63	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	2/4-5/2010	5-20	98.25	2.98	95.27	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	6/1/2010	5-20	98.25	2.55	95.70	<50	<30	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	8/10/2010	5-20	98.25	5.86	92.39	<50	<29	--	<190	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	11/18/2010	5-20	98.25	1.44	96.81	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	3/15/2011	5-20	98.25	2.08	96.17	<50	<30	--	250	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	8/25/2011	5-20	98.25	6.36	91.89	<50	31	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	11/10/2011	5-20	98.25	3.40	94.85	<50	<31	--	<72	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	2/10/2012	5-20	98.25	2.25	96.00	<50	39	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	5/30/2012	5-20	98.25	3.10	95.15	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	8/27/2012	5-20	98.25	6.51	91.74	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	11/20/2012	5-20	98.25	2.63	95.62	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	

Table 2
Groundwater Gauging Data and Analytical Results Fourth Quarter 2004 to Current
Former Standard Oil Bulk Plant 302095
149 and 167 Main Street
Morton, Washington

Well	Date	Screen Interval	Top of Casing	Depth to Water	Groundwater Elevation	TPH-GRO	TPH-DRO	TPH-DRO w/ SGC	TPH-HRO	TPH-HRO w/ SGC	Benzene	Toluene	Ethylbenzene	Total Xylenes	Methyl tert-butyl ether	Dissolved Lead	Total Lead	Naphthalene	n-Hexane	Comments
MTCA Method A CULs						**800/1,000**	**500**	**500**	**500**	**500**	**5**	**1000**	**700**	**1000**	**20**	**15**	**15**	**160**	**NE**	
MW-12	2/7/2013	5-20	98.25	2.01	96.24	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	5/10/2013	5-20	98.25	3.80	94.45	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	8/8/2013	5-20	98.25	6.32	91.93	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	10/22/2013	5-20	98.25	3.79	94.46	<50	<29	--	<67	--	<0.5	<05	<0.5	<1.5	--	--	--	--	--	
MW-12	2/24/2014	5-20	98.25	3.40	94.85	<50	<29	--	71	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	5/28/2014	5-20	98.25	3.32	94.93	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	8/25/2014	5-20	98.25	5.79	92.46	<50	<28	--	89	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	11/3/2014	5-20	98.25	2.62	95.63	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	3/23-24/2015	5-20	98.25	2.71	95.54	<50	<31	--	<71	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	5/26-27/2015	5-20	98.25	4.88	93.37	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	8/13/2015	5-20	98.25	6.03	92.22	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	11/16-17/2015	5-20	98.25	2.87	95.38	<50	<45	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	2/21-22/2016	5-20	98.25	2.43	95.82	<50	<47	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	5/15-16/2016	5-20	98.25	4.39	93.86	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	8/15-16/2016	5-20	98.25	5.44	92.81	<50	<46	--	<100	--	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--	
MW-12	11/15/2016	5-20	99.25	2.48	96.77	<50	<45	--	<100	--	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--	
MW-12	1/10/2019	5-20	98.25	2.72	95.53	<19	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-12	7/21/2019	5-20	98.25	4.11	94.14	<19	<45	--	<100	--	<0.2[1]	<0.2[1]	<0.4[1]	<1.0[1]	--	--	--	--	--	
MW-12	2/12/2020	5-20	949.53	2.35	947.18	<100	<200	--	<250	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	Well Resurveyed
MW-12	8/2/2020	5-20	949.53	5.00	944.53	64.4 B J	142 J	--	100 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-12	2/9/2021	5-20	949.53	2.40	947.13	32.8 B J	<200	--	<250	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-12	7/13/2021	5-20	949.53	4.46	945.07	54.9 B J	79.8 J	--	86.6 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-12	1/10/2022	5-20	950.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Locate
MW-12	7/20/2022	5-20	950.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Locate
MW-13	12/2/2008	3-18	99.02	3.22	95.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-13	3/18/2009	3-18	99.02	2.24	96.78	<50	180	--	330	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-13	5/26-27/2009	3-18	99.02	3.88	95.14	<50	360	--	**<700**	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-13	8/3-4/2009	3-18	99.02	6.73	92.29	<50	**660**	--	**700**	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-13	12/29-30/2009	3-18	99.02	4.57	94.45	<50	110	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	2/4-5/2010	3-18	99.02	3.68	95.34	<50	59	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	6/1/2010	3-18	99.02	2.83	96.19	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	8/10/2010	3-18	99.02	6.20	92.82	<50	<300	--	**<700**	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	11/18/2010	3-18	99.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Sample - Area Flooded
MW-13	3/15/2011	3-18	99.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Sample - Area Flooded
MW-13	6/2/2011	3-18	99.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Sample - Area Flooded
MW-13	8/25/2011	3-18	99.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Sample - Area Flooded
MW-13	11/10/2011	3-18	99.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Sample - Area Flooded
MW-13	2/9/2012	3-18	99.02	3.50	95.52	86	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	5/31/2012	3-18	99.02	1.20	97.82	<50	<32	--	<75	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	8/28/2012	3-18	99.02	6.69	92.33	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	11/21/2012	3-18	99.02	1.12	97.90	<50	<29	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	2/8/2013	3-18	99.02	2.13	96.89	<50	<28	--	120	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	5/10/2013	3-18	99.02	4.36	94.66	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	8/8/2013	3-18	99.02	6.72	92.30	<50	<29	--	<68	--	<0 5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	10/23/2013	3-18	99.02	4.17	94.85	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	2/25/2014	3-18	99.02	3.02	96.00	<50	<29	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	5/28/2014	3-18	99.02	4.92	94.10	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	8/26/2014	3-18	99.02	6.83	92.19	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	11/4/2014	3-18	99.02	1.22	97.80	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	3/23-24/2015	3-18	99.02	2.93	96.09	<50	<30	--	<71	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	5/26-27/2015	3-18	99.02	4.72	94.30	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	8/13/2015	3-18	99.02	7.80	91.22	<50	100	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	11/16-17/2015	3-18	99.02	2.96	96.06	<50	50	--	<100	--	<0.5	<0.5	<0.5	<15	--	--	--	--	--	
MW-13	2/21-22/2016	3-18	99.02	2.96	96.06	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	5/15-16/2016	3-18	99.02	4.79	94.23	<50	77	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-13	8/15-16/2016	3-18	99.02	5.76	93.26	<50	<46	--	<100	--	<0.2	<0.2	<0 2	<0.2	--	--	--	--	--	
MW-13	11/15/2016	3-18	99.02	2.72	96.30	<50	<45	--	<100	--	<0.2	<0.2	<0 2	<0.2	--	--	--	--	--	
MW-13	1/10/2019	3-18	99.02	2.41	96.61	--	--	--	--	--	--	--	--	--	--	--	--	--		Not Included in Monitoring Program
MW-13	7/21/2019	3-18	99.02	3.95	95.07	--	--	--	--	--	--	--	--	--	--	--	--	--		Not Included in Monitoring Program
MW-13	2/12/2020	3-18	950.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Well Resurveyed; Not Included in Monitoring Program
MW-13	8/2/2020	3-18	950.32	4.20	946.12	--	--	--	--	--	--	--	--	--	--	--	--	--		Not Included in Monitoring Program
MW-13	2/9/2021	3-18	950.32	2.11	948.21	--	--	--	--	--	--	--	--	--	--	--	--	--		Not Included in Monitoring Program
MW-13	7/13/2021	3-18	950.32	3.73	946.59	--	--	--	--	--	--	--	--	--	--	--	--	--		Not Included in Monitoring Program
MW-13	1/10/2022	3-18	951.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Unable to Locate
MW-13	7/20/2022	3-18	951.32	4.31	947.01	<100	176 J	--	131 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-13	1/10/2023	3-18	951.32	2.97	948.35	<100	172 J	--	130 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	
MW-13	7/25/2023	3-18	951.32	6.43	944.89	<100	126 J	--	153 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	
MW-14	12/2/2008	3-18	98.50	2.76	95.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-14	3/18/2009	3-18	98.50	1.71	96.79	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-14	05/26-27/2009	3-18	98.50	3.49	95.01	<50	180	--	<69	--	0.6	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-14	8/3-4/2009	3-18	98.50	5.58	92.92	<50	**550**	--	<74	--	0.9	<0.5	0.7	<0.5	<0.5	--	--	--	--	
MW-14	12/29-30/2009	3-18	98.50	3.81	94.69	<50	42	--	<65	--	1.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	2/4-5/2010	3-18	98.50	3.88	94.62	<50	37	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	6/1/2010	3-18	98.50	2.96	95.54	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	8/10/2010	3-18	98.50	6.40	92.10	<50	120	--	<90	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	11/18/2010	3-18	98.50	2.71	95.79	<50	<29	--	76	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	3/15/2011	3-18	98.50	2.91	95.59	<50	<31	--	94	--	1.6	1.4	<0.5	<1.5	--	--	--	--	--	
MW-14	6/2/2011	3-18	98.50	3.83	94.67	<50	<29	--	190	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	8/25/2011	3-18	98.50	6.55	91.95	<50	48	--	<80	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	11/10/2011	3-18	98.50	3.60	94.90	<50	<30	--	<71	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	2/10/2012	3-18	98.50	3.50	95.00	<50	80	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	5/31/2012	3-18	98.50	3.40	95.10	<50	<31	--	<73	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	8/27/2012	3-18	98.50	6.41	92.09	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	11/21/2012	3-18	98.50	2.86	95.64	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	2/8/2013	3-18	98.50	3.09	95.41	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	5/10/2013	3-18	98.50	4.44	94.06	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	8/8/2013	3-18	98.50	6.44	92.06	<50	73	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	10/23/2013	3-18	98.50	3.46	95.04	<50	<30	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	2/25/2014	3-18	98.50	2.64	95.86	<50	<28	--	<65	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	5/28/2014	3-18	98.50	3.92	94.58	<50	<28	--	<66	--	<0 5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	8/26/2014	3-18	98.50	5.89	92.61	<50	<29	--	100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	11/4/2014	3-18	98.50	2.77	95.73	<50	<29	--	<68	--	<03	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	3/23-24/2015	3-18	98.50	3.00	95.50	<50	<28	--	<65	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	5/26-27/2015	3-18	98.50	5.28	93.22	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	8/13/2015	3-18	98.50	7.19	91.31	<50	100	--	<100	--	<03	<0.5	<0.5	<1.5	--	--	--	--	--	

Table 2
Groundwater Gauging Data and Analytical Results Fourth Quarter 2004 to Current
Former Standard Oil Bulk Plant 302095
149 and 167 Main Street
Morton, Washington

Well	Date	Screen Interval	Top of Casing	Depth to Water	Groundwater Elevation	TPH-GRO	TPH-DRO	TPH-DRO w/ SGC	TPH-HRO	TPH-HRO w/ SGC	Benzene	Toluene	Ethylbenzene	Total Xylenes	Methyl tert-butyl ether	Dissolved Lead	Total Lead	Naphthalene	n-Hexane	Comments
MTCA Method A CULs						**800/1,000**	**500**	**500**	**500**	**500**	**5**	**1000**	**700**	**1000**	**20**	**15**	**15**	**160**	**NE**	
MW-14	11/16-17/2015	3-18	98.50	3.02	95.48	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	2/21-22/2016	3-18	98.50	2.94	95.56	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	5/15-16/2016	3-18	98.50	4.87	93.63	<50	<47	--	<110	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-14	8/15-16/2016	3-18	98.50	5.70	92.80	<50	<46	--	<100	--	<0.2	<0.2	<0.2	<0 2	--	--	--	--	--	
MW-14	11/15/2016	3-18	98.50	2.76	95.74	<50	<46	--	<100	--	<0.2	<0.2	<0.2	<0 2	--	--	--	--	--	
MW-14	1/10/2019	3-18	98.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Not Included in Monitoring Program
MW-14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Well Abandoned March 2018
MW-15	12/2/2008	3-18	97.81	1.73	96.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-15	3/18/2009	3-18	97.81	1.45	96.36	**1,200**	300	--	180	--	<0.5	<0.5	1	<0.5	<0.5	--	--	--	--	
MW-15	5/26-27/2009	3-18	97.81	2.75	95.06	**1,500**	140	--	<69	--	<0.5	<0.5	1	<0.5	<0.5	--	--	--	--	
MW-15	8/3-4/2009	3-18	97.81	5.59	92.22	**1,200**	190	--	<69	--	0.9	<0.5	1	<0.5	<0.5	--	--	--	--	
MW-15	12/29-30/2009	3-18	97.81	2.48	95.33	**1,500**	230	--	<68	--	1.9	1.1	1.8	2.9	--	--	--	--	--	
MW-15	2/4-5/2010	3-18	97.81	2.54	95.27	**1,600**	190	--	<69	--	1.7	1.1	1.9	3.2	--	--	--	--	--	
MW-15	6/1/2010	3-18	97.81	1.67	96.14	760	82	--	<69	--	<0.5	0.7	0.9	<5.0	--	--	--	--	--	
MW-15	8/10/2010	3-18	97.81	5.15	92.66	**1,300**	160	--	<69	--	1.5	0.9	1.3	<10	--	--	--	--	--	
MW-15	11/18/2010	3-18	97.81	1.38	96.43	**830**	120	--	<66	--	1.2	0.8	0.9	<5.0	--	--	--	--	--	
MW-15	3/15/2011	3-18	97.81	1.60	96.21	**1,200**	180	--	77	--	2.6	2.1	1.6	6.9	--	--	--	--	--	
MW-15	6/2/2011	3-18	97.81	2.55	95.26	**1,300**	270	--	<71	--	1.6	<10	1.8	4.8	--	--	--	--	--	
MW-15	8/25/2011	3-18	97.81	5.60	92.21	**870**	210	--	<69	--	1.3	<0.5	1.5	7.1	--	--	--	--	--	
MW-15	11/10/2011	3-18	97.81	3.05	94.76	750	66	--	<69	--	<2.0	<5.0	1.3	6.7	--	--	--	--	--	
MW-15	2/10/2012	3-18	97.81	2.50	95.31	**820**	35	--	160	--	<2.0	<6.0	2.1	5.8	--	--	--	--	--	
MW-15	5/30/2012	3-18	97.81	2.50	95.31	**1,100**	110	--	<69	--	1.1	<8.0	2.4	7.8	--	--	--	--	--	
MW-15	8/28/2012	3-18	97.81	5.53	92.28	740	190	--	<69	--	1.4	<5.0	1.9	5.4	--	--	--	--	--	
MW-15	11/21/2012	3-18	97.81	1.93	95.88	760	57	--	<66	--	1.4	<5.0	2	5.6	--	--	--	--	--	
MW-15	2/7/2013	3-18	97.81	1.78	96.03	640	47	--	<66	--	1.1	<6.0	1.8	<6.0	--	--	--	--	--	
MW-15	5/10/2013	3-18	97.81	4.23	93.58	580	<29	--	<67	--	1	<4.0	0.9	<6.0	--	--	--	--	--	
MW-15	8/8/2013	3-18	97.81	5.89	91.92	630	150	--	<66	--	**13**	<5.0	1.9	6.3	--	--	--	--	--	
MW-15	10/22/2013	3-18	97.81	2.98	94.83	430	<30	--	<70	--	0.6	<3.0	0.8	2.3	--	--	--	--	--	
MW-15	2/25/2014	3-18	97.81	1.54	96.27	**900**	38	--	<70	--	1	<5.0	1.6	6.8	--	--	--	--	--	
MW-15	5/28/2014	3-18	97.81	2.32	95.49	760	36	--	<68	--	<2.0	<2.0	1.2	6	--	--	--	--	--	
MW-15	8/26/2014	3-18	97.81	4.89	92.92	870	50	--	<67	--	<2.0	<2.0	1.5	<8.0	--	--	--	--	--	
MW-15	11/3/2014	3-18	97.81	1.89	95.92	360	50	--	<69	--	0.9	<2.0	1	<6.0	--	--	--	--	--	
MW-15	3/23-24/2015	3-18	97.81	1.91	95.90	480	48	--	<65	--	<0.5	1.2	1.1	<5.0	--	--	--	--	--	
MW-15	5/26-27/2015	3-18	97.81	5.58	92.23	580	51	--	<68	--	<0.5	<2.0	1.6	<7.0	--	--	--	--	--	
MW-15	8/13/2015	3-18	97.81	6.06	91.75	**900**	150	--	<110	--	1	1.1	1.7	5.4	--	--	--	--	--	
MW-15	11/16-17/2015	3-18	97.81	1.75	96.06	460	78	--	<100	--	<0.5	<0.5	<0.5	2.6	--	--	--	--	--	
MW-15	2/21-22/2016	3-18	97.81	1.45	96.36	180	69	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-15	5/15-16/2016	3-18	97.81	3.55	94.26	330	62	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-15	8/15-16/2016	3-18	97.81	4.65	93.16	**1,000**	85	--	<100	--	<0.2	<0.2	1	4.1	--	--	--	--	--	
MW-15	11/15/2016	3-18	97.81	1.70	96.11	**1,200**	73	--	<100	--	<0.9	<0.2	1.3	4.8						
MW-15	1/10/2019	3-18	97.81	1.29	96.52	<19	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-15	7/21/2019	3-18	97.81	2.70	95.11	<19	<45	--	<100	--	<0.2	<0.2	<0.4	<1.0	--	--	--	--	--	
MW-15	2/12/2020	3-18	949.09	1.25	947.84	379	238	--	<250	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	Well Resurveyed
MW-15	8/2/2020	3-18	949.09	3.82	945.27	670	218	--	<250	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-15	2/9/2021	3-18	949.09	1.25	947.84	254 B	<200	--	<250	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-15	7/13/2021	3-18	949.09	3.16	945.93	46.5 B J	<200	--	<250	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-15	1/10/2022	3-18	949.09	1.18	947.91	228	233	<200 J3	111 J	<250	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-15	7/20/2022	3-18	949.09	2.65	946.44	<100	84.7 J	--	<250	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-15	1/10/2023	3-18	949.09	1.38	947.71	<100	117 J	--	162 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	
MW-15	7/25/2023	3-18	949.09	4.30	944.79043	233	320	--	116 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	
MW-16	12/2/2008	3-18	97.73	2.32	95.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-16	3/18/2009	3-18	97.73	1.30	96.43	520	**1,200**	--	220	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-16	5/26-27/2009	3-18	97.73	2.97	94.76	680	390	--	<69	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-16	8/3-4/2009	3-18	97.73	5.36	92.37	410	**540**	--	<69	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-16	12/29-30/2009	3-18	97.73	2.80	94.93	500	**710**	--	100	--	0.6	0.6	<0.5	1.7	--	--	--	--	--	
MW-16	2/4-5/2010	3-18	97.73	2.89	94.84	**810**	**730**	--	70	--	0.8	0.9	0.7	1.7	--	--	--	--	--	
MW-16	6/1/2010	3-18	98.63	2.79	95.84	**1,400**	380	--	<69	--	<5.0	2.2	1.3	<1.5	--	--	--	--	--	
MW-16	8/10/2010	3-18	98.63	6.33	92.30	550	240	--	<90	--	0.6	0.6	0.6	1.7	--	--	--	--	--	
MW-16	11/18/2010	3-18	98.63	2.44	96.19	710	420	--	<68	--	0.8	1	0.9	1.8	--	--	--	--	--	
MW-16	3/15/2011	3-18	98.63	2.71	95.92	**890**	**1,500**	--	440	--	2.6	2.2	1.1	3.8	--	--	--	--	--	
MW-16	6/2/2011	3-18	98.63	3.60	95.03	490	**2,400**	--	320	--	0.5	<2.0	0.6	<5.0	--	--	--	--	--	
MW-16	8/25/2011	3-18	98.63	6.60	92.03	110	230	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-16	11/10/2011	3-18	98.63	4.35	94.28	510	**850**	--	<69	--	0.5	0.6	0.8	2.9	--	--	--	--	--	
MW-16	2/10/2012	3-18	98.63	3.35	95.28	370	71	--	<67	--	0.6	0.6	0.7	1.6	--	--	--	--	--	
MW-16	5/31/2012	3-18	98.63	3.80	94.83	530	**1,800**	--	<70	--	0.7	0.6	1	2.7	--	--	--	--	--	
MW-16	8/28/2012	3-18	98.63	6.39	92.24	130	42	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-16	11/20/2012	3-18	98.63	2.83	95.80	390	120	--	<66	--	0.6	0.5	0.6	<1.5	--	--	--	--	--	
MW-16	2/7/2013	3-18	98.63	2.91	95.72	480	120	--	<66	--	0.7	0.5	0.8	<1.5	--	--	--	--	--	
MW-16	5/9/2013	3-18	98.63	4.39	94.24	450	77	--	<68	--	0.6	<0.5	0.6	<5.0	--	--	--	--	--	
MW-16	8/8/2013	3-18	98.63	6.23	92.40	170	400	--	<67	--	<0.5	<0.5	0.6	<1.5	--	--	--	--	--	
MW-16	10/23/2013	3-18	98.63	4.16	94.47	580	99	--	<67	--	0.7	0.5	0.9	<5.0	--	--	--	--	--	
MW-16	2/25/2014	3-18	98.63	2.64	95.99	660	120	--	<70	--	0.7	0.6	1	2.7	--	--	--	--	--	
MW-16	5/27/2014	3-18	98.63	3.80	94.83	650	140	--	<67	--	0.6	0.5	0.9	2.5	--	--	--	--	--	
MW-16	8/25/2014	3-18	98.63	5.87	92.76	220	57	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-16	11/4/2014	3-18	98.63	2.88	95.75	480	**1,800**	--	220	--	<2.0	0.7	1.1	<5.0	--	--	--	--	--	
MW-16	3/23-24/2015	3-18	98.63	2.82	95.81	220	230	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-16	5/26-27/2015	3-18	98.63	4.72	93.91	180	93	--	<66	--	<0 5	<0.5	0.5	<2.0	--	--	--	--	--	
MW-16	8/13/2015	3-18	98.63	7.13	91.50	100	150	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-16	11/16-17/2015	3-18	98.63	2.98	95.65	**1,700**	**1,700**	--	250	--	1.3	1.2	1.5	2.1	--	--	--	--	--	
MW-16	2/21-22/2016	3-18	98.63	2.68	95.95	**1,800**	**760**	--	<100	--	1.3	1	1.4	2.2	--	--	--	--	--	
MW-16	5/15-16/2016	3-18	98.63	4.89	93.74	400	280	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-16	8/15-16/2016	3-18	98.63	5.69	92.94	700	290	--	<100	--	0.5	<0.2	0.8	1.6	--	--	--	--	--	
MW-16	11/15/2016	3-18	98.63	2.56	96.07	**940**	380	--	<100	--	0.7	0.6	1	1.7						
MW-16	1/10/2019	3-18	98.63	2.31	96.32	610	**590**	--	<100	--	0.9 J	0.6 J	1 J	<1.5	--	--	--	--	--	
MW-16	7/21/2019	3-18	98.63	3.77	94.86	**2,000**[1]	**550**	--	<100	--	<0.2	0.5 J	<0.4	<1.0	--	--	--	--	--	
MW-16	2/12/2020	3-18	949.89	2.18	947.71	167	**670**	--	184 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	
MW-16 DUP	2/12/2020	3-18	949.89	2.18	947.71	105	**665**	--	175 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	Well Resurveyed
MW-16	8/2/2020	3-18	949.89	4.70	945.19	345 B	**1,570**	--	134 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-16	2/9/2021	3-18	949.89	2.21	947.68	292 B	**642**	--	**593**	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-16	7/13/2021	3-18	949.89	4.16	945.73	493 B	**536**	--	177 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-16 DUP	7/13/2021	3-18	949.89	--	--	413 B	**550**	--	142 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-16	1/10/2022	3-18	949.89	2.20	947.69	179	**665**	127 J J3	333	<250	<1.00	<1.00	<1.00	0.225 J	--	--	--	--		
MW-16	7/20/2022	3-18	949.89	3.76	946.13	313	**731**	--	208 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-16	1/10/2023	3-18	949.89	2.60	947.29	185 B	**720**	143 J	237 J	<250	0.106 J	<1.00	<1.00	<3.00	--	--	--	--	--	
MW-16	7/25/2023	3-18	949.89	6.00	943.88796	40.5 J	292	--	174 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	

Table 2
Groundwater Gauging Data and Analytical Results Fourth Quarter 2004 to Current
Former Standard Oil Bulk Plant 302095
149 and 167 Main Street
Morton, Washington

Well	Date	Screen Interval	Top of Casing	Depth to Water	Groundwater Elevation	TPH-GRO	TPH-DRO	TPH-DRO w/ SGC	TPH-HRO	TPH-HRO w/ SGC	Benzene	Toluene	Ethylbenzene	Total Xylenes	Methyl tert-butyl ether	Dissolved Lead	Total Lead	Naphthalene	n-Hexane	Comments
MTCA Method A CULs						**800/1,000**	**500**	**500**	**500**	**500**	**5**	**1000**	**700**	**1000**	**20**	**15**	**15**	**160**	**NE**	
MW-17	12/2/2008	3-18	97.76	2.21	95.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-17	3/18/2009	3-18	97.76	1.29	96.47	<50	310	--	200	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-17	5/26-27/2009	3-18	97.76	2.78	94.98	130	360	--	<69	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-17	8/3-4/2009	3-18	97.76	5.45	92.31	<50	100	--	<68	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-17	12/29-30/2009	3-18	97.76	3.44	94.32	<50	150	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	2/4-5/2010	3-18	97.76	3.49	94.27	53	220	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	6/1/2010	3-18	97.76	2.54	95.22	<50	82	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	8/10/2010	3-18	97.76	6.22	91.54	<50	87	--	<90	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	11/18/2010	3-18	97.76	2.34	95.42	<50	70	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	3/15/2011	3-18	97.76	2.55	95.21	94	140	--	84	--	2	2	<0.5	<1.5	--	--	--	--	--	
MW-17	6/2/2011	3-18	97.76	3.41	94.35	70	280	--	160	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	8/25/2011	3-18	97.76	6.70	91.06	<50	95	--	<73	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	11/10/2011	3-18	97.76	4.00	93.76	<50	100	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	2/10/2012	3-18	97.76	3.20	94.56	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	5/31/2012	3-18	97.76	3.60	94.16	<50	81	--	<71	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	8/28/2012	3-18	97.76	6.35	91.41	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	11/20/2012	3-18	97.76	2.53	95.23	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	2/7/2013	3-18	97.76	2.89	94.87	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	5/9/2013	3-18	97.76	4.13	93.63	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	8/8/2013	3-18	97.76	6.24	91.52	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	10/23/2013	3-18	97.76	4.04	93.72	<50	<29	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	2/25/2014	3-18	97.76	2.48	95.28	56	<28	--	<65	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	5/27/2014	3-18	97.76	3.64	94.12	<50	36	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	8/25/2014	3-18	97.76	5.97	91.79	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	11/4/2014	3-18	97.76	2.61	95.15	<50	99	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	3/23-24/2015	3-18	97.76	2.88	94.88	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	5/26-27/2015	3-18	97.76	4.71	93.05	<50	31	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	8/13/2015	3-18	97.76	7.26	90.50	<50	58	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	11/16-17/2015	3-18	97.76	2.70	95.06	79	65	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	2/21-22/2016	3-18	97.76	2.62	95.14	100	110	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	5/15-16/2016	3-18	97.76	4.76	93.00	<50	87	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-17	8/15-16/2016	3-18	97.76	5.73	92.03	<50	60	--	<100	--	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--	
MW-17	11/15/2016	3-18	97.76	2.41	95.35	<50	74	--	<100	--	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--	
MW-17	1/10/2019	3-18	97.76	2.38	95.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Included in Monitoring Program
MW-17	7/21/2019	3-18	97.76	3.54	94.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Included in Monitoring Program
MW-17	2/12/2020	3-18	949.85	2.00	947.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Resurveyed; Not Included in Monitoring Program
MW-17	8/2/2020	3-18	949.85	4.58	945.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Included in Monitoring Program
MW-17	2/9/2021	3-18	949.85	2.08	947.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Included in Monitoring Program
MW-17	7/13/2021	3-18	949.85	3.98	945.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Included in Monitoring Program
MW-17	1/10/2022	3-18	949.85	2.05	947.80	<100	230	92.1 J J3	200 J	134 J	<1.00	<1.00	<1.00	0.263 J	--	--	--	--		
MW-17	7/20/2022	3-18	949.85	3.98	945.87	<100	352	--	169 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-17 DUP	7/20/2022	3-18	949.85	--	--	<100	341	--	186 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--		
MW-17	1/10/2023	3-18	949.85	2.35	947.50	<100	333	<200	220 J	<250	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	
MW-17 DUP	1/10/2023	3-18	949.85	--	--	<100	320	<200	202 J	<250	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	Duplicate
MW-17	7/25/2023	3-18	949.85	5.96	943.89	<100	145 J	--	175 J	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	
MW-18	12/2/2008	3-18	98.44	3.41	95.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-18	3/18/2009	3-18	98.44	2.61	95.83	<50	73	--	<72	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-18	5/26-27/2009	3-18	98.44	3.83	94.61	120	390	--	110	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-18	8/3-4/2009	3-18	98.44	6.51	91.93	<50	130	--	<70	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-18	12/29-30/2009	3-18	98.44	3.02	95.42	<50	360	--	120	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	2/4-5/2010	3-18	98.44	2.77	95.67	<50	130	--	310	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	6/1/2010	3-18	98.44	1.62	96.82	<50	<30	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	8/10/2010	3-18	98.44	5.66	92.78	<50	310	--	400	--	<0.5	<0.5	<0.5	<1.6	--	--	--	--	--	
MW-18	11/18/2010	3-18	98.44	0.85	97.59	<50	42	--	160	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	3/15/2011	3-18	98.44	1.17	97.27	<50	60	--	200	--	3	2	<0.5	<1.5	--	--	--	--	--	
MW-18	6/2/2011	3-18	98.44	1.46	96.98	<50	<300	--	**<700**	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	8/25/2011	3-18	98.44	6.10	92.34	<50	**710**	--	230	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	11/10/2011	3-18	98.44	3.40	95.04	<50	<29	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	2/10/2012	3-18	98.44	2.40	96.04	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	5/31/2012	3-18	98.44	1.20	97.24	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	8/27/2012	3-18	98.44	5.35	93.09	<50	31	--	190	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	11/20/2012	3-18	98.44	1.23	97.21	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	2/7/2013	3-18	98.44	0.97	97.47	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	5/9/2013	3-18	98.44	3.74	94.70	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	8/8/2013	3-18	98.44	5.65	92.79	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	10/23/2013	3-18	98.44	3.60	94.84	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	2/25/2014	3-18	98.44	1.33	97.11	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	5/27/2014	3-18	98.44	2.68	95.76	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	8/25/2014	3-18	98.44	5.27	93.17	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	11/4/2014	3-18	98.44	1.31	97.13	<50	<29	--	<68	--	<05	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	3/23-24/2015	3-18	98.44	1.01	97.43	<50	<30	--	<71	--	<0.5	<0.5	<0 5	<1.5	--	--	--	--	--	
MW-18	5/26-27/2015	3-18	98.44	4.41	94.03	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	8/13/2015	3-18	98.44	6.82	91.62	<50	77	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	11/16-17/2015	3-18	98.44	1.08	97.36	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	2/21-22/2016	3-18	98.44	1.19	97.25	<50	<47	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	5/15-16/2016	3-18	98.44	3.22	95.22	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-18	8/15-16/2016	3-18	98.44	5.21	93.23	<50	<46	--	<100	--	<0.2	<0.2	<0 2	<0.2	--	--	--	--	--	
MW-18	11/15/2016	3-18	98.44	0.44	98.00	<50	<45	--	<100	--	<0.2	<0.2	<0 2	<0.2	--	--	--	--	--	
MW-18	1/10/2019	3-18	98.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Included in Monitoring Program
MW-18	7/21/2019	3-18	98.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Included in Monitoring Program
MW-18	2/12/2020	3-18	949.19	0.84	948.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Resurveyed; Not Included in Monitoring Program
MW-19	12/2/2008	3-18	98.54	3.78	94.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-19	3/18/2009	3-18	98.54	2.90	95.64	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-19	5/26-27/2009	3-18	98.54	4.56	93.98	<50	360	--	500	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-19	8/3-4/2009	3-18	98.54	6.88	91.66	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-19	12/29-30/2009	3-18	98.54	3.02	95.52	<50	<29	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	2/4-5/2010	3-18	98.54	3.75	94.79	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	6/1/2010	3-18	98.54	3.14	95.40	<50	<30	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	8/10/2010	3-18	98.54	6.41	92.13	<50	<29	--	<90	--	<0.5	<0.5	<0.5	<1.6	--	--	--	--	--	
MW-19	11/18/2010	3-18	98.54	1.89	96.65	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	3/15/2011	3-18	98.54	2.78	95.76	<50	44	--	85	--	2	2	<0.5	<1.5	--	--	--	--	--	
MW-19	6/2/2011	3-18	98.54	3.94	94.60	<50	36	--	79	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	8/25/2011	3-18	98.54	6.95	91.59	<50	41	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	11/10/2011	3-18	98.54	4.70	93.84	<50	<29	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	

Table 2
Groundwater Gauging Data and Analytical Results Fourth Quarter 2004 to Current
Former Standard Oil Bulk Plant 302095
149 and 167 Main Street
Morton, Washington

Well	Date	Screen Interval	Top of Casing	Depth to Water	Groundwater Elevation	TPH-GRO	TPH-DRO	TPH-DRO w/ SGC	TPH-HRO	TPH-HRO w/ SGC	Benzene	Toluene	Ethylbenzene	Total Xylenes	Methyl tert-butyl ether	Dissolved Lead	Total Lead	Naphthalene	n-Hexane	Comments
MTCA Method A CULs						**800/1,000**	**500**	**500**	**500**	**500**	**5**	**1000**	**700**	**1000**	**20**	**15**	**15**	**160**	**NE**	
MW-19	2/10/2012	3-18	98.54	4.05	94.49	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	5/31/2012	3-18	98.54	4.30	94.24	<50	<32	--	<75	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	8/27/2012	3-18	98.54	6.90	91.64	<50	<32	--	<75	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	11/20/2013	3-18	98.54	3.18	95.36	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	2/7/2013	3-18	98.54	3.74	94.80	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	5/9/2013	3-18	98.54	5.03	93.51	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	8/8/2013	3-18	98.54	6.89	91.65	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	10/23/2013	3-18	98.54	4.83	93.71	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	2/24/2014	3-18	98.54	3.40	95.14	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	5/27/2014	3-18	98.54	4.52	94.02	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	8/25/2014	3-18	98.54	6.59	91.95	<50	<28	--	<66	--	<0.5	<0.5	<0 5	<15	--	--	--	--	--	
MW-19	11/4/2014	3-18	98.54	1.86	96.68	<50	<33	--	<77	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	3/23-24/2015	3-18	98.54	1.00	97.54	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	5/26-27/2015	3-18	98.54	5.64	92.90	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	8/13/2015	3-18	98.54	7.79	90.75	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	11/16-17/2015	3-18	98.54	2.70	95.84	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	2/21-22/2016	3-18	98.54	3.45	95.09	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	5/15-16/2016	3-18	98.54	5.55	92.99	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-19	8/15-16/2016	3-18	98.54	6.46	92.08	<50	<46	--	<100	--	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--	
MW-19	11/15/2016	3-18	98.54	2.74	95.80	<50	<45	--	<100	--	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--	
MW-19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Abandoned March 2018
MW-20	12/2/2008	3-18	98.92	1.93	96.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-20	3/18/2009	3-18	98.92	1.85	97.07	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-20	5/26-27/2009	3-18	98.92	3.60	95.32	<50	63	--	<69	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-20	8/3-4/2009	3-18	98.92	7.28	91.64	<50	75	--	<70	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
MW-20	12/29-30/2009	3-18	98.92	2.81	96.11	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	2/4-5/2010	3-18	98.92	2.70	96.22	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	6/1/2010	3-18	98.92	2.30	96.62	<50	<29	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	8/10/2010	3-18	98.92	6.49	92.43	<50	350	--	300	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	11/18/2010	3-18	98.92	1.80	97.12	<50	<29	--	170	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	3/15/2011	3-18	98.92	2.26	96.66	<50	<29	--	170	--	2	2	<0.5	<1.5	--	--	--	--	--	
MW-20	6/3/2011	3-18	98.92	2.73	96.19	<50	<31	--	<71	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	8/25/2011	3-18	98.92	7.27	91.65	<50	120	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	11/10/2011	3-18	98.92	3.55	95.37	<50	<30	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	2/10/2012	3-18	98.92	2.45	96.47	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	5/30/2012	3-18	98.92	2.80	96.12	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	8/28/2012	3-18	98.92	6.82	92.10	<50	70	--	<69	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	11/21/2012	3-18	98.92	1.93	96.99	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	2/7/2013	3-18	98.92	2.40	96.52	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	5/10/2013	3-18	98.92	4.06	94.86	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	8/8/2013	3-18	98.92	6.18	92.74	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	10/22/2013	3-18	98.92	3.81	95.11	<50	<30	--	<70	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	2/25/2014	3-18	98.92	2.26	96.66	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	5/28/2014	3-18	98.92	2.76	96.16	<50	<29	--	<67	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	8/26/2014	3-18	98.92	6.08	92.84	<50	30	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	11/3/2014	3-18	98.92	1.90	97.02	<50	<28	--	<66	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	3/23-24/2015	3-18	98.92	1.98	96.94	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	5/26-27/2015	3-18	98.92	4.88	94.04	<50	<29	--	<68	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	8/13/2015	3-18	98.92	7.81	91.11	<50	89	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	11/16-17/2015	3-18	98.92	2.20	96.72	<50	<45	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	2/21-22/2016	3-18	98.92	1.94	96.98	<50	<46	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	5/15-16/2016	3-18	98.92	3.89	95.03	<50	<47	--	<100	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	
MW-20	8/15-16/2016	3-18	98.92	5.76	93.16	<50	300	--	<100	--	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--	
MW-20	11/15/2016	3-18	98.92	1.84	97.08	<50	<45	--	<100	--	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--	
MW-20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Abandoned March 2018

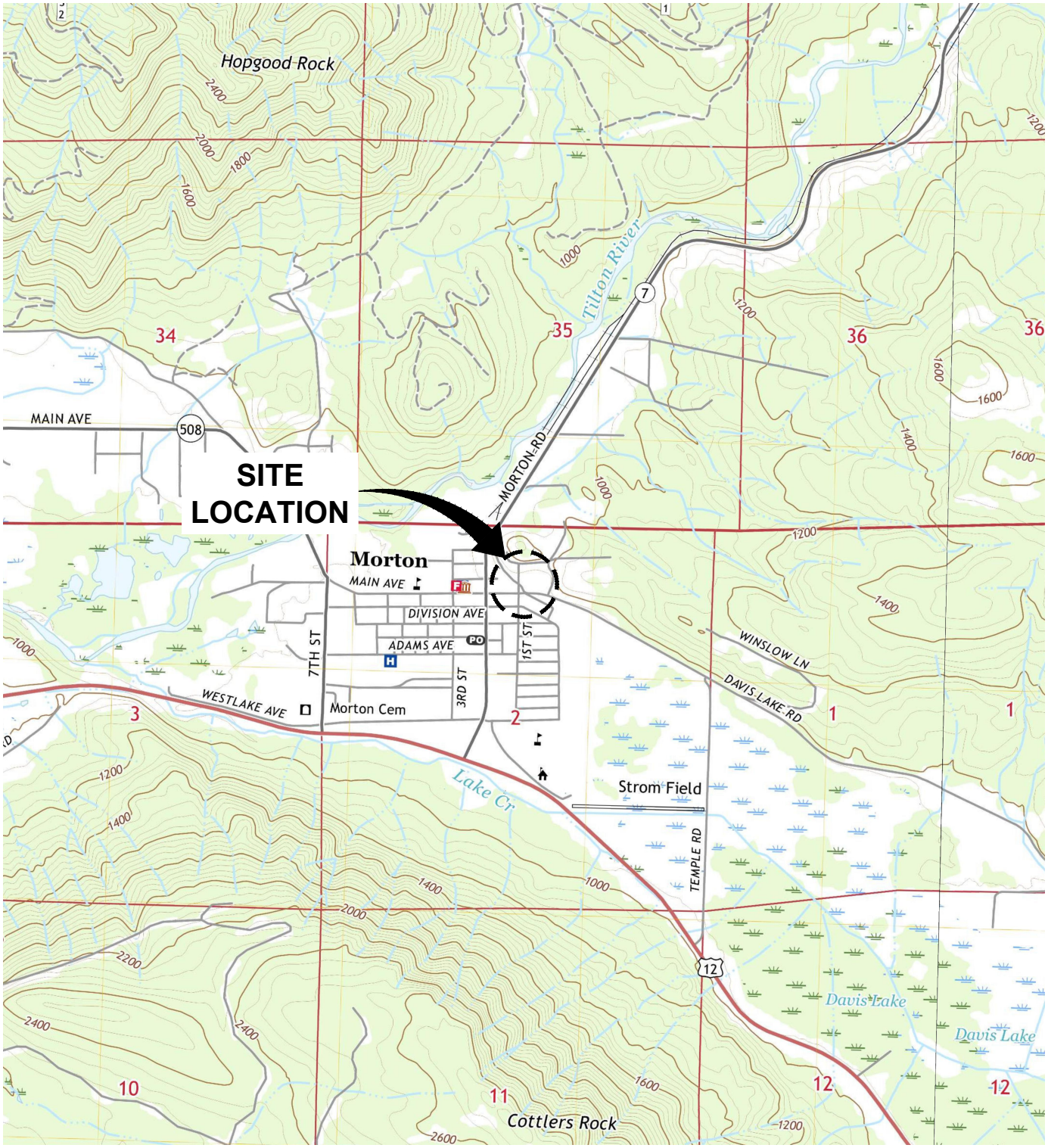
Notes:
1. Bold and grey highlighted concentrations are greater thsn their respective MTCA Method A CUL
2. Analytical results are presented in µg/L.
3. TPH-GRO MTCA Method A CUL with benzene present is 800 µg/L and without is 1,000 µg/L.
4. TOC elevations were resurveyed relative to NAVD 88 in July 2023.
5. Depth to Water Measured in feet below TOC.

Abbreviations:
-- = Not applicable, not available, or not analyzed
< = Not detected at or above the laboratory reporting limit
µg/L = micrograms per liter
BTEX = benzene, toluene, ethylbenzene, and xylenes
CUL = Cleanup Level
NAVD 88 = North American Vertical Datum of 1988
MTCA = Model Toxics Control Act
SGC= Silica gel Cleanup
TOC = Top of casing
TPH-DRO = Total Petroleum Hydrocarbon as Diesel Range Organics
TPH-GRO = Total Petroleum Hydrocarbons as Gasoline-Range Organics
TPH-HRO = Total Pretoleum Hydrocarbons as Heavy Oil Range Organics
USEPA = United States Environmental Protection Agency

Laboratory Qualifiers
J = The associated numerical value is an estimated concentration only
B = The same analyte is found in the associated blank

Current Analytical Methods:
TPH-GRO by Northwest Method NWTPH-Gx
TPH-DRO and TPH-HRO by Northwest Method NWTPH-Dx
BTEX by United States Environmental Protection Agency Method 8260B

FIGURES



SOURCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., MORTON AND GLENOMA, WA 2020.

N

0 2,000' 4,000'

APPROXIMATE SCALE : 1 in. = 2,000 ft.

WASHINGTON

FORMER STANDARD OIL BULK PLANT NO. 302095
149 & 167 MAIN STREET
MORTON, WASHINGTON

SITE LOCATION MAP

ARCADIS

FIGURE 1

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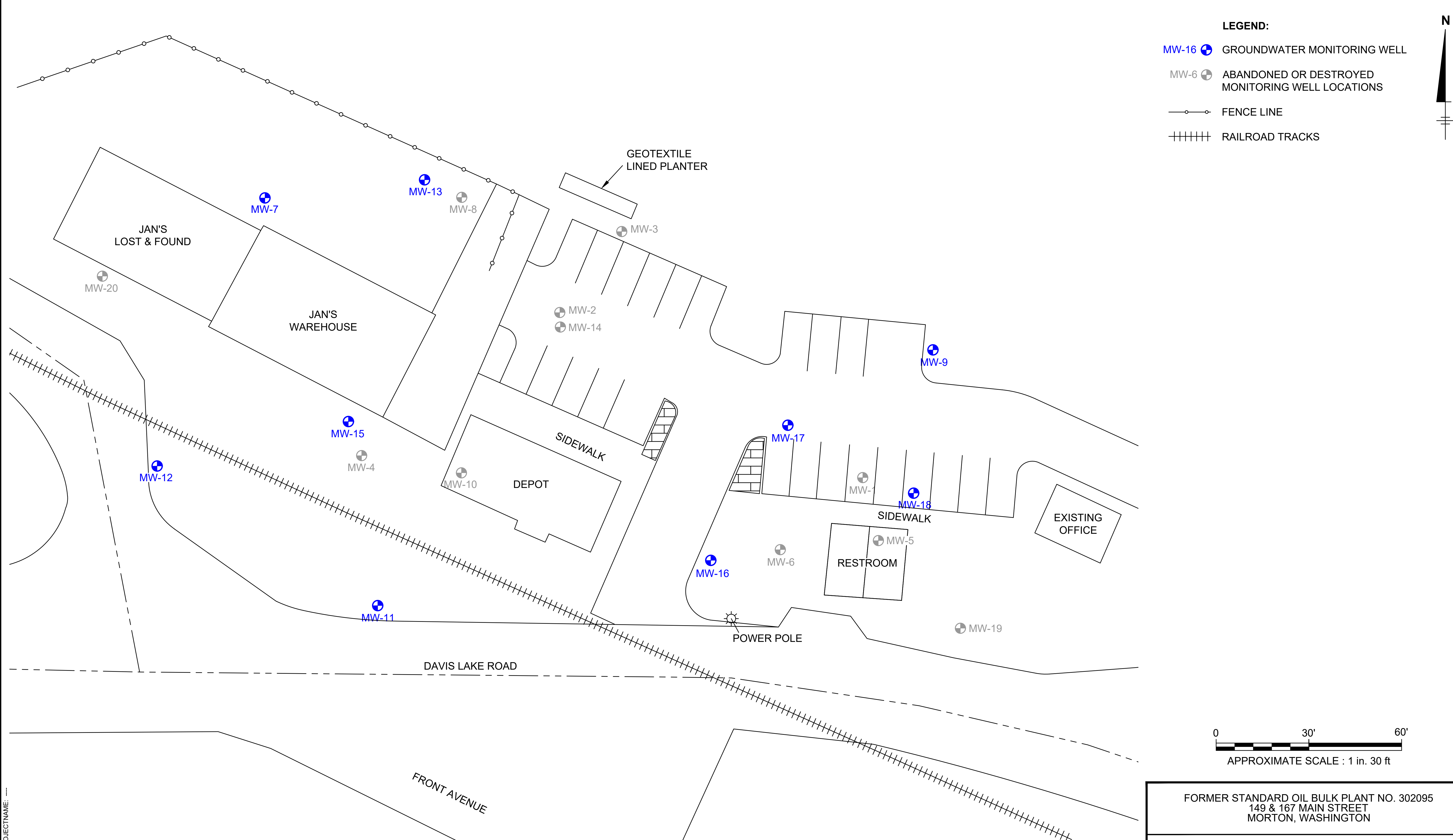

FORMER STANDARD OIL BULK PLANT NO. 302095
149 & 167 MAIN STREET
MORTON, WASHINGTON

SITE PLAN

ARCADIS

FIGURE
2

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LEGEND:

- MW-16 — GROUNDWATER MONITORING WELL
- MW-6 — ABANDONED OR DESTROYED MONITORING WELL LOCATIONS
- FENCE LINE
- RAILROAD TRACKS
- (944.89) — GROUNDWATER ELEVATION (FEET ABOVE NAVD 88)
- 944.70 — GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- (NG) — NOT GAUGED
- NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

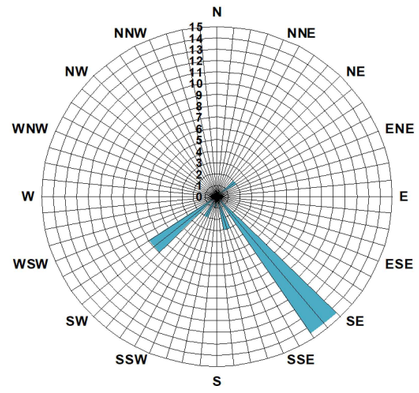
N

MW-7 (944.32)
MW-13 (944.89)
MW-8
MW-3
MW-2
MW-14
MW-9 (NG)
MW-15 (944.79)
MW-4
MW-10
MW-12 (NG)
MW-17 (943.89)
MW-1
MW-18 (NG)
MW-5
MW-6
MW-16 (943.89)
MW-11 (NG)
MW-19
MW-20

944.25
944.50
944.75
944.75
944.50
944.25
944.00
944.25
944.00

GEOTEXTILE LINED PLANTER

JAN'S LOST & FOUND
JAN'S WAREHOUSE
SIDEWALK
DEPOT
SIDEWALK
EXISTING OFFICE
RESTROOM
POWER POLE
DAVIS LAKE ROAD
FRONT AVENUE



GROUNDWATER FLOW DIRECTION

0 30' 60'

APPROXIMATE SCALE : 1 in. 30 ft

FORMER STANDARD OIL BULK PLANT NO. 302095
149 & 167 MAIN STREET
MORTON, WASHINGTON

GROUNDWATER ELEVATION CONTOUR MAP JULY 25, 2023

ARCADIS

FIGURE 3

MW-7	
Date	7/25/2023
TPH-GRO	<100 [<100]
TPH-DRO	**1,060 [1,110]**
TPH-DRO w/ SGC	--
TPH-HRO	**530 [588]**
TPH-HRO w/ SGC	--
B	<1.00 [<1.00]
T	<1.00 [<1.00]
E	<1.00 [<1.00]
X	0.181 J [<3.00]

MW-13	
Date	7/25/2023
TPH-GRO	<100
TPH-DRO	126 J
TPH-DRO w/ SGC	--
TPH-HRO	153 J
TPH-HRO w/ SGC	--
B	<1.00
T	<1.00
E	<1.00
X	<3.00

MW-17	
Date	7/25/2023
TPH-GRO	<100
TPH-DRO	145 J
TPH-DRO w/ SGC	--
TPH-HRO	175 J
TPH-HRO w/ SGC	--
B	<1.00
T	<1.00
E	<1.00
X	<3.00

MW-15	
Date	7/25/2023
TPH-GRO	233
TPH-DRO	320
TPH-DRO w/ SGC	--
TPH-HRO	116 J
TPH-HRO w/ SGC	--
B	<1.00
T	<1.00
E	<1.00
X	<3.00

MW-16	
Date	7/25/2023
TPH-GRO	40.5 J
TPH-DRO	292
TPH-DRO w/ SGC	--
TPH-HRO	174 J
TPH-HRO w/ SGC	--
B	<1.00
T	<1.00
E	<1.00
X	<3.00

MW-7
MW-13
MW-8
MW-3
MW-2
MW-14
MW-9 (NS)
MW-17
MW-15
MW-4
MW-10
MW-12 (NS)
MW-1
MW-18 (NS)
MW-16
MW-6
MW-5
MW-11 (NS)
MW-19

JAN'S LOST & FOUND
JAN'S WAREHOUSE
EOTEXTILE NED PLANTER
SIDEWALK
DEPOT
SIDEWALK
EXISTING OFFICE
RESTROOM
POWER POLE
DAVIS LAKE ROAD
FRONT AVENUE

LEGEND:

- MW-16 — GROUNDWATER MONITORING WELL
- MW-6 — ABANDONED OR DESTROYED MONITORING WELL LOCATIONS
- FENCE LINE
- RAILROAD TRACKS
- **BOLD** — BOLD AND HIGHLIGHTED VALUES ARE GREATER THAN THEIR RESPECTIVE MODEL TOXIC CONTROL ACT (MTCA) METHOD A CLEANUP LEVEL
- <1.00 — NOT DETECTED AT OR ABOVE THE LABORATORY REPORTED DETECTION LIMIT
- J — THE IDENTIFICATION OF THE ANALYTE IS ACCEPTABLE; THE REPORTED VALUE IS AN ESTIMATE
- [ ] — DUPLICATE SAMPLE RESULTS
- (NS) — NOT SAMPLED
- -- — NOT ANALYZED

N

MTCA METHOD A CLEANUP LEVELS		
ABBREVIATION	**CONSTITUENT**	**MTCA METHOD A CLEANUP LEVEL**
B	BENZENE	**5**
T	TOLUENE	**1,000**
E	ETHYLBENZENE	**700**
X	TOTAL XYLENES	**1,000**
TPH-GRO	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE RANGE ORGANICS	**800/1,000**
TPH-DRO	TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS	**500**
TPH-DRO w/ SGC	TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS WITH SILICA GEL CLEANUP	**500**
TPH-HRO	TOTAL PETROLEUM HYDROCARBONS AS HEAVY OIL RANGE ORGANICS	**500**
TPH-HRO w/ SGC	TOTAL PETROLEUM HYDROCARBONS AS HEAVY OIL RANGE ORGANICS WITH SILICA GEL CLEANUP	**500**

0 30' 60'

APPROXIMATE SCALE : 1 in. 30 ft

NOTES:

1. ALL CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (µg/L).
2. GRO MTCA METHOD A CLEANUP LEVEL IS 800 (µg/L) IF BENZENE PRESENT IN GROUNDWATER AND 1,000 (µg/L) IF NO DETECTABLE BENZENE IN GROUNDWATER.

FORMER STANDARD OIL BULK PLANT NO. 302095
149 & 167 MAIN STREET
MORTON, WASHINGTON

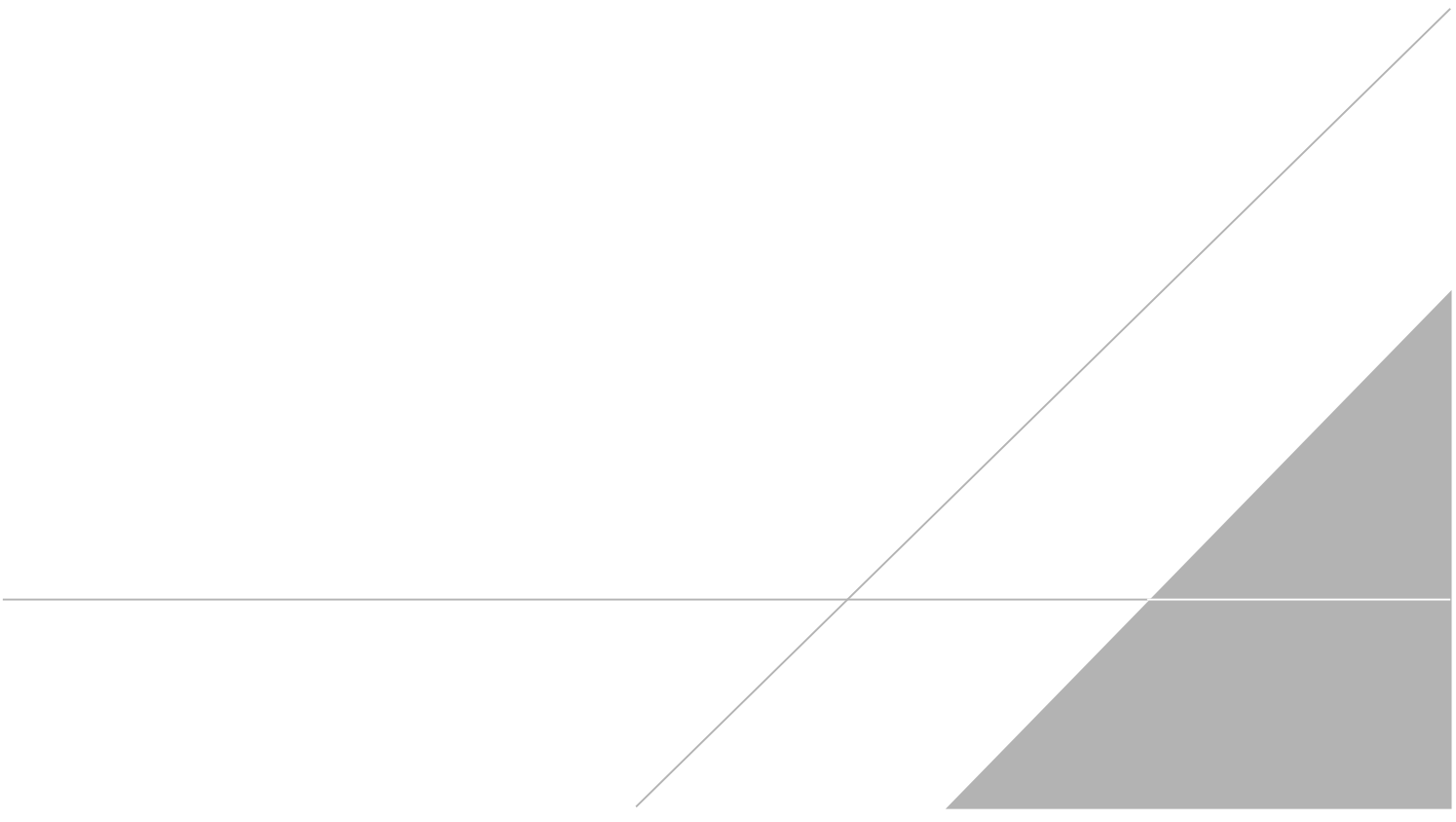
GROUNDWATER ANALYTICAL MAP JULY 25, 2023

ARCADIS

FIGURE 4

ATTACHMENT A

Regulatory Directive, April 24, 2017



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

April 24, 2017

Electronic Copy

Mr. Don Wyll
Principal Project Manager
Leidos
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

Re: Former Chevron Bulk Plant (Wolfe and Parks Property), Morton, Washington.
Compliance Groundwater Monitoring Modifications Approval Letter.

Dear Mr. Wyll:

I reviewed your proposed modifications to the Compliance Groundwater Monitoring Plan (copy enclosed) for the Former Chevron Bulk Plant (Wolfe and Parks Property) Site located at 149 and 167 Main Street, Morton, Washington. I also reviewed the results of the groundwater monitoring conducted at this Site from 2004 through 2016.

Based on my review of the above information, Ecology is here by approving your request except the abandonment of monitoring wells MW-13 and MW-17. Ecology's approval include the following:

- Reduction in the sampling frequency from quarterly to semi-annual.

- Reduction in the number of monitoring wells from twelve to five (MW-7, MW-11, MW-12, MW-15 and MW-16) for chemical analysis.

- Abandonment of four monitoring wells (MW-14, MW-18, MW-19 and MW-2). Based on the results of groundwater monitoring, Ecology understands that the contaminant concentrations in these wells were either below the laboratory detection limits or below the Model Toxics Control Act (MTCA) Method A cleanup levels since December 2008 (30 rounds of monitoring). Since continued monitoring of these wells will not provide any valuable information, it is Ecology's opinion that it is appropriate to discontinue the monitoring and abandon these wells.

- Ecology would like to retain the monitoring wells MW-13 and MW-17 just for water level measurements. Ecology believes that measurement of water level elevations in seven wells (MW-7, MW-11, MW-12, MW-13, MW-15, MW-16 and MW-17) will aid to develop a more accurate groundwater flow direction at the site.

- The two rounds of semi-annual groundwater monitoring must reflect the lowest and highest water level elevations (seasons). Please review the existing water level elevation data and select two rounds (seasons) for reflecting the lowest and highest water level conditions at the Site. These two rounds may coincide with the summer and winter seasons.

If you have any questions, regarding this approval, please call me at (360) 407-6335.

Sincerely,

Panjini Balaraju, P.E.

By Certified Mail: [91 7199 9991 7037 0279 7772]

Enclosure: (1)

cc: Central File

ATTACHMENT B

Field Data Sheets

Groundwater Gauging Log

Project Number	30063832
Client:	Chevron
Site ID:	302095
Site Location:	Morton, Washington
Measuring Point:	Top of Casing
Date(s):	07/25/2023
Sampler(s):	Lee Bures
Gauging Equipment:	Interface Probe

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
MW-7	07/25/2023	08:45	6.79	ND	18.95	--	--	--
MW-13	07/25/2023	08:41	6.43	ND	16.34	--	--	--
MW-15	07/25/2023	08:37	4.30	ND	17.55	--	--	--
MW-16	07/25/2023	08:31	6.00	ND	18.64	--	--	--
MW-17	07/25/2023	08:34	5.96	ND	17.95	--	--	--

ft-bmp = feet below measuring point ND = Not Detected PID = Photoionization Detector Reading

ppm = parts per million -- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30063832	**Well ID**	MW-7	**Date**	7/25/2023		
Site Location	Morton, Washington	**Site ID**	302095	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 19	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	6.79	**Total Depth (ft-bmp)**	18.95	**Water Column (ft)**	12.16	**Gallons in Well**	1.98
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	09:13	**Well Volumes Purged**	0.40	**Sample ID**	MW-7-W-20230725	**Purge Equipment**	Peristaltic
Purge Start	08:55	**Gallons Purged**	0.79	**Duplicate ID**	BD-W-20230725	**Sample Equipment**	Peristaltic
Purge End	09:10	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Color
08:58	200	6.84	6.41	0.189	92.0	2.85	12.93	151	Clear
09:01	200	6.84	6.35	0.185	69.0	2.48	12.83	162.4	Clear
09:04	200	6.84	6.30	0.180	65.0	2.18	12.97	175.7	Clear
09:07	200	6.84	6.29	0.179	62.0	2.28	13.00	179.1	Clear
09:10	200	6.84	6.28	0.178	60.0	2.21	13.02	181.2	Clear

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-7-W-20230725 Sample Time: 09:13 Sample Depth (ft-bmp) (e.g. pump intake): 13

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30063832	**Well ID**	MW-13	**Date**	7/25/2023		
Site Location	Morton, Washington	**Site ID**	302095	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 18	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	6.43	**Total Depth (ft-bmp)**	16.34	**Water Column (ft)**	9.91	**Gallons in Well**	1.61
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	
Sample Time	09:52	**Well Volumes Purged**	0.49	**Sample ID**	MW-13-W-20230725	**Purge Equipment**	Peristaltic
Purge Start	09:34	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	09:49	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Color
09:37	200	6.5	6.80	0.314	577	0.39	13.59	233.8	Clear
09:40	200	6.5	6.81	0.314	268	0.40	13.59	230.7	Clear
09:43	200	6.5	6.80	0.316	244	0.37	14.03	227.4	Clear
09:46	200	6.5	6.80	0.316	239	0.35	14.10	224	Clear
09:49	200	6.5	6.80	0.316	234	0.31	14.12	223.1	Clear

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-13-W-20230725 Sample Time: 09:52 Sample Depth (ft-bmp) (e.g. pump intake): 11

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30063832	**Well ID**	MW-15	**Date**	7/25/2023		
Site Location	Morton, Washington	**Site ID**	302095	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 18	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	4.3	**Total Depth (ft-bmp)**	17.55	**Water Column (ft)**	13.25	**Gallons in Well**	2.15
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	10:32	**Well Volumes Purged**	0.37	**Sample ID**	MW-15-W-20230725	**Purge Equipment**	Peristaltic
Purge Start	10:14	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	10:29	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Color
10:17	200	4.31	6.74	0.138	86.0	0.54	14.69	32	Clear
10:20	200	4.31	6.68	0.142	51.0	0.50	14.94	6.5	Clear
10:23	200	4.32	6.68	0.142	48.0	0.48	14.74	2.7	Clear
10:26	200	4.32	6.67	0.142	45.0	0.48	14.80	2.8	Clear
10:29	200	4.32	6.66	0.142	44.0	0.47	14.82	1.9	Clear

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-15-W-20230725 Sample Time: 10:32 Sample Depth (ft-bmp) (e.g. pump intake): 11

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30063832	**Well ID**	MW-16	**Date**	7/25/2023		
Site Location	Morton, Washington	**Site ID**	302095	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 18	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	6	**Total Depth (ft-bmp)**	18.64	**Water Column (ft)**	12.64	**Gallons in Well**	2.05
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	11:44	**Well Volumes Purged**	0.39	**Sample ID**	MW-16-W-20230725	**Purge Equipment**	Peristaltic
Purge Start	11:26	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	11:41	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Color
11:29	200	6.09	6.47	0.251	122	0.81	20.25	-49	Clear
11:32	200	6.17	6.44	0.244	244	0.66	19.75	-46.2	Clear
11:35	200	6.24	6.44	0.240	267	0.62	19.49	-43.6	Clear
11:38	200	6.3	6.42	0.237	260	0.58	19.55	-40.9	Clear
11:41	200	6.38	6.41	0.236	257	0.56	19.57	-39.1	Clear

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-16-W-20230725 Sample Time: 11:44 Sample Depth (ft-bmp) (e.g. pump intake): 12.5

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30063832	**Well ID**	MW-17	**Date**	7/25/2023		
Site Location	Morton, Washington	**Site ID**	302095	**Weather (°F)**	Clear	**Sampled by**	Lee Bures
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3 to 18	**Casing Diameter (in.)**	2	**Well Casing Material**	
Static Water Level (ft-bmp)	5.96	**Total Depth (ft-bmp)**	17.95	**Water Column (ft)**	11.99	**Gallons in Well**	1.95
Water Quality Meter Make/Model	Hach 2100Q,Hanna HI 98129	**Purge Method**	Low-Flow	**Collection Type**		Grab	

Sample Time	11:06	**Well Volumes Purged**	0.41	**Sample ID**	MW-17-W-20230725	**Purge Equipment**	Peristaltic
Purge Start	10:48	**Gallons Purged**	0.79	**Duplicate ID**	--	**Sample Equipment**	Peristaltic
Purge End	11:03	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Color
10:51	200	6	6.39	0.295	43.0	0.57	16.48	29.6	Clear
10:54	200	6	6.38	0.296	26.0	0.53	16.85	26.9	Clear
10:57	200	6.02	6.38	0.294	26.0	0.50	17.02	42.4	Clear
11:00	200	6.03	6.38	0.294	25.0	0.47	17.07	42.9	Clear
11:03	200	6.05	6.38	0.294	24.0	0.42	17.10	43.7	Clear

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-17-W-20230725 Sample Time: 11:06 Sample Depth (ft-bmp) (e.g. pump intake): 12

Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Company Name/Address:
Arcadis - Chevron - WA

1420 5th Ave
Unit 2400
Seattle, WA 98101

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

Pres Chk

Report to:
Sydney Clark

Email To:
Alaura.Gonzalez@arcadis.com;sydney.clark@ar

Project Description:
302095

City/State Collected: Morton, WA

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30063832

Lab Project #
CHEVARCWA-302095

Collected by (print):
Diana Ojeda

Collected by (signature):
Diana Ojeda

Immediately Packed on Ice N ___ Y X

Site/Facility ID #
MAIN AVE, MORTON, WA

P.O. #

Quote #

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

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHDX no silica 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	V8260BTEX 40mlAmb-HCl								Remarks	Sample # (lab only)
MW-7-W-20230725	G	GW	-	7/25/23	0913	8	X	X	X									
MW-13-W-20230725		GW	-		0952	8	X	X	X									
MW-15-W-20230725		GW	-		1032	8	X	X	X									
MW-16-W-20230725		GW	-		1144	8	X	X	X									
MW-17-W-20230725		GW	-		1106	8	X	X	X									
BD-W-20230725		GW	-		1200	8	X	X	X									
TB-W-20230725		GW	-		0900	2		X	X									
		GW																

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

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

SDG #

Table #

Acctnum: **CHEVARCWA**
Template: **T233818**
Prelogin: **P1011373**
PM: **110 - Brian Ford**
PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Diana Ojeda	7/25/23	1430	Shipped via Fedex		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: / Condition: NCF / OK

WELLHEAD INSPECTION FORM

Client: Arcadis Site: 149 & 167 Main St, Morton Date: 7/25/23

Job #: 230725-D01 Technician: DO Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency: Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty)	Tabs stripped (list qty)	Tabs broken (list qty)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade	Other (explain in notes)	Well Not Inspected (explain in notes)	Notes (list if cap or lick replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)
MW-7	X			X											
MW-11															
MW-12															
MW-13	X			X	3/3										
MW-15	X			X	1/3										
MW-16	X			X	2/3										
MW-17	X			X											

NOTES:

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME Morton, WA				PROJECT NUMBER 230725-D01			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
HANNA	07460031101	7/25/23 @ 0645	pH 4 7 10	3.98 7.04 9.98	✓	19.9	DO
			Cond 3900 ORP 237.5 DO 100	3902 236.1 94.3	✓	19.8	DO

CHEVRON-WASHINGTON/OREGON TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING** FOR PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF WASHINGTON AND OREGON. THE PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR AND HAULED TO THEIR FACILITY IN KENT, WASHINGTON FOR TEMPORARILY HOLDING PENDING TRANSPORT BY OTHERS TO FINAL DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 22727 72ND Ave South, Suite D – 102, Kent, WA 98032. BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

302095 — CHEVRON #

Carl Donovan — Chevron Project Manager

149 & 167 — Street number

Main St — street name

Morton — city

WA — state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-7	1		
MW-13	1		
MW-15	1		
MW-16	1		
MW-17	1		

added equip. rinse water 1 0.2

any other adjustments /

TOTAL GALS. RECOVERED 5.2

loaded onto BTS vehicle # 90

BTS event # 230725-D01

time

date 7/25/23

signature Diana Steele

Blaine Tech Services, Inc.

Permit To Work

for Chevron EMC Sites

Client: Arcadis Date 7/25/23

Site Address: 149 & 167 Main St, Morton

Job Number: 230725-D01 Technician(s): DO

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed. Reviewed: ☑

2. Special Permit Required Task Review

Are there any conditions or tasks that would require:	Yes	No
Confined space entry	☐	☑
Working at height	☐	☑
Lock-out/Tag-out	☐	☑
Excavations greater than 4 feet deep	☐	☑
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	☐	☑
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	☐	☑
Hot work	☐	☑

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

	Yes	No
3. Is a Traffic Control Permit required for today's work?	☐	☑
If so is it in the folder?	☐	☑
Is it current?	☐	☑
Do you understand the Traffic Control Plan and what equipment you will need?	☐	☑

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP.	☑
2. Route to hospital understood.	☑
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.	☑
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.	☑
5. Understands procedure to follow, if site circumstances change, to address new site hazards.	☑
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.	☑
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.	☑
8. After lunch tailgate safety meeting refresher conducted.	☑

If Checklist Task cannot be completed, explain:

Permit To Work Authority: Diana Ojeda Technician 7/25/23 0733

Name Title Date Time

ATTACHMENT C

Laboratory Report and Chain-of-Custody Documentation

ANALYTICAL REPORT

August 03, 2023

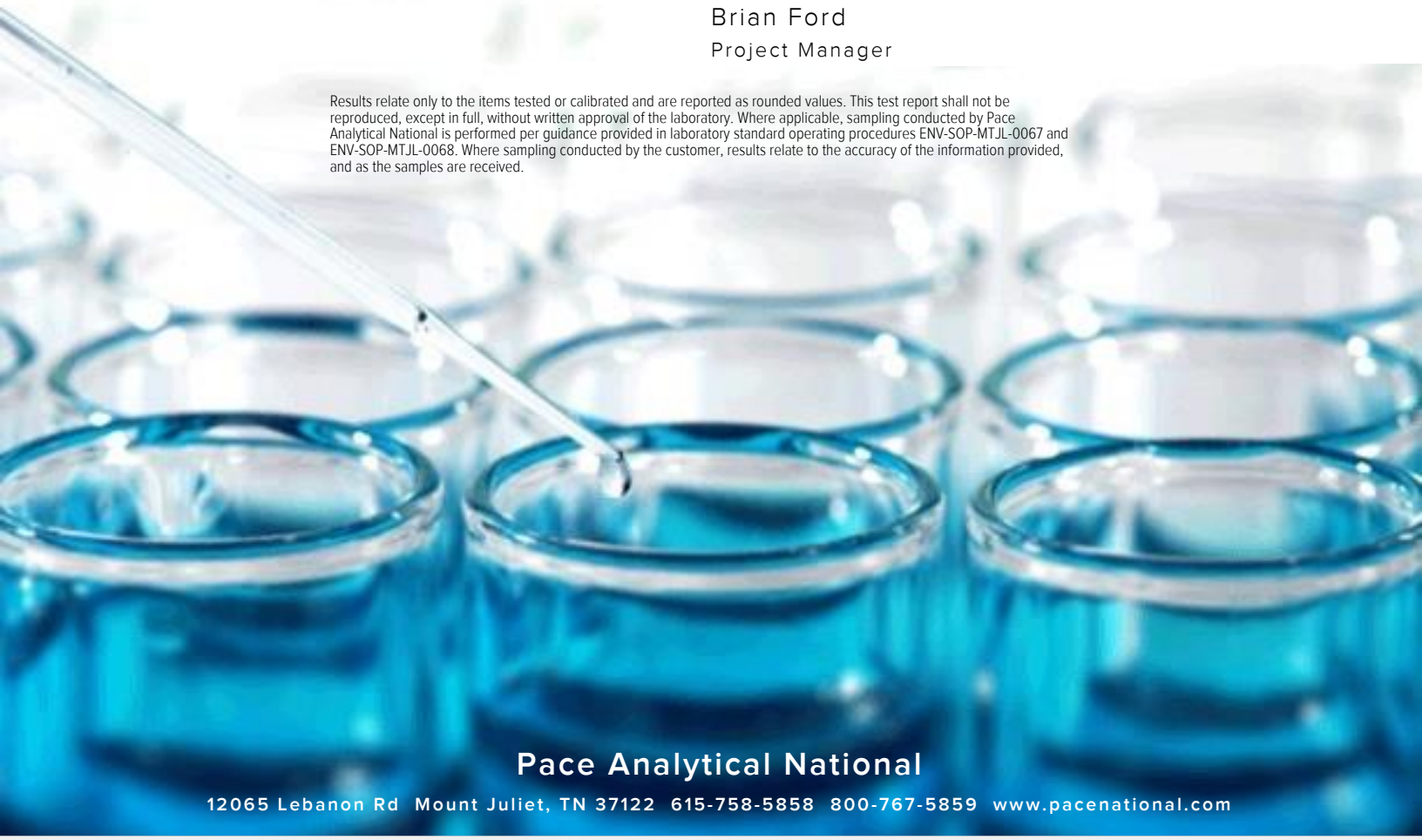
Arcadis - Chevron - WA

Sample Delivery Group:	L1639395
Samples Received:	07/26/2023
Project Number:	30063832
Description:	302095
Site:	MAIN AVE, MORTON, WA 98356
Report To:	Sydney Kunze 1420 5th Ave Unit 2400 Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford

Project Manager



Pace Analytical National

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

TABLE OF CONTENTS

MW-7-W-20230725 L1639395-01 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 09:13 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2104154	1	08/01/23 04:56	08/01/23 04:56	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2103198	1	07/28/23 02:08	07/28/23 02:08	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2104582	1	07/31/23 17:43	08/01/23 18:32	TJD	Mt. Juliet, TN

MW-13-W-20230725 L1639395-02 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 09:52 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2104154	1	08/01/23 05:18	08/01/23 05:18	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2103198	1	07/28/23 02:29	07/28/23 02:29	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2104582	1	07/31/23 17:43	08/01/23 18:52	TJD	Mt. Juliet, TN

MW-15-W-20230725 L1639395-03 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 10:32 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2104154	1	08/01/23 05:40	08/01/23 05:40	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2103198	1	07/28/23 02:51	07/28/23 02:51	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2104582	1	07/31/23 17:43	08/01/23 19:13	TJD	Mt. Juliet, TN

MW-16-W-20230725 L1639395-04 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 11:44 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2104154	1	08/01/23 06:02	08/01/23 06:02	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2103198	1	07/28/23 03:11	07/28/23 03:11	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2104582	1	07/31/23 17:43	08/01/23 19:33	TJD	Mt. Juliet, TN

MW-17-W-20230725 L1639395-05 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 11:06 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2104154	1	08/01/23 06:24	08/01/23 06:24	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2103198	1	07/28/23 03:33	07/28/23 03:33	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2104582	1	07/31/23 17:43	08/01/23 19:53	TJD	Mt. Juliet, TN

BD-W-20230725 L1639395-06 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 12:00 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2104154	1	08/01/23 06:46	08/01/23 06:46	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2103411	1	07/28/23 14:30	07/28/23 14:30	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2104582	1	07/31/23 17:43	08/01/23 20:14	TJD	Mt. Juliet, TN

SAMPLE SUMMARY

TB-W-20230725 L1639395-07 GW

Collected by: Diana Ojeda
Collected date/time: 07/25/23 09:00
Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2105422	1	07/31/23 21:38	07/31/23 21:38	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2103411	1	07/28/23 11:18	07/28/23 11:18	ACG	Mt. Juliet, TN

CASE NARRATIVE

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

Brian Ford
Project Manager

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	08/01/2023 04:56	WG2104154
(S) a,a,a-Trifluorotoluene(FID)	*103*			*78.0-120*		*08/01/2023 04:56*	WG2104154

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	07/28/2023 02:08	WG2103198
Toluene	U		0.278	1.00	1	07/28/2023 02:08	WG2103198
Ethylbenzene	U		0.137	1.00	1	07/28/2023 02:08	WG2103198
Total Xylenes	0.181	J	0.174	3.00	1	07/28/2023 02:08	WG2103198
(S) Toluene-d8	*98.6*			*80.0-120*		*07/28/2023 02:08*	WG2103198
(S) 4-Bromofluorobenzene	*94.9*			*77.0-126*		*07/28/2023 02:08*	WG2103198
(S) 1,2-Dichloroethane-d4	*96.7*			*70.0-130*		*07/28/2023 02:08*	WG2103198

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	1060		66.7	200	1	08/01/2023 18:32	WG2104582
Residual Range Organics (RRO)	530		83.3	250	1	08/01/2023 18:32	WG2104582
(S) o-Terphenyl	*92.6*			*52.0-156*		*08/01/2023 18:32*	WG2104582

Sample Narrative:

L1639395-01 WG2104582: Sample resembles laboratory standard for Hydraulic Fluid.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	08/01/2023 05:18	WG2104154
(S) a,a,a-Trifluorotoluene(FID)	*102*			*78.0-120*		*08/01/2023 05:18*	WG2104154

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	07/28/2023 02:29	WG2103198
Toluene	U		0.278	1.00	1	07/28/2023 02:29	WG2103198
Ethylbenzene	U		0.137	1.00	1	07/28/2023 02:29	WG2103198
Total Xylenes	U		0.174	3.00	1	07/28/2023 02:29	WG2103198
(S) Toluene-d8	*98.9*			*80.0-120*		*07/28/2023 02:29*	WG2103198
(S) 4-Bromofluorobenzene	*94.7*			*77.0-126*		*07/28/2023 02:29*	WG2103198
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*07/28/2023 02:29*	WG2103198

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	126	J	66.7	200	1	08/01/2023 18:52	WG2104582
Residual Range Organics (RRO)	153	J	83.3	250	1	08/01/2023 18:52	WG2104582
(S) o-Terphenyl	*109*			*52.0-156*		*08/01/2023 18:52*	WG2104582

Sample Narrative:

L1639395-02 WG2104582: Sample does not resemble laboratory standards.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	233		31.6	100	1	08/01/2023 05:40	WG2104154
(S) a,a,a-Trifluorotoluene(FID)	*90.7*			*78.0-120*		*08/01/2023 05:40*	WG2104154

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	07/28/2023 02:51	WG2103198
Toluene	U		0.278	1.00	1	07/28/2023 02:51	WG2103198
Ethylbenzene	U		0.137	1.00	1	07/28/2023 02:51	WG2103198
Total Xylenes	U		0.174	3.00	1	07/28/2023 02:51	WG2103198
(S) Toluene-d8	*96.9*			*80.0-120*		*07/28/2023 02:51*	WG2103198
(S) 4-Bromofluorobenzene	*91.6*			*77.0-126*		*07/28/2023 02:51*	WG2103198
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*07/28/2023 02:51*	WG2103198

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	320		66.7	200	1	08/01/2023 19:13	WG2104582
Residual Range Organics (RRO)	116	J	83.3	250	1	08/01/2023 19:13	WG2104582
(S) o-Terphenyl	*103*			*52.0-156*		*08/01/2023 19:13*	WG2104582

Sample Narrative:

L1639395-03 WG2104582: Sample resembles laboratory standard for Diesel.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	40.5	J	31.6	100	1	08/01/2023 06:02	WG2104154
(S) a,a,a-Trifluorotoluene(FID)	*103*			*78.0-120*		*08/01/2023 06:02*	WG2104154

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	07/28/2023 03:11	WG2103198
Toluene	U		0.278	1.00	1	07/28/2023 03:11	WG2103198
Ethylbenzene	U		0.137	1.00	1	07/28/2023 03:11	WG2103198
Total Xylenes	U		0.174	3.00	1	07/28/2023 03:11	WG2103198
(S) Toluene-d8	*98.1*			*80.0-120*		*07/28/2023 03:11*	WG2103198
(S) 4-Bromofluorobenzene	*94.7*			*77.0-126*		*07/28/2023 03:11*	WG2103198
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*07/28/2023 03:11*	WG2103198

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	292		66.7	200	1	08/01/2023 19:33	WG2104582
Residual Range Organics (RRO)	174	J	83.3	250	1	08/01/2023 19:33	WG2104582
(S) o-Terphenyl	*101*			*52.0-156*		*08/01/2023 19:33*	WG2104582

Sample Narrative:

L1639395-04 WG2104582: Sample resembles laboratory standard for Diesel.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	08/01/2023 06:24	WG2104154
(S) a,a,a-Trifluorotoluene(FID)	*105*			*78.0-120*		*08/01/2023 06:24*	WG2104154

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	07/28/2023 03:33	WG2103198
Toluene	U		0.278	1.00	1	07/28/2023 03:33	WG2103198
Ethylbenzene	U		0.137	1.00	1	07/28/2023 03:33	WG2103198
Total Xylenes	U		0.174	3.00	1	07/28/2023 03:33	WG2103198
(S) Toluene-d8	*98.3*			*80.0-120*		*07/28/2023 03:33*	WG2103198
(S) 4-Bromofluorobenzene	*93.3*			*77.0-126*		*07/28/2023 03:33*	WG2103198
(S) 1,2-Dichloroethane-d4	*98.0*			*70.0-130*		*07/28/2023 03:33*	WG2103198

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	145	J	66.7	200	1	08/01/2023 19:53	WG2104582
Residual Range Organics (RRO)	175	J	83.3	250	1	08/01/2023 19:53	WG2104582
(S) o-Terphenyl	*107*			*52.0-156*		*08/01/2023 19:53*	WG2104582

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	08/01/2023 06:46	WG2104154
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*08/01/2023 06:46*	WG2104154

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	07/28/2023 14:30	WG2103411
Toluene	U		0.278	1.00	1	07/28/2023 14:30	WG2103411
Ethylbenzene	U		0.137	1.00	1	07/28/2023 14:30	WG2103411
Total Xylenes	U		0.174	3.00	1	07/28/2023 14:30	WG2103411
(S) Toluene-d8	*98.5*			*80.0-120*		*07/28/2023 14:30*	WG2103411
(S) 4-Bromofluorobenzene	*96.0*			*77.0-126*		*07/28/2023 14:30*	WG2103411
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*		*07/28/2023 14:30*	WG2103411

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	1110		66.7	200	1	08/01/2023 20:14	WG2104582
Residual Range Organics (RRO)	588		83.3	250	1	08/01/2023 20:14	WG2104582
(S) o-Terphenyl	*98.9*			*52.0-156*		*08/01/2023 20:14*	WG2104582

Sample Narrative:

L1639395-06 WG2104582: Sample resembles laboratory standard for Hydraulic Fluid.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/31/2023 21:38	WG2105422
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*07/31/2023 21:38*	WG2105422

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	07/28/2023 11:18	WG2103411
Toluene	U		0.278	1.00	1	07/28/2023 11:18	WG2103411
Ethylbenzene	U		0.137	1.00	1	07/28/2023 11:18	WG2103411
Total Xylenes	U		0.174	3.00	1	07/28/2023 11:18	WG2103411
(S) Toluene-d8	*98.5*			*80.0-120*		*07/28/2023 11:18*	WG2103411
(S) 4-Bromofluorobenzene	*94.7*			*77.0-126*		*07/28/2023 11:18*	WG2103411
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/28/2023 11:18*	WG2103411

Method Blank (MB)

(MB) R3955960-2 08/01/23 04:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3955960-1 08/01/23 03:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5110	92.9	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*96.8*	*78.0-120*	

Method Blank (MB)

(MB) R3955169-2 07/31/23 20:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*103*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3955169-1 07/31/23 19:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4990	90.7	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*97.8*	*78.0-120*	

Method Blank (MB)

(MB) R3955829-2 07/27/23 22:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Total Xylenes	U		0.174	3.00
(S) Toluene-d8	*100*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*92.0*			*70.0-130*

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

(LCS) R3955829-1 07/27/23 21:30 • (LCSD) R3955829-3 07/27/23 22:55

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Benzene	5.00	4.82	4.78	96.4	95.6	70.0-123			0.833	20
Toluene	5.00	4.52	4.41	90.4	88.2	79.0-120			2.46	20
Ethylbenzene	5.00	4.34	4.36	86.8	87.2	79.0-123			0.460	20
Total Xylenes	15.0	13.3	13.1	88.7	87.3	79.0-123			1.52	20
(S) Toluene-d8				*99.1*	*99.1*	*80.0-120*				
(S) 4-Bromofluorobenzene				*98.5*	*96.9*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*97.6*	*99.5*	*70.0-130*				

Method Blank (MB)

(MB) R3954802-3 07/28/23 08:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Total Xylenes	U		0.174	3.00
(S) Toluene-d8	*99.3*			*80.0-120*
(S) 4-Bromofluorobenzene	*92.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*

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

(LCS) R3954802-1 07/28/23 07:06 • (LCSD) R3954802-2 07/28/23 07:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	4.53	4.67	90.6	93.4	70.0-123			3.04	20
Toluene	5.00	4.40	4.48	88.0	89.6	79.0-120			1.80	20
Ethylbenzene	5.00	4.26	4.17	85.2	83.4	79.0-123			2.14	20
Total Xylenes	15.0	13.1	13.1	87.3	87.3	79.0-123			0.000	20
(S) Toluene-d8				*96.6*	*98.6*	*80.0-120*				
(S) 4-Bromofluorobenzene				*94.6*	*97.6*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*99.7*	*104*	*70.0-130*				

Method Blank (MB)

(MB) R3955483-1 08/01/23 11:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	*83.5*			*52.0-156*

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

(LCS) R3955483-2 08/01/23 11:30 • (LCSD) R3955483-3 08/01/23 11:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1370	1250	91.3	83.3	50.0-150			9.16	20
(S) o-Terphenyl				*62.0*	*59.0*	*52.0-156*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

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

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
Arcadis - Chevron - WA

1420 5th Ave
Unit 2400
Seattle. WA 98101

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

Pres Chk

Report to:
Sydney Clark

Email To:
Alaura.Gonzalez@arcadis.com;sydney.clark@ar

Project Description:
302095

City/State Collected: Morton, WA

Please Circle: PT MT CT ET

Phone: **206-325-5254**

Client Project #
30063832

Lab Project #
CHEVARCWA-302095

Collected by (print):
Diana Ojeda

Collected by (signature):
Diana Ojeda

Immediately Packed on Ice N ___ Y X

Site/Facility ID #
MAIN AVE, MORTON, WA

P.O. #

Quote #

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

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHDX no silica 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	V8260BTEX 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-7-W-20230725	G	GW	-	7/25/23	0913	8	X	X	X		-01
MW-13-W-20230725		GW	-		0952	8	X	X	X		-02
MW-15-W-20230725		GW	-		1032	8	X	X	X		-03
MW-16-W-20230725		GW	-		1144	8	X	X	X		-04
MW-17-W-20230725		GW	-		1106	8	X	X	X		-05
BD-W-20230725		GW	-		1200	8	X	X	X		-06
TB-W-20230725		GW	-		0900	2		X	X		-07
		GW									

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

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

SDG # L1639395
E180

Acctnum: **CHEVARCWA**
Template: **T233818**
Prelogin: **P1011373**
PM: **110 - Brian Ford**
PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6426 8309 6080

Sample Receipt Checklist

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Diana Ojeda	7/25/23	1430	Shipped via Fedex	2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.3 +0=4.3 °C Bottles Received: 48	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Alexa Mitchell	Date: 7/26/23 Time: 0900	Hold: Condition: NCF / OK

ANALYTICAL REPORT

August 10, 2023

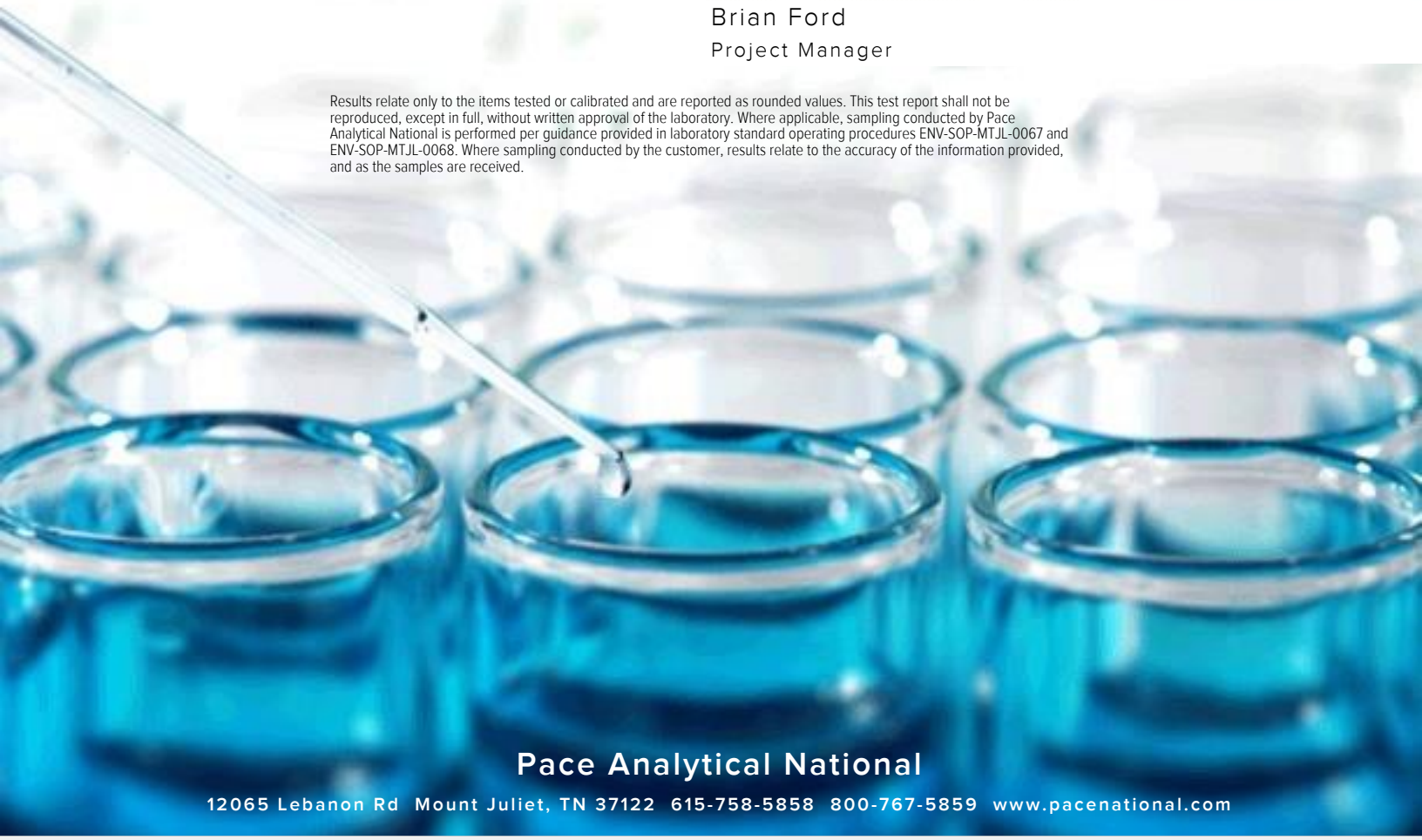
Arcadis - Chevron - WA

Sample Delivery Group:	L1642355
Samples Received:	07/26/2023
Project Number:	30063832
Description:	302095
Site:	MAIN AVE, MORTON, WA 98356
Report To:	Sydney Kunze 1420 5th Ave Unit 2400 Seattle, WA 98101

Entire Report Reviewed By:

Brian Ford

Project Manager



Pace Analytical National

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

TABLE OF CONTENTS

SAMPLE SUMMARY

MW-7-W-20230725 L1642355-01 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 09:13 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2107810	1	07/31/23 17:39	08/09/23 17:48	ICD	Mt. Juliet, TN

MW-13-W-20230725 L1642355-02 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 09:52 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2107810	1	07/31/23 17:39	08/01/23 18:52	ICD	Mt. Juliet, TN

MW-15-W-20230725 L1642355-03 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 10:32 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2107810	1	07/31/23 17:39	08/09/23 18:08	ICD	Mt. Juliet, TN

MW-16-W-20230725 L1642355-04 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 11:44 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2107810	1	07/31/23 17:39	08/09/23 18:29	ICD	Mt. Juliet, TN

MW-17-W-20230725 L1642355-05 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 11:06 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2107810	1	07/31/23 17:39	08/01/23 19:53	ICD	Mt. Juliet, TN

BD-W-20230725 L1642355-06 GW

Collected by: Diana Ojeda | Collected date/time: 07/25/23 12:00 | Received date/time: 07/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2107810	1	07/31/23 17:39	08/09/23 18:49	ICD	Mt. Juliet, TN

CASE NARRATIVE

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

Brian Ford
Project Manager

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	08/09/2023 17:48	WG2107810
Residual Range Organics (RRO)	U		83.3	250	1	08/09/2023 17:48	WG2107810
(S) o-Terphenyl	*92.6*			*52.0-156*		*08/09/2023 17:48*	WG2107810

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	126	B J	66.7	200	1	08/01/2023 18:52	WG2107810
Residual Range Organics (RRO)	153	B J	83.3	250	1	08/01/2023 18:52	WG2107810
(S) o-Terphenyl	*109*			*52.0-156*		*08/01/2023 18:52*	WG2107810

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	U		66.7	200	1	08/09/2023 18:08	WG2107810
Residual Range Organics (RRO)	U		83.3	250	1	08/09/2023 18:08	WG2107810
(S) o-Terphenyl	*92.6*			*52.0-156*		*08/09/2023 18:08*	WG2107810

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	102	B J	66.7	200	1	08/09/2023 18:29	WG2107810
Residual Range Organics (RRO)	U		83.3	250	1	08/09/2023 18:29	WG2107810
(S) o-Terphenyl	*56.3*			*52.0-156*		*08/09/2023 18:29*	WG2107810

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	145	B J	66.7	200	1	08/01/2023 19:53	WG2107810
Residual Range Organics (RRO)	175	B J	83.3	250	1	08/01/2023 19:53	WG2107810
(S) o-Terphenyl	*107*			*52.0-156*		*08/01/2023 19:53*	WG2107810

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Diesel Range Organics (DRO)	125	B J	66.7	200	1	08/09/2023 18:49	WG2107810
Residual Range Organics (RRO)	U		83.3	250	1	08/09/2023 18:49	WG2107810
(S) o-Terphenyl	*83.7*			*52.0-156*		*08/09/2023 18:49*	WG2107810

Method Blank (MB)

(MB) R3958764-1 08/09/23 16:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	254		66.7	200
Residual Range Organics (RRO)	345		83.3	250
(S) o-Terphenyl	*57.5*			*52.0-156*

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

(LCS) R3958764-2 08/09/23 17:07 • (LCSD) R3958764-3 08/09/23 17:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1300	1370	86.7	91.3	50.0-150			5.24	20
(S) o-Terphenyl				*59.5*	*113*	*52.0-156*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

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

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
Arcadis - Chevron - WA
1420 5th Ave
Unit 2400
Seattle, WA 98101

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

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

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

Report to: Sydney Clark

Email To: Alaura.Gonzalez@arcadis.com;sydney.clark@ar

Project Description: 302095

City/State Collected: Morton, WA

Please Circle: PT MT CT ET

Phone: 206-325-5254

Client Project # 30063832

Lab Project # CHEVARCWA-302095

SDG # ~~L1634395~~ E180 L1642355

Collected by (print): Diana Ojeda

Site/Facility ID # MAIN AVE, MORTON, WA

P.O. #

Collected by (signature): Diana Ojeda

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

Quote #

Date Results Needed

Immediately Packed on Ice N___ Y X

Acctnum: CHEVARCWA
Template: T233818
Prelogin: P1011373
PM: 110 - Brian Ford
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHDX no silica 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	V8260BTEX 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-7-W-20230725	G	GW	–	7/25/23	0913	8	X	X	X		~~-01~~ -01
MW-13-W-20230725		GW	–		0952	8	X	X	X		~~-02~~ 02
MW-15-W-20230725		GW	–		1032	8	X	X	X		~~-03~~ 03
MW-16-W-20230725		GW	–		1144	8	X	X	X		~~-04~~ 04
MW-17-W-20230725		GW	–		1106	8	X	X	X		~~-05~~ -05
BD-W-20230725		GW	–		1200	8	X	X	X		~~-06~~ -06
TB-W-20230725		GW	–		0900	2		X	X		~~-07~~
		GW									

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

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ______

Tracking # 6426 8309 6080

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

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)		
Diana Ojeda	7/25/23	1430	Shipped via Fedex	Trip Blank Received: Yes / No 2 HCL / MeoH TBR	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.3+0=4.3 °C Bottles Received: 48	If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Alexa Mitchell	Date: 7/26/23 Time: 0900	Hold: Condition: NCF / OK

L1639395 CHEVARCWA re-log

R2/R3/R4/RX/EX

Please re-log everything (except the trip blank) for NWTPHDXLVI with note: post analysis SGT of original extract if possible. 08/14EX

Time estimate: oh **Time spent:** oh

Members

Brian Ford

ATTACHMENT D

Ecology Correspondence

From: Misuraca, Tia (ECY) <tmis461@ECY.WA.GOV>
Sent: Wednesday, August 9, 2023 3:03 PM
To: Smith, Andrew (ECY); Donovan, Carl
Cc: Kunze, Sydney
Subject: RE: Former Union Oil Bulk Plant 302095 - FSID 7937547 - Semi-Annual Status Report, First Half 2023

Hi Carl,

Ecology has evaluated the two scenarios you proposed in your email dated August 31, 2022 and feel that Scenario 2 is the more appropriate given the seasonal fluctuation in contaminant concentrations over the past monitoring events. Ecology grants approval of a reduced groundwater monitoring schedule to every 2.5 years. With this revised schedule, your next monitoring event will be July/August of 2025.

We've done some research regarding your question about issuing an NFA for your site utilizing silica gel cleanup of groundwater samples impacted with petroleum hydrocarbons as diesel. According to TCP's policies, we are currently not allowing silica gel cleanup for groundwater impacted with diesel. TCP is in the process of developing a 'Draft Guidance for Silica Gel Cleanup in Washington State' , which will allow the use of silica gel cleanup for diesel impacted groundwater under certain conditions. Using the equation in the guidance document and your most recent diesel range organics (DRO) concentrations with and without silica gel cleanup, the polar organic concentrations are still above cleanup level of 500 ug/L.

Here is the link to the draft guidance document for your reference (Guidance SGC). Let me know if you have any other questions.

Tia Misuraca
She/Her
Site Manager
Department of Ecology
Toxics Cleanup Program
360-742-2807

From: Smith, Andrew (ECY) <ansm461@ECY.WA.GOV>
Sent: Thursday, August 3, 2023 10:43 AM
To: Donovan, Carl <Carl.Donovan@arcadis.com>
Cc: Kunze, Sydney <Sydney.Kunze@arcadis.com>; Misuraca, Tia (ECY) <tmis461@ECY.WA.GOV>
Subject: RE: Former Union Oil Bulk Plant 302095 - FSID 7937547 - Semi-Annual Status Report, First Half 2023

Carl,
We are working on evaluating the best approach for this site. I have a new site manager (Tia Misuraca) that I have assigned this question to and between us we will make a decision on the best approach. Give us some time to work through the silica gel question and the best approach for the soil issues. We will get back to you.
Thanks
Andy

Andrew Smith, PE, LHG

Unit Supervisor UST/Technical Support Unit
Department of Ecology
Toxics Cleanup Program
360-485-3987

From: Donovan, Carl
Sent: Thursday, July 6, 2023 8:30 AM
To: 'Smith, Andrew (ECY)' <ansm461@ECY.WA.GOV>
Cc: Clark, Sydney <Sydney.Clark@arcadis.com>
Subject: RE: Former Union Oil Bulk Plant 302095 - FSID 7937547 - Semi-Annual Status Report, First Half 2023

Hi Andy,

Just wanted to follow up on a path forward for the site. You were going to follow up on the use of SGC given the concentrations, age of release, and biogenic material encountered to confirm the use of silica gel. Once we get confirmation on the use of SGC, we have a few options to support an NFA:

1. Use of empirical demonstration coupled with Model Remedy 4 for Sites with Petroleum Impacts to Soil to support an NFA without an EC. I would also offer that a model remedy using a multiple line of evidence approach could support that additional soil assessment if not needed and we could rely on existing data.
2. A limited soil assessment to demonstrate that soil is now less than applicable CULs. During that assessment, VPH/EPH data will/may be collected to determine a site-specific TPH CUL to support an NFA without an EC.

Thanks,
Carl

Carl Donovan | Project Geologist | carl.donovan@arcadis-us.com
Arcadis | Arcadis U.S., Inc.
830 NE Holladay Street Suite 109, Portland, OR | 97232 | USA
T: 503.785.9470 | C: 916.915.7309