



## **Transmittal**

March 24, 2021

To: Mr. Kyle Parker  
Toxics Cleanup Program  
Department of Ecology - Central Regional Office  
1250 W. Alder Street, Union Gap, WA 98903

Ref. No.: 11220390

From: Matthew Davis

GHD Tel: 425-563-6541

**Subject:** 2020 Annual Groundwater Monitoring Report – Former Union Oil Bulk Facility - Yakima

**Issued for:**  Your information  As requested  Construction  Quotation  
 Your approval/comments  Returned to you  For re-submission

Sent by:  Overnight courier  Same day courier  Other: Email

#### Remarks:

Copy to: Ed Ralston, P66 (via Livelink)

Completed by: Matthew Davis [Please Print] Signed:

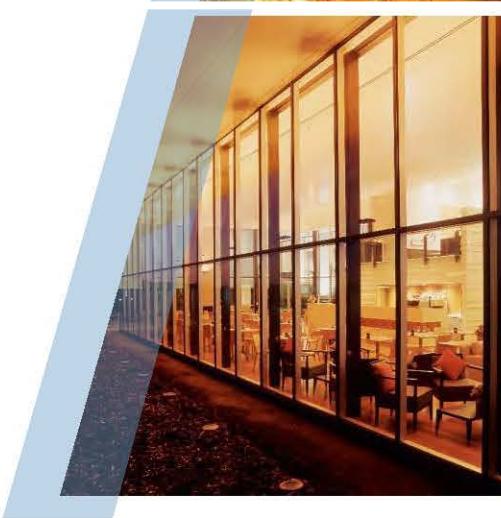
Filing: Correspondence File



# **2020 Annual Groundwater Monitoring Report**

Former Union Oil Facility  
Phillips 66 Site 5886 (Formerly 980)  
920 North 6<sup>th</sup> Avenue  
Yakima, Washington  
Facility Site ID: 53365837  
VCP Site ID: CE0468

**Phillips 66 Company**





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## 1. Introduction

GHD Services Inc. (GHD) prepared this report on behalf of Phillips 66 Company (P66). This annual report includes all groundwater monitoring data collected in 2020.

### 1.1 Site Information

Site Address	920 North 6 <sup>th</sup> Avenue, Yakima, Washington
Site Use	Active Bulk Fuel Terminal
GHD Project Manager	Matthew Davis
Lead Agency	Washington Department of ecology Voluntary Cleanup Program (VCP)
VCP No.	CE0468

## 2. Site Activities and Findings

### 2.1 Current Activities

Groundwater monitoring and sampling was completed by Blaine Tech Services, Inc. (BTS) according to the established monitoring program during 2020. Groundwater monitoring and sampling consisted of measuring depth to water in each well from the surveyed top of casing elevation and collecting a groundwater sample using low-flow sampling procedures. Groundwater samples were placed immediately on ice and shipped under chain of custody to an approved laboratory for analysis of the Site constituents of concern.

GHD prepared a site location map (Figure 1) and groundwater contour and chemical concentration maps (Figures 2 through 5). GHD prepared Table 1 summarizing groundwater monitoring data and laboratory analytical results. Field forms and the laboratory analytical reports are included as Appendices A and B, respectively.

### 2.2 Findings

Quarter/Date	1 <sup>st</sup> /March 9, 2020
Groundwater Flow Direction	Southeast
Hydraulic Gradient	0.01 foot/foot
Depth to Water	23.48 to 26.04 feet below top of well casing



<b>Quarter/Date</b>	<b>2<sup>nd</sup>/June 17, 2020</b>
Groundwater Flow Direction	Southeast
Hydraulic Gradient	0.01 foot/foot
Depth to Water	18.49 to 19.78 feet below top of well casing
<b>Quarter/Date</b>	<b>3<sup>rd</sup>/September 10, 2020</b>
Groundwater Flow Direction	Southeast
Hydraulic Gradient	0.04 foot/foot
Depth to Water	14.02 to 17.22 feet below top of well casing
<b>Quarter/Date</b>	<b>4<sup>th</sup>/December 1, 2020</b>
Groundwater Flow Direction	Southeast
Hydraulic Gradient	0.02 foot/foot
Depth to Water	17.36 to 19.96 feet below top of well casing

Groundwater monitoring activities included gauging all site wells and sampling wells MW-15, MW-17 and MW-19 in second, third and fourth quarters of 2020. Quarterly groundwater sampling was not completed in first quarter of 2020 due to the presence of LNAPL in well MW-15 and obstructions encountered in wells MW-17 and MW-19. An LNAPL recovery event was completed in April 2020, at which point the obstructions in wells MW-17 and MW-19 were removed. Further information summarizing the site investigation activities can be found in the *Groundwater Monitoring and Site Activities Report* submitted to the Washington State Department of Ecology on July 24, 2020.

Laboratory analytical results indicate concentrations of total petroleum hydrocarbons as gasoline (TPHg), diesel (TPHd) and benzene exceeding MTCA Method A cleanup levels in well MW-15 during second and third quarter sampling events. Laboratory analytical results indicate concentrations of TPHd were below MTCA Method A cleanup levels and/or reporting limits for MW-17 and MW-19 during the three consecutive quarters of sampling. In November of 2020, GHD completed interim action activities to inject Petrofix®, a micro-carbon solution, at three locations within the vicinity of MW-15. Sulfate and nitrate concentrations were monitored as part of the post injection monitoring as required by the Washington State Department of Ecology Underground Injection Control permit (UIC) obtained for the injection activities. During injection activities, repairs were made to well MW-19 to repair a crack in the casing approximately 1.5 below ground surface. A summary of the interim action activities and follow-up post-injection monitoring will be reported under separate cover. Fourth quarter sampling was completed on December 1, 2020 following the interim action activities. Laboratory analytical results indicate concentrations TPHd and benzene



exceeding MTCA Method A cleanup levels in MW-15. TPHg concentrations were below MTCA Method A cleanup levels after exceeding cleanup levels for eight consecutive quarters. GHD will continue to monitor and determine if concentrations decrease over time.

GHD will continue post-injection and quarterly groundwater monitoring activities to evaluate whether impacts attenuate following injection activities. Monitoring wells MW-17 and MW-19 have been below MTCA Method A cleanup levels for three consecutive quarters. Following four consecutive quarters of results below MTCA Method A cleanup levels, GHD will request discontinuing monitoring of wells MW-17 and MW-19.

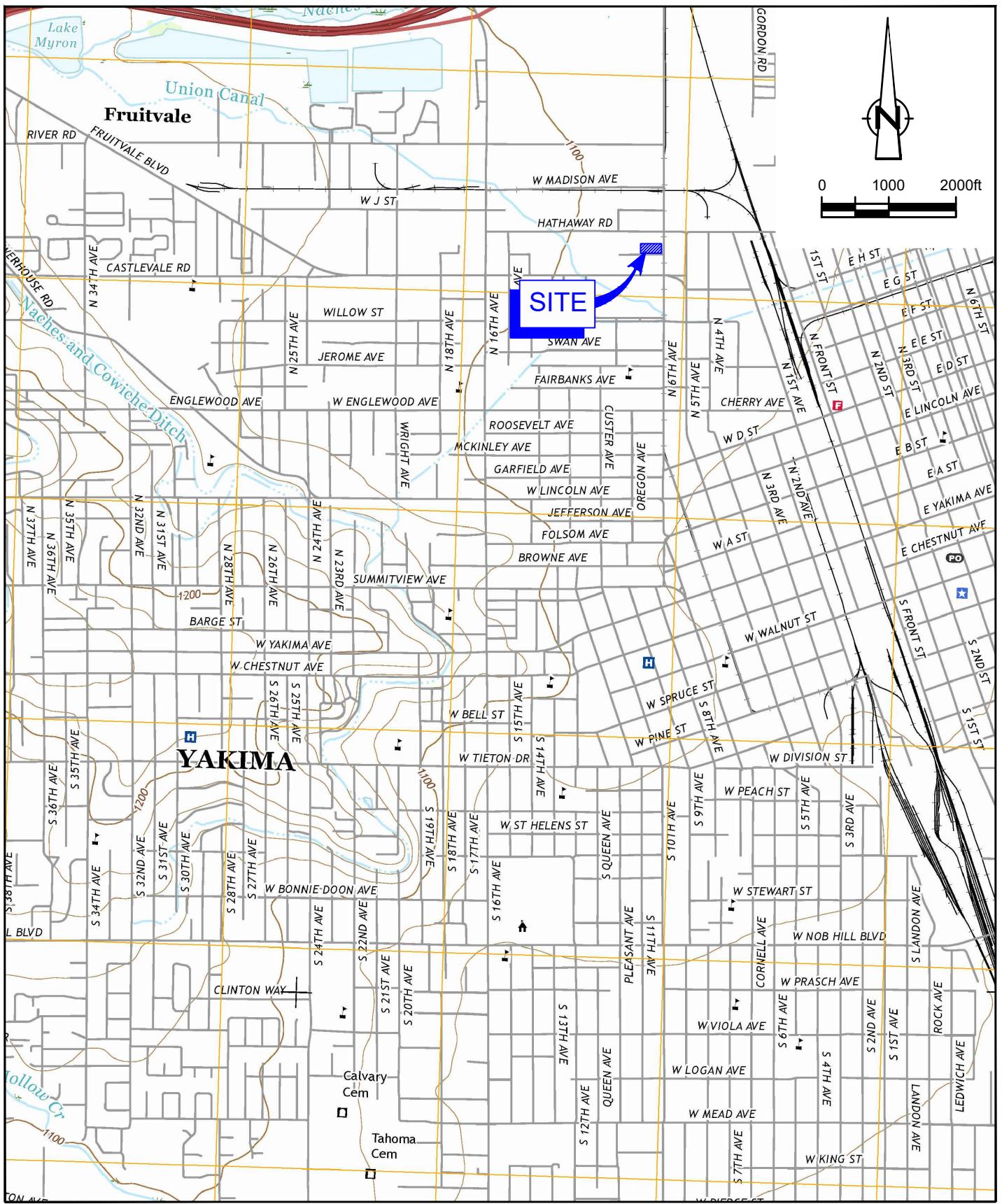
All of Which is Respectfully Submitted,

GHD

A handwritten signature in black ink, appearing to read "Arthur Clauss". Below the signature, the text "Arthur Clauss, GIT" is printed in a smaller, standard font.

A handwritten signature in black ink, appearing to read "Matthew Davis". Below the signature, the text "Matthew Davis, LSC" is printed in a smaller, standard font.

## **Figures**



Source: USGS QUADRANGLE MAP: YAKIMA WEST, WA. (2017).



PHILLIPS 66  
920 NORTH 6TH AVENUE  
YAKIMA, WASHINGTON

11220390  
Jan 8, 2021

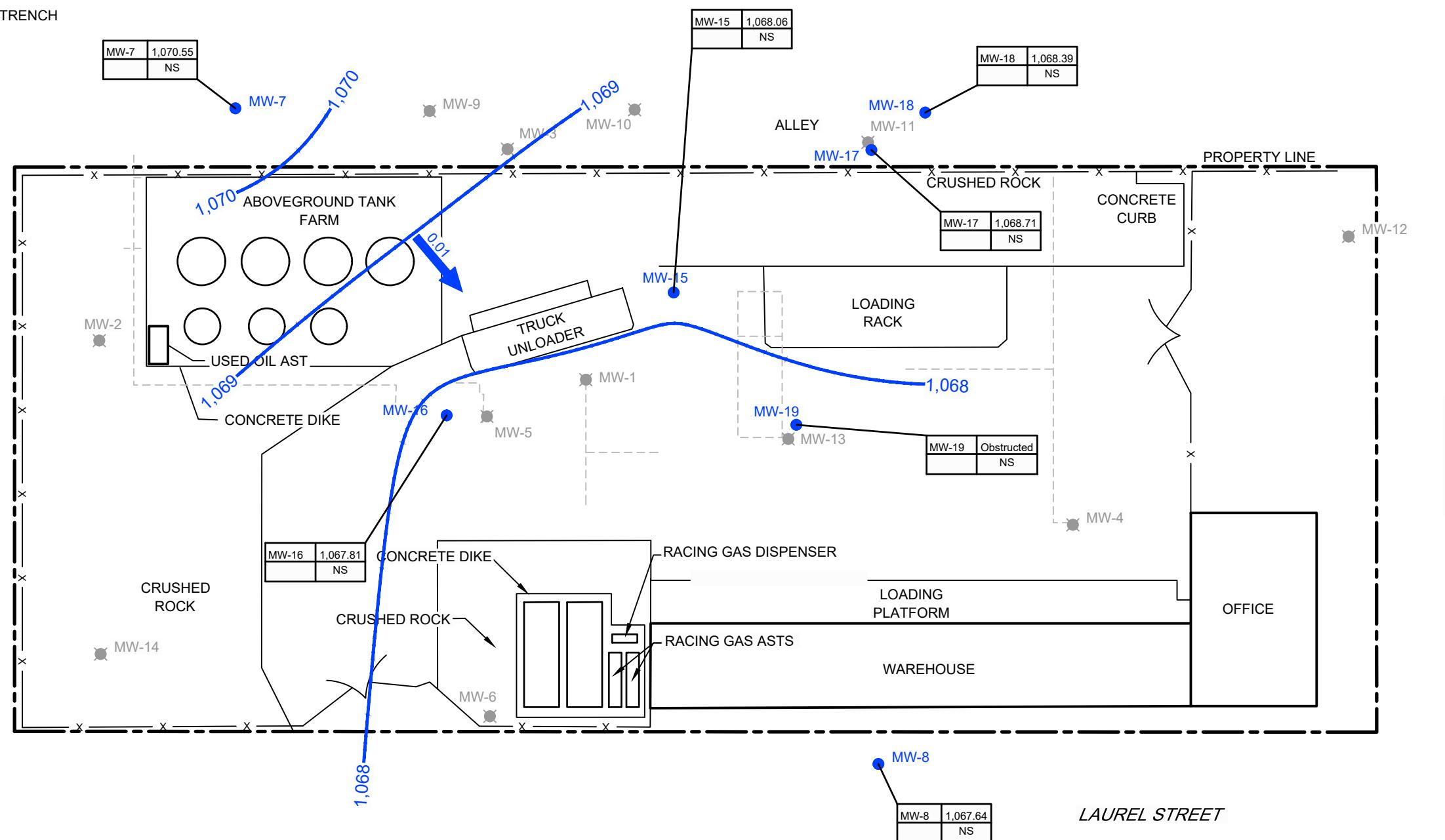
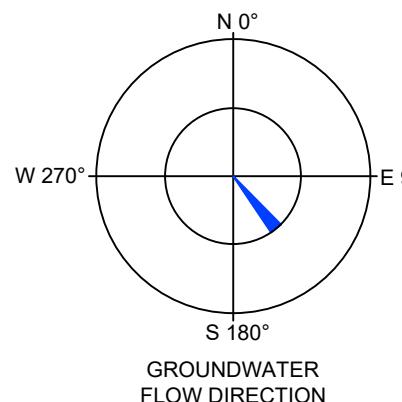
## SITE LOCATION MAP

## FIGURE 1

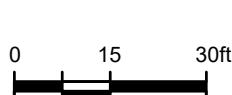
**LEGEND**

<b>APPROXIMATE PROPERTY LINE</b>
<b>MW-1</b> MONITORING WELL LOCATION
<b>MW-6</b> DECOMMISSIONED/ABANDONED MONITORING WELL LOCATION
<b>ABANDONED IN PLACE UNDERGROUND PIPING TRENCH</b>
<b>1,071</b> GROUNDWATER ELEVATION CONTOUR DASHED WHERE INFERRED (FEET AMSL)
<b>0.01</b> GROUNDWATER FLOW DIRECTION AND GRADIENT
<b>SAMPLE LOCATION</b>
<b>GROUNDWATER ELEVATION (MSL)</b>
<b>RESULT</b>
<b>PARAMETER</b>

- NOTES:
1. ALL CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER ( $\mu\text{g}/\text{L}$ )
  1. TPH-G = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
  2. TPH-D = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
  3. TPH-O = TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
  4. B = BENZENE
  5. <X = NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMIT
  6. NS = NOT SAMPLED



Source: STANTEC, FIGURE 2, SITE MAP WITH ANALYTICAL RESULTS (JUNE 14 & 15, 2010), DATED 7/12/10. STATEWIDE LAND SURVEYING, INC. 6/5/18.



PHILLIPS 66 SITE 5886 (Formerly 980)  
920 NORTH 6TH AVENUE  
YAKIMA, WASHINGTON

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP - MARCH 9, 2020

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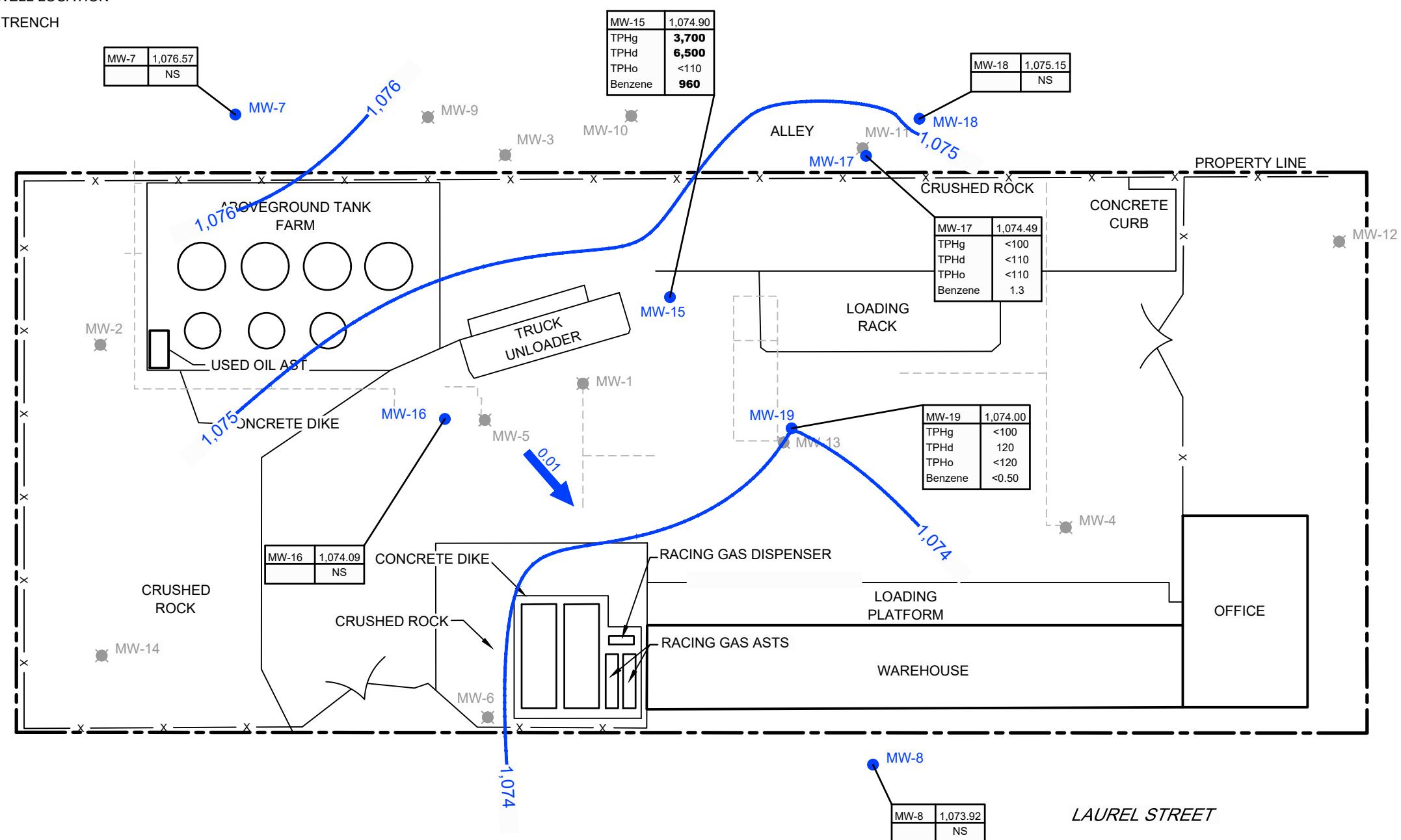
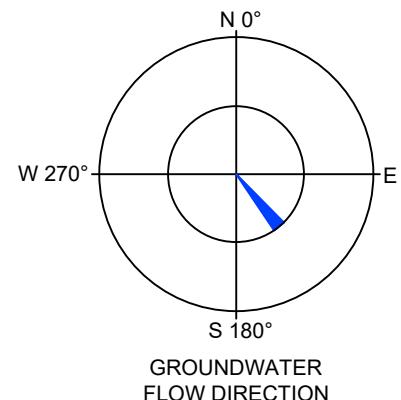
Jan 8, 2021

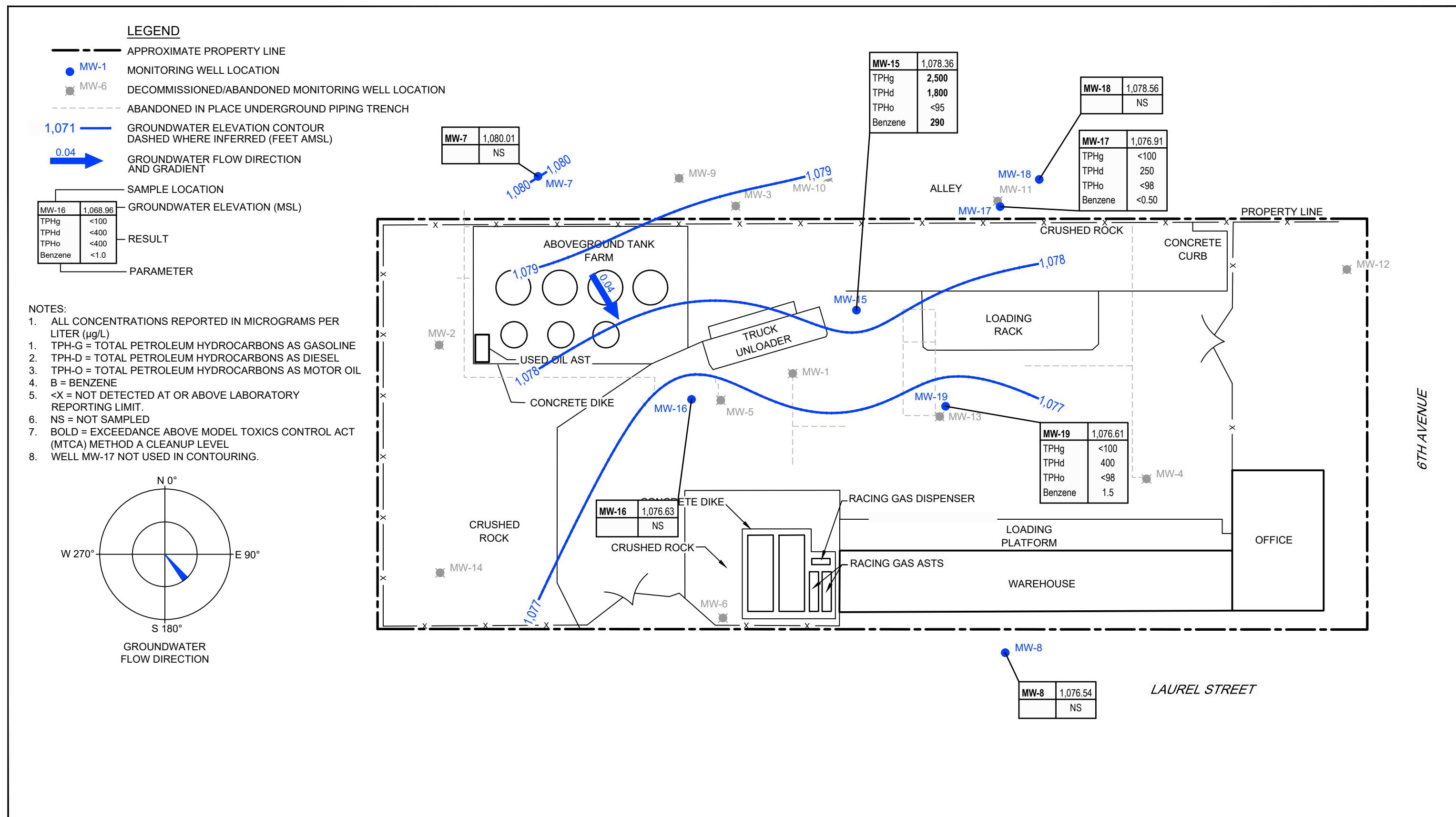
FIGURE 2

### LEGEND

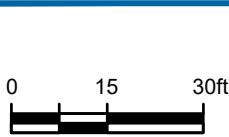
	APPROXIMATE PROPERTY LINE
	MONITORING WELL LOCATION
	DECOMMISSIONED/ABANDONED MONITORING WELL LOCATION
	ABANDONED IN PLACE UNDERGROUND PIPING TRENCH
	GROUNDWATER ELEVATION CONTOUR DASHED WHERE INFERRRED (FEET AMSL)
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  3. TPH-O = TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
  4. B = BENZENE
  5.  $<\text{X}$  = NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMIT
  6. NS = NOT SAMPLED
  7. BOLD = EXCEEDANCE ABOVE MODEL TOXICS CONTROL ACT (MTCA) METHOD A CLEANUP LEVEL





Source: STANTEC, FIGURE 2, SITE MAP WITH ANALYTICAL RESULTS (JUNE 14 & 15, 2010), DATED 7/12/10. STATEWIDE LAND SURVEYING, INC. 6/5/

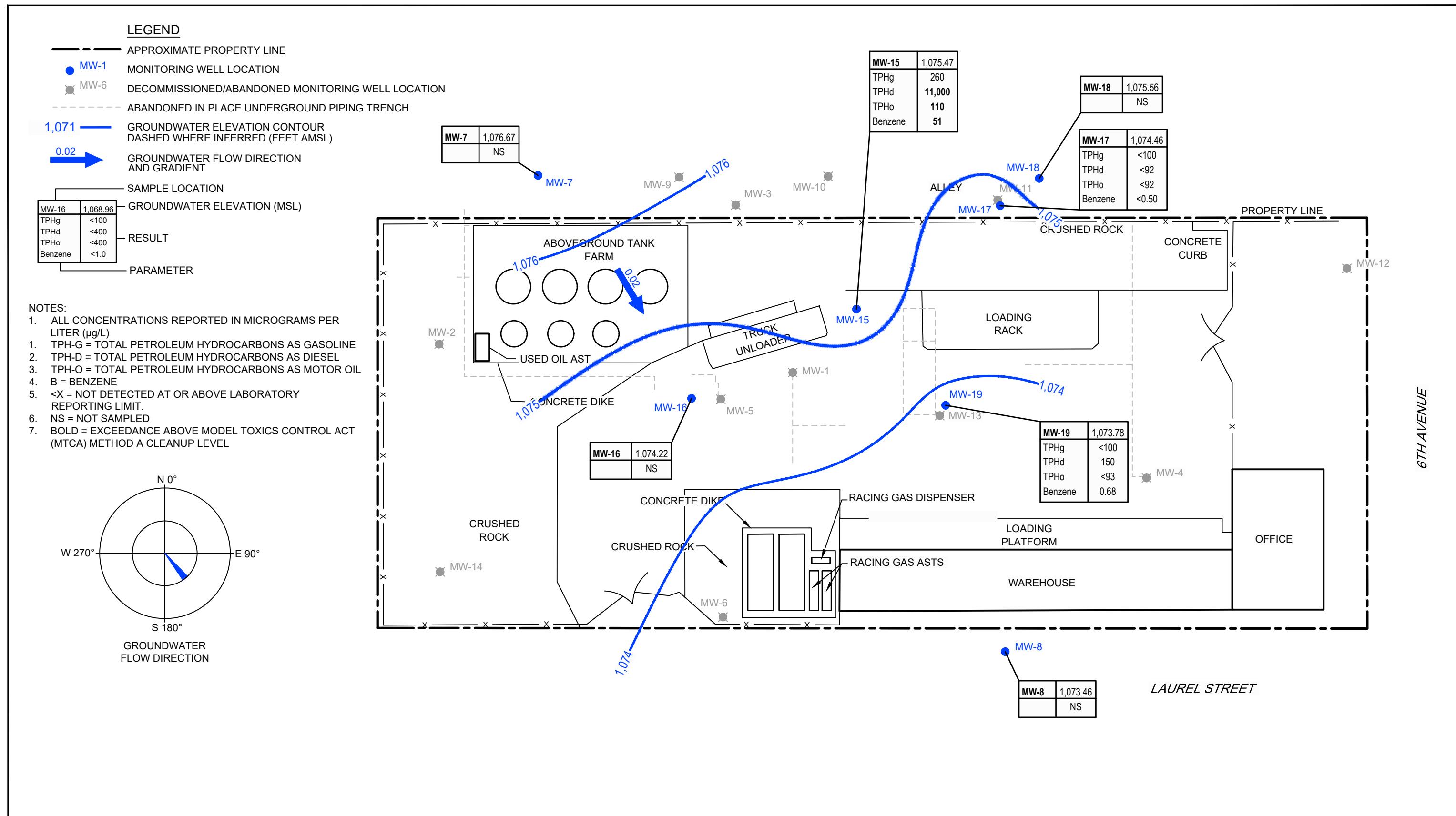


PHILLIPS 66 SITE 5886 (Formerly 980)  
920 NORTH 6TH AVENUE  
YAKIMA, WASHINGTON

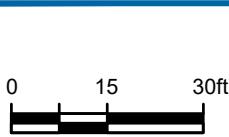
GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP - SEPTEMBER 10, 2020

| 11220390

Jan 8, 2021



Source: STANTEC, FIGURE 2, SITE MAP WITH ANALYTICAL RESULTS (JUNE 14 & 15, 2010), DATED 7/12/10. STATEWIDE LAND SURVEYING, INC. 6/5/



PHILLIPS 66 SITE 5886 (Formerly 980)  
920 NORTH 6TH AVENUE  
YAKIMA, WASHINGTON

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP - DECEMBER 1, 2020

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Jan 8, 2021

## FIGURE 5

## **Table**

Table 1

**Groundwater Monitoring Data and Analytical Results**  
**76 Products Facility No. 351384**  
**920 North 6th Avenue**  
**Yakima, Washington**

Well ID	Sample Date	TOC			TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved					
		Elevation (feet)	Depth to Water (feet)	LPH (feet)											Total Lead (ug/L)	Lead (ug/L)	Ethanol (ug/L)	Naphthalene (ug/L)	Nitrate (ug/L)	Sulfate (ug/L)
<b>MTCA Method A Cleanup Levels:</b>																				
MW-1	7/14/1989	104.44	--	--	--	--	38,000	<0.5	<0.5	1.4	5.5	--	--	--	--	--	--	--	--	
MW-1	5/23/1991	103.8	14.04	--	90.40	<1,000	<1000	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
MW-1	9/25/1991	103.8	18.57	--	85.87	<1,000	<1000	<1,000	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
MW-1	9/28/1998	103.8	14.10	--	90.34	<50	638	<500	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	
MW-1	3/24/1999	103.8	21.96	--	83.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	4/28/1999	103.8	18.21	--	83.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	3/22/2000	103.8	20.73	--	83.71	84.1	1,800	<500	12.9	<0.500	<0.500	<1.00	<5.00	--	--	--	--	--	--	
MW-1	9/14/2000	103.8	14.01	--	90.43	<50.0	730	<500	<0.5	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	
MW-1	4/12/2001	103.8	20.08	--	84.36	118	60,100	<20,500	8.31	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	
MW-1	9/12/2001	103.8	14.05	--	90.39	<50.0	261	<500	<0.5	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	
MW-1	3/20/2002	103.8	18.98	--	85.46	245	71,600	1,050	<0.5	<2.00	<1.00	<1.50	<5.00	--	--	--	--	--	--	
MW-1	9/25/2002	103.8	14.13	--	90.31	<100	383	<500	1.70	2.99	<1.00	1.55	--	--	--	--	--	--	--	
MW-1	3/11/2003	103.8	17.51	--	86.93	639	10,200	<500	158	2.97	17.7	23.8	--	--	--	--	--	--	--	
MW-1	7/31/2003	103.8	13.96	--	90.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	9/23/2003	103.8	14.26	--	90.18	<50	974	<500	<0.5	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	
MW-1	3/9/2004	103.8	20.43	--	84.01	1,220	573	<237	673	<10	99.9	144.4	--	--	--	--	--	--	--	
MW-1	9/13/2004	103.8	14.10	--	90.34	588	8,470	<498	<1.0	<1	<2	--	--	--	--	--	--	--	--	
MW-1	4/7/2005	103.8	23.05	--	81.39	19,200	620,000	8,890	78.5	<50	<50	64.6	--	--	--	--	--	--	--	
MW-1	6/16/2005	103.8	16.02	--	88.42	1,090	191,000	<10,200	<1.0	<1	1.67	8.37	--	--	--	--	--	--	--	
MW-1	9/27/2005	103.8	14.33	--	90.11	<48	2,100	180	<0.2	<0.2	<0.2	<0.6	--	--	--	--	--	--	--	
MW-1	12/6/2005	103.8	17.11	--	87.33	110	13,000	<2,000	2.0	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-1	2/3/2006	103.8	18.53	--	85.91	200	1,600	<98	95	2	9	29	--	--	--	--	--	--	--	
MW-1	4/26/2006	103.8	15.30	--	89.14	380	9,000	<500	30	2.0	28	83	--	--	--	--	--	--	--	
MW-1	7/26/2006	103.8	13.96	--	90.48	<48	130	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-1	10/18/2006	103.8	14.51	--	89.93	<48	310	<98	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-1	1/23/2007	103.8	19.01	--	85.43	<48	3,800	<500	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-1	4/19/2007	103.8	18.75	--	85.69	62	2,410	<490	1.50	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-1	7/17/2007	103.8	14.12	--	89.68	<50	400	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-1	10/15/2007	103.8	--	--	--	--	--	Unable to open										--	--	
MW-1	1/16/2008	103.8	--	--	--	--	--	Unable to open										--	--	
MW-1	4/17/2008	103.8	19.78	--	84.02	<50	290	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-1	10/15/2008	103.8	--	--	Unable to gauge	<50	<78	<98	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-1	4/8/2009	103.8	21.20	--	82.60	439	400	<410	1.4	<1.0	1.6	8.2	<1.0	<1.0	<0.010	8.02	6.26	--	--	
MW-1	6/24/2009	103.8	14.35	--	89.45	--	--	--	--	--	--	--	Gauge only this quarter.	--	--	--	--	--	--	--
MW-1	9/21/2009	103.8	13.75	--	90.05	--	--	--	--	--	--	--	Gauge only this quarter.	--	--	--	--	--	--	--
MW-1	11/30/2009	103.8	16.54	--	87.26	--	--	--	--	--	--	--	Gauge only this quarter.	--	--	--	--	--	--	--
MW-1	3/2/2010	103.8	19.83	--	83.97	299	228	98.5 J	80.9	1.1	7.5	13.0	--	--	--	--	--	--	--	
MW-1	6/14/2010	103.8	14.87	--	88.93	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	
MW-1	8/30/2010	103.8	13.13	--	90.67	<50.0	<79.2	<396	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	
MW-1	12/14/2010	103.8	16.54	--	87.26	<50.0	256	<39												

Table 1

**Groundwater Monitoring Data and Analytical Results**  
**76 Products Facility No. 351384**  
**920 North 6th Avenue**  
**Yakima, Washington**

Well ID	Sample Date	TOC			TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved				
		Elevation (feet)	Depth to Water (feet)	LPH (feet)											Total Lead (ug/L)	Lead (ug/L)	Ethanol (ug/L)	Naphthalene (ug/L)	Nitrate (ug/L)
<b>MTCA Method A Cleanup Levels:</b>																			
MW-2	3/22/2000	105.76	22.25	--	83.73	<50.0	<b>5,660</b>	<500	<0.500	<0.500	<0.500	<1.00	<5.00	--	--	--	--	--	--
MW-2	9/14/2000	105.76	14.43	--	91.55	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	
MW-2	4/12/2001	105.76	21.01	--	84.97	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	
MW-2	9/12/2001	105.76	14.44	--	91.54	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	
MW-2	3/20/2002	105.76	19.80	--	86.18	<100	<250	<500	<0.500	<2.00	<1.00	<1.50	<5.00	--	--	--	--	--	--
MW-2	9/25/2002	105.76	14.63	--	91.35	<100	<250	<500	<0.500	<2.00	<1.00	<1.50	--	--	--	--	--	--	--
MW-2	3/11/2003	105.76	18.20	--	87.78	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
MW-2	7/31/2003	105.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	9/23/2003	105.76	14.79	--	91.19	<50	<250	<500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
MW-2	3/9/2004	105.76	21.73	--	84.25	<100	<119	<238	<1.00	<1.00	<1.00	<2.00	--	--	--	--	--	--	--
MW-2	8/24/2004	105.76	14.48	--	91.50	<100	<247	<494	<1	<1	<1	<2	--	--	--	--	--	--	--
MW-2	4/7/2005	105.76	--	--	--	--	Well covered by drums												--
MW-2	6/16/2005	105.76	16.75	--	89.23	<100	<271	<542	<1	<1	<1	<2	--	--	--	--	--	--	--
MW-2	9/27/2005	105.76	14.70	--	91.28	<48	<82	<100	<0.2	<0.2	<0.2	<0.6	--	--	--	--	--	--	--
MW-2	12/6/2005	105.76	18.01	--	87.97	<48	93	180	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-2	2/3/2006	105.76	19.68	--	86.30	<48	<82	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-2	4/26/2006	105.76	15.62	--	90.36	<48	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-2	7/26/2006	105.76	14.25	--	91.73	<48	190	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-2	10/18/2006	105.76	14.95	--	91.03	<48	<79	<99	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-2	1/23/2007	105.76	19.97	--	86.01	<48	<79	<99	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-2	4/19/2007	105.76	--	--	--	Not sampled												--	--
MW-2	7/17/2007	105.76	14.35	--	91.41	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-2	10/16/2007	105.76	14.47	--	91.29	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-2	1/16/2008	105.76	--	--	--	Unable to locate												--	--
MW-2	4/17/2008	105.76	19.74	--	86.02	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-2	10/15/2008	105.76	14.25	--	91.51	<50	<77	<97	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-2	4/8/2009	105.76	23.29	--	82.47	Insufficient water to sample												--	--
MW-2	6/24/2009	105.76	14.95	--	90.81	Gauge only this quarter.												--	--
MW-2	9/21/2009	105.76	14.25	Trace	91.51	Gauge only this quarter.												--	--
MW-2	11/30/2009	105.76	17.36	--	88.40	Gauge only this quarter.												--	--
MW-2	3/2/2010	105.76	21.10	--	84.66	16.4 J	38.3 J	<59.2	<0.12	<0.21	<0.20	2.3 J	--	--	--	--	--	--	--
MW-2	6/14/2010	105.76	15.28	--	90.48	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-2	8/30/2010	105.76	13.83	--	91.93	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-2	12/14/2010	105.76	--	--	--	Inaccessible												--	--
MW-2	3/27/2011	105.76	--	--	--	Inaccessible												--	--
MW-2	5/19/2011	105.76	--	--	--	Inaccessible												--	--
MW-2	9/8/2011	105.76	13.90	--	91.86	<50	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--

Table 1

**Groundwater Monitoring Data and Analytical Results**  
**76 Products Facility No. 351384**  
**920 North 6th Avenue**  
**Yakima, Washington**

Well ID	Sample Date	TOC	Depth to Water	LPH	GW Elevation	TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved				
		Elevation (feet)														Total Lead (ug/L)	Lead (ug/L)	Ethanol (ug/L)	Naphthalene (ug/L)	Nitrate (ug/L)
<b>MTCA Method A Cleanup Levels:</b>																				
MW-3	3/20/2002	104.32	18.35	--	86.31	<b>45,600</b>	491	<500	<b>1,060</b>	<b>6,150</b>	<b>1,460</b>	<b>6,720</b>	<2.00	--	--	--	--	--	--	--
MW-3	9/25/2002	104.32	13.32	--	91.34	<b>1,070</b>	<250	<500	<b>50.9</b>	20.4	37.6	89.5	--	--	--	--	--	--	--	--
MW-3	3/11/2003	104.32	16.44	--	88.22	<b>1,660</b>	<b>509</b>	<500	<b>21.8</b>	76.9	50.4	206	--	--	--	--	--	--	--	--
MW-3	7/31/2003	104.32	13.21	--	91.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	9/23/2003	104.32	13.44	--	91.22	617	<b>1,060</b>	<500	<b>17.9</b>	8.47	16.1	17.5	--	--	--	--	--	--	--	--
MW-3	3/9/2004	104.32	20.22	--	84.44	<b>54,800</b>	<b>1,300</b>	<256	<b>1,180</b>	<b>11,000</b>	<b>1,010</b>	<b>5,340</b>	--	--	--	--	--	--	--	--
MW-3	8/24/2004	104.32	13.35	--	91.31	<b>16,600</b>	<b>5,760</b>	<499	<b>56</b>	122	152	<b>1,309</b>	--	--	--	--	--	--	--	--
MW-3	4/7/2005	104.32	22.38	--	82.28	<b>54,500</b>	<244	<487	<b>517</b>	<b>8,650</b>	<b>1,010</b>	<b>7,910</b>	--	--	--	--	--	--	--	--
MW-3	6/16/2005	104.32	15.50	--	89.16	<b>48,000</b>	<b>85,800</b>	<5,140	<b>81.1</b>	976	<b>1,250</b>	<b>7,760</b>	--	--	--	--	--	--	--	--
MW-3	9/27/2005	104.32	13.44	--	91.22	<b>6,200</b>	<b>9,200</b>	<2,000	<b>30</b>	64	110	360	--	--	--	--	--	--	--	--
MW-3	12/6/2005	104.32	16.49	--	88.17	<b>2,800</b>	<b>4,900</b>	<970	<b>19</b>	25	40	150	--	--	--	--	--	--	--	--
MW-3	2/3/2006	104.32	18.28	--	86.38	<b>42,000</b>	3,900	<540	<b>460</b>	<b>2,400</b>	<b>1,800</b>	<b>7,900</b>	--	--	--	--	--	--	--	--
MW-3	4/26/2006	104.32	14.09	--	90.57	470	<b>570</b>	380	<0.5	<0.7	4.0	26	--	--	--	--	--	--	--	--
MW-3	7/26/2006	104.32	13.08	--	91.58	<b>5,400</b>	180	100	<b>60</b>	290	190	660	--	--	--	--	--	--	--	--
MW-3	10/18/2006	104.32	13.77	--	90.39	<b>1,000</b>	140	<98	<b>5</b>	26	25	86	--	--	--	--	--	--	--	--
MW-3	1/23/2007	104.32	18.45	--	86.21	<b>10,000</b>	<b>2,400</b>	<490	<b>180</b>	250	260	<b>1,400</b>	--	--	--	--	--	--	--	--
MW-3	4/19/2007	104.32	18.27	--	86.39	<b>3,850</b>	400	<98	<b>11.8</b>	131	158	864	--	--	--	--	--	--	--	--
MW-3	7/17/2007	104.32	13.21	--	91.11	<b>6,300</b>	<b>860</b>	<99	<b>13.0</b>	24	140	710	--	--	--	--	--	--	--	--
MW-3	10/16/2007	104.32	13.27	--	91.05	<b>2,300</b>	220	<95	3	2	43	32	--	--	--	--	--	--	--	--
MW-3	1/16/2008	104.32	--	--	--	Unable to open														
MW-3	4/17/2008	104.32	19.30	--	85.02	470	<76	<95	<b>6</b>	8	2	52	--	--	--	--	--	--	--	--
MW-3	10/15/2008	104.32	13.11	--	91.21	320	<78	<97	0.6	<0.7	8	4	--	--	--	--	--	--	--	--
MW-3	4/8/2009	104.32	21.85	--	82.47	--	Insufficient water to sample													
MW-3	6/24/2009	104.32	13.70	--	90.62	<b>251<sup>cd</sup></b>	66 J	<39	<1.0	1.5	3.1	51.8	--	--	--	--	--	--	--	--
MW-3	9/21/2009	104.32	13.24	--	91.08	<50.0	<78	100 J	<1.0	<1.0	<1.0	0.15 J	--	--	--	--	--	--	--	--
MW-3	11/30/2009	104.32	16.06	--	88.26	<50.0 <sup>ab</sup>	41J	<380	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	--
MW-3	3/2/2010	104.32	19.70	--	84.62	<b>20,700</b>	<b>945</b>	255 J	<b>150</b>	<b>1,470</b>	654	<b>6,710</b>	--	--	--	--	--	--	--	--
MW-3	6/15/2010	104.32	13.91	--	90.41	171	283	<392	<1.0	<1.0	1.8	25.0	--	--	--	--	--	--	--	--
MW-3	8/31/2010	104.32	12.91	--	91.41	<50.0	<78.4	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	--
MW-3	12/15/2010	104.32	16.18	--	88.14	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	--
MW-3	3/21/2011	104.32	20.38	--	83.94	<b>7,790</b>	<b>810</b>	<392	<b>28.9</b>	344	275	<b>1,940</b>	--	--	--	--	--	--	--	--
MW-3	5/20/2011	104.32	15.45	--	88.87	56.4	<78.4	<392	<1.0	<1.0	1.2	9.5	--	--	--	--	--	--	--	--
MW-3	9/8/2011	104.32	13.02	--	91.30	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	--
MW-3	12/28/11 <sup>b</sup>	104.32	17.86	--	86.46	<b>870</b>	<b>530</b>	<140	3	<0.5	<0.5	55	--	--	--	--	<50	--	--	--
MW-3	3/9/2012	104.32	20.75	--	83.57	<b>3,300</b>	290	<67	<1	<1	<1	<1	--	--	--	--	<100	--	--	--
MW-3	6/27/2012	104.32	13.19	--	91.1															

Table 1

**Groundwater Monitoring Data and Analytical Results**  
**76 Products Facility No. 351384**  
**920 North 6th Avenue**  
**Yakima, Washington**

Well ID	Sample Date	TOC	Depth to Water (feet)	LPH (feet)	GW Elevation (feet)	TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved			
		Elevation (feet)														Lead (ug/L)	Ethanol (ug/L)	Naphthalene (ug/L)	Nitrate (ug/L)
<b>MTCA Method A Cleanup Levels:</b>																			
MW-4	8/24/2004	103.83	15.60	--	88.52	<100	<248	<497	<1	<1	<1	<2	--	--	--	--	--	--	--
MW-4	4/7/2005	103.83	23.56	--	80.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	6/16/2005	103.83	17.78	--	86.34	<100	<253	<506	<1	<1	<1	<2	--	--	--	--	--	--	--
MW-4	9/27/2005	103.83	16.05	--	88.07	<48	170	<100	<0.2	<0.2	<0.2	<0.6	--	--	--	--	--	--	--
MW-4	12/6/2005	103.83											Well not located under ice and snow.						
MW-4	2/3/2006	103.83	20.35	--	83.77	<48	<79	<99	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-4	4/26/2006	103.83	18.41	--	85.71	<48	<79	100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-4	7/26/2006	103.83	15.98	--	88.14	<48	<80	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-4	10/18/2006	103.83	16.40	--	87.72	<48	<79	190	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-4	1/23/2007	103.83	20.93	--	83.19	<48	<81	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-4	4/19/2007	103.83											Not Sampled						
MW-4	7/17/2007	103.83	15.60	--	88.23	<50	110	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-4	10/16/2007	103.83	15.40	--	88.43	<50	<78	<97	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-4	1/16/2008	103.83	20.16	--	83.67	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-4	4/17/2008	103.83	19.44	--	84.39	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-4	10/15/2008	103.83	15.52	--	88.31	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-4	4/8/2009	103.83	22.97	--	80.86								Insufficient water to sample						
MW-4	6/24/2009	103.83	16.08	--	87.75								Gauge only this quarter.						
MW-4	9/21/2009	103.83	15.36	--	88.47								Gauge only this quarter.						
MW-4	11/30/2009	103.83	18.13	--	85.70								Gauge only this quarter.						
MW-4	3/1/2010	103.83	21.15	--	82.68	14.8 J	71.8 J	179 J	<0.12	0.21 J	0.56 J	1.4 J	--	--	--	--	--	--	--
MW-4	6/14/2010	103.83	17.00	--	86.83	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-4	8/30/2010	103.83	14.89	--	88.94	<50.0	<78.4	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-4	12/14/2010	103.83	17.98	--	85.85	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-4	3/21/2011	103.83	21.60	--	82.23	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-4	5/19/2011	103.83	17.45	--	86.38	<50.0	<78.4	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-4	9/8/2011	103.83	14.99	--	88.84	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--	--
MW-4	12/28/11 <sup>b</sup>	103.83	19.60	--	84.23	<50	<29	<68	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--	--
MW-4	3/8/2012	103.83	22.34	--	81.49	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--	--
MW-4	6/27/2012	103.83	15.97	--	87.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	07/12/12 <sup>c</sup>	103.83	15.31	--	88.52	<50	30	<69	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--	--
MW-4	9/4/2012	103.83	14.31	--	89.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	11/27/2012	103.83	18.07	--	85.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	3/25/2013	103.83	23.13	--	80.70								Insufficient water to sample						
MW-4	6/13/2013	103.83	17.90	--	85.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	9/23/2013	103.83	16.00	--	87.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	12/12/2013	103.83	19.74	--	84.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	4/9/2014	103.83											Well was dry						
MW-4	6/25/2014	103.83											Well was dry						
MW-4	9/24/2014	103.83											Well was dry						

**Table 1**

**Groundwater Monitoring Data and Analytical Results  
76 Products Facility No. 351384  
920 North 6th Avenue  
Yakima, Washington**

### Example 1

**Groundwater Monitoring Data and Analytical Results  
76 Products Facility No. 351384  
920 North 6th Avenue  
Yakima, Washington**

Well ID	Sample Date	TOC			TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved				
		Elevation (feet)	Depth to Water (feet)	LPH (feet)											Total Lead (ug/L)	Lead (ug/L)	Ethanol (ug/L)	Naphthalene (ug/L)	Nitrate (ug/L)
<b>MTCA Method A Cleanup Levels:</b>					800	500	500	5	1,000	700	1,000	20	5	0.01	15	15	NE	160	NE
MW-6	11/30/2009	105	19.65	--	85.35														
MW-6	3/1/2010	105	22.55	--	82.45	<13.4	43.6 J	<58.7	<0.12	<0.21	<0.20	1.6 J	--	--	--	--	--	--	--
MW-6	6/14/2010	105	18.45	--	86.55	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-6	8/30/2010	105	15.79	--	89.21	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-6	12/14/2010	105	19.68	--	85.32	<50.0	151	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-6	3/21/2011	105	23.04	--	81.96	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-6	5/19/2011	105	18.98	--	86.02	<50.0	<78.4	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-6	9/8/2011	105	16.21	--	88.79	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--
MW-6	12/28/11 <sup>b</sup>	105	21.11	--	83.89	<50	30	<69	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--
MW-6	3/8/2012	105	23.77	--	81.23	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--
MW-6	6/27/2012	105	17.57	--	87.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	07/12/12 <sup>c</sup>	105	16.72	--	88.28	<50	140	72	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--
MW-6	9/4/2012	105	15.30	--	89.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	11/27/2012	105	19.21	--	85.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	3/25/2013	105	24.95	--	80.05	<50	<32	<74	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--
MW-6	6/13/2013	105	19.60	--	85.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	9/23/2013	105	17.40	--	87.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	12/12/2013	105	20.15	--	84.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	4/9/2014	105																	
MW-6	6/25/2014	105																	
MW-6	9/24/2014	105																	
MW-6	12/28/2015	105																	
MW-7	7/31/2003	105.41	13.51	--	91.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	9/23/2003	104.73	13.72	--	91.69	<50	<250	<500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
MW-7	3/9/2004	104.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	8/24/2004	104.73	13.60	--	91.81	<100	<277	<555	<1	<1	<1	<2	--	--	--	--	--	--	--
MW-7	4/7/2005	104.73	22.93	--	82.48	<100	<b>2,910</b>	<561	<1	<1	<1	<2	--	--	--	--	--	--	--
MW-7	6/16/2005	104.73	15.95	--	89.46	<100	<253	<507	<1	<1	<1	<2	--	--	--	--	--	--	--
MW-7	9/27/2005	104.73	13.76	--	91.65	<48	<79	<99	<0.2	<0.2	<0.2	<0.6	--	--	--	--	--	--	--
MW-7	12/6/2005	104.73	17.10	--	88.31	<48	<160	<200	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-7	2/3/2006	104.73	18.89	--	86.52	<48	<82	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-7	4/26/2006	104.73	14.68	--	90.73	<48	<78	160	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-7	7/26/2006	104.73	14.29	--	91.12	<48	<79	<98	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-7	10/18/2006	104.73	14.05	--	91.36	<48	<78	220	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-7	1/23/2007	104.73	19.15	--	86.26	<48	<80	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-7	4/19/2007	104.73																	
MW-7	7/17/2007	104.73	13.50	--	91.23	<50	<78	<97	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-7	10/15/2007	104.73																	
MW-7	1/16/2008	104.73																	
MW-7	4/17/2008	104.73																	
MW-7	10/15/2008	104.73																	
MW-7	4/8/2009	104.73																	
MW-7	6/24/2009	104.73																	
MW-7	9/21/2009	104.73	13.15	--	91.58														
MW-7	11/30/2009	104.73	16.35	--	88.38														
MW-7	3/2/2010	104.73	20.05	--	84.68	14.6 J	39.6 J	<58.7	<0.12	<0.21	<0.20	4.9	--	--	--	--	--	--	--
MW-7	6/14/2010	104.73	14.12	--	90.61	<50.0	<77.7	<388	<1.0										

**Table 1**

**Groundwater Monitoring Data and Analytical Results  
76 Products Facility No. 351384  
920 North 6th Avenue  
Yakima, Washington**

Well ID	Sample Date	TOC			TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved				
		Elevation (feet)	Depth to Water (feet)	LPH (feet)											Total Lead (ug/L)	Lead (ug/L)	Ethanol (ug/L)	Naphthalene (ug/L)	Nitrate (ug/L)
<b>MTCA Method A Cleanup Levels:</b>					800	500	500	5	1,000	700	1,000	20	5	0.01	15	15	NE	160	NE
MW-7	12/12/2013	104.73	17.00	--	87.73	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	4/9/2014	104.73																	
MW-7	6/25/2014	104.73																	
MW-7	9/24/2014	104.73																	
MW-7	12/28/2015	104.73																	
MW-7	6/8/2018	1094.03	23.26	--	1070.77														
MW-7	9/19/2018	1094.03	12.47	--	1081.56	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	
MW-7	12/13/2018	1094.03	17.76	--	1076.27	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	
MW-7	3/18/2019	1094.03	22.65	--	1071.38	Insufficient water to sample		--	--	--	--	--	--	--	--	--	--	--	
MW-7	6/17/2019	1094.03	16.60	--	1077.43	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	9/16/2019	1094.03	13.74	--	1080.29	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	12/26/2019	1094.03	19.63	--	1074.40	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	3/9/2020	1094.03	23.48	--	1070.55	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	6/17/2020	1094.03	17.46	--	1076.57	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	9/10/2020	1094.03	14.02	--	1080.01	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	12/1/2020	1094.03	17.36	--	1076.67	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	7/31/2003	104.21	15.38	--	88.83	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	9/23/2003	104.21	15.64	--	88.57	<50	<250	<500	<0.500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	
MW-8	3/9/2004	104.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	8/24/2004	104.21																	
MW-8	4/7/2005	104.21																	
MW-8	6/16/2005	104.21																	
MW-8	9/27/2005	104.21																	
MW-8	12/6/2005	104.21																	
MW-8	2/3/2006	104.21																	
MW-8	4/26/2006	104.21	18.65	--	85.56	<48	150	120	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	
MW-8	7/26/2006	104.21	15.94	--	88.27	<48	110	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	
MW-8	10/18/2006	104.21	16.36	--	87.85	<48	<78	180	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	
MW-8	1/23/2007	104.21	21.16	--	83.05	<48	<79	190	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	
MW-8	4/19/2007	104.21	22.03	--	82.18	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	
MW-8	7/17/2007	104.21	15.70	--	88.51	<50	130	<97	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	
MW-8	10/15/2007	104.21	16.00	--	88.21	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	
MW-8	1/16/2008	104.21	20.92	--	83.29	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	
MW-8	4/17/2008	104.21	23.06	--	81.15	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	
MW-8	10/15/2008	104.21																	
MW-8	4/8/2009	104.21																	
MW-8	6/24/2009	104.21																	
MW-8	9/21/2009	104.21																	
MW-8	11/30/2009	104.21																	
MW-8	3/1/2010	104.21																	
MW-8	6/14/2010	104.21																	
MW-8	8/30/2010	104.21																	
MW-8	12/14/2010	104.21																	
MW-8	3/21/2011	104.21																	
MW-8	5/19/2011	104.21																	
MW-8	9/8/2011	104.21	15.35	--	88.86	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	
MW-8	12/28/11 <sup>b</sup>	104.21	20.30	--	83.72	<50	<30	<70	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	
MW-8	3/9/2012	104.21	23.07	--	81.14	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	
MW-8	6/27/2012	104.21	16.78	--	87.43	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	07/12/12 <sup>c</sup>	104.21	15.83	--	88.38	<50	170	80	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	
MW-8	9/4/2012	104.21	14.38	--	89.83	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/27/2012	104.21	17.83	--	86.38	--	--												

**Table 1**

**Groundwater Monitoring Data and Analytical Results**  
**76 Products Facility No. 351384**  
**920 North 6th Avenue**  
**Yakima, Washington**

Well ID	Sample Date	TOC			TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved					
		Elevation (feet)	Depth to Water (feet)	LPH (feet)											Total Lead (ug/L)	Lead (ug/L)	Ethanol (ug/L)	Naphthalene (ug/L)	Nitrate (ug/L)	Sulfate (ug/L)
<b>MTCA Method A Cleanup Levels:</b>					800	500	500	5	1,000	700	1,000	20	5	0.01	15	15	NE	160	NE	NE
MW-8	9/19/2018	1093.34	14.60	--	1078.74	<100	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	--	
MW-8	12/13/2018	1093.34	20.13	--	1073.21	<100	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	--	
MW-8	3/18/2019	1093.34	24.54	--	1068.80	<100	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	--	
MW-8	6/17/2019	1093.34	18.78	--	1074.56	<100	<417	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	--	
MW-8	9/16/2019	1093.34	16.70	--	1076.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	12/26/2019	1093.34	21.71	--	1071.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	3/9/2020	1093.34	25.70	--	1067.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	6/17/2020	1093.34	19.42	--	1073.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	9/10/2020	1093.34	16.80	--	1076.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	12/1/2020	1093.34	19.88	--	1073.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	7/17/2007	104.9	13.44	--	91.46	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-9	10/15/2007	104.9	13.60	--	91.30	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-9	1/16/2008	104.9							Unable to locate						--	--	--	--	--	
MW-9	4/17/2008	104.9	17.93	--	86.97	860	<76	<95	3	110	12	330	--	--	--	--	--	--	--	
MW-9	10/15/2008	104.9	13.58	--	91.32	<50	<77	<96	<0.5	<0.7	<0.8	2	--	--	--	--	--	--	--	
MW-9	4/8/2009	104.9	21.97	--	82.93	68.2	<83	<420	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.010	<1.00	<1.00	<1.00	--	
MW-9	6/24/2009	104.9	14.15	--	90.75				Gauge only this quarter.						--	--	--	--	--	
MW-9	9/21/2009	104.9	13.62	--	91.28				Gauge only this quarter.						--	--	--	--	--	
MW-9	11/30/2009	104.9	16.61	--	88.29				Gauge only this quarter.						--	--	--	--	--	
MW-9	3/2/2010	104.9	20.26	--	84.64	52.8	43 J	<58.1	<0.12	0.25 J	0.26 J	8.6	--	--	--	--	--	--	--	
MW-9	6/14/2010	104.9	14.50	--	90.40	<50.0	<80.0	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	
MW-9	8/31/2010	104.9	13.20	--	91.70	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	
MW-9	12/15/2010	104.9	16.72	--	88.18	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	
MW-9	3/21/2011	104.9	20.91	--	83.99	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	
MW-9	5/19/2011	104.9	15.97	--	88.93	<50.0	<78.4	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	
MW-9	9/8/2011	104.9	13.32	--	91.58	<50	<28	<66	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-9	12/28/11 <sup>b</sup>	104.9	18.44	--	86.46	<50	<30	<69	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-9	3/8/2012	104.9	21.27	--	83.63	<50	<28	<66	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-9	6/27/2012	104.9	13.55	--	91.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	07/12/12 <sup>c</sup>	104.9	13.30	--	91.60	<50	<30	<71	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-9	9/4/2012	104.9	12.98	--	91.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/27/2012	104.9	15.78	--	89.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	3/25/2013	104.9	22.29	--	82.61	<50	<31	<72	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-9	6/13/2013	104.9	16.00	--	88.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	9/23/2013	104.9	14.11	--	90.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	12/12/2013	104.9	17.30	--	87.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	4/9/2014	104.9	24.78	--	80.12				Insufficient water to sample						--	--	--	--	--	
MW-9	6/25/2014	104.9							Well was dry						--	--	--	--	--	
MW-9	9/24/2014	104.9							Well was dry						--	--	--	--	--	
MW-9	12/28/2015	104.9							Well was dry						--	--	--	--	--	
MW-10	7/17/2007	104.77	13.60	--	91.17	<50	<78	<97	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-10	10/15/2007	104.77	13.74	--	91.03	<50	<76	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-10	1/16/2008	104.77							Unable to locate											

Table 1

**Groundwater Monitoring Data and Analytical Results**  
**76 Products Facility No. 351384**  
**920 North 6th Avenue**  
**Yakima, Washington**

Well ID	Sample Date	TOC	Depth to Water	LPH	GW Elevation	TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved			
		Elevation (feet)														(ug/L)	(ug/L)	(ug/L)	(ug/L)
<b>MTCA Method A Cleanup Levels:</b>																			
MW-10	9/4/2012	104.77	13.20	--	91.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	11/27/2012	104.77	15.70	--	89.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	3/25/2013	104.77	22.35	--	82.42	<50	<31	<73	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--
MW-10	6/13/2013	104.77	16.10	--	88.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	9/23/2013	104.77	13.97	--	90.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	12/12/2013	104.77	17.20	--	87.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	4/9/2014	104.77	23.38	--	81.39														
MW-10	6/25/2014	104.77																	
MW-10	9/24/2014	104.77																	
MW-10	12/28/2015	104.77																	
Insufficient water to sample																			
MW-11	7/17/2007	104.33	14.10	--	90.23	<50	96	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-11	10/16/2007	104.33	14.45	--	89.88	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-11	1/16/2008	104.33																	
MW-11	4/17/2008	104.33	18.67	--	85.66	56	230	<95	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-11	10/15/2008	104.33	14.00	--	90.33	53	<78	<97	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-11	4/8/2009	104.33	21.14	--	83.19														
MW-11	6/24/2009	104.33	14.52	--	89.81														
MW-11	9/21/2009	104.33	13.99	--	90.34														
MW-11	11/30/2009	104.33	16.65	--	87.68														
MW-11	3/1/2010	104.33	20.26	--	84.07	<13.4	<b>2,960</b>	233 J	<0.12	<0.21	<0.20	<0.42	--	--	--	--	--	--	--
MW-11	6/14/2010	104.33	14.96	--	89.37	<50.0	248	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-11	8/30/2010	104.33	13.51	--	90.82	<50.0	317	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-11	12/14/2010	104.33	16.48	--	87.85	<50.0	230	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-11	3/21/2011	104.33	21.00	--	83.33	<50.0	<b>1,010</b>	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-11	5/19/2011	104.33	16.13	--	88.20	65.2	<b>847</b>	<396	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-11	9/8/2011	104.33	13.70	--	90.63	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--	--
MW-11	12/28/11 <sup>b</sup>	104.33	18.49	--	85.84	<50	350	<69	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--	--
MW-11	3/8/2012	104.33	22.36	--	81.97														
MW-11	6/27/2012	104.33	13.87	--	90.46	<50	35	<67	<0.5	<0.5	<0.5	2	--	--	--	<50	--	--	--
MW-11	9/4/2012	104.33	13.28	--	91.05	<50	<b>1,600</b>	<70	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--	--
MW-11	11/27/2012	104.33	15.80	--	88.53	<50	310	<70	<0.5	<0.5	<0.5	<0.5	--	--	--	140	--	--	--
MW-11	3/25/2013	104.33	22.90	--	81.43														
MW-11	6/13/2013	104.33	16.33	--	88.00	<50	<b>7,600</b>	<b>600</b>	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--	--
MW-11	9/23/2013	104.33	14.30	--	90.03	<50	37	<69	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--	--
MW-11	12/12/2013	104.33	17.30	--	87.03	<50	<b>1,300</b>	390	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--	--
MW-11	4/9/2014	104.33																	
MW-11	6/25/2014	104.33																	
MW-11	9/24/2014	104.33																	
MW-11	12/28/2015	104.33																	
MW-12	7/17/2007	102.99	14.64	--	88.35	<50	<78	<98	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-12	10/15/2007	102.99	14.90	--	88.09	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--
MW-12	1/16/2008	102.99																	
MW-12	4/17/2008	102.99	19.17	--	83.82	&													

Table 1

**Groundwater Monitoring Data and Analytical Results**  
**76 Products Facility No. 351384**  
**920 North 6th Avenue**  
**Yakima, Washington**

Well ID	Sample Date	TOC	Depth to Water	LPH	GW Elevation	TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved				
		Elevation (feet)														Total Lead (ug/L)	Lead (ug/L)	Ethanol (ug/L)	Naphthalene (ug/L)	Nitrate (ug/L)
<b>MTCA Method A Cleanup Levels:</b>																				
MW-12	3/25/2013	102.99	22.87	--	80.12	800	500	500	5	1,000	700	1,000	20	5	0.01	15	15	NE	NE	
MW-12	6/13/2013	102.99	17.73	--	85.26	<50	-- <sup>d</sup>	-- <sup>d</sup>	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-12	9/23/2013	102.99	15.70	--	87.29	<50	57	<73	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-12	12/12/2013	102.99	19.00	--	83.99	<50	<30	<69	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-12	4/9/2014	102.99	22.98	--	80.01															
MW-12	6/25/2014	102.99																		
MW-12	9/24/2014	102.99																		
MW-12	12/28/2015	102.99																		
MW-13	7/17/2007	104.17	14.63	--	89.54	240	2,300	<97	6	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-13	10/15/2007	104.17	14.91	--	89.26	1,400	730	<94	47	2	97	76	--	--	--	--	--	--	--	
MW-13	1/16/2008	104.17																		
MW-13	4/17/2008	104.17	Unable to gauge	--	--	1,200	370	<94	91	13	48	120	--	--	--	--	--	--	--	
MW-13	10/15/2008	104.17	14.88	--	88.29	1,300	450	<96	38	1	83	27	--	--	--	--	--	--	--	
MW-13	4/8/2009	104.17	23.29	--	80.88															
MW-13	6/24/2009	104.17	15.43	--	88.74	571	570	<400	7.5	5.0	1.2	61.9	--	--	--	--	--	--	--	
MW-13	9/21/2009	104.17	14.73	--	89.44	654	230	<390	5.6	<1.0	<1.0	15.2	--	--	--	--	--	--	--	
MW-13	11/30/2009	104.17	17.36	--	86.81	318	230	<390	15.0	2.0	<1.0	11.2	--	--	--	--	--	--	--	
MW-13	3/2/2010	104.17	21.28	--	82.89	82.1	215	72.0J	0.91 J	<0.21	0.31 J	5.4	--	--	--	--	--	--	--	
MW-13	6/15/2010	104.17	15.98	--	88.19	130	558	<392	7.4	<1.0	<1.0	3.0	--	--	--	--	--	--	--	
MW-13	8/31/2010	104.17	14.10	--	90.07	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	
MW-13	12/15/2010	104.17	17.50	--	86.67	204	226	<392	10.4	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	
MW-13	3/21/2011	104.17	21.90	--	82.27	132	297	<392	19.3	<1.0	3.1	<3.0	--	--	--	--	--	--	--	
MW-13	5/20/2011	104.17	16.84	--	87.33	117	490	<392	4.6	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	
MW-13	9/8/2011	104.17	14.40	--	89.77	51	36	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-13	12/28/11 <sup>b</sup>	104.17	19.81	--	84.36	180	530	<71	2	<0.5	1	0.7	--	--	--	--	<50	--	--	
MW-13	3/9/2012	104.17	22.81	--	81.36	140	850	<66	8	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-13	6/27/2012	104.17	14.89	--	89.28	<50	670	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-13	9/4/2012	104.17	13.63	--	90.54	<50	240	<70	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-13	11/27/2012	104.17	16.80	--	87.37	<50	490	<69	0.7	<0.5	<0.5	0.5	--	--	--	--	<50	--	--	
MW-13	3/25/2013	104.17	23.56	--	80.61															
MW-13	6/13/2013	104.17	17.00	--	87.17	57	3,600	590	5	<0.5	<0.5	0.5	--	--	--	--	<50	--	--	
MW-13	9/23/2013	104.17	15.16	--	89.01	<50	420	<69	0.8	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-13	12/12/2013	104.17	18.85	--	85.32	78	1,400	250	4	<0.5	<0.5	<0.5	--	--	--	--	<50	--	--	
MW-13	4/9/2014	104.17	23.49	--	80.68															
MW-13	6/25/2014	104.17	23.58	--	80.59															
MW-13	9/24/2014	104.17																		
MW-13	12/28/2015	104.17																		
MW-14	7/17/2007	105.32	16.43	--	88.89	<50	<79	<99	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-14	10/15/2007	105.32	16.64	--	88.68	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-14	1/16/2008	105.32																		
MW-14	4/17/2008	105.32	20.96	--	84.36	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	
MW-14	10/15/2008	105.32	16.65	--	88.67	<50	<78	<97	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	

Table 1

**Groundwater Monitoring Data and Analytical Results**  
**76 Products Facility No. 351384**  
**920 North 6th Avenue**  
**Yakima, Washington**

Well ID	Sample Date	TOC	Depth to Water	LPH	GW Elevation	TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved			
		Elevation (feet)														Lead (ug/L)	Ethanol (ug/L)	Naphthalene (ug/L)	Nitrate (ug/L)
<b>MTCA Method A Cleanup Levels:</b>																			
MW-14	6/13/2013	105.32	19.60	--	85.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	9/23/2013	105.32	17.00	--	88.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	12/12/2013	105.32	20.43	--	84.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	4/9/2014	105.32	23.87	--	81.45														
MW-14	6/25/2014	105.32																	
MW-14	9/24/2014	105.32																	
MW-14	12/28/2015	105.32																	
MW-15	6/8/2018	1093.39	19.33	--	1074.06	6,800	1,500	<400	575	1,210	226	214	<1.0	<1.0	<1.0	<10	--	--	<4.0
MW-15	9/19/2018	1093.39	14.91	--	1078.48	3,920	1,200	<390	378	142	386	198	--	--	--	--	--	--	--
MW-15	12/13/2018	1093.39	18.49	--	1074.9	6,100	1,600	<400	1,150	268	515	543	--	--	--	--	--	--	--
MW-15	3/18/2019	1093.39	25.18	--	1068.21	2,710	4,400	<400	243	12.9	175	81.8	--	--	--	--	--	--	--
MW-15	6/17/2019	1093.39	17.48	--	1075.91	5,080	3,120	<417	968	26.3	262	222	--	--	--	--	--	--	--
MW-15	9/16/2019	1093.39	14.85	--	1078.54	3,080	1,590	<417	639	10.0	147	115	--	<5.0	--	<5.0	--	--	--
MW-15	12/26/2019	1093.39	20.79	0.60	1073.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	3/9/2020	1093.39	25.75	0.53	1068.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	6/17/2020	1093.39	18.49	--	1074.90	3,700	6,500	<110	960	32	260	110	--	<2.0	--	<4.0	--	--	--
MW-15 Dup	6/17/2020	1093.39	18.49	--	1074.90	3,600	7,300	<110	1,000	33	260	110	--	<2.0	--	<4.0	--	--	--
	9/10/2020	1093.39	15.03	--	1078.36	2,500	1,800	<95	290	<5.0	23	<15	--	<2.5	--	<5.0	--	--	--
MW-15	11/10/2020	1093.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<100	1,100
MW-15	12/1/2020	1093.39	17.92	--	1075.47	260	11,000	110	51	<1.0	<1.0	<2.0	--	--	--	--	--	<100	39,000
MW-16	6/8/2018	1093.85	20.62	--	1073.23	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-16	9/19/2018	1093.85	14.99	--	1078.86	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-16	11/13/2018	1093.85	20.30	--	1073.55	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-16	12/13/2018	1093.85	20.30	--	1073.55	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-16	3/18/2019	1093.85	24.89	--	1068.96	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-16	6/17/2019	1093.85	19.06	--	1074.79	<100	<417	<417	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-16	6/17/2019	1093.85	19.06	--	1074.79	<100	<417	<417	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-16	9/16/2019	1093.85	16.90	--	1076.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	12/26/2019	1093.85	21.82	--	1072.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	3/9/2020	1093.85	26.04	--	1067.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	6/17/2020	1093.85	19.76	--	1074.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	9/10/2020	1093.85	17.22	--	1076.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	12/1/2020	1093.85	19.63	--	1074.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	6/8/2018	1093.91	20.50	--	1073.41	858	<400	<400	141	36	2.4	173	--	--	--	--	--	--	--
MW-17	9/19/2018	1093.91	14.90	--	1079.01	338	<390	<390	44.4	8.1	45.4	35.6	--	--	--	--	--	--	--
MW-17	12/13/2018	1093.91	19.61	--	1074.30	<100	<390	<390	1.9	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-17	3/18/2019	1093.91	24.39	--	1069.52	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-17	6/17/2019	1093.91	18.78	--	1075.13	443	902	<385	95.9	1.3	11.0	88.1	--	--	--	--	--	--	--
MW-17	9/16/2019	1093.91	16.45	--	1077.46	<100	<392	<392	13.1	<1.0	5.5	3.0	--	<1.0	--	<1.0	--	--	--
MW-17	12/26/2019	1093.91	21.22	--	1072.69	<100	<93	--	<1.0	<1.0	<1.0	<3.0	--	<0.50	--	<1.0	--	--	--
MW-17 Dup	12/26/2019	1093.91	2																

Table 1

**Groundwater Monitoring Data and Analytical Results**  
**76 Products Facility No. 351384**  
**920 North 6th Avenue**  
**Yakima, Washington**

Well ID	Sample Date	TOC			TPH-G (ug/L)	TPH-D (ug/L)	TPH-O (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	EDC (ug/L)	EDB (ug/L)	Dissolved		Nitrate (ug/L)	Sulfate (ug/L)	
		Elevation (feet)	Depth to Water (feet)	LPH (feet)											Total Lead (ug/L)	Lead (ug/L)	Ethanol (ug/L)	Naphthalene (ug/L)	
<b>MTCA Method A Cleanup Levels:</b>																			
MW-19	9/19/2018	1093.74	13.37	--	1080.37	<100	<b>500</b>	<410	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-19	12/13/2018	1093.74	20.02	--	1073.72	<100	<b>570</b>	<390	<1.0	<1.0	<1.0	<3.1	--	--	--	--	--	--	--
MW-19	3/18/2019	1093.74	24.96	--	1068.78	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-19	3/18/2019	1093.74	24.96	--	1068.78	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-19	6/17/2019	1093.74	--	--	--	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
MW-19	9/16/2019	1093.74	17.18	--	1076.56	<100	<b>818</b>	<392	2.7	<1.0	<1.0	<3.0	--	<1.0	--	<1.0	--	--	--
MW-19 Dup	9/16/2019	1093.74	17.18	--	1076.56	<100	<b>984</b>	<400	2.7	<1.0	<1.0	<3.0	--	<1.0	--	<1.0	--	--	--
MW-19	12/26/2019	1093.74	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	3/9/2020	1093.74	Obstructed	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-19	6/17/2020	1093.74		19.74	--	1074.00	<100	120	<120	<0.50	<1.0	<1.0	<3.0	--	<0.50	--	<1.0	--	--
MW-19	9/10/2020	1093.74	17.13	--	1076.61	<100	400	<98	1.5	<1.0	<1.0	<3.0	--	<0.50	--	<1.0	--	--	--
MW-19 Dup	9/10/2020	1093.74	17.13	--	1076.61	<100	460	<99	1.5	<1.0	<1.0	<3.0	--	<0.50	--	<1.0	--	--	--
MW-19	11/10/2020	1093.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2,600	14,000
MW-19	12/1/2020	1093.74	19.96	--	1073.78	<100	150	<93	0.68	<1.0	<1.0	<2.0	--	--	--	--	--	--	1900
MW-19 Dup	12/1/2020	1093.74	19.96	--	1073.78	<100	150	<98	0.73	<1.0	<1.0	<2.0	--	--	--	--	--	--	20,000

**NOTES:**

Bold values equal or exceed Department of Ecology Model Toxics Control Act (MTCA) Method A Cleanup Level, per Cleanup Level and Risk Calculation (CLARC) data tables published in August 2015.

Groundwater monitoring data, top of casing elevations, and laboratory analytical results prior to September 8, 2011 provided by STANTEC Consulting Corporation.

ft = feet

MTCA = Model Toxics Control Act

LPH = Liquid Phase Hydrocarbons

NM = Not Measured

USEPA = United States Environmental Protection Agency

ug/L = Micrograms per liter

-- = Not Analyzed or Sampled

<x = Reported concentration below laboratory method detection limit.

Top of Casing (TOC) elevation data prior to 2018 is referenced to an arbitrary datum. TOC elevations reported in 2018 were surveyed in reference to North American Vertical Datum of 88 (NAV88).

TPH as Gasoline-range organics (TPHg) analyzed by Northwest Method NWTPH-Gx.

TPH as Diesel-range organics (TPHd) analyzed by Northwest Method NWTPH-Dx.

TPH as Heavy Oil-range organics (TPHo) analyzed by Northwest Method NWTPH-Dx.

Benzene, toluene, ethylbenzene, total xylenes (BTEX) analyzed by USEPA Method 8260B or 8021B

Methyl tert-butyl ether (MTBE) analyzed by EPA Method 8260B

1,2 Dichloroethane (EDC) analyzed by EPA Method 8260B

1,2 Dibromoethane (EDB) analyzed by EPA Method 8260B

Lead analyzed by EPA Method 7421/6020 (Total Lead).

Nitrate and Sulfate analyzed by EPA Method 300.

a = Sample was evaluated to the MDL

b = Analyte present in the associated method blank above the detection limit

c = Analyte was detected in the associated method blank as well as in the sample

d = Result confirmed by second analysis

## **Appendices**

## **Appendix A**

## **Field Forms**

## WELL GAUGING DATA

Project # 200309 - FKI Date 3/9/20 Client GHD

Site 920 N 6<sup>th</sup> Ave Yakima, WA

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #:	200309-FK1	Client:	6HD
Sampler:	FK	Gauging Date:	3/9/20
Well I.D.:	MW-15	Well Diameter (in.) :	(2) 3 4 6 8 —
Total Well Depth (ft.) :	—	Depth to Water (ft.) :	25.75
Depth to Free Product:	25.22	Thickness of Free Product (feet):	0.53
Referenced to:	PVC	Grade	Flow Cell Type: YS1 556

Purge Method: 2" Grundfos Pump  
Sampling Method: Dedicated Tubing

## Peristaltic Pump New Tubing

Bladder Pump  
Other

Start Purge Time:

Flow Rate:

Pump Depth: \_\_\_\_\_

Did well dewater? Yes No

Amount actually evacuated:

Sampling Time:

Sampling Date:

Sample I.D.:

### Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D

Other:

~~Equipment~~ Blank I.D.:

@ Time

Duplicate I.D.:

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #: 200309 - FK1	Client: GHD
Sampler: FK	Gauging Date: 3/9/20
Well I.D.: MiW-17	Well Diameter (in.): (2) 3 4 6 8 _____
Total Well Depth (ft.): 25.53	Depth to Water (ft.): 25.20
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: PVC	Grade _____
	Flow Cell Type: _____

Purge Method: \_\_\_\_\_ 2" Grundfos Pump  
Sampling Method: \_\_\_\_\_ Dedicated Tubing  
Start Purge Time: \_\_\_\_\_ Flow Rate: \_\_\_\_\_  
Peristaltic Pump  
New Tubing  
Bladder Pump  
Other  
Pump Depth: \_\_\_\_\_

Did well dewater? Yes No      Amount actually evacuated:

Sample I.D.: / Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Equipment Blank I.D.:    Time \_\_\_\_\_ Duplicate I.D.: \_\_\_\_\_

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #:	200309-Fk1	Client:	GHD
Sampler:	Fk	Gauging Date:	3/9/20
Well I.D.:	MW-19	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.) :	1.00	Depth to Water (ft.) :	DRY
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump

Sampling Method: Dedicated Tubing

## Peristaltic Pump

## New Tubing

## Bladder Pump

Other

Start Purge Time:

Flow Rate:

Pump Depth: \_\_\_\_\_

Did well dewater? Yes No

~~Amount actually evacuated:~~

Sampling Time:

Sampling Date:

Sample I.D.:

### Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D

Other:

### Equipment Blank I.D.:

*a* Time

Duplicate I.D.:

## **WELLHEAD INSPECTION FORM**

Client: GTID Site: 920 N 6<sup>th</sup> Ave Yakima WA Date: 3/9/20  
Job #: 200309-EK1 Technician: Faster K Page 1 of 1

## **NOTES:**

## **Monitoring Well Record for Low-Flow Purging**

(Form SP-09)

### Project Data:

Project Name: PSC YAKIMA  
Ref. No.:

Date: 06-17-20  
Personnel:

### **Monitoring Well Data:**

Well No.: MW-17

Saturated Screen Length (m/ft): \_\_\_\_\_  
Depth to Pump Intake (m/ft)<sup>(1)</sup>: 25  
Well Diameter, D (cm/in): 2"  
Well Screen Volume,  $V_s$  (L)<sup>(2)</sup>: \_\_\_\_\_  
Initial Depth to Water (m/ft): 19.42

Constructed Well Depth (m/ft): \_\_\_\_\_  
Measured Well Depth (m/ft): 29.03  
Depth of Sediment (m/ft): \_\_\_\_\_

**Sample ID:** Gw-061720-JDL-MW<sup>1</sup>1

Sample Time: 1025

### Notes:

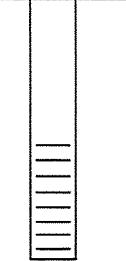
- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
  - (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units,  $V_s = \pi * (r^2) * L$  in mL, where r ( $r=D/2$ ) and L are in cm. For Imperial units,  $V_s = \pi * (r^2) * L * (2.54)^3$ , where r and L are in inches
  - (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.
  - (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged=  $V_p/V_s$ .
  - (5) For conductivity, the average value of three readings  $<1 \text{ mS/cm} \pm 0.005 \text{ mS/cm}$  or where conductivity  $>1 \text{ mS/cm} \pm 0.01 \text{ mS/cm}$ .

## Monitoring Well Record for Low-Flow Purging

(Form SP-09)

## Project Data:

 Project Name: P66 Glaciar  
 Ref. No.: \_\_\_\_\_

 Date: 6-17-20  
 Personnel: JBL


## Monitoring Well Data:

 Well No.: MW-15  
 Vapour PID (ppm): -  
 Measurement Point: TOC  
 Constructed Well Depth (m/ft): \_\_\_\_\_  
 Measured Well Depth (m/ft): \_\_\_\_\_  
 Depth of Sediment (m/ft): \_\_\_\_\_

 Saturated Screen Length (m/ft): \_\_\_\_\_  
 Depth to Pump Intake (m/ft)<sup>(1)</sup>: 25'  
 Well Diameter, D (cm/in): 2"  
 Well Screen Volume,  $V_s$  (L)<sup>(2)</sup>: \_\_\_\_\_  
 Initial Depth to Water (m/ft): 18.49

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level <sup>(3)</sup> (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, $V_p$ (L)	No. of Well Screen Volumes Purged <sup>(4)</sup>
1035	100	18.51	0.02	17.4	0.69	3.8	0.68	6.80	-108.4		
1045	100	18.51	0.02	17.4	0.69	3.2	0.65	6.79	-109.0		
1050	100	18.50	0.01	17.4	0.69	2.7	0.59	6.78	-109.7		
1055	100	18.50	0.01	17.3	0.69	2.7	0.59	6.78	-109.7		
1100	100	18.50	0.01	17.6	0.69	2.3	0.57	6.78	-110.0		

 Sample ID: 6/17/20-JBL-MW15

 Sample Time: 1105

 Notes: DUP TAKEN HERE

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units,  $V_s = \pi * (r^2) * L$  in mL, where r ( $r=D/2$ ) and L are in cm.
- (3) For Imperial units,  $V_s = \pi * (r^2) * L * (2.54)^3$ , where r and L are in inches
- (4) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.
- (5) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged =  $V_p/V_s$ .
- (6) For conductivity, the average value of three readings  $< 1 \text{ mS/cm} \pm 0.005 \text{ mS/cm}$  or where conductivity  $> 1 \text{ mS/cm} \pm 0.01 \text{ mS/cm}$ .

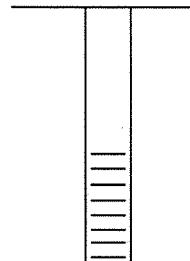
## **Monitoring Well Record for Low-Flow Purging**

(Form SP-09)

### Project Data:

Project Name: Plots Yachna  
Ref. No.:

Date: 06-17-20  
Personnel: \_\_\_\_\_



### **Monitoring Well Data:**

Monitoring Well Data:

Well No.:	MW-19
Vapour PID (ppm):	
Measurement Point:	TOC
Constructed Well Depth (m/ft):	
Measured Well Depth (m/ft):	34.91
Depth of Sediment (m/ft):	8.0

Saturated Screen Length (m/ft): \_\_\_\_\_  
Depth to Pump Intake (m/ft)<sup>(1)</sup>: 27'  
Well Diameter, D (cm/in): 2"  
Well Screen Volume,  $V_s$  (L)<sup>(2)</sup>: \_\_\_\_\_  
Initial Depth to Water (m/ft): 19.74

Sample ID: PW-061720-JPL-MW19

Sample Time: 1150

## Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
  - (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units,  $V_s = \pi * (r^2) * L$  in mL, where r ( $r=D/2$ ) and L are in cm. For Imperial units,  $V_s = \pi * (r^2) * L * (2.54)^3$ , where r and L are in inches
  - (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.
  - (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged=  $V_p/V_s$ .
  - (5) For conductivity, the average value of three readings  $<1 \text{ mS/cm} \pm 0.005 \text{ mS/cm}$  or where conductivity  $>1 \text{ mS/cm} \pm 0.01 \text{ mS/cm}$ .



**ALS Environmental**  
8620 Holly Drive, Suite 100  
Everett, WA 98208  
Phone (425) 356-2600  
Fax (425) 356-2626  
<http://www.alsglobal.com>

## **Chain Of Custody/ Laboratory Analysis Request**

ALS Job# (Laboratory Use Only)

Date 6-17-10 Page 1 Of 1

### SPECIAL INSTRUCTIONS

**SIGNATURES (Name, Company, Date, Time)**

1. Relinquished By: \_\_\_\_\_  
Received By: \_\_\_\_\_

2. Relinquished By: \_\_\_\_\_  
Received By: \_\_\_\_\_

TURNAROUND  
Organic, Metals & Inorganic Analysis

**OTHERS**

**10      5      3      2      1      SAME**

# Fuels & Hydrocarbon Analysis

Specify:

*\*Turnaround request less than standard may incur Rush Charges.*

## WELL GAUGING DATA

Project # 200910-Pk2 Date 9/10/20 Client GHD

Site 920 N 6<sup>th</sup> Ave Yakima WA

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #: 200910-FK2	Client: GHD
Sampler: FK	Gauging Date: 9/10/20
Well I.D.: MW-1S	Well Diameter (in.): 2 3 4 6 8
Total Well Depth (ft.): 33.38	Depth to Water (ft.): 15.03
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Grade
Flow Cell Type: YSI 556	

Purge Method: 2" Grundfos Pump  
Sampling Method: Dedicated Tubing

**Peristaltic Pump  
New Tubing**

Bladder Pump  
Other \_\_\_\_\_

Start Purge Time: 1145 Flow Rate: 200 mL/min Pump Depth: 24

Start Purge Time: 1145 Flow Rate: 200 mL/min Pump Depth: 24

Start Purge Time: 1145 Flow Rate: 200 mL/min Pump Depth: 24

Did well dewater? Yes  No  Amount actually evacuated: 3000 ml

Sampling Time: 12:03 Sampling Date: 9/10/20

Sample I.D.: MW-15 Laboratory: CalScience

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D  Other See COC

Equipment Blank I.D.: @ Time Duplicate I.D.: \_\_\_\_\_

**Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555**

## LOW FLOW WELL MONITORING DATA SHEET

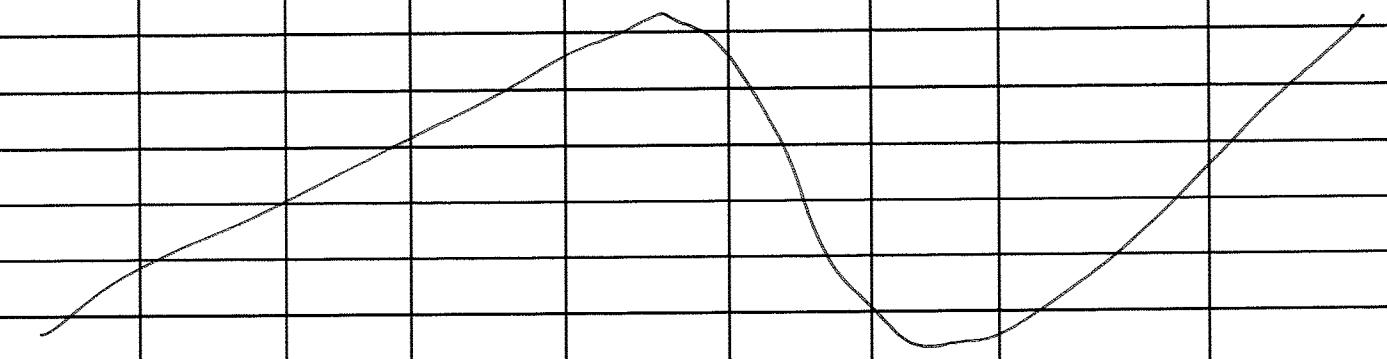
Project #:	200910-FK2	Client:	GHD
Sampler:	FK	Gauging Date:	9/10/20
Well I.D.:	MW-5	Well Diameter (in.) :	2 3 4 6 8
Total Well Depth (ft.) :	29.00	Depth to Water (ft.) :	17.00
Depth to Free Product:	—	Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type:

Purge Method: 2" Grundfos Pump      Peristaltic Pump      Bladder Pump  
Sampling Method: Dedicated Tubing      New Tubing      Other

Sampling Method: Dedicated Tubing      New Tubing \_\_\_\_\_ Other \_\_\_\_\_

Start Purge Time: 1305 Flow Rate: 200 mL/min Pump Depth: 13

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or μS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1308	19.86	7.07	285	36	1.50	160.2	600	17.00
1311	19.75	6.59	283	30	1.23	167.8	1300	17.00
1314	19.67	6.40	281	27	1.02	166.4	1800	17.00
1317	19.68	6.39	280	27	1.10	162.4	2400	17.00
1320	19.58	6.39	279	28	1.08	160.9	3000	17.00



Did well dewater? Yes  No  Amount actually evacuated: 3000 mL

Sampling Time: 1323 Sampling Date: 9/10/26

Sample I.D.: MW-17 Laboratory: Algience

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See C&C

Equipment Blank I.D.: @ Time Duplicate I.D.: \_\_\_\_\_

**Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555**

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #:	200910-Fk2	Client:	GHD
Sampler:	Fk	Gauging Date:	9/10/20
Well I.D.:	MW-19	Well Diameter (in.) :	2 3 4 6 8
Total Well Depth (ft.) :	35,00	Depth to Water (ft.) :	17.13
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	PVC	Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump

Sampling Method: Dedicated Tubing

## Peristaltic Pump

## New Tubing

## Bladder Pump

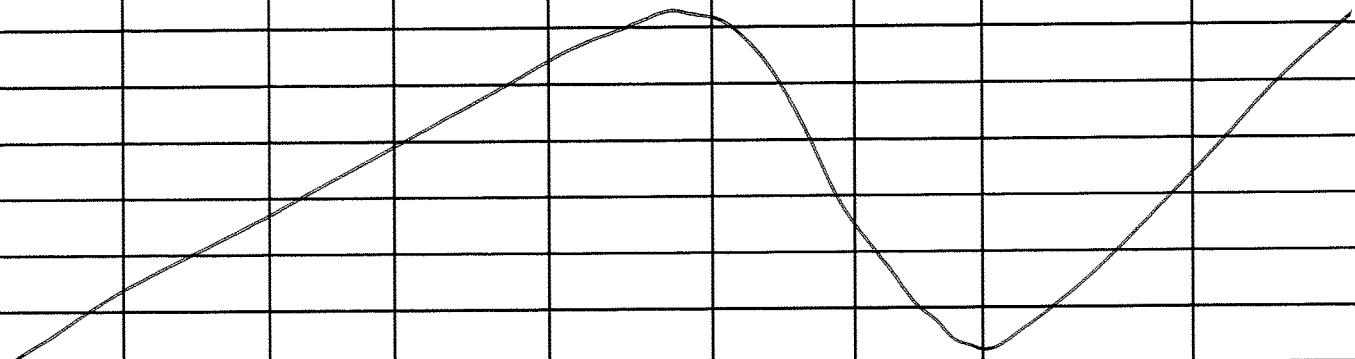
Other

Start Purge Time: 12:22

Flow Rate: 200 mL/min

Pump Depth: 26

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
20.71	20.71	7.24	367	33	1.85	153.6	600	17.28
1238	21.14	6.97	370	21	1.44	154.8	1200	17.35
1231	21.35	6.84	372	18	1.32	152.1	1800	17.35
1234	21.33	6.82	371	19	1.20	149.1	2400	17.35
1237	21.32	6.80	371	19	1.25	147.9	3000	17.35



Did well dewater? Yes  No

Amount actually evacuated: 3000 m<sup>3</sup>

Sampling Time: 12:40

Sampling Date: 9/10/23

Sample I.D.: MW-19

Laboratory: CalScience

Analyzed for:

TPH-G BTEX MTBE TPH-D

Other

See coc

### Equipment Blank LD

Time

### Duplicate I.D.:

DUP-1



Calscience

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For courier service / sample drop off information, contact us26 sales@eurofinsus.com or call us.

## **WELLHEAD INSPECTION FORM**

Client: GHD Site: 920 N 6th Ave Yakima WA Date: 9/10/20  
Job #: 200910-Fk2 Technician: Foster K Page 1 of 1

## NOTES:

## TEST EQUIPMENT CALIBRATION LOG

PHILLIPS 66-WASHINGTON/OREGON TYPE A BILL OF LADING

SOURCE RECORD **BILL OF LADING**  
 FOR PURGEWATER RECOVERED FROM  
 GROUNDWATER WELLS AT PHILLIPS 66 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 72<sup>ND</sup> Ave South, Suite D – 102, Kent, WA 98032. BLAINE TECH. is authorized by PHILLIPS 66 to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the PHILLIPS 66 facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one PHILLIPS 66 facility to BLAINE TECH; from one PHILLIPS 66 facility to BLAINE TECH via another PHILLIPS 66 facility; or any combination thereof. The well purgewater is and remains the property of PHILLIPS 66.

This Source Record **BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the PHILLIPS 66 facility described below:

PHILLIPS 66 #	<u>1145979</u>	PHILLIPS 66 Project Manager	<u>Matt Davis</u>
Street number	<u>920</u>	street name	<u>N 6<sup>th</sup> Ave</u>
		city	<u>Yakima</u>
		state	<u>WA</u>

WELL I.D.	GALS.	WELL I.D.	GALS.
<u>MW-15</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>MW-17</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>MW-19</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
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<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
added equip. rinse water	<u>/</u>	any other adjustments	<u>/</u>
TOTAL GALS.	<u>4</u>	loaded onto	<u>88</u>
RECOVERED	<u>4</u>	BTS vehicle #	<u>88</u>
BTS event #	<u>200910-FK2</u>	time	<u>1645</u>
		date	<u>9/10/20</u>
signature	<u>Roger Davis</u>		

## WELL GAUGING DATA

Project # 201201-LB1 Date 12/11/20 Client GHD

Site PGB YAKIMA - 920 N. 6<sup>TH</sup> Ave

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or POC	Notes
MW-7	0900	2	—	—	—	—	17.30	23.73		
MW-8	0838	2	—	—	—	—	19.88	27.62		
MW-15	0848	2	—	—	—	—	17.92	33.13		
MW-16	0851	2	—	—	—	—	19.63	33.04		
MW-17	0910	2	—	—	—	—	19.45	28.70		
MW-18	0907	2	—	—	—	—	18.37	32.28		
MW-19	0843	2	—	—	—	—	19.96	34.79	↓	

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	201201-LB1	Client:	GHD
Sampler:	LB	Gauging Date:	12/1/20
Well I.D.:	MW-15	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.) :	33.13	Depth to Water (ft.) :	17.92
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YES ProPlus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump  
Sampling Method: Dedicated Tubing New Tubing Other \_\_\_\_\_  
Start Purge Time: 1057 Flow Rate: 200 ml/min Pump Depth: 25'

Did well dewater? Yes No Amount actually evacuated: 4.2

Sampling Time: 1119 Sampling Date: 12/1/20

Sample I.D.: MW-15 Laboratory: CAL SCIENCE

Analyzed for: TPH-G BTEX MTBE TPH-D Others *see CO*

Analyzed for: TPH-G BTX MTBE TPH-D Others See Cox

Analyzed for: TPH-G BTX MTBE TPH-D Others See Cox

Equipment Blank ID : @ - Duplicate ID :

**Blaine Tech Services, Inc. 1680 Rogers Ave. San Jose, CA 95112 (408) 5**

Blaine Tech Services, Inc. 1600 Rogers Ave., San Jose, CA 95112 (408) 5

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	201201-LB1	Client:	GHD
Sampler:	LB	Gauging Date:	12/1/20
Well I.D.:	MW-17	Well Diameter (in.) :	20 3 4 6 8
Total Well Depth (ft.) :	28.70	Depth to Water (ft.) :	19.45
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI ProPlus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump  
Sampling Method: Dedicated Tubing New Tubing Other \_\_\_\_\_  
Start Purge Time: 0919 Flow Rate: 200 mL/min Pump Depth: 25'

Did well dewater? Yes No Amount actually evacuated: 3.61

Sampling Time: 0938 Sampling Date: 12/1/20

Sample I.D.: MW-17 Laboratory: Cal Senience

Analyzed for:  TPH-A  BTEX  MTBE  TPH-D  Other  *see / cr*

Equipment Blank ID : @ Duplicate ID :

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### LOW FLOW WELL MONITORING DATA SHEET

Project #:	201201-LB1	Client:	GHD
Sampler:	LB	Gauging Date:	12/1/20
Well I.D.:	MW-19	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.) :	34.79	Depth to Water (ft.) :	19.96
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI Pro Plus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump  
 Sampling Method: Dedicated Tubing New Tubing Other \_\_\_\_\_  
 Start Purge Time: 1004 Flow Rate: 200 mL/min Pump Depth: 25'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or $\mu$ S/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1007	16.6	6.43	338	77	0.41	104.6	600	19.99
1010	16.7	6.38	333	72	0.99	105.3	1200	19.99
1013	16.7	6.35	328	70	0.97	105.8	1800	19.99
1016	16.6	6.34	325	70	0.90	98.4	2400	19.99
1019	16.6	6.34	324	70	0.89	96.3	3000	19.99
1022	16.6	6.33	324	69	0.88	95.8	3600	19.99

Did well dewater? Yes  Amount actually evacuated: 3.6L

Sampling Time: 1022 Sampling Date: 12/1/20

Sample I.D.: MW-19 Laboratory: CALSCIENCE

Analyzed for: TPH-G BTEX MTBE TPH-D Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.: DUP-1

# WELLHEAD INSPECTION FORM

Client: GHD Site: PCC Yakima - 920 N. 6<sup>th</sup> Ave Date: 12/1/20  
 Job #: 2012C1-LBI Technician: L. BURES Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency										Notes (list if cap or lid 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)	
		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	
MW-7	X			X									
MW-8	X			X									
MW-15	X			X									
MW-16	X			X									
MW-17	X			X									
MW-18	X			X									
MW-19	X			X									

NOTES: \_\_\_\_\_

## TEST EQUIPMENT CALIBRATION LOG

PHILLIPS 66-WASHINGTON/OREGON TYPE A BILL OF LADING

SOURCE RECORD **BILL OF LADING**  
 FOR PURGEWATER RECOVERED FROM  
 GROUNDWATER WELLS AT PHILLIPS 66 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 72<sup>ND</sup> Ave South, Suite D – 102, Kent, WA 98032. BLAINE TECH. is authorized by PHILLIPS 66 to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the PHILLIPS 66 facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one PHILLIPS 66 facility to BLAINE TECH; from one PHILLIPS 66 facility to BLAINE TECH via another PHILLIPS 66 facility; or any combination thereof. The well purgewater is and remains the property of PHILLIPS 66.

This Source Record **BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the PHILLIPS 66 facility described below:

PHILLIPS 66 #	PHILLIPS 66 Project Manager
920 N. 6 <sup>TH</sup> Ave,	YAKIMA, WA
Street number	street name
	city
	state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-15 /	1.0	/	/
MW-17 /	1.0	/	/
MW-19 /	1.0	/	/
/	/	/	/
/	/	/	/
/	/	/	/
/	/	/	/
/	/	/	/
/	/	/	/
/	/	/	/
added equip. rinse water /	1.0	any other adjustments /	/
<b>TOTAL GALS.</b>		loaded onto	
<b>RECOVERED</b> 4.0		BTS vehicle # 92	
BTS event #	time	date	
201201-LB1	1200	12 / 1 / 12	
signature			

## **Appendix B**

# **Laboratory Analytical Reports**



eurofins

Environment Testing  
America



## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-31506-1  
Client Project/Site: P66 Yakima / 11145929

For:  
GHD Services Inc.  
20818 44th Ave W  
Suite 190  
Lynnwood, Washington 98036

Attn: Heather Gadwa

*Vik Patel*

Authorized for release by:  
6/25/2020 4:30:50 PM  
Vikas Patel, Project Manager I  
(714)895-5494  
[vikaspatel@eurofinsus.com](mailto:vikaspatel@eurofinsus.com)

### LINKS

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Expert

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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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# Definitions/Glossary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Qualifiers

### GC VOA

Qualifier	Qualifier Description
Z	The chromatographic response does not resemble a typical fuel pattern.

### GC Semi VOA

Qualifier	Qualifier Description
Z	The chromatographic response does not resemble a typical fuel pattern.

## Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

<input checked="" type="checkbox"/>	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Job ID: 570-31506-1

### Laboratory: Eurofins Calscience LLC

#### Narrative

#### Job Narrative 570-31506-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 6/20/2020 12:00 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.4° C.

#### Receipt Exceptions

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

#### GC/MS VOA

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-77149.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-77494. LCS/LCSD was performed to meet QC requirement.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## **Client Sample ID: GW-061720-JRL-MW15**

## **Lab Sample ID: 570-31506-1**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	260		4.0	ug/L	4		8260B	Total/NA
o-Xylene	8.3		4.0	ug/L	4		8260B	Total/NA
m,p-Xylene	100		8.0	ug/L	4		8260B	Total/NA
Toluene	32		4.0	ug/L	4		8260B	Total/NA
Xylenes, Total	110		12	ug/L	4		8260B	Total/NA
Benzene - RA	960		25	ug/L	50		8260B	Total/NA
TPH as Gasoline (C4-C13)	3700	Z	100	ug/L	1		NWTPH-Gx	Total/NA
TPH as Diesel Range	6.5	Z	1.1	mg/L	10		NWTPH-Dx	Total/NA

## **Client Sample ID: GW-061720-JRL-MW17**

## **Lab Sample ID: 570-31506-2**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.3		0.50	ug/L	1		8260B	Total/NA

## **Client Sample ID: GW-061720-JRL-MW19**

## **Lab Sample ID: 570-31506-3**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
TPH as Diesel Range	0.12	Z	0.12	mg/L	1		NWTPH-Dx	Total/NA

## **Client Sample ID: DUP**

## **Lab Sample ID: 570-31506-4**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	260		4.0	ug/L	4		8260B	Total/NA
o-Xylene	8.6		4.0	ug/L	4		8260B	Total/NA
m,p-Xylene	98		8.0	ug/L	4		8260B	Total/NA
Toluene	33		4.0	ug/L	4		8260B	Total/NA
Xylenes, Total	110		12	ug/L	4		8260B	Total/NA
Benzene - RA	1000		25	ug/L	50		8260B	Total/NA
TPH as Gasoline (C4-C13)	3600	Z	100	ug/L	1		NWTPH-Gx	Total/NA
TPH as Diesel Range	7.3	Z	1.1	mg/L	10		NWTPH-Dx	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: GHD Services Inc.

Job ID: 570-31506-1

Project/Site: P66 Yakima / 11145929

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: GW-061720-JRL-MW15**

**Date Collected: 06/18/20 11:05**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	260		4.0	ug/L			06/23/20 18:24	4
o-Xylene	8.3		4.0	ug/L			06/23/20 18:24	4
m,p-Xylene	100		8.0	ug/L			06/23/20 18:24	4
Methyl-t-Butyl Ether (MTBE)	ND		4.0	ug/L			06/23/20 18:24	4
Toluene	32		4.0	ug/L			06/23/20 18:24	4
Xylenes, Total	110		12	ug/L			06/23/20 18:24	4
1,2-Dibromoethane	ND		4.0	ug/L			06/23/20 18:24	4
1,2-Dichloroethane	ND		2.0	ug/L			06/23/20 18:24	4
Naphthalene	ND		40	ug/L			06/23/20 18:24	4
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	105			80 - 129			06/23/20 18:24	4
4-Bromofluorobenzene (Surr)	97			77 - 120			06/23/20 18:24	4
Dibromofluoromethane (Surr)	105			80 - 128			06/23/20 18:24	4
Toluene-d8 (Surr)	91			80 - 120			06/23/20 18:24	4

**Client Sample ID: GW-061720-JRL-MW17**

**Date Collected: 06/18/20 10:25**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.3		0.50	ug/L			06/24/20 03:29	1
Ethylbenzene	ND		1.0	ug/L			06/24/20 03:29	1
o-Xylene	ND		1.0	ug/L			06/24/20 03:29	1
m,p-Xylene	ND		2.0	ug/L			06/24/20 03:29	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			06/24/20 03:29	1
Toluene	ND		1.0	ug/L			06/24/20 03:29	1
Xylenes, Total	ND		3.0	ug/L			06/24/20 03:29	1
1,2-Dibromoethane	ND		1.0	ug/L			06/24/20 03:29	1
1,2-Dichloroethane	ND		0.50	ug/L			06/24/20 03:29	1
Naphthalene	ND		10	ug/L			06/24/20 03:29	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	105			80 - 129			06/24/20 03:29	1
4-Bromofluorobenzene (Surr)	93			77 - 120			06/24/20 03:29	1
Dibromofluoromethane (Surr)	107			80 - 128			06/24/20 03:29	1
Toluene-d8 (Surr)	101			80 - 120			06/24/20 03:29	1

**Client Sample ID: GW-061720-JRL-MW19**

**Date Collected: 06/18/20 11:50**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			06/24/20 03:58	1
Ethylbenzene	ND		1.0	ug/L			06/24/20 03:58	1
o-Xylene	ND		1.0	ug/L			06/24/20 03:58	1
m,p-Xylene	ND		2.0	ug/L			06/24/20 03:58	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			06/24/20 03:58	1
Toluene	ND		1.0	ug/L			06/24/20 03:58	1
Xylenes, Total	ND		3.0	ug/L			06/24/20 03:58	1
1,2-Dibromoethane	ND		1.0	ug/L			06/24/20 03:58	1
1,2-Dichloroethane	ND		0.50	ug/L			06/24/20 03:58	1

# Client Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: GW-061720-JRL-MW19**

**Date Collected: 06/18/20 11:50**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10	ug/L			06/24/20 03:58	1
<b>Surrogate</b>								
1,2-Dichloroethane-d4 (Surr)	106	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94			80 - 129			06/24/20 03:58	1
Dibromofluoromethane (Surr)	106			77 - 120			06/24/20 03:58	1
Toluene-d8 (Surr)	101			80 - 128			06/24/20 03:58	1
				80 - 120			06/24/20 03:58	1

**Client Sample ID: DUP**

**Date Collected: 06/18/20 00:00**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	260		4.0	ug/L			06/23/20 18:52	4
o-Xylene	8.6		4.0	ug/L			06/23/20 18:52	4
m,p-Xylene	98		8.0	ug/L			06/23/20 18:52	4
Methyl-t-Butyl Ether (MTBE)	ND		4.0	ug/L			06/23/20 18:52	4
Toluene	33		4.0	ug/L			06/23/20 18:52	4
Xylenes, Total	110		12	ug/L			06/23/20 18:52	4
1,2-Dibromoethane	ND		4.0	ug/L			06/23/20 18:52	4
1,2-Dichloroethane	ND		2.0	ug/L			06/23/20 18:52	4
Naphthalene	ND		40	ug/L			06/23/20 18:52	4
<b>Surrogate</b>								
1,2-Dichloroethane-d4 (Surr)	104	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98			80 - 129			06/23/20 18:52	4
Dibromofluoromethane (Surr)	107			77 - 120			06/23/20 18:52	4
Toluene-d8 (Surr)	99			80 - 128			06/23/20 18:52	4
				80 - 120			06/23/20 18:52	4

# Client Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

**Client Sample ID: GW-061720-JRL-MW15**

**Date Collected: 06/18/20 11:05**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	960		25	ug/L			06/24/20 16:31	50
<b>Surrogate</b>								
1,2-Dichloroethane-d4 (Surr)	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
95			80 - 129				06/24/20 16:31	50
4-Bromofluorobenzene (Surr)			77 - 120				06/24/20 16:31	50
Dibromofluoromethane (Surr)			80 - 128				06/24/20 16:31	50
Toluene-d8 (Surr)			80 - 120				06/24/20 16:31	50

**Client Sample ID: DUP**

**Date Collected: 06/18/20 00:00**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1000		25	ug/L			06/24/20 17:00	50
<b>Surrogate</b>								
1,2-Dichloroethane-d4 (Surr)	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
95			80 - 129				06/24/20 17:00	50
4-Bromofluorobenzene (Surr)			77 - 120				06/24/20 17:00	50
Dibromofluoromethane (Surr)			80 - 128				06/24/20 17:00	50
Toluene-d8 (Surr)			80 - 120				06/24/20 17:00	50

# Client Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

**Client Sample ID: GW-061720-JRL-MW15**

**Date Collected: 06/18/20 11:05**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	3700	Z	100	ug/L			06/22/20 23:09	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	119		38 - 134				06/22/20 23:09	1

**Client Sample ID: GW-061720-JRL-MW17**

**Date Collected: 06/18/20 10:25**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			06/23/20 00:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	84		38 - 134				06/23/20 00:20	1

**Client Sample ID: GW-061720-JRL-MW19**

**Date Collected: 06/18/20 11:50**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			06/23/20 00:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	84		38 - 134				06/23/20 00:44	1

**Client Sample ID: DUP**

**Date Collected: 06/18/20 00:00**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	3600	Z	100	ug/L			06/23/20 01:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	118		38 - 134				06/23/20 01:08	1

# Client Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

**Client Sample ID: GW-061720-JRL-MW15**

**Date Collected: 06/18/20 11:05**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	6.5	Z	1.1	mg/L		06/24/20 12:16	06/25/20 13:24	10
TPH as Motor Oil Range	ND		0.11	mg/L		06/24/20 12:16	06/25/20 11:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)	123		68 - 140			06/24/20 12:16	06/25/20 11:59	1
n-Octacosane (Surr)	114		68 - 140			06/24/20 12:16	06/25/20 13:24	10

**Client Sample ID: GW-061720-JRL-MW17**

**Date Collected: 06/18/20 10:25**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.11	mg/L		06/24/20 12:16	06/25/20 12:20	1
TPH as Motor Oil Range	ND		0.11	mg/L		06/24/20 12:16	06/25/20 12:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)	129		68 - 140			06/24/20 12:16	06/25/20 12:20	1

**Client Sample ID: GW-061720-JRL-MW19**

**Date Collected: 06/18/20 11:50**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	0.12	Z	0.12	mg/L		06/24/20 12:16	06/25/20 12:42	1
TPH as Motor Oil Range	ND		0.12	mg/L		06/24/20 12:16	06/25/20 12:42	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)	113		68 - 140			06/24/20 12:16	06/25/20 12:42	1

**Client Sample ID: DUP**

**Date Collected: 06/18/20 00:00**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	7.3	Z	1.1	mg/L		06/24/20 12:16	06/25/20 13:46	10
TPH as Motor Oil Range	ND		0.11	mg/L		06/24/20 12:16	06/25/20 13:03	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)	126		68 - 140			06/24/20 12:16	06/25/20 13:03	1
n-Octacosane (Surr)	110		68 - 140			06/24/20 12:16	06/25/20 13:46	10

# Surrogate Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-129)	BFB (77-120)	DBFM (80-128)	TOL (80-120)
570-31506-1	GW-061720-JRL-MW15	105	97	105	91
570-31506-1 - RA	GW-061720-JRL-MW15	95	91	100	99
570-31506-2	GW-061720-JRL-MW17	105	93	107	101
570-31506-3	GW-061720-JRL-MW19	106	94	106	101
570-31506-4	DUP	104	98	107	99
570-31506-4 - RA	DUP	95	93	99	99
570-31550-B-1 MS	Matrix Spike	92	100	95	98
570-31550-B-1 MSD	Matrix Spike Duplicate	91	98	95	98
LCS 570-77149/3	Lab Control Sample	102	96	106	102
LCS 570-77306/4	Lab Control Sample	98	100	101	100
LCS 570-77379/3	Lab Control Sample	90	97	95	97
LCSD 570-77149/4	Lab Control Sample Dup	107	98	107	96
LCSD 570-77306/5	Lab Control Sample Dup	96	99	99	101
LCSD 570-77379/4	Lab Control Sample Dup	89	98	95	97
MB 570-77149/7	Method Blank	103	99	103	101
MB 570-77306/10	Method Blank	99	96	99	101
MB 570-77379/7	Method Blank	94	91	99	99

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-129)	BFB (77-120)	DBFM (80-128)	TOL (80-120)
570-31455-J-2-A MS	Matrix Spike	98	98	101	100
570-31455-J-2-A MSD	Matrix Spike Duplicate	98	99	100	101

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB1 (38-134)			
570-31506-1	GW-061720-JRL-MW15	119			
570-31506-1 MS	GW-061720-JRL-MW15	124			
570-31506-1 MSD	GW-061720-JRL-MW15	125			
570-31506-2	GW-061720-JRL-MW17	84			
570-31506-3	GW-061720-JRL-MW19	84			
570-31506-4	DUP	118			

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# Surrogate Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)	Percent Surrogate Recovery (Acceptance Limits)
LCS 570-76920/6	Lab Control Sample	91	_____
LCSD 570-76920/7	Lab Control Sample Dup	92	_____
MB 570-76920/8	Method Blank	83	_____

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN (68-140)	Percent Surrogate Recovery (Acceptance Limits)
570-31506-1	GW-061720-JRL-MW15	123	_____
570-31506-1	GW-061720-JRL-MW15	114	_____
570-31506-2	GW-061720-JRL-MW17	129	_____
570-31506-3	GW-061720-JRL-MW19	113	_____
570-31506-4	DUP	126	_____
570-31506-4	DUP	110	_____
LCS 570-77494/2-A	Lab Control Sample	116	_____
LCSD 570-77494/3-A	Lab Control Sample Dup	114	_____
MB 570-77494/1-A	Method Blank	100	_____

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: GHD Services Inc.

Job ID: 570-31506-1

Project/Site: P66 Yakima / 11145929

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-77149/7**

**Matrix: Water**

**Analysis Batch: 77149**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			06/23/20 11:00	1
Ethylbenzene	ND		1.0	ug/L			06/23/20 11:00	1
o-Xylene	ND		1.0	ug/L			06/23/20 11:00	1
m,p-Xylene	ND		2.0	ug/L			06/23/20 11:00	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			06/23/20 11:00	1
Toluene	ND		1.0	ug/L			06/23/20 11:00	1
Xylenes, Total	ND		3.0	ug/L			06/23/20 11:00	1
1,2-Dibromoethane	ND		1.0	ug/L			06/23/20 11:00	1
1,2-Dichloroethane	ND		0.50	ug/L			06/23/20 11:00	1
Naphthalene	ND		10	ug/L			06/23/20 11:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 129		06/23/20 11:00	1
4-Bromofluorobenzene (Surr)	99		77 - 120		06/23/20 11:00	1
Dibromofluoromethane (Surr)	103		80 - 128		06/23/20 11:00	1
Toluene-d8 (Surr)	101		80 - 120		06/23/20 11:00	1

**Lab Sample ID: LCS 570-77149/3**

**Matrix: Water**

**Analysis Batch: 77149**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Benzene	50.0	55.05		ug/L		110	78 - 120
Ethylbenzene	50.0	50.61		ug/L		101	80 - 120
o-Xylene	50.0	49.34		ug/L		99	80 - 125
m,p-Xylene	100	98.60		ug/L		99	80 - 125
Methyl-t-Butyl Ether (MTBE)	50.0	43.59		ug/L		87	77 - 120
Toluene	50.0	51.37		ug/L		103	80 - 122
1,2-Dibromoethane	50.0	51.63		ug/L		103	80 - 120
1,2-Dichloroethane	50.0	54.55		ug/L		109	75 - 123
Naphthalene	50.0	55.33		ug/L		111	64 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 129
4-Bromofluorobenzene (Surr)	96		77 - 120
Dibromofluoromethane (Surr)	106		80 - 128
Toluene-d8 (Surr)	102		80 - 120

**Lab Sample ID: LCSD 570-77149/4**

**Matrix: Water**

**Analysis Batch: 77149**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD
Benzene	50.0	49.19		ug/L		98	78 - 120	11	21
Ethylbenzene	50.0	48.58		ug/L		97	80 - 120	4	20
o-Xylene	50.0	47.82		ug/L		96	80 - 125	3	20
m,p-Xylene	100	96.59		ug/L		97	80 - 125	2	30
Methyl-t-Butyl Ether (MTBE)	50.0	42.61		ug/L		85	77 - 120	2	24

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# QC Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-77149/4**

**Matrix: Water**

**Analysis Batch: 77149**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD RPD	RPD Limit
Toluene	50.0	45.97		ug/L		92	80 - 122	11	20
1,2-Dibromoethane	50.0	51.42		ug/L		103	80 - 120	0	30
1,2-Dichloroethane	50.0	49.32		ug/L		99	75 - 123	10	24
Naphthalene	50.0	53.73		ug/L		107	64 - 136	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	107		80 - 129
4-Bromofluorobenzene (Surr)	98		77 - 120
Dibromofluoromethane (Surr)	107		80 - 128
Toluene-d8 (Surr)	96		80 - 120

**Lab Sample ID: MB 570-77306/10**

**Matrix: Water**

**Analysis Batch: 77306**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	MB RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L		06/23/20 23:08		1
Ethylbenzene	ND		1.0	ug/L		06/23/20 23:08		1
o-Xylene	ND		1.0	ug/L		06/23/20 23:08		1
m,p-Xylene	ND		2.0	ug/L		06/23/20 23:08		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L		06/23/20 23:08		1
Toluene	ND		1.0	ug/L		06/23/20 23:08		1
Xylenes, Total	ND		3.0	ug/L		06/23/20 23:08		1
1,2-Dibromoethane	ND		1.0	ug/L		06/23/20 23:08		1
1,2-Dichloroethane	ND		0.50	ug/L		06/23/20 23:08		1
Naphthalene	ND		10	ug/L		06/23/20 23:08		1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 129		06/23/20 23:08	1
4-Bromofluorobenzene (Surr)	96		77 - 120		06/23/20 23:08	1
Dibromofluoromethane (Surr)	99		80 - 128		06/23/20 23:08	1
Toluene-d8 (Surr)	101		80 - 120		06/23/20 23:08	1

**Lab Sample ID: LCS 570-77306/4**

**Matrix: Water**

**Analysis Batch: 77306**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	48.72		ug/L		97	78 - 120
Ethylbenzene	50.0	49.93		ug/L		100	80 - 120
o-Xylene	50.0	52.66		ug/L		105	80 - 125
m,p-Xylene	100	100.2		ug/L		100	80 - 125
Methyl-t-Butyl Ether (MTBE)	50.0	47.58		ug/L		95	77 - 120
Toluene	50.0	48.36		ug/L		97	80 - 122
1,2-Dibromoethane	50.0	53.09		ug/L		106	80 - 120
1,2-Dichloroethane	50.0	49.26		ug/L		99	75 - 123
Naphthalene	50.0	52.79		ug/L		106	64 - 136

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-77306/4**

**Matrix: Water**

**Analysis Batch: 77306**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98				80 - 129
4-Bromofluorobenzene (Surr)	100				77 - 120
Dibromofluoromethane (Surr)	101				80 - 128
Toluene-d8 (Surr)	100				80 - 120

**Lab Sample ID: LCSD 570-77306/5**

**Matrix: Water**

**Analysis Batch: 77306**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	Limit
Benzene	50.0	50.08		ug/L	100	78 - 120	3	21
Ethylbenzene	50.0	51.54		ug/L	103	80 - 120	3	20
o-Xylene	50.0	53.79		ug/L	108	80 - 125	2	20
m,p-Xylene	100	102.6		ug/L	103	80 - 125	2	30
Methyl-t-Butyl Ether (MTBE)	50.0	47.15		ug/L	94	77 - 120	1	24
Toluene	50.0	50.12		ug/L	100	80 - 122	4	20
1,2-Dibromoethane	50.0	53.67		ug/L	107	80 - 120	1	30
1,2-Dichloroethane	50.0	50.97		ug/L	102	75 - 123	3	24
Naphthalene	50.0	53.13		ug/L	106	64 - 136	1	30

Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96				80 - 129
4-Bromofluorobenzene (Surr)	99				77 - 120
Dibromofluoromethane (Surr)	99				80 - 128
Toluene-d8 (Surr)	101				80 - 120

**Lab Sample ID: MB 570-77379/7**

**Matrix: Water**

**Analysis Batch: 77379**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene			ND		0.50	ug/L			06/24/20 11:37	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)			94		80 - 129				06/24/20 11:37	1
4-Bromofluorobenzene (Surr)			91		77 - 120				06/24/20 11:37	1
Dibromofluoromethane (Surr)			99		80 - 128				06/24/20 11:37	1
Toluene-d8 (Surr)			99		80 - 120				06/24/20 11:37	1

**Lab Sample ID: LCS 570-77379/3**

**Matrix: Water**

**Analysis Batch: 77379**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	RPD
Benzene	50.0	48.78		ug/L	98	78 - 120	

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-77379/3**

**Matrix: Water**

**Analysis Batch: 77379**

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)		90			80 - 129
4-Bromofluorobenzene (Surr)		97			77 - 120
Dibromofluoromethane (Surr)		95			80 - 128
Toluene-d8 (Surr)		97			80 - 120

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Lab Sample ID: LCSD 570-77379/4**

**Matrix: Water**

**Analysis Batch: 77379**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	
				ug/L		Limits	Limit	
Benzene	50.0	44.67			89	78 - 120	9	21

Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)		89			80 - 129
4-Bromofluorobenzene (Surr)		98			77 - 120
Dibromofluoromethane (Surr)		95			80 - 128
Toluene-d8 (Surr)		97			80 - 120

**Lab Sample ID: 570-31550-B-1 MS**

**Matrix: Water**

**Analysis Batch: 77379**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.
				ug/L		ug/L		Limits
Benzene	ND		100	103.0			103	75 - 125

Surrogate	MS	MS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)		92			80 - 129
4-Bromofluorobenzene (Surr)		100			77 - 120
Dibromofluoromethane (Surr)		95			80 - 128
Toluene-d8 (Surr)		98			80 - 120

**Lab Sample ID: 570-31550-B-1 MSD**

**Matrix: Water**

**Analysis Batch: 77379**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.
				ug/L		ug/L		Limits
Benzene	ND		100	101.2			101	75 - 125

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)		91			80 - 129
4-Bromofluorobenzene (Surr)		98			77 - 120
Dibromofluoromethane (Surr)		95			80 - 128
Toluene-d8 (Surr)		98			80 - 120

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

# QC Sample Results

Client: GHD Services Inc.

Job ID: 570-31506-1

Project/Site: P66 Yakima / 11145929

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-31455-J-2-A MS**

**Matrix: Water**

**Analysis Batch: 77306**

**Client Sample ID: Matrix Spike**  
**Prep Type: TCLP**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		5000	5276		ug/L	106	75 - 125	
Ethylbenzene	ND		5000	5288		ug/L	106	75 - 125	
o-Xylene	ND		5000	5544		ug/L	111	75 - 136	
m,p-Xylene	ND		10000	10560		ug/L	106	75 - 133	
Methyl-t-Butyl Ether (MTBE)	ND		5000	4679		ug/L	94	75 - 128	
Toluene	ND		5000	5171		ug/L	103	75 - 125	
1,2-Dibromoethane	ND		5000	5343		ug/L	107	75 - 125	
1,2-Dichloroethane	ND		5000	5162		ug/L	103	75 - 125	
Naphthalene	ND		5000	5037		ug/L	101	71 - 131	
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Surrogate	MS %Recovery		MS Qualifier	Limits					
1,2-Dichloroethane-d4 (Surr)	98			80 - 129					
4-Bromofluorobenzene (Surr)	98			77 - 120					
Dibromofluoromethane (Surr)	101			80 - 128					
Toluene-d8 (Surr)	100			80 - 120					

**Lab Sample ID: 570-31455-J-2-A MSD**

**Matrix: Water**

**Analysis Batch: 77306**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: TCLP**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		5000	5178		ug/L	104	75 - 125		2	20
Ethylbenzene	ND		5000	5248		ug/L	105	75 - 125		1	20
o-Xylene	ND		5000	5448		ug/L	109	75 - 136		2	20
m,p-Xylene	ND		10000	10450		ug/L	105	75 - 133		1	20
Methyl-t-Butyl Ether (MTBE)	ND		5000	4714		ug/L	94	75 - 128		1	20
Toluene	ND		5000	5044		ug/L	101	75 - 125		2	20
1,2-Dibromoethane	ND		5000	5391		ug/L	108	75 - 125		1	20
1,2-Dichloroethane	ND		5000	5111		ug/L	102	75 - 125		1	20
Naphthalene	ND		5000	5203		ug/L	104	71 - 131		3	20
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Surrogate	MSD %Recovery		MSD Qualifier	Limits							
1,2-Dichloroethane-d4 (Surr)	98			80 - 129							
4-Bromofluorobenzene (Surr)	99			77 - 120							
Dibromofluoromethane (Surr)	100			80 - 128							
Toluene-d8 (Surr)	101			80 - 120							

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

**Lab Sample ID: MB 570-76920/8**

**Matrix: Water**

**Analysis Batch: 76920**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			06/22/20 13:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		38 - 134				06/22/20 13:40	1

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# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

**Lab Sample ID: LCS 570-76920/6**

**Matrix: Water**

**Analysis Batch: 76920**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec. Limits	
TPH as Gasoline (C4-C13)	2000	2011		ug/L	101		78 - 120	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	91		38 - 134					

**Lab Sample ID: LCSD 570-76920/7**

**Matrix: Water**

**Analysis Batch: 76920**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	%Rec. Limits	RPD	RPD Limit
TPH as Gasoline (C4-C13)	2000	2021		ug/L	101		78 - 120	0	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	92		38 - 134						

**Lab Sample ID: 570-31506-1 MS**

**Matrix: Water**

**Analysis Batch: 76920**

**Client Sample ID: GW-061720-JRL-MW15**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	%Rec. Limits	
TPH as Gasoline (C4-C13)	3700	Z	2000	5259		ug/L	80		68 - 122	
Surrogate	MS %Recovery	MS Qualifier	Limits							
4-Bromofluorobenzene (Surr)	124		38 - 134							

**Lab Sample ID: 570-31506-1 MSD**

**Matrix: Water**

**Analysis Batch: 76920**

**Client Sample ID: GW-061720-JRL-MW15**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	%Rec. Limits	RPD	RPD Limit
TPH as Gasoline (C4-C13)	3700	Z	2000	5391		ug/L	86		68 - 122	2	18
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	125		38 - 134								

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

**Lab Sample ID: MB 570-77494/1-A**

**Matrix: Water**

**Analysis Batch: 77684**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 77494**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		0.10	mg/L		06/24/20 12:16	06/25/20 09:51	1
TPH as Motor Oil Range	ND		0.10	mg/L		06/24/20 12:16	06/25/20 09:51	1
Surrogate	MB %Recovery	MB Qualifier	Limits					
n-Octacosane (Surr)	100		68 - 140					
						Prepared	Analyzed	Dil Fac
						06/24/20 12:16	06/25/20 09:51	1

Eurofins Calscience LLC

# QC Sample Results

Client: GHD Services Inc.

Job ID: 570-31506-1

Project/Site: P66 Yakima / 11145929

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

**Lab Sample ID: LCS 570-77494/2-A**

**Matrix: Water**

**Analysis Batch: 77684**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 77494**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	0.800	0.7919		mg/L	99	75 - 117	
<hr/>							
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
n-Octacosane (Surr)	116		68 - 140				

**Lab Sample ID: LCSD 570-77494/3-A**

**Matrix: Water**

**Analysis Batch: 77684**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 77494**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	0.800	0.7936		mg/L	99	75 - 117		0	13
<hr/>									
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
n-Octacosane (Surr)	114		68 - 140						

# QC Association Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## GC/MS VOA

### Analysis Batch: 77149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-31506-1	GW-061720-JRL-MW15	Total/NA	Water	8260B	
570-31506-4	DUP	Total/NA	Water	8260B	
MB 570-77149/7	Method Blank	Total/NA	Water	8260B	
LCS 570-77149/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-77149/4	Lab Control Sample Dup	Total/NA	Water	8260B	

### Leach Batch: 77260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-31455-J-2-A MS	Matrix Spike	TCLP	Water	1311	
570-31455-J-2-A MSD	Matrix Spike Duplicate	TCLP	Water	1311	

### Analysis Batch: 77306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-31506-2	GW-061720-JRL-MW17	Total/NA	Water	8260B	
570-31506-3	GW-061720-JRL-MW19	Total/NA	Water	8260B	
MB 570-77306/10	Method Blank	Total/NA	Water	8260B	
LCS 570-77306/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-77306/5	Lab Control Sample Dup	Total/NA	Water	8260B	
570-31455-J-2-A MS	Matrix Spike	TCLP	Water	8260B	77260
570-31455-J-2-A MSD	Matrix Spike Duplicate	TCLP	Water	8260B	77260

### Analysis Batch: 77379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-31506-1 - RA	GW-061720-JRL-MW15	Total/NA	Water	8260B	
570-31506-4 - RA	DUP	Total/NA	Water	8260B	
MB 570-77379/7	Method Blank	Total/NA	Water	8260B	
LCS 570-77379/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-77379/4	Lab Control Sample Dup	Total/NA	Water	8260B	
570-31550-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
570-31550-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

## GC VOA

### Analysis Batch: 76920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-31506-1	GW-061720-JRL-MW15	Total/NA	Water	NWTPH-Gx	
570-31506-2	GW-061720-JRL-MW17	Total/NA	Water	NWTPH-Gx	
570-31506-3	GW-061720-JRL-MW19	Total/NA	Water	NWTPH-Gx	
570-31506-4	DUP	Total/NA	Water	NWTPH-Gx	
MB 570-76920/8	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 570-76920/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 570-76920/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
570-31506-1 MS	GW-061720-JRL-MW15	Total/NA	Water	NWTPH-Gx	
570-31506-1 MSD	GW-061720-JRL-MW15	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Prep Batch: 77494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-31506-1	GW-061720-JRL-MW15	Total/NA	Water	3510C	
570-31506-2	GW-061720-JRL-MW17	Total/NA	Water	3510C	
570-31506-3	GW-061720-JRL-MW19	Total/NA	Water	3510C	

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# QC Association Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## GC Semi VOA (Continued)

### Prep Batch: 77494 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-31506-4	DUP	Total/NA	Water	3510C	
MB 570-77494/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-77494/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-77494/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 77684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-31506-1	GW-061720-JRL-MW15	Total/NA	Water	NWTPH-Dx	77494
570-31506-1	GW-061720-JRL-MW15	Total/NA	Water	NWTPH-Dx	77494
570-31506-2	GW-061720-JRL-MW17	Total/NA	Water	NWTPH-Dx	77494
570-31506-3	GW-061720-JRL-MW19	Total/NA	Water	NWTPH-Dx	77494
570-31506-4	DUP	Total/NA	Water	NWTPH-Dx	77494
570-31506-4	DUP	Total/NA	Water	NWTPH-Dx	77494
MB 570-77494/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	77494
LCS 570-77494/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	77494
LCSD 570-77494/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	77494

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

**Client Sample ID: GW-061720-JRL-MW15**  
**Date Collected: 06/18/20 11:05**  
**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	50	5 mL	5 mL	77379	06/24/20 16:31	NET3	ECL 2
		Instrument ID: GCMSOO								
Total/NA	Analysis	8260B		4	5 mL	5 mL	77149	06/23/20 18:24	CVA6	ECL 2
		Instrument ID: GCMSW								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	76920	06/22/20 23:09	W6MG	ECL 2
		Instrument ID: GC1								
Total/NA	Prep	3510C			458.7 mL	5 mL	77494	06/24/20 12:16	UFLU	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			77684	06/25/20 11:59	I9H5	ECL 1
		Instrument ID: GC48								
Total/NA	Prep	3510C			458.7 mL	5 mL	77494	06/24/20 12:16	UFLU	ECL 1
Total/NA	Analysis	NWTPH-Dx		10			77684	06/25/20 13:24	I9H5	ECL 1
		Instrument ID: GC48								

**Client Sample ID: GW-061720-JRL-MW17**  
**Date Collected: 06/18/20 10:25**  
**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	77306	06/24/20 03:29	NET3	ECL 2
		Instrument ID: GCMSJJ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	76920	06/23/20 00:20	W6MG	ECL 2
		Instrument ID: GC1								
Total/NA	Prep	3510C			456.5 mL	5 mL	77494	06/24/20 12:16	UFLU	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			77684	06/25/20 12:20	I9H5	ECL 1
		Instrument ID: GC48								

**Client Sample ID: GW-061720-JRL-MW19**  
**Date Collected: 06/18/20 11:50**  
**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	77306	06/24/20 03:58	NET3	ECL 2
		Instrument ID: GCMSJJ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	76920	06/23/20 00:44	W6MG	ECL 2
		Instrument ID: GC1								
Total/NA	Prep	3510C			424.2 mL	5 mL	77494	06/24/20 12:16	UFLU	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			77684	06/25/20 12:42	I9H5	ECL 1
		Instrument ID: GC48								

**Client Sample ID: DUP**  
**Date Collected: 06/18/20 00:00**  
**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	50	5 mL	5 mL	77379	06/24/20 17:00	NET3	ECL 2
		Instrument ID: GCMSOO								

Eurofins Calscience LLC

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

**Client Sample ID: DUP**

**Date Collected: 06/18/20 00:00**

**Date Received: 06/20/20 12:00**

**Lab Sample ID: 570-31506-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	77149	06/23/20 18:52	CVA6	ECL 2
Total/NA	Analysis	NWTPH-Gx Instrument ID: GC1		1	5 mL	5 mL	76920	06/23/20 01:08	W6MG	ECL 2
Total/NA	Prep	3510C			462.9 mL	5 mL	77494	06/24/20 12:16	UFLU	ECL 1
Total/NA	Analysis	NWTPH-Dx Instrument ID: GC48		1			77684	06/25/20 13:03	I9H5	ECL 1
Total/NA	Prep	3510C			462.9 mL	5 mL	77494	06/24/20 12:16	UFLU	ECL 1
Total/NA	Analysis	NWTPH-Dx Instrument ID: GC48		10			77684	06/25/20 13:46	I9H5	ECL 1

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

## Method Summary

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ECL 2
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	ECL 1
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2

### Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Sample Summary

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-31506-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-31506-1	GW-061720-JRL-MW15	Water	06/18/20 11:05	06/20/20 12:00	
570-31506-2	GW-061720-JRL-MW17	Water	06/18/20 10:25	06/20/20 12:00	
570-31506-3	GW-061720-JRL-MW19	Water	06/18/20 11:50	06/20/20 12:00	
570-31506-4	DUP	Water	06/18/20 00:00	06/20/20 12:00	

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ALS Environmental  
8620 Holly Drive, Suite 100  
Everett, WA 98208  
Phone (425) 356-2600  
Fax (425) 356-2626  
<http://www.alsglobal.com>

# Chain Of Custody/ Laboratory Analysis Request

ALS Job# 31506  
(Labora)

Date 6-17-10 Page 1 Of 1

PROJECT ID:	Ple 4 Yakima 1145 929			
REPORT TO COMPANY:	GHD			
PROJECT MANAGER:	MATT DAVIS			
ADDRESS:	20815 44TH AVE N, SUITE 190 LYNNWOOD, WA			
PHONE:	P.O. #:			
E-MAIL:				
INVOICE TO COMPANY:	GHD			
ATTENTION:	HEATHER GADWA			
ADDRESS:	SSOW; 1145 929 2020-06 TBD			
SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. GW-061720-JRL-MW15	4/18/20	1105	W	
2. GW-061720-JRL-MW17	↓	1025	W	
3. GW-061720-JRL-MW19	↓	1150	W	
4. Dup	—	—	W	
5.				
6.				
7.				
8.				
9.				
10.				

## SPECIAL INSTRUCTIONS

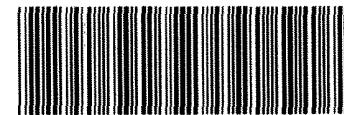
*[Signature]*

## SIGNATURES (Name, Company, Date, Time):

- Relinquished By: *[Signature]*, 6/19/10 1200
- Received By: *[Signature]*, 6/20/2020 1200
- Relinquished By: \_\_\_\_\_

Received By: \_\_\_\_\_

ANALYSIS REQUESTED	OTHER (Specify)										
	TCB-Metals	VOC	Semi-VOC	Pest	Hats	PCBs	Multis-MTCA-5	RCPA-8	Hi-Pol	TAL	Multis Oil (Specify)
EDB / EDC by EPA 8260 SIM (water)	<input type="checkbox"/>	Halogenated Volatiles by EPA 8260									
EDB / EDC by EPA 8260 (soil)	<input type="checkbox"/>	Volatile Organic Compounds by EPA 8260									
NITRO by EPA 8260	<input type="checkbox"/>	EDB / EDC by EPA 8260 SIM (water)									
PCBs by EPA 8082	<input type="checkbox"/>	Semivolatile Organic Compounds by EPA 8270									
Multis-MTCA-5	<input type="checkbox"/>	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM									
Multis Oil (Specify)	<input type="checkbox"/>	PCBs by EPA 8082									
TCB-Metals	<input type="checkbox"/>	Multis Oil (Specify)									
VOC	<input type="checkbox"/>	PCBs by EPA 8082									
Semi-VOC	<input type="checkbox"/>	Multis-MTCA-5									
Pest	<input type="checkbox"/>	EDB / EDC by EPA 8260									
Hats	<input type="checkbox"/>	NITRO by EPA 8260									
PCBs	<input type="checkbox"/>	EDB / EDC by EPA 8260 (soil)									
Multis Oil (Specify)	<input type="checkbox"/>	NITRO by EPA 8260									
TCB-Metals	<input type="checkbox"/>	EDB / EDC by EPA 8260 SIM (water)									
VOC	<input type="checkbox"/>	NITRO by EPA 8260									
Semi-VOC	<input type="checkbox"/>	EDB / EDC by EPA 8260									
Pest	<input type="checkbox"/>	Multis-MTCA-5									
Hats	<input type="checkbox"/>	EDB / EDC by EPA 8260 (soil)									
PCBs	<input type="checkbox"/>	NITRO by EPA 8260									
Multis Oil (Specify)	<input type="checkbox"/>	EDB / EDC by EPA 8260 SIM (water)									
TCB-Metals	<input type="checkbox"/>	NITRO by EPA 8260									
VOC	<input type="checkbox"/>	EDB / EDC by EPA 8260									
Semi-VOC	<input type="checkbox"/>	Multis-MTCA-5									
Pest	<input type="checkbox"/>	EDB / EDC by EPA 8260 (soil)									
Hats	<input type="checkbox"/>	NITRO by EPA 8260									



570-31506 Chain of Custody

TURNAROUND REQUESTED in Business Days\*  
Organic, Metals & Inorganic Analysis

OTHER:

Specify: \_\_\_\_\_

10    5    3    2    1    SAME DAY

Fuels & Hydrocarbon Analysis

5    3    1    SAME DAY

Standard    13    12    11    10    9    8

14    15    16    17    18    19    20

\*Turnaround = test kit han stdard m. a. incur f. e. Charge

3.8/3.4 SW

## Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-31506-1

**Login Number: 31506**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Ramos, Maribel**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



eurofins

Environment Testing  
America



## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-38415-1  
Client Project/Site: P66 Yakima / 11145929

For:  
GHD Services Inc.  
3600 Port of Tacoma Road  
Tacoma, Washington 98424

Attn: Matt Davis

Vik Patel

---

Authorized for release by:  
9/22/2020 10:21:08 AM

Vikas Patel, Project Manager I  
(714)895-5494  
[vikas.patel@eurofinset.com](mailto:vikas.patel@eurofinset.com)

### LINKS

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results through

Total Access

Have a Question?

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The  
Expert

Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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# Definitions/Glossary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Qualifiers

### GC VOA

Qualifier	Qualifier Description
Z	The chromatographic response does not resemble a typical fuel pattern.

### GC Semi VOA

Qualifier	Qualifier Description
Z	The chromatographic response does not resemble a typical fuel pattern.

## Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

**Job ID: 570-38415-1**

**Laboratory: Eurofins Calscience LLC**

## Narrative

**Job Narrative  
570-38415-1**

## Comments

No additional comments.

## Receipt

The samples were received on 9/15/2020 10:10 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2° C.

## GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-95178. LCS/LCSD was performed to meet QC requirement.

Method 3510C: The following samples formed emulsions during the extraction procedure: MW-19 (570-38415-3) and DUP-1 (570-38415-4). The emulsions were broken up using <Na<sub>2</sub>SO<sub>4</sub>>.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## **Client Sample ID: MW-15**

**Lab Sample ID: 570-38415-1**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	290		2.5	ug/L	5		8260B	Total/NA
Ethylbenzene	23		5.0	ug/L	5		8260B	Total/NA
m,p-Xylene	11		10	ug/L	5		8260B	Total/NA
TPH as Gasoline (C4-C13)	2500	Z	100	ug/L	1		NWTPH-Gx	Total/NA
TPH as Diesel Range	1800	Z	95	ug/L	1		NWTPH-Dx	Total/NA

## **Client Sample ID: MW-17**

**Lab Sample ID: 570-38415-2**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
TPH as Diesel Range	250	Z	98	ug/L	1		NWTPH-Dx	Total/NA

## **Client Sample ID: MW-19**

**Lab Sample ID: 570-38415-3**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.50	ug/L	1		8260B	Total/NA
TPH as Diesel Range	400	Z	98	ug/L	1		NWTPH-Dx	Total/NA

## **Client Sample ID: DUP-1**

**Lab Sample ID: 570-38415-4**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.50	ug/L	1		8260B	Total/NA
TPH as Diesel Range	460	Z	99	ug/L	1		NWTPH-Dx	Total/NA

## **Client Sample ID: TB01**

**Lab Sample ID: 570-38415-5**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: MW-15**

**Date Collected: 09/10/20 12:03**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	290		2.5	ug/L			09/17/20 18:48	5
Ethylbenzene	23		5.0	ug/L			09/17/20 18:48	5
o-Xylene	ND		5.0	ug/L			09/17/20 18:48	5
m,p-Xylene	11		10	ug/L			09/17/20 18:48	5
Methyl-t-Butyl Ether (MTBE)	ND		5.0	ug/L			09/17/20 18:48	5
Toluene	ND		5.0	ug/L			09/17/20 18:48	5
Xylenes, Total	ND		15	ug/L			09/17/20 18:48	5
1,2-Dibromoethane	ND		5.0	ug/L			09/17/20 18:48	5
1,2-Dichloroethane	ND		2.5	ug/L			09/17/20 18:48	5
Naphthalene	ND		50	ug/L			09/17/20 18:48	5
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	115		80 - 129				09/17/20 18:48	5
4-Bromofluorobenzene (Surr)	107		77 - 120				09/17/20 18:48	5
Dibromofluoromethane (Surr)	108		80 - 128				09/17/20 18:48	5
Toluene-d8 (Surr)	104		80 - 120				09/17/20 18:48	5

**Client Sample ID: MW-17**

**Date Collected: 09/10/20 13:23**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			09/17/20 19:15	1
Ethylbenzene	ND		1.0	ug/L			09/17/20 19:15	1
o-Xylene	ND		1.0	ug/L			09/17/20 19:15	1
m,p-Xylene	ND		2.0	ug/L			09/17/20 19:15	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/17/20 19:15	1
Toluene	ND		1.0	ug/L			09/17/20 19:15	1
Xylenes, Total	ND		3.0	ug/L			09/17/20 19:15	1
1,2-Dibromoethane	ND		1.0	ug/L			09/17/20 19:15	1
1,2-Dichloroethane	ND		0.50	ug/L			09/17/20 19:15	1
Naphthalene	ND		10	ug/L			09/17/20 19:15	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	117		80 - 129				09/17/20 19:15	1
4-Bromofluorobenzene (Surr)	106		77 - 120				09/17/20 19:15	1
Dibromofluoromethane (Surr)	108		80 - 128				09/17/20 19:15	1
Toluene-d8 (Surr)	105		80 - 120				09/17/20 19:15	1

**Client Sample ID: MW-19**

**Date Collected: 09/10/20 12:40**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.5		0.50	ug/L			09/17/20 19:42	1
Ethylbenzene	ND		1.0	ug/L			09/17/20 19:42	1
o-Xylene	ND		1.0	ug/L			09/17/20 19:42	1
m,p-Xylene	ND		2.0	ug/L			09/17/20 19:42	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/17/20 19:42	1
Toluene	ND		1.0	ug/L			09/17/20 19:42	1
Xylenes, Total	ND		3.0	ug/L			09/17/20 19:42	1
1,2-Dibromoethane	ND		1.0	ug/L			09/17/20 19:42	1

Eurofins Calscience LLC

# Client Sample Results

Client: GHD Services Inc.

Job ID: 570-38415-1

Project/Site: P66 Yakima / 11145929

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: MW-19**

**Date Collected: 09/10/20 12:40**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.50	ug/L			09/17/20 19:42	1
Naphthalene	ND		10	ug/L			09/17/20 19:42	1
<b>Surrogate</b>								
1,2-Dichloroethane-d4 (Surr)	115		80 - 129			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		77 - 120				09/17/20 19:42	1
Dibromofluoromethane (Surr)	105		80 - 128				09/17/20 19:42	1
Toluene-d8 (Surr)	105		80 - 120				09/17/20 19:42	1

**Client Sample ID: DUP-1**

**Date Collected: 09/10/20 12:00**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.5		0.50	ug/L			09/17/20 20:09	1
Ethylbenzene	ND		1.0	ug/L			09/17/20 20:09	1
o-Xylene	ND		1.0	ug/L			09/17/20 20:09	1
m,p-Xylene	ND		2.0	ug/L			09/17/20 20:09	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/17/20 20:09	1
Toluene	ND		1.0	ug/L			09/17/20 20:09	1
Xylenes, Total	ND		3.0	ug/L			09/17/20 20:09	1
1,2-Dibromoethane	ND		1.0	ug/L			09/17/20 20:09	1
1,2-Dichloroethane	ND		0.50	ug/L			09/17/20 20:09	1
Naphthalene	ND		10	ug/L			09/17/20 20:09	1
<b>Surrogate</b>								
1,2-Dichloroethane-d4 (Surr)	117		80 - 129			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		77 - 120				09/17/20 20:09	1
Dibromofluoromethane (Surr)	107		80 - 128				09/17/20 20:09	1
Toluene-d8 (Surr)	104		80 - 120				09/17/20 20:09	1

**Client Sample ID: TB01**

**Date Collected: 09/10/20 12:00**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			09/17/20 23:16	1
Ethylbenzene	ND		1.0	ug/L			09/17/20 23:16	1
o-Xylene	ND		1.0	ug/L			09/17/20 23:16	1
m,p-Xylene	ND		2.0	ug/L			09/17/20 23:16	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/17/20 23:16	1
Toluene	ND		1.0	ug/L			09/17/20 23:16	1
Xylenes, Total	ND		3.0	ug/L			09/17/20 23:16	1
1,2-Dibromoethane	ND		1.0	ug/L			09/17/20 23:16	1
1,2-Dichloroethane	ND		0.50	ug/L			09/17/20 23:16	1
Naphthalene	ND		10	ug/L			09/17/20 23:16	1
<b>Surrogate</b>								
1,2-Dichloroethane-d4 (Surr)	113		80 - 129			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		77 - 120				09/17/20 23:16	1
Dibromofluoromethane (Surr)	108		80 - 128				09/17/20 23:16	1
Toluene-d8 (Surr)	104		80 - 120				09/17/20 23:16	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

**Client Sample ID: MW-15**

**Date Collected: 09/10/20 12:03**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	2500	Z	100	ug/L			09/16/20 00:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	88		38 - 134				09/16/20 00:25	1

**Client Sample ID: MW-17**

**Date Collected: 09/10/20 13:23**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			09/16/20 00:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	72		38 - 134				09/16/20 00:50	1

**Client Sample ID: MW-19**

**Date Collected: 09/10/20 12:40**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			09/17/20 21:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	92		38 - 134				09/17/20 21:21	1

**Client Sample ID: DUP-1**

**Date Collected: 09/10/20 12:00**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			09/16/20 02:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	68		38 - 134				09/16/20 02:32	1

**Client Sample ID: TB01**

**Date Collected: 09/10/20 12:00**

**Date Received: 09/15/20 10:10**

**Lab Sample ID: 570-38415-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			09/15/20 21:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	65		38 - 134				09/15/20 21:52	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

<b>Client Sample ID: MW-15</b>							<b>Lab Sample ID: 570-38415-1</b> <b>Matrix: Water</b>			
<b>Date Collected: 09/10/20 12:03</b>										
<b>Date Received: 09/15/20 10:10</b>										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
TPH as Diesel Range	1800	Z	95	ug/L		09/17/20 09:06	09/19/20 09:30	1		
TPH as Motor Oil Range	ND		95	ug/L		09/17/20 09:06	09/19/20 09:30	1		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	119		68 - 140			09/17/20 09:06	09/19/20 09:30	1		
<b>Client Sample ID: MW-17</b>							<b>Lab Sample ID: 570-38415-2</b> <b>Matrix: Water</b>			
<b>Date Collected: 09/10/20 13:23</b>										
<b>Date Received: 09/15/20 10:10</b>										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
TPH as Diesel Range	250	Z	98	ug/L		09/17/20 09:06	09/19/20 18:35	1		
TPH as Motor Oil Range	ND		98	ug/L		09/17/20 09:06	09/19/20 18:35	1		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	130		68 - 140			09/17/20 09:06	09/19/20 18:35	1		
<b>Client Sample ID: MW-19</b>							<b>Lab Sample ID: 570-38415-3</b> <b>Matrix: Water</b>			
<b>Date Collected: 09/10/20 12:40</b>										
<b>Date Received: 09/15/20 10:10</b>										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
TPH as Diesel Range	400	Z	98	ug/L		09/17/20 09:06	09/19/20 18:58	1		
TPH as Motor Oil Range	ND		98	ug/L		09/17/20 09:06	09/19/20 18:58	1		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	131		68 - 140			09/17/20 09:06	09/19/20 18:58	1		
<b>Client Sample ID: DUP-1</b>							<b>Lab Sample ID: 570-38415-4</b> <b>Matrix: Water</b>			
<b>Date Collected: 09/10/20 12:00</b>										
<b>Date Received: 09/15/20 10:10</b>										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
TPH as Diesel Range	460	Z	99	ug/L		09/17/20 09:06	09/19/20 19:20	1		
TPH as Motor Oil Range	ND		99	ug/L		09/17/20 09:06	09/19/20 19:20	1		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	120		68 - 140			09/17/20 09:06	09/19/20 19:20	1		

# Surrogate Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-129)	BFB (77-120)	DBFM (80-128)	TOL (80-120)
570-38024-A-7 MS	Matrix Spike	109	114	108	102
570-38024-A-7 MSD	Matrix Spike Duplicate	107	114	109	102
570-38351-A-1 MS	Matrix Spike	110	114	108	103
570-38351-A-1 MSD	Matrix Spike Duplicate	111	115	111	101
570-38415-1	MW-15	115	107	108	104
570-38415-2	MW-17	117	106	108	105
570-38415-3	MW-19	115	108	105	105
570-38415-4	DUP-1	117	107	107	104
570-38415-5	TB01	113	108	108	104
LCS 570-95170/3	Lab Control Sample	108	114	109	103
LCS 570-95300/3	Lab Control Sample	110	113	111	101
LCSD 570-95170/4	Lab Control Sample Dup	107	113	107	102
LCSD 570-95300/4	Lab Control Sample Dup	108	115	109	102
MB 570-95170/6	Method Blank	113	109	105	104
MB 570-95300/6	Method Blank	114	108	108	104

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB1 (38-134)			
570-38415-1	MW-15	88			
570-38415-2	MW-17	72			
570-38415-2 MS	MW-17	74			
570-38415-2 MSD	MW-17	86			
570-38415-3	MW-19	92			
570-38415-4	DUP-1	68			
570-38415-5	TB01	65			
570-38506-A-1 MS	Matrix Spike	98			
570-38506-A-1 MSD	Matrix Spike Duplicate	98			
LCS 570-94678/3	Lab Control Sample	88			
LCS 570-95290/12	Lab Control Sample	100			
LCSD 570-94678/4	Lab Control Sample Dup	92			
LCSD 570-95290/13	Lab Control Sample Dup	100			
MB 570-94678/5	Method Blank	54			
MB 570-95290/14	Method Blank	93			

### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

# Surrogate Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

**Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)**

**Matrix: Water**

**Prep Type: Total/NA**

## Percent Surrogate Recovery (Acceptance Limits)

OTCSN  
(68-140)

Lab Sample ID	Client Sample ID	OTCSN (68-140)
570-38415-1	MW-15	119
570-38415-2	MW-17	130
570-38415-3	MW-19	131
570-38415-4	DUP-1	120
LCS 570-95178/2-A	Lab Control Sample	108
LCSD 570-95178/3-A	Lab Control Sample Dup	101
MB 570-95178/1-A	Method Blank	90

### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: GHD Services Inc.

Job ID: 570-38415-1

Project/Site: P66 Yakima / 11145929

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-95170/6**

**Matrix: Water**

**Analysis Batch: 95170**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			09/17/20 11:11	1
Ethylbenzene	ND		1.0	ug/L			09/17/20 11:11	1
o-Xylene	ND		1.0	ug/L			09/17/20 11:11	1
m,p-Xylene	ND		2.0	ug/L			09/17/20 11:11	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/17/20 11:11	1
Toluene	ND		1.0	ug/L			09/17/20 11:11	1
Xylenes, Total	ND		3.0	ug/L			09/17/20 11:11	1
1,2-Dibromoethane	ND		1.0	ug/L			09/17/20 11:11	1
1,2-Dichloroethane	ND		0.50	ug/L			09/17/20 11:11	1
Naphthalene	ND		10	ug/L			09/17/20 11:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		80 - 129		09/17/20 11:11	1
4-Bromofluorobenzene (Surr)	109		77 - 120		09/17/20 11:11	1
Dibromofluoromethane (Surr)	105		80 - 128		09/17/20 11:11	1
Toluene-d8 (Surr)	104		80 - 120		09/17/20 11:11	1

**Lab Sample ID: LCS 570-95170/3**

**Matrix: Water**

**Analysis Batch: 95170**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	53.17		ug/L		106	78 - 120
Ethylbenzene	50.0	52.24		ug/L		104	80 - 120
o-Xylene	50.0	52.10		ug/L		104	80 - 125
m,p-Xylene	100	102.8		ug/L		103	80 - 125
Methyl-t-Butyl Ether (MTBE)	50.0	47.40		ug/L		95	77 - 120
Toluene	50.0	53.59		ug/L		107	80 - 122
1,2-Dibromoethane	50.0	50.96		ug/L		102	80 - 120
1,2-Dichloroethane	50.0	52.62		ug/L		105	75 - 123
Naphthalene	50.0	49.49		ug/L		99	64 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		80 - 129
4-Bromofluorobenzene (Surr)	114		77 - 120
Dibromofluoromethane (Surr)	109		80 - 128
Toluene-d8 (Surr)	103		80 - 120

**Lab Sample ID: LCSD 570-95170/4**

**Matrix: Water**

**Analysis Batch: 95170**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	52.75		ug/L		105	78 - 120	1	21
Ethylbenzene	50.0	51.98		ug/L		104	80 - 120	0	20
o-Xylene	50.0	52.67		ug/L		105	80 - 125	1	20
m,p-Xylene	100	103.7		ug/L		104	80 - 125	1	30
Methyl-t-Butyl Ether (MTBE)	50.0	47.34		ug/L		95	77 - 120	0	24

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# QC Sample Results

Client: GHD Services Inc.

Job ID: 570-38415-1

Project/Site: P66 Yakima / 11145929

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-95170/4**

**Matrix: Water**

**Analysis Batch: 95170**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	50.0	53.35		ug/L		107	80 - 122	0	20
1,2-Dibromoethane	50.0	51.68		ug/L		103	80 - 120	1	30
1,2-Dichloroethane	50.0	51.44		ug/L		103	75 - 123	2	24
Naphthalene	50.0	53.93		ug/L		108	64 - 136	9	30

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	107		80 - 129
4-Bromofluorobenzene (Surr)	113		77 - 120
Dibromofluoromethane (Surr)	107		80 - 128
Toluene-d8 (Surr)	102		80 - 120

**Lab Sample ID: 570-38351-A-1 MS**

**Matrix: Water**

**Analysis Batch: 95170**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		50.0	53.27		ug/L		107	75 - 125
Ethylbenzene	ND		50.0	52.01		ug/L		104	75 - 125
o-Xylene	ND		50.0	52.51		ug/L		105	75 - 136
m,p-Xylene	ND		100	103.3		ug/L		103	75 - 133
Methyl-t-Butyl Ether (MTBE)	ND		50.0	49.11		ug/L		98	75 - 128
Toluene	ND		50.0	54.26		ug/L		109	75 - 125
1,2-Dibromoethane	ND		50.0	53.35		ug/L		107	75 - 125
1,2-Dichloroethane	ND		50.0	54.27		ug/L		109	75 - 125
Naphthalene	ND		50.0	49.81		ug/L		100	71 - 131

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	110		80 - 129
4-Bromofluorobenzene (Surr)	114		77 - 120
Dibromofluoromethane (Surr)	108		80 - 128
Toluene-d8 (Surr)	103		80 - 120

**Lab Sample ID: 570-38351-A-1 MSD**

**Matrix: Water**

**Analysis Batch: 95170**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		50.0	52.06		ug/L		104	75 - 125	2	20
Ethylbenzene	ND		50.0	51.00		ug/L		102	75 - 125	2	20
o-Xylene	ND		50.0	51.26		ug/L		103	75 - 136	2	20
m,p-Xylene	ND		100	100.4		ug/L		100	75 - 133	3	20
Methyl-t-Butyl Ether (MTBE)	ND		50.0	49.38		ug/L		99	75 - 128	1	20
Toluene	ND		50.0	52.57		ug/L		105	75 - 125	3	20
1,2-Dibromoethane	ND		50.0	53.12		ug/L		106	75 - 125	0	20
1,2-Dichloroethane	ND		50.0	53.48		ug/L		107	75 - 125	1	20
Naphthalene	ND		50.0	52.68		ug/L		105	71 - 131	6	20

# QC Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-38351-A-1 MSD**

**Matrix: Water**

**Analysis Batch: 95170**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	111		80 - 129
4-Bromofluorobenzene (Surr)	115		77 - 120
Dibromofluoromethane (Surr)	111		80 - 128
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: MB 570-95300/6**

**Matrix: Water**

**Analysis Batch: 95300**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	ND		0.50	ug/L			09/17/20 22:49	1
Ethylbenzene	ND		1.0	ug/L			09/17/20 22:49	1
o-Xylene	ND		1.0	ug/L			09/17/20 22:49	1
m,p-Xylene	ND		2.0	ug/L			09/17/20 22:49	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/17/20 22:49	1
Toluene	ND		1.0	ug/L			09/17/20 22:49	1
Xylenes, Total	ND		3.0	ug/L			09/17/20 22:49	1
1,2-Dibromoethane	ND		1.0	ug/L			09/17/20 22:49	1
1,2-Dichloroethane	ND		0.50	ug/L			09/17/20 22:49	1
Naphthalene	ND		10	ug/L			09/17/20 22:49	1

**MB MB**

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	114		80 - 129			1
4-Bromofluorobenzene (Surr)	108		77 - 120			1
Dibromofluoromethane (Surr)	108		80 - 128			1
Toluene-d8 (Surr)	104		80 - 120			1

**Lab Sample ID: LCS 570-95300/3**

**Matrix: Water**

**Analysis Batch: 95300**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
	Added	Result	Qualifier					
Benzene	50.0	51.46		ug/L		103	78 - 120	
Ethylbenzene	50.0	49.39		ug/L		99	80 - 120	
o-Xylene	50.0	50.08		ug/L		100	80 - 125	
m,p-Xylene	100	98.01		ug/L		98	80 - 125	
Methyl-t-Butyl Ether (MTBE)	50.0	49.82		ug/L		100	77 - 120	
Toluene	50.0	51.70		ug/L		103	80 - 122	
1,2-Dibromoethane	50.0	52.40		ug/L		105	80 - 120	
1,2-Dichloroethane	50.0	52.33		ug/L		105	75 - 123	
Naphthalene	50.0	52.10		ug/L		104	64 - 136	

**LCS LCS**

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	110		80 - 129
4-Bromofluorobenzene (Surr)	113		77 - 120
Dibromofluoromethane (Surr)	111		80 - 128
Toluene-d8 (Surr)	101		80 - 120

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# QC Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-95300/4**

**Matrix: Water**

**Analysis Batch: 95300**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	52.65		ug/L		105	78 - 120	2	21
Ethylbenzene	50.0	50.27		ug/L		101	80 - 120	2	20
o-Xylene	50.0	51.03		ug/L		102	80 - 125	2	20
m,p-Xylene	100	98.88		ug/L		99	80 - 125	1	30
Methyl-t-Butyl Ether (MTBE)	50.0	48.78		ug/L		98	77 - 120	2	24
Toluene	50.0	52.67		ug/L		105	80 - 122	2	20
1,2-Dibromoethane	50.0	53.48		ug/L		107	80 - 120	2	30
1,2-Dichloroethane	50.0	53.69		ug/L		107	75 - 123	3	24
Naphthalene	50.0	53.38		ug/L		107	64 - 136	2	30

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	108		80 - 129
4-Bromofluorobenzene (Surr)	115		77 - 120
Dibromofluoromethane (Surr)	109		80 - 128
Toluene-d8 (Surr)	102		80 - 120

**Lab Sample ID: 570-38024-A-7 MS**

**Matrix: Water**

**Analysis Batch: 95300**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	4.5		50.0	57.32		ug/L		106	75 - 125
Ethylbenzene	ND		50.0	50.73		ug/L		101	75 - 125
o-Xylene	ND		50.0	50.75		ug/L		102	75 - 136
m,p-Xylene	ND		100	99.03		ug/L		99	75 - 133
Methyl-t-Butyl Ether (MTBE)	ND		50.0	49.29		ug/L		99	75 - 128
Toluene	ND		50.0	53.88		ug/L		107	75 - 125
1,2-Dibromoethane	ND		50.0	52.33		ug/L		105	75 - 125
1,2-Dichloroethane	ND		50.0	54.92		ug/L		110	75 - 125
Naphthalene	ND		50.0	56.37		ug/L		113	71 - 131

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	109		80 - 129
4-Bromofluorobenzene (Surr)	114		77 - 120
Dibromofluoromethane (Surr)	108		80 - 128
Toluene-d8 (Surr)	102		80 - 120

**Lab Sample ID: 570-38024-A-7 MSD**

**Matrix: Water**

**Analysis Batch: 95300**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	4.5		50.0	56.59		ug/L		104	75 - 125	1	20
Ethylbenzene	ND		50.0	50.25		ug/L		100	75 - 125	1	20
o-Xylene	ND		50.0	50.60		ug/L		101	75 - 136	0	20
m,p-Xylene	ND		100	98.11		ug/L		98	75 - 133	1	20
Methyl-t-Butyl Ether (MTBE)	ND		50.0	49.30		ug/L		99	75 - 128	0	20
Toluene	ND		50.0	52.78		ug/L		105	75 - 125	2	20

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# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-38024-A-7 MSD**

**Matrix: Water**

**Analysis Batch: 95300**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
1,2-Dibromoethane	ND		50.0	53.09		ug/L	106	75 - 125	1	20
1,2-Dichloroethane	ND		50.0	54.37		ug/L	109	75 - 125	1	20
Naphthalene	ND		50.0	58.69		ug/L	117	71 - 131	4	20

Surrogate	MSD		%Recovery	Qualifier	Limits
	MB	MB			
1,2-Dichloroethane-d4 (Surr)	107				80 - 129
4-Bromofluorobenzene (Surr)	114				77 - 120
Dibromofluoromethane (Surr)	109				80 - 128
Toluene-d8 (Surr)	102				80 - 120

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

**Lab Sample ID: MB 570-94678/5**

**Matrix: Water**

**Analysis Batch: 94678**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	Result	MB Qualifier	MB RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			09/15/20 16:02	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	54		38 - 134		09/15/20 16:02	1

**Lab Sample ID: LCS 570-94678/3**

**Matrix: Water**

**Analysis Batch: 94678**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	RPD
TPH as Gasoline (C4-C13)		2020	2351		ug/L	117	78 - 120	

Surrogate	LCS %Recovery	LCS Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		38 - 134		09/15/20 16:02	1

**Lab Sample ID: LCSD 570-94678/4**

**Matrix: Water**

**Analysis Batch: 94678**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
TPH as Gasoline (C4-C13)		2020	2385		ug/L	118	78 - 120	1

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		38 - 134		09/15/20 16:02	1

**Lab Sample ID: 570-38415-2 MS**

**Matrix: Water**

**Analysis Batch: 94678**

**Client Sample ID: MW-17**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	RPD
TPH as Gasoline (C4-C13)	ND		2020	2352		ug/L	115	68 - 122	

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# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Surrogate	MS	MS
	%Recovery	Qualifier
4-Bromofluorobenzene (Surr)	74	Limits 38 - 134

Lab Sample ID: 570-38415-2 MSD

Matrix: Water

Analysis Batch: 94678

Client Sample ID: MW-17  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
TPH as Gasoline (C4-C13)	ND		2020	2297		ug/L		112	68 - 122	2 18

Surrogate	MSD	MSD
	%Recovery	Qualifier
4-Bromofluorobenzene (Surr)	86	Limits 38 - 134

Lab Sample ID: MB 570-95290/14

Matrix: Water

Analysis Batch: 95290

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			09/17/20 15:28	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac

Lab Sample ID: LCS 570-95290/12

Matrix: Water

Analysis Batch: 95290

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
TPH as Gasoline (C4-C13)		2020	2025		ug/L		100	78 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits					

Lab Sample ID: LCSD 570-95290/13

Matrix: Water

Analysis Batch: 95290

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
TPH as Gasoline (C4-C13)		2020	2142		ug/L		106	78 - 120	6	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits							

Lab Sample ID: 570-38506-A-1 MS

Matrix: Water

Analysis Batch: 95290

Client Sample ID: Matrix Spike  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
TPH as Gasoline (C4-C13)	ND		2020	2172		ug/L		108	68 - 122

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

**Lab Sample ID: 570-38506-A-1 MS**

**Matrix: Water**

**Analysis Batch: 95290**

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	98		38 - 134

**Client Sample ID: Matrix Spike  
Prep Type: Total/NA**

**Lab Sample ID: 570-38506-A-1 MSD**

**Matrix: Water**

**Analysis Batch: 95290**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD	Limit
TPH as Gasoline (C4-C13)	ND		2020	2051		ug/L	102	68 - 122	6		18
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	98		38 - 134								

**Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA**

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

**Lab Sample ID: MB 570-95178/1-A**

**Matrix: Water**

**Analysis Batch: 95707**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		100	ug/L		09/17/20 09:06	09/19/20 08:24	1
TPH as Motor Oil Range	ND		100	ug/L		09/17/20 09:06	09/19/20 08:24	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	90		68 - 140			09/17/20 09:06	09/19/20 08:24	1

**Lab Sample ID: LCS 570-95178/2-A**

**Matrix: Water**

**Analysis Batch: 95707**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.
C10-C28	800	839.3		ug/L	105	75 - 117
Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits			
n-Octacosane (Surr)	108		68 - 140			

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 95178**

**Lab Sample ID: LCSD 570-95178/3-A**

**Matrix: Water**

**Analysis Batch: 95707**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
C10-C28	800	774.6		ug/L	97	75 - 117	8
Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits				
n-Octacosane (Surr)	101		68 - 140				

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 95178**

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## GC/MS VOA

### Analysis Batch: 95170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38415-1	MW-15	Total/NA	Water	8260B	1
570-38415-2	MW-17	Total/NA	Water	8260B	2
570-38415-3	MW-19	Total/NA	Water	8260B	3
570-38415-4	DUP-1	Total/NA	Water	8260B	4
MB 570-95170/6	Method Blank	Total/NA	Water	8260B	5
LCS 570-95170/3	Lab Control Sample	Total/NA	Water	8260B	6
LCSD 570-95170/4	Lab Control Sample Dup	Total/NA	Water	8260B	7
570-38351-A-1 MS	Matrix Spike	Total/NA	Water	8260B	8
570-38351-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	9

### Analysis Batch: 95300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38415-5	TB01	Total/NA	Water	8260B	10
MB 570-95300/6	Method Blank	Total/NA	Water	8260B	11
LCS 570-95300/3	Lab Control Sample	Total/NA	Water	8260B	12
LCSD 570-95300/4	Lab Control Sample Dup	Total/NA	Water	8260B	13
570-38024-A-7 MS	Matrix Spike	Total/NA	Water	8260B	14
570-38024-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	15

## GC VOA

### Analysis Batch: 94678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38415-1	MW-15	Total/NA	Water	NWTPH-Gx	1
570-38415-2	MW-17	Total/NA	Water	NWTPH-Gx	2
570-38415-4	DUP-1	Total/NA	Water	NWTPH-Gx	3
570-38415-5	TB01	Total/NA	Water	NWTPH-Gx	4
MB 570-94678/5	Method Blank	Total/NA	Water	NWTPH-Gx	5
LCS 570-94678/3	Lab Control Sample	Total/NA	Water	NWTPH-Gx	6
LCSD 570-94678/4	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	7
570-38415-2 MS	MW-17	Total/NA	Water	NWTPH-Gx	8
570-38415-2 MSD	MW-17	Total/NA	Water	NWTPH-Gx	9

### Analysis Batch: 95290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38415-3	MW-19	Total/NA	Water	NWTPH-Gx	1
MB 570-95290/14	Method Blank	Total/NA	Water	NWTPH-Gx	2
LCS 570-95290/12	Lab Control Sample	Total/NA	Water	NWTPH-Gx	3
LCSD 570-95290/13	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	4
570-38506-A-1 MS	Matrix Spike	Total/NA	Water	NWTPH-Gx	5
570-38506-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	NWTPH-Gx	6

## GC Semi VOA

### Prep Batch: 95178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38415-1	MW-15	Total/NA	Water	3510C	1
570-38415-2	MW-17	Total/NA	Water	3510C	2
570-38415-3	MW-19	Total/NA	Water	3510C	3
570-38415-4	DUP-1	Total/NA	Water	3510C	4
MB 570-95178/1-A	Method Blank	Total/NA	Water	3510C	5
LCS 570-95178/2-A	Lab Control Sample	Total/NA	Water	3510C	6

Eurofins Calscience LLC

# QC Association Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## GC Semi VOA (Continued)

### Prep Batch: 95178 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 570-95178/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 95707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38415-1	MW-15	Total/NA	Water	NWTPH-Dx	95178
MB 570-95178/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	95178
LCS 570-95178/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	95178
LCSD 570-95178/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	95178

### Analysis Batch: 95851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38415-2	MW-17	Total/NA	Water	NWTPH-Dx	95178
570-38415-3	MW-19	Total/NA	Water	NWTPH-Dx	95178
570-38415-4	DUP-1	Total/NA	Water	NWTPH-Dx	95178

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

**Client Sample ID: MW-15**

**Lab Sample ID: 570-38415-1**

Matrix: Water

Date Collected: 09/10/20 12:03

Date Received: 09/15/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	95170	09/17/20 18:48	J78Y	ECL 2
		Instrument ID: GCMSQQ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	94678	09/16/20 00:25	W6MG	ECL 2
		Instrument ID: GC42								
Total/NA	Prep	3510C			523.9 mL	5 mL	95178	09/17/20 09:06	UFLU	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			95707	09/19/20 09:30	UJ3K	ECL 1
		Instrument ID: GC46								

**Client Sample ID: MW-17**

**Lab Sample ID: 570-38415-2**

Matrix: Water

Date Collected: 09/10/20 13:23

Date Received: 09/15/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	95170	09/17/20 19:15	J78Y	ECL 2
		Instrument ID: GCMSQQ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	94678	09/16/20 00:50	W6MG	ECL 2
		Instrument ID: GC42								
Total/NA	Prep	3510C			508.8 mL	5 mL	95178	09/17/20 09:06	UFLU	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			95851	09/19/20 18:35	UJ3K	ECL 1
		Instrument ID: GC46								

**Client Sample ID: MW-19**

**Lab Sample ID: 570-38415-3**

Matrix: Water

Date Collected: 09/10/20 12:40

Date Received: 09/15/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	95170	09/17/20 19:42	J78Y	ECL 2
		Instrument ID: GCMSQQ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	95290	09/17/20 21:21	HKC	ECL 2
		Instrument ID: GC53								
Total/NA	Prep	3510C			510.3 mL	5 mL	95178	09/17/20 09:06	UFLU	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			95851	09/19/20 18:58	UJ3K	ECL 1
		Instrument ID: GC46								

**Client Sample ID: DUP-1**

**Lab Sample ID: 570-38415-4**

Matrix: Water

Date Collected: 09/10/20 12:00

Date Received: 09/15/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	95170	09/17/20 20:09	J78Y	ECL 2
		Instrument ID: GCMSQQ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	94678	09/16/20 02:32	W6MG	ECL 2
		Instrument ID: GC42								
Total/NA	Prep	3510C			507.6 mL	5 mL	95178	09/17/20 09:06	UFLU	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			95851	09/19/20 19:20	UJ3K	ECL 1
		Instrument ID: GC46								

Eurofins Calscience LLC

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

**Client Sample ID: TB01**

**Lab Sample ID: 570-38415-5**

**Matrix: Water**

Date Collected: 09/10/20 12:00

Date Received: 09/15/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: GCMSQQ		1	5 mL	5 mL	95300	09/17/20 23:16	J78Y	ECL 2
Total/NA	Analysis	NWTPH-Gx Instrument ID: GC42		1	5 mL	5 mL	94678	09/15/20 21:52	W6MG	ECL 2

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

## Method Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ECL 2
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	ECL 1
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2

### Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Sample Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-38415-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-38415-1	MW-15	Water	09/10/20 12:03	09/15/20 10:10	
570-38415-2	MW-17	Water	09/10/20 13:23	09/15/20 10:10	
570-38415-3	MW-19	Water	09/10/20 12:40	09/15/20 10:10	
570-38415-4	DUP-1	Water	09/10/20 12:00	09/15/20 10:10	
570-38415-5	TB01	Water	09/10/20 12:00	09/15/20 10:10	

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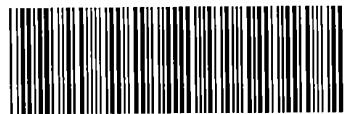
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Calscience



570-38415 Chain of Custody

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494  
 For courier service / sample drop off information, contact us26\_sales@eurofinsus.com or call us.

## CHAIN OF CUSTODY RECORD

DATE: 9/10/20

PAGE: 1 OF 1

LABORATORY CLIENT: 6HD		CLIENT PROJECT NAME / NUMBER: 11145929		P.O. NO.:																																	
ADDRESS: 920 N 6th Ave		PROJECT CONTACT: Matt Davis		SAMPLER(S): (PRINT) Foster Koetz																																	
CITY: Yakima	STATE: WA	ZIP:																																			
TEL: (253) 302-8281	E-MAIL:	REQUESTED ANALYSES																																			
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD			Please check box or fill in blank as needed.																																		
<input type="checkbox"/> COELT EDF	GLOBAL ID:	LOG CODE:																																			
SPECIAL INSTRUCTIONS:																																					
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH(g)	GRO	DRC	TPH	C6-C36	C6-C44	TPH = 0	BTEX / MTBE	X 8260	VOCs (8260)	Oxygenates (8260)	Prep (5035)	En Core	Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs:	8270	8270 SIM	T22 Metals:	6010/747X	6020/747X	Cr(VI):	7196	7199	218.6	Naphthalene	
		DATE	TIME																																		
1	MW-15	9/10/20	1203	GW	8	2	6	X	X	X	X	X	X	X	X	X	X	X	X	Oxygenates (8260)	Prep (5035)	En Core	Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs:	8270	8270 SIM	T22 Metals:	6010/747X	6020/747X	Cr(VI):	7196	7199	218.6	Naphthalene
2	MW-17	9/10/20	1323	GW	8	2	8	X	X	X	X	X	X	X	X	X	X	X	X	Oxygenates (8260)	Prep (5035)	En Core	Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs:	8270	8270 SIM	T22 Metals:	6010/747X	6020/747X	Cr(VI):	7196	7199	218.6	Naphthalene
3	MW-19	9/10/20	1240	GW	8	2	6	X	X	X	X	X	X	X	X	X	X	X	X	Oxygenates (8260)	Prep (5035)	En Core	Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs:	8270	8270 SIM	T22 Metals:	6010/747X	6020/747X	Cr(VI):	7196	7199	218.6	Naphthalene
4	DiP-1	9/10/20	1200	GW	8	2	6	X	X	X	X	X	X	X	X	X	X	X	X	Oxygenates (8260)	Prep (5035)	En Core	Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs:	8270	8270 SIM	T22 Metals:	6010/747X	6020/747X	Cr(VI):	7196	7199	218.6	Naphthalene
5	TB01	9/10/20	1203	GW	3	3	X	X	X	X	X	X	X	X	X	X	X	X	X	Oxygenates (8260)	Prep (5035)	En Core	Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs:	8270	8270 SIM	T22 Metals:	6010/747X	6020/747X	Cr(VI):	7196	7199	218.6	Naphthalene
Relinquished by: (Signature) 						Received by: (Signature/Affiliation) Shipped via FedEx						Date: 9/11/20	Time: 1515																								
Relinquished by: (Signature)						Received by: (Signature/Affiliation) Jenay						Date: 9/15/2020	Time: 10:10																								
Relinquished by: (Signature)						Received by: (Signature/Affiliation)						Date:	Time:																								

## Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-38415-1

**Login Number:** 38415

**List Source:** Eurofins Calscience

**List Number:** 1

**Creator:** Patel, Jayesh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Environment Testing America



# ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-43448-1

Client Project/Site: P66 Yakima 11210594/ 11145929

For:

GHD Services Inc.  
20818 44th Ave W  
Suite 190  
Lynnwood, Washington 98036

Attn: Heather Gadwa

*Vik Patel*

Authorized for release by:  
11/18/2020 12:39:12 PM

Vikas Patel, Project Manager I  
(714)895-5494  
[vikas.patel@eurofinset.com](mailto:vikas.patel@eurofinset.com)

### LINKS

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results through

**Total Access**

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The  
Expert

Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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# Definitions/Glossary

Client: GHD Services Inc.

Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

## Glossary

### Abbreviation

These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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# Case Narrative

Client: GHD Services Inc.  
Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

**Job ID: 570-43448-1**

**Laboratory: Eurofins Calscience LLC**

## Narrative

**Job Narrative  
570-43448-1**

## Comments

No additional comments.

## Receipt

The samples were received on 11/11/2020 9:45 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.8° C.

## HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## Detection Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

**Client Sample ID: GW-11210594-111020-DT-MW19**

**Lab Sample ID: 570-43448-1**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	2600		100	ug/L	1		300.0	Total/NA
Sulfate	14000		1000	ug/L	1		300.0	Total/NA

**Client Sample ID: GW-11210594-111020-DT-MW15**

**Lab Sample ID: 570-43448-2**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	1100		1000	ug/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

## Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: GW-11210594-111020-DT-MW19

Date Collected: 11/10/20 08:00

Date Received: 11/11/20 09:45

Lab Sample ID: 570-43448-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2600		100	ug/L			11/11/20 14:57	1
Sulfate	14000		1000	ug/L			11/11/20 14:57	1

Client Sample ID: GW-11210594-111020-DT-MW15

Date Collected: 11/10/20 08:30

Date Received: 11/11/20 09:45

Lab Sample ID: 570-43448-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		100	ug/L			11/11/20 15:18	1
Sulfate	1100		1000	ug/L			11/11/20 15:18	1

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID:** MB 570-108648/5

**Matrix:** Water

**Analysis Batch:** 108648

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		100	ug/L			11/11/20 08:49	1

**Lab Sample ID:** LCS 570-108648/6

**Matrix:** Water

**Analysis Batch:** 108648

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Nitrate as N	5000	5282		ug/L	106	90 - 110	

**Lab Sample ID:** LCSD 570-108648/7

**Matrix:** Water

**Analysis Batch:** 108648

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Nitrate as N	5000	5300		ug/L	106	90 - 110		0	15

**Lab Sample ID:** 570-43413-F-2 MS

**Matrix:** Water

**Analysis Batch:** 108648

**Client Sample ID:** Matrix Spike  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Nitrate as N	ND		5000	5461		ug/L	109	80 - 120	

**Lab Sample ID:** 570-43413-F-2 MSD

**Matrix:** Water

**Analysis Batch:** 108648

**Client Sample ID:** Matrix Spike Duplicate  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Nitrate as N	ND		5000	5584		ug/L	112	80 - 120		2	20

**Lab Sample ID:** MB 570-108649/5

**Matrix:** Water

**Analysis Batch:** 108649

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1000	ug/L			11/11/20 08:49	1

**Lab Sample ID:** LCS 570-108649/6

**Matrix:** Water

**Analysis Batch:** 108649

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfate	50000	49180		ug/L	98	90 - 110	

**Lab Sample ID:** LCSD 570-108649/7

**Matrix:** Water

**Analysis Batch:** 108649

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Sulfate	50000	49350		ug/L	99	90 - 110		0	15

Eurofins Calscience LLC

# QC Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 570-43413-F-2 MS

Matrix: Water

Analysis Batch: 108649

Client Sample ID: Matrix Spike  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits		
Sulfate	ND		50000	50360		ug/L	100	80 - 120			

Lab Sample ID: 570-43413-F-2 MSD

Matrix: Water

Analysis Batch: 108649

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Sulfate	ND		50000	51350		ug/L	102	80 - 120		2	20

# QC Association Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

## HPLC/IC

### Analysis Batch: 108648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-43448-1	GW-11210594-111020-DT-MW19	Total/NA	Water	300.0	
570-43448-2	GW-11210594-111020-DT-MW15	Total/NA	Water	300.0	
MB 570-108648/5	Method Blank	Total/NA	Water	300.0	
LCS 570-108648/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-108648/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-43413-F-2 MS	Matrix Spike	Total/NA	Water	300.0	
570-43413-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

### Analysis Batch: 108649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-43448-1	GW-11210594-111020-DT-MW19	Total/NA	Water	300.0	
570-43448-2	GW-11210594-111020-DT-MW15	Total/NA	Water	300.0	
MB 570-108649/5	Method Blank	Total/NA	Water	300.0	
LCS 570-108649/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-108649/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-43413-F-2 MS	Matrix Spike	Total/NA	Water	300.0	
570-43413-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

# Lab Chronicle

Client: GHD Services Inc.

Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

**Client Sample ID: GW-11210594-111020-DT-MW19**

**Lab Sample ID: 570-43448-1**

**Matrix: Water**

Date Collected: 11/10/20 08:00

Date Received: 11/11/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			108648	11/11/20 14:57	URMH	ECL 1
		Instrument ID: IC15								
Total/NA	Analysis	300.0		1			108649	11/11/20 14:57	URMH	ECL 1
		Instrument ID: IC15								

**Client Sample ID: GW-11210594-111020-DT-MW15**

**Lab Sample ID: 570-43448-2**

**Matrix: Water**

Date Collected: 11/10/20 08:30

Date Received: 11/11/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			108648	11/11/20 15:18	URMH	ECL 1
		Instrument ID: IC15								
Total/NA	Analysis	300.0		1			108649	11/11/20 15:18	URMH	ECL 1
		Instrument ID: IC15								

## Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

## Accreditation/Certification Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

### Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-30-21
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

## Method Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	ECL 1

**Protocol References:**

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Sample Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima 11210594/ 11145929

Job ID: 570-43448-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-43448-1	GW-11210594-111020-DT-MW19	Water	11/10/20 08:00	11/11/20 09:45	
570-43448-2	GW-11210594-111020-DT-MW15	Water	11/10/20 08:30	11/11/20 09:45	

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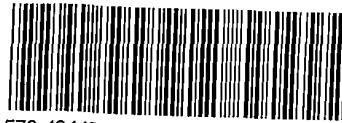
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Calscience



570-43448 Chain of Custody

## **CHAIN OF CUSTODY RECORD**

DATE: 11.10.2020

PAGE: \_\_\_\_\_ OF \_\_\_\_\_

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

For courier service / sample drop off information, contact us26\_sales@eurofinsus.com or call us

## Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-43448-1

**Login Number:** 43448

**List Source:** Eurofins Calscience

**List Number:** 1

**Creator:** Liao, Gineyau

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing  
America



## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-45124-1  
Client Project/Site: P66 Yakima / 11145929

For:  
GHD Services Inc.  
3600 Port of Tacoma Road  
Tacoma, Washington 98424

Attn: Matt Davis

*Vik Patel*

---

Authorized for release by:  
12/9/2020 11:28:42 AM

Vikas Patel, Project Manager I  
(714)895-5494  
[vikas.patel@eurofinset.com](mailto:vikas.patel@eurofinset.com)

### LINKS

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results through

**TotalAccess**

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The  
Expert

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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	1
D	Listed under the "D" column to designate that the result is reported on a dry weight basis	2
%R	Percent Recovery	3
CFL	Contains Free Liquid	4
CFU	Colony Forming Unit	5
CNF	Contains No Free Liquid	6
DER	Duplicate Error Ratio (normalized absolute difference)	7
Dil Fac	Dilution Factor	8
DL	Detection Limit (DoD/DOE)	9
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	10
DLC	Decision Level Concentration (Radiochemistry)	11
EDL	Estimated Detection Limit (Dioxin)	12
LOD	Limit of Detection (DoD/DOE)	13
LOQ	Limit of Quantitation (DoD/DOE)	14
MCL	EPA recommended "Maximum Contaminant Level"	15
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	
TNTC	Too Numerous To Count	

# Case Narrative

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

**Job ID: 570-45124-1**

**Laboratory: Eurofins Calscience LLC**

## Narrative

**Job Narrative  
570-45124-1**

## Comments

No additional comments.

## Receipt

The samples were received on 12/2/2020 1:00 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9° C.

## GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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## Detection Summary

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

### **Client Sample ID: MW-15**

### **Lab Sample ID: 570-45124-1**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	51		0.50	ug/L	1		8260B	Total/NA
TPH as Gasoline (C4-C13)	260		100	ug/L	1		NWTPH-Gx	Total/NA
TPH as Diesel Range	11000		970	ug/L	10		NWTPH-Dx	Total/NA
TPH as Motor Oil Range	110		97	ug/L	1		NWTPH-Dx	Total/NA
Sulfate	39000		1000	ug/L	1		300.0	Total/NA

### **Client Sample ID: MW-17**

### **Lab Sample ID: 570-45124-2**

No Detections.

### **Client Sample ID: MW-19**

### **Lab Sample ID: 570-45124-3**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.68		0.50	ug/L	1		8260B	Total/NA
TPH as Diesel Range	150		93	ug/L	1		NWTPH-Dx	Total/NA
Nitrate as N	1900		100	ug/L	1		300.0	Total/NA
Sulfate	20000		1000	ug/L	1		300.0	Total/NA

### **Client Sample ID: DUP-1**

### **Lab Sample ID: 570-45124-4**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.73		0.50	ug/L	1		8260B	Total/NA
TPH as Diesel Range	150		98	ug/L	1		NWTPH-Dx	Total/NA

### **Client Sample ID: TB-1**

### **Lab Sample ID: 570-45124-5**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: MW-15**

**Date Collected: 12/01/20 11:19**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	51		0.50	ug/L			12/04/20 13:05	1
Ethylbenzene	ND		1.0	ug/L			12/04/20 13:05	1
o-Xylene	ND		1.0	ug/L			12/04/20 13:05	1
m,p-Xylene	ND		2.0	ug/L			12/04/20 13:05	1
Toluene	ND		1.0	ug/L			12/04/20 13:05	1
Xylenes, Total	ND		2.0	ug/L			12/04/20 13:05	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	105		80 - 129				12/04/20 13:05	1
4-Bromofluorobenzene (Surr)	99		77 - 120				12/04/20 13:05	1
Dibromofluoromethane (Surr)	95		80 - 128				12/04/20 13:05	1
Toluene-d8 (Surr)	95		80 - 120				12/04/20 13:05	1

**Client Sample ID: MW-17**

**Date Collected: 12/01/20 09:38**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			12/03/20 20:11	1
Ethylbenzene	ND		1.0	ug/L			12/03/20 20:11	1
o-Xylene	ND		1.0	ug/L			12/03/20 20:11	1
m,p-Xylene	ND		2.0	ug/L			12/03/20 20:11	1
Toluene	ND		1.0	ug/L			12/03/20 20:11	1
Xylenes, Total	ND		2.0	ug/L			12/03/20 20:11	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	103		80 - 129				12/03/20 20:11	1
4-Bromofluorobenzene (Surr)	98		77 - 120				12/03/20 20:11	1
Dibromofluoromethane (Surr)	92		80 - 128				12/03/20 20:11	1
Toluene-d8 (Surr)	95		80 - 120				12/03/20 20:11	1

**Client Sample ID: MW-19**

**Date Collected: 12/01/20 10:22**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.68		0.50	ug/L			12/03/20 20:38	1
Ethylbenzene	ND		1.0	ug/L			12/03/20 20:38	1
o-Xylene	ND		1.0	ug/L			12/03/20 20:38	1
m,p-Xylene	ND		2.0	ug/L			12/03/20 20:38	1
Toluene	ND		1.0	ug/L			12/03/20 20:38	1
Xylenes, Total	ND		2.0	ug/L			12/03/20 20:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	103		80 - 129				12/03/20 20:38	1
4-Bromofluorobenzene (Surr)	98		77 - 120				12/03/20 20:38	1
Dibromofluoromethane (Surr)	92		80 - 128				12/03/20 20:38	1
Toluene-d8 (Surr)	96		80 - 120				12/03/20 20:38	1

# Client Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: DUP-1**

**Date Collected: 12/01/20 00:00**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.73		0.50	ug/L			12/03/20 21:05	1
Ethylbenzene	ND		1.0	ug/L			12/03/20 21:05	1
o-Xylene	ND		1.0	ug/L			12/03/20 21:05	1
m,p-Xylene	ND		2.0	ug/L			12/03/20 21:05	1
Toluene	ND		1.0	ug/L			12/03/20 21:05	1
Xylenes, Total	ND		2.0	ug/L			12/03/20 21:05	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	103		80 - 129				12/03/20 21:05	1
4-Bromofluorobenzene (Surr)	97		77 - 120				12/03/20 21:05	1
Dibromofluoromethane (Surr)	92		80 - 128				12/03/20 21:05	1
Toluene-d8 (Surr)	95		80 - 120				12/03/20 21:05	1

**Client Sample ID: TB-1**

**Date Collected: 12/01/20 09:00**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			12/04/20 00:15	1
Ethylbenzene	ND		1.0	ug/L			12/04/20 00:15	1
o-Xylene	ND		1.0	ug/L			12/04/20 00:15	1
m,p-Xylene	ND		2.0	ug/L			12/04/20 00:15	1
Toluene	ND		1.0	ug/L			12/04/20 00:15	1
Xylenes, Total	ND		2.0	ug/L			12/04/20 00:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	104		80 - 129				12/04/20 00:15	1
4-Bromofluorobenzene (Surr)	98		77 - 120				12/04/20 00:15	1
Dibromofluoromethane (Surr)	95		80 - 128				12/04/20 00:15	1
Toluene-d8 (Surr)	95		80 - 120				12/04/20 00:15	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

**Client Sample ID: MW-15**

**Date Collected: 12/01/20 11:19**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	260		100	ug/L			12/04/20 18:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	77		50 - 150				12/04/20 18:23	1

**Client Sample ID: MW-17**

**Date Collected: 12/01/20 09:38**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			12/04/20 17:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	67		50 - 150				12/04/20 17:58	1

**Client Sample ID: MW-19**

**Date Collected: 12/01/20 10:22**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			12/04/20 16:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	67		50 - 150				12/04/20 16:44	1

**Client Sample ID: DUP-1**

**Date Collected: 12/01/20 00:00**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			12/04/20 18:47	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	67		50 - 150				12/04/20 18:47	1

**Client Sample ID: TB-1**

**Date Collected: 12/01/20 09:00**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			12/04/20 15:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	69		50 - 150				12/04/20 15:54	1

# Client Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

**Client Sample ID: MW-15**

**Date Collected: 12/01/20 11:19**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	11000		970	ug/L		12/07/20 13:12	12/08/20 18:16	10
TPH as Motor Oil Range	110		97	ug/L		12/07/20 13:12	12/08/20 01:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)	87		50 - 150			12/07/20 13:12	12/08/20 01:56	1
n-Octacosane (Surr)	60		50 - 150			12/07/20 13:12	12/08/20 18:16	10

**Client Sample ID: MW-17**

**Date Collected: 12/01/20 09:38**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		92	ug/L		12/07/20 13:12	12/08/20 15:10	1
TPH as Motor Oil Range	ND		92	ug/L		12/07/20 13:12	12/08/20 15:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)	82		50 - 150			12/07/20 13:12	12/08/20 15:10	1

**Client Sample ID: MW-19**

**Date Collected: 12/01/20 10:22**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	150		93	ug/L		12/07/20 13:12	12/08/20 02:37	1
TPH as Motor Oil Range	ND		93	ug/L		12/07/20 13:12	12/08/20 02:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)	99		50 - 150			12/07/20 13:12	12/08/20 02:37	1

**Client Sample ID: DUP-1**

**Date Collected: 12/01/20 00:00**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	150		98	ug/L		12/07/20 13:12	12/08/20 02:57	1
TPH as Motor Oil Range	ND		98	ug/L		12/07/20 13:12	12/08/20 02:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)	103		50 - 150			12/07/20 13:12	12/08/20 02:57	1

# Client Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: 300.0 - Anions, Ion Chromatography

**Client Sample ID: MW-15**

**Date Collected: 12/01/20 11:19**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		100	ug/L			12/02/20 21:42	1
Sulfate	39000		1000	ug/L			12/02/20 21:42	1

**Client Sample ID: MW-19**

**Date Collected: 12/01/20 10:22**

**Date Received: 12/02/20 13:00**

**Lab Sample ID: 570-45124-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1900		100	ug/L			12/02/20 22:01	1
Sulfate	20000		1000	ug/L			12/02/20 22:01	1

# Surrogate Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-129)	BFB (77-120)	DBFM (80-128)	TOL (80-120)
570-44978-A-4 MS	Matrix Spike	103	100	97	95
570-44978-A-4 MSD	Matrix Spike Duplicate	103	100	97	95
570-45079-A-2 MS	Matrix Spike	102	100	97	96
570-45079-A-2 MSD	Matrix Spike Duplicate	104	100	97	95
570-45124-1	MW-15	105	99	95	95
570-45124-1 MS	MW-15	102	102	95	95
570-45124-1 MSD	MW-15	102	100	97	95
570-45124-2	MW-17	103	98	92	95
570-45124-3	MW-19	103	98	92	96
570-45124-4	DUP-1	103	97	92	95
570-45124-5	TB-1	104	98	95	95
LCS 570-113629/4	Lab Control Sample	101	101	95	95
LCS 570-113738/3	Lab Control Sample	102	100	97	95
LCS 570-113915/3	Lab Control Sample	101	100	96	96
LCSD 570-113629/5	Lab Control Sample Dup	103	101	97	96
LCSD 570-113738/4	Lab Control Sample Dup	100	101	96	95
LCSD 570-113915/4	Lab Control Sample Dup	103	101	97	96
MB 570-113629/7	Method Blank	102	97	94	95
MB 570-113738/6	Method Blank	102	98	95	94
MB 570-113915/6	Method Blank	103	99	95	95

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB1 (50-150)			
570-45124-1	MW-15	77			
570-45124-2	MW-17	67			
570-45124-3	MW-19	67			
570-45124-3 MS	MW-19	100			
570-45124-3 MSD	MW-19	100			
570-45124-4	DUP-1	67			
570-45124-5	TB-1	69			
LCS 570-113979/3	Lab Control Sample	97			
LCSD 570-113979/4	Lab Control Sample Dup	97			
MB 570-113979/5	Method Blank	71			

### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Surrogate Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

**Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)**

**Matrix: Water**

**Prep Type: Total/NA**

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN (50-150)	Percent Surrogate Recovery (Acceptance Limits)
570-45124-1	MW-15	87	
570-45124-1	MW-15	60	
570-45124-2	MW-17	82	
570-45124-3	MW-19	99	
570-45124-4	DUP-1	103	
LCS 570-114466/2-A	Lab Control Sample	105	
LCSD 570-114466/3-A	Lab Control Sample Dup	108	
MB 570-114466/1-A	Method Blank	90	

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-113629/7**

**Matrix: Water**

**Analysis Batch: 113629**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			12/03/20 12:57	1
Ethylbenzene	ND		1.0	ug/L			12/03/20 12:57	1
o-Xylene	ND		1.0	ug/L			12/03/20 12:57	1
m,p-Xylene	ND		2.0	ug/L			12/03/20 12:57	1
Toluene	ND		1.0	ug/L			12/03/20 12:57	1
Xylenes, Total	ND		2.0	ug/L			12/03/20 12:57	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 129		12/03/20 12:57	1
4-Bromofluorobenzene (Surr)	97		77 - 120		12/03/20 12:57	1
Dibromofluoromethane (Surr)	94		80 - 128		12/03/20 12:57	1
Toluene-d8 (Surr)	95		80 - 120		12/03/20 12:57	1

**Lab Sample ID: LCS 570-113629/4**

**Matrix: Water**

**Analysis Batch: 113629**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	44.78		ug/L		90	78 - 120
Ethylbenzene	50.0	53.29		ug/L		107	80 - 120
o-Xylene	50.0	53.67		ug/L		107	80 - 125
m,p-Xylene	100	105.8		ug/L		106	80 - 125
Toluene	50.0	44.75		ug/L		89	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		80 - 129
4-Bromofluorobenzene (Surr)	101		77 - 120
Dibromofluoromethane (Surr)	95		80 - 128
Toluene-d8 (Surr)	95		80 - 120

**Lab Sample ID: LCSD 570-113629/5**

**Matrix: Water**

**Analysis Batch: 113629**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	45.19		ug/L		90	78 - 120	1	21
Ethylbenzene	50.0	53.79		ug/L		108	80 - 120	1	20
o-Xylene	50.0	54.30		ug/L		109	80 - 125	1	20
m,p-Xylene	100	107.4		ug/L		107	80 - 125	1	30
Toluene	50.0	45.25		ug/L		90	80 - 122	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		80 - 129
4-Bromofluorobenzene (Surr)	101		77 - 120
Dibromofluoromethane (Surr)	97		80 - 128
Toluene-d8 (Surr)	96		80 - 120

# QC Sample Results

Client: GHD Services Inc.

Job ID: 570-45124-1

Project/Site: P66 Yakima / 11145929

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-44978-A-4 MS**

**Matrix: Water**

**Analysis Batch: 113629**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits						
Benzene	ND		50.0	45.92		ug/L		92	75 - 125						
Ethylbenzene	ND		50.0	54.64		ug/L		109	75 - 125						
o-Xylene	ND		50.0	55.15		ug/L		110	75 - 136						
m,p-Xylene	ND		100	109.7		ug/L		110	75 - 133						
Toluene	ND		50.0	45.80		ug/L		92	75 - 125						
<b>Surrogate</b>															
1,2-Dichloroethane-d4 (Surr)	103	%Recovery	Qualifier	Limits											
4-Bromofluorobenzene (Surr)	100			80 - 129											
Dibromofluoromethane (Surr)	97			77 - 120											
Toluene-d8 (Surr)	95			80 - 128											
<b>Lab Sample ID: 570-44978-A-4 MSD</b>															
<b>Client Sample ID: Matrix Spike Duplicate</b>															
<b>Prep Type: Total/NA</b>															

**Lab Sample ID: 570-44978-A-4 MSD**

**Matrix: Water**

**Analysis Batch: 113629**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		50.0	45.08		ug/L		90	75 - 125	2	20
Ethylbenzene	ND		50.0	53.18		ug/L		106	75 - 125	3	20
o-Xylene	ND		50.0	54.07		ug/L		108	75 - 136	2	20
m,p-Xylene	ND		100	106.5		ug/L		106	75 - 133	3	20
Toluene	ND		50.0	44.88		ug/L		90	75 - 125	2	20
<b>Surrogate</b>											
1,2-Dichloroethane-d4 (Surr)	103	%Recovery	Qualifier	Limits						80 - 129	
4-Bromofluorobenzene (Surr)	100			77 - 120						80 - 128	
Dibromofluoromethane (Surr)	97			80 - 120						80 - 120	
Toluene-d8 (Surr)	95			80 - 120						80 - 120	

**Lab Sample ID: MB 570-113738/6**

**Matrix: Water**

**Analysis Batch: 113738**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Benzene	ND		0.50	ug/L			12/03/20 23:47	1			
Ethylbenzene	ND		1.0	ug/L			12/03/20 23:47	1			
o-Xylene	ND		1.0	ug/L			12/03/20 23:47	1			
m,p-Xylene	ND		2.0	ug/L			12/03/20 23:47	1			
Toluene	ND		1.0	ug/L			12/03/20 23:47	1			
Xylenes, Total	ND		2.0	ug/L			12/03/20 23:47	1			
<b>Surrogate</b>											
1,2-Dichloroethane-d4 (Surr)	102	%Recovery	Qualifier	Limits						80 - 129	
4-Bromofluorobenzene (Surr)	98			77 - 120						80 - 128	
Dibromofluoromethane (Surr)	95			80 - 120						80 - 120	
Toluene-d8 (Surr)	94			80 - 120						80 - 120	

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# QC Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-113738/3**

**Matrix: Water**

**Analysis Batch: 113738**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	45.17		ug/L		90	78 - 120
Ethylbenzene	50.0	52.65		ug/L		105	80 - 120
o-Xylene	50.0	53.31		ug/L		107	80 - 125
m,p-Xylene	100	104.3		ug/L		104	80 - 125
Toluene	50.0	44.90		ug/L		90	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 129
4-Bromofluorobenzene (Surr)	100		77 - 120
Dibromofluoromethane (Surr)	97		80 - 128
Toluene-d8 (Surr)	95		80 - 120

**Lab Sample ID: LCSD 570-113738/4**

**Matrix: Water**

**Analysis Batch: 113738**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	45.05		ug/L		90	78 - 120	0	21
Ethylbenzene	50.0	53.21		ug/L		106	80 - 120	1	20
o-Xylene	50.0	54.06		ug/L		108	80 - 125	1	20
m,p-Xylene	100	106.1		ug/L		106	80 - 125	2	30
Toluene	50.0	44.81		ug/L		90	80 - 122	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		80 - 129
4-Bromofluorobenzene (Surr)	101		77 - 120
Dibromofluoromethane (Surr)	96		80 - 128
Toluene-d8 (Surr)	95		80 - 120

**Lab Sample ID: 570-45079-A-2 MS**

**Matrix: Water**

**Analysis Batch: 113738**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		50.0	45.88		ug/L		92	75 - 125
Ethylbenzene	ND		50.0	53.13		ug/L		106	75 - 125
o-Xylene	ND		50.0	53.67		ug/L		107	75 - 136
m,p-Xylene	ND		100	105.2		ug/L		105	75 - 133
Toluene	ND		50.0	45.01		ug/L		90	75 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 129
4-Bromofluorobenzene (Surr)	100		77 - 120
Dibromofluoromethane (Surr)	97		80 - 128
Toluene-d8 (Surr)	96		80 - 120

# QC Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-45079-A-2 MSD**

**Matrix: Water**

**Analysis Batch: 113738**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		50.0	45.53		ug/L		91	75 - 125	1	20
Ethylbenzene	ND		50.0	53.14		ug/L		106	75 - 125	0	20
o-Xylene	ND		50.0	53.71		ug/L		107	75 - 136	0	20
m,p-Xylene	ND		100	104.4		ug/L		104	75 - 133	1	20
Toluene	ND		50.0	44.90		ug/L		90	75 - 125	0	20

**MSD MSD**

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		80 - 129
4-Bromofluorobenzene (Surr)	100		77 - 120
Dibromofluoromethane (Surr)	97		80 - 128
Toluene-d8 (Surr)	95		80 - 120

**Lab Sample ID: MB 570-113915/6**

**Matrix: Water**

**Analysis Batch: 113915**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			12/04/20 12:38	1
Ethylbenzene	ND		1.0	ug/L			12/04/20 12:38	1
o-Xylene	ND		1.0	ug/L			12/04/20 12:38	1
m,p-Xylene	ND		2.0	ug/L			12/04/20 12:38	1
Toluene	ND		1.0	ug/L			12/04/20 12:38	1
Xylenes, Total	ND		2.0	ug/L			12/04/20 12:38	1

**MB MB**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 129		12/04/20 12:38	1
4-Bromofluorobenzene (Surr)	99		77 - 120		12/04/20 12:38	1
Dibromofluoromethane (Surr)	95		80 - 128		12/04/20 12:38	1
Toluene-d8 (Surr)	95		80 - 120		12/04/20 12:38	1

**Lab Sample ID: LCS 570-113915/3**

**Matrix: Water**

**Analysis Batch: 113915**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene		50.0	46.66		ug/L		93	78 - 120
Ethylbenzene		50.0	55.10		ug/L		110	80 - 120
o-Xylene		50.0	55.42		ug/L		111	80 - 125
m,p-Xylene		100	110.0		ug/L		110	80 - 125
Toluene		50.0	46.81		ug/L		94	80 - 122

**LCS LCS**

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		80 - 129
4-Bromofluorobenzene (Surr)	100		77 - 120
Dibromofluoromethane (Surr)	96		80 - 128
Toluene-d8 (Surr)	96		80 - 120

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# QC Sample Results

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-113915/4**

**Matrix: Water**

**Analysis Batch: 113915**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	46.27		ug/L		93	78 - 120	1	21
Ethylbenzene	50.0	54.20		ug/L		108	80 - 120	2	20
o-Xylene	50.0	54.74		ug/L		109	80 - 125	1	20
m,p-Xylene	100	108.2		ug/L		108	80 - 125	2	30
Toluene	50.0	45.70		ug/L		91	80 - 122	2	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103		80 - 129
4-Bromofluorobenzene (Surr)	101		77 - 120
Dibromofluoromethane (Surr)	97		80 - 128
Toluene-d8 (Surr)	96		80 - 120

**Lab Sample ID: 570-45124-1 MS**

**Matrix: Water**

**Analysis Batch: 113915**

**Client Sample ID: MW-15**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	51		50.0	91.35		ug/L		81	75 - 125
Ethylbenzene	ND		50.0	56.78		ug/L		112	75 - 125
o-Xylene	ND		50.0	56.13		ug/L		112	75 - 136
m,p-Xylene	ND		100	111.2		ug/L		111	75 - 133
Toluene	ND		50.0	46.72		ug/L		93	75 - 125

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	102		80 - 129
4-Bromofluorobenzene (Surr)	102		77 - 120
Dibromofluoromethane (Surr)	95		80 - 128
Toluene-d8 (Surr)	95		80 - 120

**Lab Sample ID: 570-45124-1 MSD**

**Matrix: Water**

**Analysis Batch: 113915**

**Client Sample ID: MW-15**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	51		50.0	92.15		ug/L		82	75 - 125	1	20
Ethylbenzene	ND		50.0	54.64		ug/L		108	75 - 125	4	20
o-Xylene	ND		50.0	53.57		ug/L		107	75 - 136	5	20
m,p-Xylene	ND		100	106.4		ug/L		106	75 - 133	4	20
Toluene	ND		50.0	45.32		ug/L		91	75 - 125	3	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	102		80 - 129
4-Bromofluorobenzene (Surr)	100		77 - 120
Dibromofluoromethane (Surr)	97		80 - 128
Toluene-d8 (Surr)	95		80 - 120

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# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

**Lab Sample ID: MB 570-113979/5**

**Matrix: Water**

**Analysis Batch: 113979**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		100	ug/L			12/04/20 15:06	1
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	71		50 - 150				12/04/20 15:06	1

**Lab Sample ID: LCS 570-113979/3**

**Matrix: Water**

**Analysis Batch: 113979**

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	
TPH as Gasoline (C4-C13)		2020	1879		ug/L		93	76 - 128
Surrogate		%Recovery	Qualifer	Limits				
4-Bromofluorobenzene (Surr)		97		50 - 150				

**Lab Sample ID: LCSD 570-113979/4**

**Matrix: Water**

**Analysis Batch: 113979**

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.		RPD	RPD
TPH as Gasoline (C4-C13)		2020	1957		ug/L		97	76 - 128	4	10
Surrogate		%Recovery	Qualifer	Limits						
4-Bromofluorobenzene (Surr)		97		50 - 150						

**Lab Sample ID: 570-45124-3 MS**

**Matrix: Water**

**Analysis Batch: 113979**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	
TPH as Gasoline (C4-C13)	ND		2020	2075		ug/L		103	69 - 132
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		50 - 150						

**Lab Sample ID: 570-45124-3 MSD**

**Matrix: Water**

**Analysis Batch: 113979**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.		RPD
TPH as Gasoline (C4-C13)	ND		2020	1967		ug/L		97	69 - 132	5
Surrogate	MSD %Recovery	MSD Qualifier	Limits							15
4-Bromofluorobenzene (Surr)	100		50 - 150							

**Client Sample ID: MW-19**

**Prep Type: Total/NA**

**Client Sample ID: MW-19**

**Prep Type: Total/NA**

# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

**Lab Sample ID:** MB 570-114466/1-A

**Matrix:** Water

**Analysis Batch:** 114444

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 114466

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel Range	ND		100	ug/L		12/07/20 13:12	12/08/20 00:12	1
TPH as Motor Oil Range	ND		100	ug/L		12/07/20 13:12	12/08/20 00:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	90		50 - 150			12/07/20 13:12	12/08/20 00:12	1

**Lab Sample ID:** LCS 570-114466/2-A

**Matrix:** Water

**Analysis Batch:** 114444

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 114466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	
C10-C28	800	721.4		ug/L		90	Limits
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
n-Octacosane (Surr)	105		50 - 150				

**Lab Sample ID:** LCSD 570-114466/3-A

**Matrix:** Water

**Analysis Batch:** 114444

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 114466

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.		RPD	Limit
C10-C28	800	753.4		ug/L		94	Limits	4	14
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
n-Octacosane (Surr)	108		50 - 150						

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID:** MB 570-113378/5

**Matrix:** Water

**Analysis Batch:** 113378

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		100	ug/L			12/02/20 13:46	1

**Lab Sample ID:** LCS 570-113378/6

**Matrix:** Water

**Analysis Batch:** 113378

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	
Nitrate as N	5000	4951		ug/L		99	Limits

**Lab Sample ID:** LCSD 570-113378/7

**Matrix:** Water

**Analysis Batch:** 113378

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.		RPD	Limit
Nitrate as N	5000	4954		ug/L		99	Limits	0	15

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# QC Sample Results

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: 570-45124-3 MS**

**Matrix: Water**

**Analysis Batch: 113378**

**Client Sample ID: MW-19**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits		
Nitrate as N	1900		5000	7036		ug/L		103	80 - 120		

**Lab Sample ID: 570-45124-3 MSD**

**Matrix: Water**

**Analysis Batch: 113378**

**Client Sample ID: MW-19**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Nitrate as N	1900		5000	7119		ug/L		104	80 - 120	1	20

**Lab Sample ID: MB 570-113379/5**

**Matrix: Water**

**Analysis Batch: 113379**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1000		ug/L			12/02/20 13:46	1

**Lab Sample ID: LCS 570-113379/6**

**Matrix: Water**

**Analysis Batch: 113379**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfate		50000	48910		ug/L		98	90 - 110

**Lab Sample ID: LCSD 570-113379/7**

**Matrix: Water**

**Analysis Batch: 113379**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Sulfate		50000	49060		ug/L		98	90 - 110	0	15

**Lab Sample ID: 570-45124-3 MS**

**Matrix: Water**

**Analysis Batch: 113379**

**Client Sample ID: MW-19**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Sulfate	20000		50000	72780		ug/L		106	80 - 120

**Lab Sample ID: 570-45124-3 MSD**

**Matrix: Water**

**Analysis Batch: 113379**

**Client Sample ID: MW-19**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Sulfate	20000		50000	73880		ug/L		108	80 - 120	1	20

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## GC/MS VOA

### Analysis Batch: 113629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-45124-2	MW-17	Total/NA	Water	8260B	1
570-45124-3	MW-19	Total/NA	Water	8260B	2
570-45124-4	DUP-1	Total/NA	Water	8260B	3
MB 570-113629/7	Method Blank	Total/NA	Water	8260B	4
LCS 570-113629/4	Lab Control Sample	Total/NA	Water	8260B	5
LCSD 570-113629/5	Lab Control Sample Dup	Total/NA	Water	8260B	6
570-44978-A-4 MS	Matrix Spike	Total/NA	Water	8260B	7
570-44978-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	8

### Analysis Batch: 113738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-45124-5	TB-1	Total/NA	Water	8260B	9
MB 570-113738/6	Method Blank	Total/NA	Water	8260B	10
LCS 570-113738/3	Lab Control Sample	Total/NA	Water	8260B	11
LCSD 570-113738/4	Lab Control Sample Dup	Total/NA	Water	8260B	12
570-45079-A-2 MS	Matrix Spike	Total/NA	Water	8260B	13
570-45079-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	14

### Analysis Batch: 113915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-45124-1	MW-15	Total/NA	Water	8260B	14
MB 570-113915/6	Method Blank	Total/NA	Water	8260B	15
LCS 570-113915/3	Lab Control Sample	Total/NA	Water	8260B	16
LCSD 570-113915/4	Lab Control Sample Dup	Total/NA	Water	8260B	17
570-45124-1 MS	MW-15	Total/NA	Water	8260B	18
570-45124-1 MSD	MW-15	Total/NA	Water	8260B	19

## GC VOA

### Analysis Batch: 113979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-45124-1	MW-15	Total/NA	Water	NWTPH-Gx	
570-45124-2	MW-17	Total/NA	Water	NWTPH-Gx	
570-45124-3	MW-19	Total/NA	Water	NWTPH-Gx	
570-45124-4	DUP-1	Total/NA	Water	NWTPH-Gx	
570-45124-5	TB-1	Total/NA	Water	NWTPH-Gx	
MB 570-113979/5	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 570-113979/3	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 570-113979/4	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
570-45124-3 MS	MW-19	Total/NA	Water	NWTPH-Gx	
570-45124-3 MSD	MW-19	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Analysis Batch: 114444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-45124-1	MW-15	Total/NA	Water	NWTPH-Dx	114466
570-45124-3	MW-19	Total/NA	Water	NWTPH-Dx	114466
570-45124-4	DUP-1	Total/NA	Water	NWTPH-Dx	114466
MB 570-114466/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	114466
LCS 570-114466/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	114466
LCSD 570-114466/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	114466

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# QC Association Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## GC Semi VOA

### Prep Batch: 114466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-45124-1	MW-15	Total/NA	Water	3510C	
570-45124-2	MW-17	Total/NA	Water	3510C	
570-45124-3	MW-19	Total/NA	Water	3510C	
570-45124-4	DUP-1	Total/NA	Water	3510C	
MB 570-114466/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-114466/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-114466/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 114693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-45124-1	MW-15	Total/NA	Water	NWTPH-Dx	114466
570-45124-2	MW-17	Total/NA	Water	NWTPH-Dx	114466

## HPLC/IC

### Analysis Batch: 113378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-45124-1	MW-15	Total/NA	Water	300.0	
570-45124-3	MW-19	Total/NA	Water	300.0	
MB 570-113378/5	Method Blank	Total/NA	Water	300.0	
LCS 570-113378/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-113378/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-45124-3 MS	MW-19	Total/NA	Water	300.0	
570-45124-3 MSD	MW-19	Total/NA	Water	300.0	

### Analysis Batch: 113379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-45124-1	MW-15	Total/NA	Water	300.0	
570-45124-3	MW-19	Total/NA	Water	300.0	
MB 570-113379/5	Method Blank	Total/NA	Water	300.0	
LCS 570-113379/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-113379/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-45124-3 MS	MW-19	Total/NA	Water	300.0	
570-45124-3 MSD	MW-19	Total/NA	Water	300.0	

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# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

**Client Sample ID: MW-15**

Date Collected: 12/01/20 11:19

Date Received: 12/02/20 13:00

**Lab Sample ID: 570-45124-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	113915	12/04/20 13:05	OH1	ECL 2
		Instrument ID: GCMSQQ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	113979	12/04/20 18:23	Z9SI	ECL 2
		Instrument ID: GC24								
Total/NA	Prep	3510C			513.8 mL	5 mL	114466	12/07/20 13:12	N5Y3	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			114444	12/08/20 01:56	N1A	ECL 1
		Instrument ID: GC48								
Total/NA	Prep	3510C			513.8 mL	5 mL	114466	12/07/20 13:12	N5Y3	ECL 1
Total/NA	Analysis	NWTPH-Dx		10			114693	12/08/20 18:16	N5Y3	ECL 1
		Instrument ID: GC48								
Total/NA	Analysis	300.0		1			113378	12/02/20 21:42	URMH	ECL 1
		Instrument ID: IC9								
Total/NA	Analysis	300.0		1			113379	12/02/20 21:42	URMH	ECL 1
		Instrument ID: IC9								

**Client Sample ID: MW-17**

Date Collected: 12/01/20 09:38

Date Received: 12/02/20 13:00

**Lab Sample ID: 570-45124-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	113629	12/03/20 20:11	N1A	ECL 2
		Instrument ID: GCMSQQ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	113979	12/04/20 17:58	Z9SI	ECL 2
		Instrument ID: GC24								
Total/NA	Prep	3510C			543.8 mL	5 mL	114466	12/07/20 13:12	N5Y3	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			114693	12/08/20 15:10	N5Y3	ECL 1
		Instrument ID: GC48								

**Client Sample ID: MW-19**

Date Collected: 12/01/20 10:22

Date Received: 12/02/20 13:00

**Lab Sample ID: 570-45124-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	113629	12/03/20 20:38	N1A	ECL 2
		Instrument ID: GCMSQQ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	113979	12/04/20 16:44	Z9SI	ECL 2
		Instrument ID: GC24								
Total/NA	Prep	3510C			539.8 mL	5 mL	114466	12/07/20 13:12	N5Y3	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			114444	12/08/20 02:37	N1A	ECL 1
		Instrument ID: GC48								
Total/NA	Analysis	300.0		1			113378	12/02/20 22:01	URMH	ECL 1
		Instrument ID: IC9								
Total/NA	Analysis	300.0		1			113379	12/02/20 22:01	URMH	ECL 1
		Instrument ID: IC9								

Eurofins Calscience LLC

# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

**Client Sample ID: DUP-1**

Date Collected: 12/01/20 00:00

Date Received: 12/02/20 13:00

**Lab Sample ID: 570-45124-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	113629	12/03/20 21:05	N1A	ECL 2
		Instrument ID: GCMSQQ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	113979	12/04/20 18:47	Z9SI	ECL 2
		Instrument ID: GC24								
Total/NA	Prep	3510C			509.5 mL	5 mL	114466	12/07/20 13:12	N5Y3	ECL 1
Total/NA	Analysis	NWTPH-Dx		1			114444	12/08/20 02:57	N1A	ECL 1
		Instrument ID: GC48								

**Client Sample ID: TB-1**

Date Collected: 12/01/20 09:00

Date Received: 12/02/20 13:00

**Lab Sample ID: 570-45124-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	113738	12/04/20 00:15	OH1	ECL 2
		Instrument ID: GCMSQQ								
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	113979	12/04/20 15:54	Z9SI	ECL 2
		Instrument ID: GC24								

## Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-20 *
California	State	2944	09-30-21
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

## Method Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ECL 2
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	ECL 1
300.0	Anions, Ion Chromatography	MCAWW	ECL 1
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2

### Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Sample Summary

Client: GHD Services Inc.

Project/Site: P66 Yakima / 11145929

Job ID: 570-45124-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-45124-1	MW-15	Water	12/01/20 11:19	12/02/20 13:00	
570-45124-2	MW-17	Water	12/01/20 09:38	12/02/20 13:00	
570-45124-3	MW-19	Water	12/01/20 10:22	12/02/20 13:00	
570-45124-4	DUP-1	Water	12/01/20 00:00	12/02/20 13:00	
570-45124-5	TB-1	Water	12/01/20 09:00	12/02/20 13:00	

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45124



Calscience



570-45124 Chain of Custody

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

For courier service / sample drop off information, contact us26\_sales@eurofinsus.com or call us.

LABORATORY CLIENT: <b>GHD</b>		CLIENT PROJECT NAME / NUMBER: <b>PCG YAKIMA - 11145929</b>		P.O. NO.:																			
ADDRESS:		PROJECT CONTACT: <b>MATT DAVIS</b>		SAMPLER(S): (PRINT) <b>L. BURES</b>																			
CITY: STATE: ZIP:		REQUESTED ANALYSES																					
TEL:	E-MAIL:	Please check box or fill in blank as needed.																					
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):																							
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																							
<input type="checkbox"/> COELT EDF	GLOBAL ID:	LOG CODE:																					
SPECIAL INSTRUCTIONS:																							
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH(g) <input type="checkbox"/> GRO	TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH <input type="checkbox"/> 0	BTEX / <del>WATER</del> <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8082)	PCBs (8082)	PAHs: <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals: <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	Cr(VI): <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	SULFATE / <del>WATER</del>
		DATE	TIME			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1	MW-15	12/1/20	1119	W	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
2	MW-17		0938	W	8	X	Y	X	X	X	X	X	X	X	X	X	X	X	X	X			
3	MW-19		1022	W	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
4	DUP-1		-	W	8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
5	TB-1		0900	W	3	Y	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Relinquished by: (Signature)						Received by: (Signature/Affiliation)						Date: <b>12/1/20</b>	Time: <b>1400</b>										
						<b>SHIPPED VIA FEDEX</b>																	
Relinquished by: (Signature)						Received by: (Signature/Affiliation)						Date: <b>12/1/2020</b>	Time: <b>1700</b>										
						<b>EN</b>																	
Relinquished by: (Signature)						Received by: (Signature/Affiliation)						Date:	Time:										

## Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 570-45124-1

**Login Number: 45124**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Cortez Diaz, Antonio**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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